



# THE 'FORMALISATION DILEMMA' OF ARTISANAL AND SMALL-SCALE MINING

An analysis with reference to the Democratic Republic of the  
Congo

by

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IN AFRICA

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“The artisanal sector has always been the pariah of the mining industry; circumspectly acknowledged but never entrusted with meaningful resources and support... Artisanal mining is at the heart of achieving inclusive transformation in the mining industry because it is rightly placed to benefit the very target constituents that play a direct role in facilitating broad based development.”

S Zhuwarara ‘Securing A Place for Artisanal Mining’ in *Mining Review Africa* (19 May 2020)

# Declaration

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# Acknowledgement

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# Abstract

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This dissertation contributes to the discussion about the impact and dynamics of the informal Artisanal and Small-scale Mining (ASM) sector in sub-Saharan Africa, focusing on the case of the Democratic Republic of Congo (DRC). The debate around ASM's informality in sub-Saharan Africa is increasingly gathering momentum in the region's development and donor dialogues. A unique sector populated by a heterogenous group of people, ASM has in recent years expanded rapidly around the globe.

More and more countries are recognising the economic importance of the ASM sector, particularly in sub-Saharan Africa, forcing many donors and policymakers to 'reconsider' development strategies for ASM. With the growth in ASM, many countries have endeavoured to formalise their ASM sectors in hope of bringing ASM activities into the formal domain and in turn mitigating the negative consequences which flow therefrom. Despite these ASM-formalisation efforts, governments continue to face numerous obstacles along the way, with many of the artisanal miners continuing to operate illegally.

The case study of the DRC provides an informative understanding of ASM's informality in sub-Saharan Africa and depicts the issues experienced by a country attempting to formalise its ASM sector. The DRC is one such country that has implemented legislation and introduced numerous initiatives to help bring its ASM sector into the formal domain. The unfortunate reality is that the country seems to be trapped in what this dissertation terms the 'formalisation dilemma', as thousands of artisanal miners continue to operate outside of the legal framework; a phenomenon which is not unique to the DRC experience.

To date, most of the AMS-formalisation undertakings and support in sub-Saharan Africa have focused on the financial and technical aspects of the sector, with emphasis being placed on controlling ASM activities *ad hoc*, instead of proactively engaging and supporting ASM operations. This dissertation examines the correlation between the

rise in ASM activities and state or institutional failure and concludes by recommending various solutions to this so-called 'formalisation dilemma'.

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# Table of Abbreviations

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|                |   |
|----------------|---|
| <b>ASM</b>     | Artisanal and Small-scale Mining  |
| <b>AMV</b>     | African Mining Vision   |
| <b>AU</b>      | African Union   |
| <b>CASM</b>    | Communities and Small-scale Mining  |
| <b>DRC</b>     | Democratic Republic of the Congo  |
| <b>DFID</b>    | Department for International Development  |
| <b>EGPS</b>    | Extractive Global Programmatic Support  |
| <b>FARDC</b>   | Forces Armées de la République Démocratique du Congo (Armed Forces of the Democratic Republic of the Congo)   |
| <b>FSI</b>     | Fragile States Index  |
| <b>GDP</b>     | Gross Domestic Product  |
| <b>GNI</b>     | Gross National Income   |
| <b>IBRD</b>    | International Bank for Reconstruction and Development   |
| <b>ICMM</b>    | International Council on Mining and Metals  |
| <b>ILO</b>     | International Labour Organization   |
| <b>IMF</b>     | International Monetary Fund   |
| <b>LSM</b>     | Large-scale Mining  |
| <b>MONUC</b>   | Mission de l'Organisation (United Nations Organisation Mission in the Democratic Republic of the Congo)   |
| <b>MONUSCO</b> | Mission de l'Organisation des Nations Unies pour la stabilisation en République démocratique du Congo (United Nations Organisation Stabilisation Mission in the Democratic Republic of the Congo) |
| <b>MPRDA</b>   | Mineral and Petroleum Resource Development Act No. 28 of 2002   |
| <b>OAU</b>     | Organisation of African Unity   |

|                 |   |
|-----------------|---|
| <b>PEPM</b>     | Permis d'Exploitation de Petite Mine' (Exploitation Licence for Small-scale Mining)   |
| <b>SAPs</b>     | Structural Adjustment Programs  |
| <b>SAESSCAM</b> | Service d'Assistance et d'Encadrement d'Artisanal et Small Scale Mining (Service for Assistance and Organisation of Artisanal and Small-scale Mining) |
| <b>UMHK</b>     | Union Minière du Haut Katanga   |
| <b>UN</b>       | United Nations  |
| <b>UNECA</b>    | United Nations Economic Commission for Africa   |
| <b>UNICEF</b>   | United Nations Children's Emergency Fund  |
| <b>US</b>       | United States of America  |
| <b>USSR</b>     | Union of Soviet Socialist Republics   |
| <b>ZEA</b>      | Zone d'exploitation Artisanale (Artisanal Exploitation Zones)   |

# CHAPTER 1: INTRODUCTION

## 1. Introduction

Over a decade ago, various African Heads of State adopted the African Mining Vision (AMV) in an attempt to tackle the paradox of ‘abundant mineral wealth existing side by side with pervasive poverty.’<sup>1</sup> The AMV seeks to transform Africa’s mining sector and ensure a globally competitive African economy.<sup>2</sup> The primary vision of the AMV is to foster the ‘transparent, equitable and optimal exploitation of Africa’s mineral resources to underpin broad based sustainable growth and socio-economic development.’<sup>3</sup> The AMV recognises the importance of the Artisanal and Small-scale Mining (ASM) sector and its contribution to local economic development.<sup>4</sup>

Although progress has been slow and out of step with the feverish expectations surrounding its creation, the AMV is still being implemented by various African countries a decade after its inception.<sup>5</sup> However, the reality is that governments across Africa are not always able to use their mineral resources strategically to ensure inclusive, broad-based development.<sup>6</sup> Nevertheless, governments are more than ever trying to prioritise their mining sectors and are recognising the developmental importance of the ASM sector.<sup>7</sup>

ASM is a global phenomenon, presenting both challenges and opportunities for governments worldwide.<sup>8</sup> The ASM sector is a critical engine for rural development.<sup>9</sup>

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<sup>1</sup> African Union (2009) ‘Africa Mining Vision’ available at <https://au.int/en/documents/20140522/africa-mining-vision-amv-decisions>, accessed on 16 March 2018 (AMV hereafter).

<sup>2</sup> Ibid at 2.

<sup>3</sup> Ibid.

<sup>4</sup> Ibid at 3.

<sup>5</sup> G Ofori ‘From Aspiration to Reality: Unpacking the African Mining vision’ (2017) *Oxfam Briefing Paper* at 2.

<sup>6</sup> T Hentschel, F Hruschka and M Priester ‘Artisanal and Small-Scale Mining: Challenges and Opportunities’ (2003) *IIED Report* at 13.

<sup>7</sup> C O’Faircheallaigh and T Corbett ‘Understanding and improving policy and regulatory responses to artisanal and small-scale mining’ (2016) 3 *The Extractive Industries and Society* 961 at 961 and G Hilson and J McQuilken ‘Four decades of support for artisanal and small-scale mining in sub-Saharan Africa: A critical review’ (2014) 1 *The Extractive Industries and Society* 104 at 105.

<sup>8</sup> A Buxton ‘Responding to the challenge of artisanal and small-scale mining. How can knowledge networks help?’ (2013) *IIED Sustainable Markets Paper* at 1.

<sup>9</sup> J De Haan ‘Revising Conflict Minerals: Let’s Formalize Artisanal Mining for Peaceful, Just and Inclusive Societies’ (2020) *SDG Knowledge Hub*, available at <https://sdg.iisd.org/commentary/guest-articles/reversing->

The sector is an important source of employment, generating an income for a broad spectrum of the population and is widespread in most developing countries.<sup>10</sup> ASM may present economic benefits to millions of people globally, but typically poses considerable challenges to those countries striving to establish peace, good governance and security.<sup>11</sup> The global livelihood of an estimated 150 million people are dependant directly and indirectly on ASM.<sup>12</sup> ASM has gained great momentum in Africa and there seems to be a consensus amongst the African States for the need to turn ASM activities into a viable economic sector.<sup>13</sup> However, for most governments in sub-Saharan Africa, regulating the artisanal mining sector has proven to be rather challenging.<sup>14</sup>

Artisanal mining operators are often victim to a lack of security of land tenure as well as struggle to accumulate income and better their livelihoods due to their rudimentary setup.<sup>15</sup> This is especially true in the case of the DRC, where artisanal mining has a long and complicated history that dates back to colonial times.<sup>16</sup> Very few of these artisanal activities are officially registered.<sup>17</sup> The ASM sector remains largely informal.<sup>18</sup>

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conflict-minerals-lets-formalize-artisanal-mining-for-peaceful-just-and-inclusive-societies/, accessed on 14 July 2021.

<sup>10</sup> K D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 4; S Banchirigah 'How have reforms fuelled the expansion of artisanal mining? Evidence from sub-Saharan Africa' (2006) 31 *Resources Policy* 165 at 165-166 and A Siwale and T Siwale 'Has the promising of formalising artisanal and small-scale mining (ASM) failed? The case of Zambia' (2017) 4 *The Extractive Industries and Society* 191 at 191.

<sup>11</sup> P Singo and K Seguin 'Best Practices: Formalization and Due Diligence in Artisanal and Small-Scale Mining' (2018) *IMPACT* at 4 and R Maconachie and G Hilson 'Safeguarding livelihoods or exacerbating poverty? Artisanal mining and formalisation in West Africa' (2011) 35 *Natural Resource Forum* 293 at 293.

<sup>12</sup> C Kumah, G Hilson and I Quaicoo 'Poverty, adaptation and vulnerability: An assessment of women's work in Ghana's artisanal gold mining sector' (2020) 52 *Area* 617 at 617 and E Levin 'Global trends in artisanal and small-scale mining: What do these mean for Mongolia?' available at <http://www.levinsources.com/blog/global-trends-in-artisanal-and-small-scale-mining-what-do-these-mean-for-mongolia>, accessed on 12 August 2018.

<sup>13</sup> Buxton (2013) *IIED Sustainable Markets Paper* at 1.

<sup>14</sup> S Geenen 'Dispossession, displacement and resistance: Artisanal miners in a gold concession in South-Kivu, Democratic Republic of Congo' (2014) 40 *Resource Policy* 90 at 91.

<sup>15</sup> K Sinding 'The dynamics of artisanal and small-scale mining reform' (2005) 29 *Natural Resource Forum* 243 at 245.

<sup>16</sup> K Matthyssen and A Montejano 'Conflict Minerals' initiative in DR Congo: Perceptions of local mining communities' (2013) at 8.

<sup>17</sup> *Ibid* and Siwale and Siwale (2017) 4 *The Extractive Industries and Society* 191 at 193.

<sup>18</sup> *Ibid*.

The formalisation of ASM has been repeatedly looked at as a means for harnessing economic development.<sup>19</sup> There are both positive and negative impacts of this formalisation process. This dissertation scrutinises these impacts, specifically with a view to creating an understanding of the conundrum law and policymakers face when they engage in attempts to facilitate formalisation through legislative reform. The dissertation looks specifically at DRC's artisanal mining legal and regulatory framework to determine whether it has resulted in a failure to regulate activities successfully within the ASM sector. The results of this analysis should contribute to ensuring that other countries, such as South Africa, are able to regulate their own ASM sectors successfully.

## 2. Background and Context

In sub-Saharan Africa, the economic importance of ASM is indisputable.<sup>20</sup> Many of the sub-Saharan African countries have weak infrastructural institutions and their states have fallen deeper and deeper into disarray.<sup>21</sup> It is the citizens and their basic needs that are left the most affected.<sup>22</sup> Many of these citizens have no choice but to survive without the state and therefore turn to activities within the informal sector.<sup>23</sup> Without a regulated domestic economy, a secondary, illegal economic market has sprung up to serve the needs of the people.<sup>24</sup>

A strong correlation exists between poverty and informality. The highest prevalence of informal sectors occurs in countries with high levels of unemployment and poverty.<sup>25</sup> The evolution and rise in ASM communities are closely related to poverty.<sup>26</sup> The notion that the ASM sector is 'poverty-driven' has long been examined in the context of sub-

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<sup>19</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) *Global Trends in Artisanal and Small-Scale Mining (ASM): A review of key numbers and issues* (2017) at 51.

<sup>20</sup> Kumah, Hilson and Quaiocoe 52 *Area* 617 at 617.

<sup>21</sup> R Bates *When Things Fall Apart: State Failure in Late-Century Africa* (2008) at 118 and C Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 85 and J Di John 'Conceptualising the Causes and Consequences of Failed States: A Critical Review of the Literature' (2008) *Crisis States Working Papers Series No.2* at 25

<sup>22</sup> R Rotberg 'the Failure and Collapse of Nation States: Breakdown, Prevention and Repair' in R Rotberg *When States Fall: Causes and Consequences* (2004) at 27.

<sup>23</sup> Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 90.

<sup>24</sup> T Callaghy 'Africa and the World Political Economy: More Caught Between a Rock and a Hard Place' in J Harbeson and D Rothchild (eds) *Africa in World Politics: The African State System in Flux* (2000) at 45.

<sup>25</sup> Banchirigah (2006) 31 *Resources Policy* 165 at 165-166.

<sup>26</sup> M Gibb 'Artisanal and Small-scale Mining in West Africa: An Overview of Sustainable Development and Environmental Issues' in G Hilson (eds) *Small-Scale Mining, Rural Subsistence and Poverty in West Africa* (2006) at 42.

Saharan Africa.<sup>27</sup> One cannot understand the nature of the ASM sector without understanding the link between informality and poverty.

There is a push from governments in sub-Saharan Africa to formalise their ASM sector in hope that such a move will reduce their unemployment rate and help eradicate poverty.<sup>28</sup> The motivation behind formalising the ASM sector in the sub-Saharan region has long been recognised.<sup>29</sup> However, the reality is that most formalisation efforts in sub-Saharan Africa have largely failed.<sup>30</sup> The paradox of a country wanting to formalise its ASM sector despite the fact that it appears to be incapable of doing so, is what this dissertation terms the ‘formalisation dilemma’.

One such country that has experienced the so-called ‘formalisation dilemma’ is the DRC.<sup>31</sup> Like many other countries in sub-Saharan Africa, the DRC has been victim to unprecedented high levels of unemployment, exacerbating poverty in the region.<sup>32</sup> This dissertation uses the case study of the DRC to depict a country that has tried to regulate its ASM sector through various legal frameworks and government initiatives.<sup>33</sup>

## 2.1 The link between poverty and informality in the ASM context

The increase in ASM activities is primarily attributed to the sector's appeal to the many individuals living below the poverty line.<sup>34</sup> As poverty levels throughout sub-Saharan Africa increase, the ASM sector is one such area that consistently ensures some sort of subsistence for the many desperate and poor households.<sup>35</sup> ASM is commonly known as a form of poverty-driven mining.<sup>36</sup> It is usually conducted in rural and remote

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<sup>27</sup> Kumah, Hilson and Quaioco 52 *Area* 617 at 618.

<sup>28</sup> S Geenen ‘A dangerous bet: The Challenges of formalising artisanal mining in the Democratic Republic of Congo’ (2012) 37 *Resource Policy* 322 at 322.

<sup>29</sup> J Davidson ‘The transformation and successful development of small-scale mining enterprise in developing countries (1993) 17(4) *Natural Resource Forum* 315 at 317.

<sup>30</sup> G Hilson, H Goumandakoye and P Diallo ‘Formalising artisanal mining ‘spaces’ in rural sub-Saharan Africa: The case of Niger’ (2019) 80 *Land Use Policy* 259 at 260.

<sup>31</sup> See discussion at chapter 7, section 1.

<sup>32</sup> See discussion at chapter 6, section 3.

<sup>33</sup> See discussion at chapter 7, section 1.

<sup>34</sup> D’Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 4; Banchirigah (2006) 31 *Resources Policy* 165 at 165-166; Maconachie and Hilson (2011) 35 *Natural Resource Forum* 293 at 295 and Siwale and Siwale (2017) 4 *The Extractive Industries and Society* 191 at 191.

<sup>35</sup> Ibid.

<sup>36</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 51.

areas, directly or indirectly supporting millions of impoverished people across the globe.<sup>37</sup>

ASM generally remains informal, often resulting in a lack of legal and regulatory frameworks.<sup>38</sup> A strong relationship between informality and ASM exists.<sup>39</sup> Discussions around ASM raise serious concerns around the miners' human rights and tend to focus on the sector's negative attributes, such as environmental degradation and chemical pollution,<sup>40</sup> occupational health and safety issues, sexual exploitation and infectious diseases,<sup>41</sup> illegal, unsanitary settlements and child labour.<sup>42</sup>

Renowned ASM scholars, such as Hilson and McQuilken, argue that the negative social and environmental impacts that flow from ASM activities are mere 'expressions' of the sector's perpetual informality and a direct result of its existing development trajectory.<sup>43</sup> These scholars maintain that if ASM sectors were formalised and better regulated, the negative socio-economic and environmental impacts would be significantly reduced.<sup>44</sup> Despite the many negative attributes associated with the ASM sector, it continues to grow rapidly.<sup>45</sup> The ASM's undeniable importance as a source of employment has the potential to reduce poverty and provide an income for many marginalised people, thereby contributing to a country's economic growth.<sup>46</sup>

As the mining sector transforms and artisanal mining expands, the primary obstacle in addressing these problems stems from the fact that the ASM sector continues to be poorly regulated.<sup>47</sup> It is further recognised that ASM in conflict-rife, rural areas can

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<sup>37</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 51.

<sup>38</sup> D Bryceson and S Geenen 'Artisanal Fortier mining of gold in Africa: Labour transformation in Tanzania and the Democratic Republic of Congo' (2016) 111(459) *African Affairs* 296 at 302-303.

<sup>39</sup> Hilson and McQuilken (2014) 1 *The Extractive Industries and Society* 104 at 104.

<sup>40</sup> Gibb *Small-Scale Mining, Rural Subsistence and Poverty in West Africa* (2006) at 42.

<sup>41</sup> G Hilson and B Hilson 'Entrepreneurship, poverty and sustainability: Critical reflections on the formalisation of small-scale mining in Ghana' (2015) *International Growth Center Working Paper* at 3.

<sup>42</sup> Gibb *Small-Scale Mining, Rural Subsistence and Poverty in West Africa* (2006) at 42.

<sup>43</sup> Hilson and McQuilken (2014) 1 *The Extractive Industries and Society* 104 at 105-106.

<sup>44</sup> Ibid.

<sup>45</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 5; Banchirigah (2006) 31 *Resources Policy* 165 at 167.

<sup>46</sup> Ibid and R Perks 'Can I go? - Existing the artisanal mining sector in the Democratic Republic of Congo' (2011) 23 *Journal of International Development* 1115 at 1115.

<sup>47</sup> Maconachie and Hilson (2011) 35 *Natural Resource Forum* 293 at 293.

contribute to escalating instability and state weakening.<sup>48</sup> Considering the increased prevalence ASM is playing in the mining sector as a whole, there is a call for governments across sub-Saharan Africa to regulate their country's ASM sectors.<sup>49</sup> Governments are increasingly looking to implement strategies to regulate ASM in the hope of generating increased state revenue and limiting the negative impacts associated with this sector.<sup>50</sup>

The scope of this dissertation is limited to those aspects of ASM which are related to formalisation, such as the ASM legal framework and the negative and positive impacts associated therein. This dissertation does not attempt to incorporate every facet of artisanal mining.

## 2.2 The "Formalisation Dilemma" and the Need to Respond to Challenges in the ASM Sector

As discussed, employment in the ASM sector creates an important source of income for many rural poverty-driven people, often being more lucrative than other livelihoods that are related to impoverishment. Despite this, the work is typically labour intensive, dangerous and usually subject to economic insecurity, with very limited effective regulations.<sup>51</sup> The focus around ASM continues to expose the negative aspects of the sector rather than attempting to address its structural challenges to help improve identified opportunities or sustainable development.<sup>52</sup> The sector is typically cast in a bad light, seen by many as unprofitable, unregulated, dirty and fundamentally unsustainable.<sup>53</sup>

The ASM sector also has the potential to cause grave physical damage to the environment by way of deforestation, contamination and silting of waterways, land degradation, river diversion and mercury toxicity caused by ASM gold processing.<sup>54</sup>

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<sup>48</sup> Singo and Seguin (2018) *IMPACT* at 8.

<sup>49</sup> Maconachie and Hilson (2011) 35 *Natural Resource Forum* 293 at 294.

<sup>50</sup> Singo and Seguin (2018) *IMPACT* at 9.

<sup>51</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 25.

<sup>52</sup> Buxton (2013) *IIED Sustainable Markets Paper* at 1 and Hilson and McQuilken (2014) 1 *The Extractive Industries and Society* 104 at 105.

<sup>53</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 1.

<sup>54</sup> O'Faircheallaigh and Corbett (2016) 3 *The Extractive Industries and Society* 961 at 961- 962 and Singo and Seguin (2018) *IMPACT* at 9.

Scholars such as Hilson and McQuilken believe there to be a dangerous nexus between the ASM sector and negative social impacts.<sup>55</sup> Some of these harmful social impacts include child labour, exploitation, the establishment of transitory temporary villages, desertion from community obligations and traditional livelihoods such as agriculture, as well as the large-scale influx of foreigners.<sup>56</sup>

Many areas in which ASM activities occur have 'become hotspots for prostitution, disease and narcotics consumption.'<sup>57</sup> Miners within the ASM sector often suffer economically as they find themselves victim to the exploitation by purchasers of their output.<sup>58</sup> Perhaps even more worrying are the associated risks incurred by miners in the ASM sector, who are seldom protected by health and safety regulations that apply to Large-scale Mining (LSM) activities.<sup>59</sup> ASM activities bring a high rate of serious accidents and fatalities, as miners often work in unregulated hazardous and unhygienic conditions, with a total lack of health and safety regulations.<sup>60</sup>

Those who advocate for ASM activities, argue that ASM must be 'formalised' - i.e., marginalised miners' inclusion in the formal economy.<sup>61</sup> At the very least, the sector must be embodied by a 'standardised legal framework, which is registered in, and governed by, a central state system.'<sup>62</sup> There is a case to be made that by formalising the ASM sector, the negative impacts generally associated with ASM will decrease and the sector's developmental impact will be maximised. This vision is supported by major development organisations such as the World Bank, the African Union, the International Labour Organization (ILO) and other United Nations bodies.<sup>63</sup>

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<sup>55</sup> Hilson and McQuilken (2014) 1 *The Extractive Industries and Society* 104 at 105.

<sup>56</sup> Ibid.

<sup>57</sup> Ibid; Hentschel, Hruschka and Priester (2003) *IIED Report* at 25 and Singo and Seguin (2018) *IMPACT* at 10.

<sup>58</sup> O'Faircheallaigh and Corbett (2016) 3 *The Extractive Industries and Society* 961 at 961- 962.

<sup>59</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 48 and Buxton (2013) *IIED Sustainable Markets Paper* at 9.

<sup>60</sup> S Rupprecht 'Bench mining utilizing manual labour and mechanized equipment – a proposed mining method for artisanal small-scale mining in Central Africa' (2017) 117 *The Journal of Southern African Institute of Mining and Metallurgy* at 26 and Hilson and Singo and Seguin (2018) *IMPACT* at 9.

<sup>61</sup> Geenen 37 *Resource Policy* 322 at 322.

<sup>62</sup> Ibid at 323.

<sup>63</sup> Ibid at 324 and Rupprecht (2017) 117 *The Journal of Southern African Institute of Mining and Metallurgy* at 27.

The drive to formalise the ASM sector in sub-Saharan Africa continues to grow.<sup>64</sup> Pressure to formalise ASM has come from international organisations like the African Union, World Diamond Council, the ITRI Tin Supply Chain Initiative, the World Bank and the United Nations (UN).<sup>65</sup> Such mounting pressure is derived from the growing recognition that: (i) the sector is impacting the economy; (ii) that there is the need for the government to take hold of sprawling activities; and (iii) that regulators must be put in a better position to address the many social and environmental concerns emanating from the sector.<sup>66</sup>

However, to date, most ASM formalisation efforts have largely failed in sub-Saharan African countries. Much of the ASM regulations are largely inappropriate as they do not ensure systems that are in tune with the realities of the sub-Saharan African ASM sectors.<sup>67</sup> The critical challenge for governments, and those working within the ASM sector, is to enhance the sector's positive benefits and mitigate the negative consequences.<sup>68</sup>

The 'dilemma' here is the tension between the widespread, indeed global, perception that the ASM sector needs to be formalised if problems created by it are to be addressed; and the on-the-ground reality of the needs of the players in this sector, which will not be served by formalisation. This tension creates the impression that the sector really appears incapable of being formalised, hence goes to the heart of the difficulties faced by countries that want to bring their ASM sectors into the legal domain by implementing various laws and regulations. One only needs to look at the example

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<sup>64</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 6; Banchirigah (2006) 31 *Resources Policy* 165 at 168.

<sup>65</sup> G Hilson and R Maconachie 'Formalising artisanal and small-scale mining: insights, contestations and clarifications' (2017) 49 *Area* 443 at 443 and Rupprecht (2017) 117 *The Journal of Southern African Institute of Mining and Metallurgy* at 27.

<sup>66</sup> A Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 29-38; Maconachie and Hilson (2011) 35 *Natural Resource Forum* 293 at 294; Geenen 37 *Resource Policy* 322 at 322 and Hilson and Maconachie (2017) 49 *Area* 443 at 443.

<sup>67</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 51 and Hilson, Goumandakoye, Diallo 80 *Land Use Policy* 259 at 260.

<sup>68</sup> Singo and Seguin (2018) *IMPACT* at 7 and Hilson and McQuilken (2014) 1 *The Extractive Industries and Society* 104 at 105-106.

of the DRC to understand this.<sup>69</sup> This dissertation uses the DRC as a case study to demonstrate this 'formalisation dilemma'.

### 3. The Case Study of the Democratic Republic of the Congo

One country that has attempted to formalise its ASM sector is the DRC.<sup>70</sup> The DRC is endowed with enormous mineral wealth, rendering it one of the world's most prospective mineral-rich countries.<sup>71</sup> The mining sector has dominated the Congolese economy since the early 1910s.<sup>72</sup> Much of the country's mining sector consists of artisanal mining activities,<sup>73</sup> which collectively constitute over 80 per cent of the entire mining sector production and provide employment for over 16 per cent of its population.<sup>74</sup> For many people living in the DRC, the artisanal mining sector is seen as a promising path, if not the only path, for income opportunity.<sup>75</sup>

The DRC, as the largest state in Sub-Saharan Africa and two-thirds the size of Western Europe, is rich in mineral resources and host to some of the largest deposits globally.<sup>76</sup> The country holds significant reserves of various minerals, including gold, copper, diamonds, cobalt, zinc, cassiterite, wolframite, and coltan.<sup>77</sup> The DRC legal framework is prescriptive and provides for the regulation of mining activities.<sup>78</sup> Exploration and exploitation permits cover a total of 33 per cent of the DRC's surface area, of which the legal artisanal exploitation tenure only covers 0.06 per cent.<sup>79</sup> The majority of artisanal mining in the DRC, therefore, operates informally without the

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<sup>69</sup> Siwale and Siwale (2017) 4 *The Extractive Industries and Society* 191 at 199 and Rupprecht (2017) 117 *The Journal of Southern African Institute of Mining and Metallurgy* at 28.

<sup>70</sup> Perks (2011) 23 *Journal of International Development* 1115 at 1115 and Pact *PROMINES study: Artisanal Mining in the Democratic Republic of Congo* (2010) at 5.

<sup>71</sup> S Geenen and B Radley 'In the face of reform: What future for ASM in the eastern DRC?' (2014) 62 *Futures* 58 at 58.

<sup>72</sup> Perks (2011) 23 *Journal of International Development* 1115 at 1117 and Rupprecht at 27.

<sup>73</sup> Ibid at 1115 and Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 51.

<sup>74</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 4; Perks (2011) 23 *Journal of International Development* 1115 at 1117.

<sup>75</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 1 and Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 52.

<sup>76</sup> Geenen (2014) 40 *Resource Policy* 90 at 91 and D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 1.

<sup>77</sup> Geenen and Radley at 59 and Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 51.

<sup>78</sup> E Wafwana, E Diata, N Mayifuala, J van Kempen and E Kasonga 'Democratic Republic of Congo' in E La Flèche (ed) *The Mining Law Review* (2012) at 44.

<sup>79</sup> Ibid at 44.

requisite legal permitting.<sup>80</sup> Global estimates indicate that more than 80 per cent of artisanal mining is informal.<sup>81</sup>

Many people within the DRC have few livelihood options as they are internally displaced or ex-combatants.<sup>82</sup> This is a result of two legacy wars in the country, foreign occupation and army invasions, corruption, political turmoil, ethnic conflict, and militia activity.<sup>83</sup> At present, the recalcitrant artisanal mining sector in the DRC remains the vital lifeline for a large portion of the population scattered across the country.<sup>84</sup>

It is against this backdrop that the DRC government has recognised the need to regulate its artisanal mining sector and ensure that miners work within the legal parameters.<sup>85</sup> Prior to April 2018, there were two primary legal documents that attempted to regulate the DRC mining sector included: the Mining Code (2002)<sup>86</sup> and the Mining Regulations (2003).<sup>87</sup> In 2018, the DRC President amended the 2002 Mining Code, which was subsequently passed by Congress and signed into law on 9 March 2018.<sup>88</sup>

Mining activities in the DRC are further influenced by foreign legislation, such as Section 1502 of the Dodd-Frank Act, which imposed certain regulations for US companies using mineral from the DRC.<sup>89</sup> Mining Activities in the DRC are also subject to specific voluntary international principles.<sup>90</sup> In the DRC, mining is managed and

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<sup>80</sup> Bryceson and Geenen (2016) 111(459) *African Affairs* 296 at 302-303.

<sup>81</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 59.

<sup>82</sup> Perks (2011) 23 *Journal of International Development* 1115 at 1115.

<sup>83</sup> G Nzongola-Ntalaja *The Congo: From Leopold to Kabila: A People's History* (2002) 15 and Perks (2011) 23 *Journal of International Development* 1115 at 1115.

<sup>84</sup> Geenen (2014) 40 *Resource Policy* 90 at 91 and Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 51.

<sup>85</sup> Perks (2011) 23 *Journal of International Development* 1115 at 1115; Geenen and Radley (2014) 62 *Futures* 58 at 59

<sup>86</sup> Mining Code Law no 7 of 2002.

<sup>87</sup> Mining Regulation decree no 38 of 2003

<sup>88</sup> Law no. 18/001 of 9 March 2018 Amending and Supplementing Law no. 007/2002 of 11 July 2002 on the Mining Code

<sup>89</sup> T Whitney 'Conflict Minerals, Black Markets, and Transparency: The Legislative Background of Dodd- Frank Section 1502 and Its Historical Lessons' (2015) 14(2) *Journal of Human Rights* 183 at 184 and N Stoop, M Verpoorten and P van der Windt 'More legislation, more violence? The impact of Dodd-Frank in the DRC' (2018) 13(8) *PLoS ONE* 1 at 2.

<sup>90</sup> International Peace Information Services 'The Formalisation of Artisanal Mining in the Democratic Republic of the Congo and Rwanda' (2012) *CIFOR Report* at 31.

regulated by different administrative, technical and political entities.<sup>91</sup> The government also implemented various initiatives, such as the implementation of PROMINES<sup>92</sup> and SAESSCAM,<sup>93</sup> to help bring the sector into the formal domain.<sup>94</sup>

Although the various mining legislation appears to regulate the country's ASM sector, it is questionable whether these initiatives are effective in improving ASM natural resource governance.<sup>95</sup> Despite the many laws regulating this sector, many artisanal miners continue to mine without adhering to the legal framework, remaining in the informal sector.<sup>96</sup> D'Souza describes the artisanal mining sector in the DRC as 'utterly chaotic with little respect for law and order in almost all mining areas in virtually all provinces.'<sup>97</sup>

#### 4. Research Question

This dissertation examines the process and difficulties experienced by a country when attempting to formalise its artisanal mining sector. It evaluates the effectiveness of the current legal frameworks for artisanal mining in the DRC. It also discusses the need to find an inclusive and integrated approach to ASM formalisation. In this way, the research will contribute to ensuring that other countries, like South Africa, can regulate their own ASM sectors successfully and learn from the experiences of countries like the DRC. This analysis hopes to contribute insights that will support the decision-making processes within governments looking to rethink their policies on ASM.

In the light of the aforementioned discussion on the DRC and its ASM sector, the research question this dissertation seeks to answer is how effective the legal framework of the DRC has been in formalising and regulating its ASM sector. This dissertation will be limited to DRC's mining legislation from 2002 onwards. The author

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<sup>91</sup> S Autesserre 'Dangerous Tales: Dominant Narratives on the Congo and Their Unintended Consequences' (2012) 111 *African Affairs* 202 at 204.

<sup>92</sup> Pact *PROMINES study* at 37.

<sup>93</sup> Ibid and Autesserre (2012) 111 *African Affairs* 202 at 205.

<sup>94</sup> Geenen 37 *Resource Policy* 322 at 326 and Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 51.

<sup>95</sup> Geenen (2014) 40 *Resource Policy* 90 at 92; Geenen 37 *Resource Policy* 322 at 325 and Wafwana, Diata, Mayifuila, van Kempen and Kasonga *The Mining Law Review* (2012) at 44.

<sup>96</sup> Geenen (2014) 40 *Resource Policy* 90 at 92; Geenen 37 *Resource Policy* 322 at 325; Perks (2011) 23 *Journal of International Development* 1115 at 1125 and Pact *PROMINES study* at 22.

<sup>97</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 4; Perks (2011) 23 *Journal of International Development* 1115 at 1115.

has chosen to focus on this period because in 2002 the Congolese Congress enacted its first Mining Code, which dealt with artisanal mining specifically and replaced all outdated mining legislation.<sup>98</sup> A case study of the DRC examines whether the country's legal provisions have effectively contributed to creating an enabling environment for illegal mining activities or not.

This inquiry is borne out of the rise in ASM activity across sub-Saharan Africa, particularly in countries such as the DRC. It is also borne out of the reform initiative of the DRC's framework for regulating mining, as expressed in its 2002 Mining Code,<sup>99</sup> Mining Regulations<sup>100</sup> and the amended 2018 Mining Code.<sup>101</sup>

## 5. Methodology

The research question is pursued by way of a desk-top study of the relevant literature available, such as books, legislation and article journals. A study of the relevant literature pertaining to artisanal mining law in sub-Saharan Africa facilitates an analysis that allows a focus on the DRC's experience with the reform of its ASM sector to draw insights for the broader sub-Saharan region.

Three considerations form the basis for the inquiry. The first is the conviction that regulation of the ASM sector in sub-Saharan Africa is needed; the second is that the artisanal mining sector in the DRC needs scrutiny from the outset to evaluate the effect of the country's formalisation efforts; and the third is responding to the challenge emanating from formalising the ASM sector.

### 5.1 Dissertation structure

The dissertation is divided into the following four parts:

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<sup>98</sup> The Law Reviews 'The Mining Law Review: Democratic Republic of Congo' available at <https://thelawreviews.co.uk/title/the-mining-law-review/democratic-republic-of-the-congo-mining-law>, accessed on 17 January 2022.

<sup>99</sup> Mining Code Law no. 7 of 2002.

<sup>100</sup> Mining Regulation decree no. 38 of 2003.

<sup>101</sup> Mining Code Law no. 18/001.

### 5.1.1 PART 1: Conceptualising Artisanal and Small-scale Mining

#### **Chapter 2: The Concept of Artisanal and Small-Scale Mining**

Chapter two introduces and conceptualises the notion of ASM. Firstly, this chapter explores what is known as the 'informal economy,' a sector of society wherein ASM operates. Chapter two further evaluates the nature of the ASM sector by (i) examining the 'informal economy' and how the ASM sectors fit therein; (ii) distinguishing between 'illegal' mining activities and 'informal' mining activities, and how the two overlap; and (iii) understanding how ASM fits within the mining world by distinguishing between the ASM sector and the LSM sector and how the two sectors are inter-related.

#### **Chapter 3: Defining Artisanal and Small-scale Mining**

Chapter three examines ASM through a more policy-oriented lens by taking a specific and critical look at how ASM has been defined by two global institutions, the World Bank and Africa Union. Once a general understanding and definition of ASM has been ascertained, this chapter will define ASM in the DRC context specifically.

### 5.1.2 PART 2: Artisanal and Small-scale Mining in sub-Saharan Africa

#### **Chapter 4: Growth of ASM in Sub-Saharan Africa**

Chapter four focuses on sub-Saharan Africa and assesses the complex history of ASM therein. One cannot discuss the rise of ASM in the context of sub-Saharan Africa without examining its relationship with poverty. Chapter four will therefore analyse the relationship between poverty and the rise in ASM activities.

#### **Chapter 5: The Need to Address ASM's Negative Consequences in Sub-Saharan Africa**

Chapter five begins by examining the negative impacts of ASM-related activities, such as environmental degradation, occupational health and safety and child labour. With a rise in ASM's negative implications, governments across sub-Saharan Africa believe that the solution lies in formalising the ASM sector. Chapter five, therefore, examines the motivation behind formalisation and what such formalisation entails.

### 5.1.3 PART 3: Case Study of the Democratic Republic of Congo

#### **Chapter 6: History of Artisanal and Small-scale Mining in DRC**

Chapter six examines ASM activities within the DRC. The chapter assesses the significance ASM has for both the Congolese population and its economy. Chapter six further examines the proliferation of ASM in the DRC by reviewing the different events that took place in history, which shaped the state and its ASM sector.

#### **Chapter 7: Formalising DRC's Artisanal and Small-Scale Mining Sector**

Chapter seven investigates the impact that the legislation has had on the ASM sector within the DRC. Chapter seven considers the impact of the DRC's 2002 Mining Code,<sup>102</sup> 2003 Mining Regulations<sup>103</sup> and the amended 2018 Mining Code<sup>104</sup> on the mining sector as a whole. The chapter also considers whether such documents have succeeded in effectively regulating the ASM sector in the DRC.

#### **Chapter 8: Effectiveness of DRC's ASM Formalisation Efforts:**

It is arguable whether the DRC's ASM formalisation efforts have been effective. The chapter assesses whether the adverse socio-economic consequences flowing from the sector have been reduced by formalising the artisanal mining sector. Chapter eight also evaluates whether the amended 2018 Mining Code has been effective in better regulating the artisanal mining sector as a whole and examines the problems that have hindered DRC's formalisation efforts.

### 5.1.4 PART 4: The Formalisation Dilemma: Conclusion and Recommendations

#### **Chapter 9: The Paradox of the 'Formalisation Dilemma'**

Chapter nine considers the impetus behind sub-Saharan African countries wanting to regulate a sector that comes with endless challenges. The challenges of countries in sub-Saharan Africa, such as the DRC, that want to formalise their ASM sectors which appear to be incapable of being formalised, what this dissertation terms the 'formalisation dilemma'. This chapter assesses the motivation behind sub-Saharan

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<sup>102</sup> Mining Code Law no. 7 of 2002.

<sup>103</sup> Mining Regulation decree no. 38 of 2003.

<sup>104</sup> Mining Code Law no. 18/001.

African countries' desire to fight against the formalisation dilemma and why formalisation efforts have generally not worked.

### **Chapter 10: The Correlation Between State Failure and the Rise in Artisanal and Small-Scale Mining**

Chapter ten highlights the reasons as to why formalisation efforts in sub-Saharan African have generally not worked. The chapter exposes the need to delve deeper and examine the nature of the government and its mining sector in countries like the DRC and why illegality, especially within the ASM sector, remains so prevalent. The chapter examines the correlation that exists between institutional failure and the rise in ASM together with its negative implications.

### **Chapter 11: Quest for Solutions**

By way of conclusion, the final chapter of this dissertation, chapter eleven, comments on this dissertation's overall findings. To conclude, chapter eleven recommends solutions to the formalisation dilemma, helping countries in the region move forward and ensure that their ASM sectors are properly regulated.

# PART ONE: CONCEPTUALISING ARTISANAL AND SMALL-SCALE MINING

Part one and part two of this dissertation sets the foundation for answering the research question: how effective the DRC has been in formalising and regulating its ASM sector. By focusing on the DRC as an example, this dissertation sheds light on how countries within sub-Saharan Africa, such as the DRC, attempt to formalise their own ASM sectors. It is hoped that the lessons learned from the DRC can then be applied to other countries within the region to ensure successful regulatory approaches.

Part one of this dissertation consists of chapters two and three, which focuses on understanding the nature of the ASM sector and ascertaining a definition of ASM to be used throughout this dissertation. Before an in-depth examination of the DRC's formalisation efforts can be addressed, one must understand what is meant by the term 'ASM'. Finding a working definition of the concept is crucial. The definition of ASM needs to be clarified for two different reasons. Firstly, from a development perspective, a working definition of ASM ensures that there is a common understanding of the term and, further, provides a long-term vision for the ASM sector. Secondly, a precise definition will ensure that the distinction between ASM and other mining activities will be upheld from a public policy perspective. Policymakers need to have a clear idea of who and what activities must be regulated. Therefore, it is pivotal to identify what is meant by 'ASM' and what kind of activities are included thereunder.

To ensure an enhanced understanding of ASM, it is necessary to evaluate the nature of the ASM sector. ASM sectors are primarily conceptualised by their informal status. Most artisanal miners work 'informally' and do not hold the requisite mining permit to mine legally.<sup>105</sup> Although informality and illegality are connected to one another and often used synonymously, the two are not the same. This chapter will begin by introducing and conceptualising ASM by explaining what is meant by the 'informal economy' and how the ASM sectors fit therein. Chapter two will then evaluate the

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<sup>105</sup> G Hilson, B Hilson, R Maconachie, J McQuilken and H Goumandakoye 'Artisanal and small-scale mining (ASM) in sub-Saharan Africa: Re-conceptualizing formalisation and 'illegal' activity' (2017) 83 *Geoforum* 80 at 81.

important distinction that exists between 'informal' ASM and 'illegal' ASM and how the two overlap. Lastly, this chapter will examine how ASM fits within the mining world by distinguishing between the ASM sector and the LSM sector and how the two sectors are inter-related.

Once the nature of the ASM sector has been outlined, one must establish a working definition of ASM that can be used throughout this dissertation. Therefore, Chapter three will focus on the ASM definition and its complexity. Chapter three will begin by highlighting the different definitions that have been used by the World Bank and African Union, two global institutions that have been deeply involved in the ASM world. Although these two global institutions differ in their political stances, they have both played an instrumental role in the ASM. Because this dissertation is focused on the DRC, it is imperative to also find a workable ASM definition in the context of the DRC, which is what the last part of this dissertation sets out to do.

# CHAPTER 2: THE CONCEPT OF ARTISANAL AND SMALL-SCALE MINING

## 1. Introduction

There has been a rapid proliferation of unlicensed mining activities in sub-Saharan Africa.<sup>106</sup> Many operational small-scale miners do not possess the requisite mining permits.<sup>107</sup> Law and policymakers in sub-Saharan Africa are taking note of the expansion of ASM activities across the continent. They are attempting to regularise such operations in the belief that this will enable better monitoring and support.<sup>108</sup> For an enhanced understanding of the ASM sector, it is necessary to examine the nature of the sector and how it fits within the mining world generally.

## 2. Understanding the Informal Economy

The World Bank estimates that about two-thirds of the world's labour force comes from the 'informal economy'.<sup>109</sup> Like those ASM activities found in the DRC, most ASM sectors in sub-Saharan Africa fall into this so-called 'informal economy'.<sup>110</sup> The International Labour Organization has defined the informal economy as:

*'All forms of informal employment - that is, employment without labour or social protection - both inside and outside informal enterprises, including both self-employment in small, unregistered enterprises and wage employment in unprotected jobs.'*<sup>111</sup>

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<sup>106</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 4; Banchirigah (2006) 31 *Resources Policy* 165 at 165-166.

<sup>107</sup> Hilson, Hilson, Maconachie, McQuilken and Goumandakoye (2017) 83 *Geoforum* 80 at 81.

<sup>108</sup> Ibid and D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 45.

<sup>109</sup> The World Bank World Bank 'The Long Shadow of Informality: Challenges and Policies' available at <https://thedocs.worldbank.org/en/doc/37511318c092e6fd4ca3c60f0af0bea3-0350012021/related/Informal-economy-full-report.pdf>, accessed on 25 August 2020 & S Verick *The Impact of Globalization of the Informal Sector in Africa* (2008) at 4.

<sup>110</sup> Autesserre (2012) 111 *African Affairs* 202 at 205.

<sup>111</sup> C Martha 'Rethinking the informal economy: Linkages with the formal economy and the formal regulatory environment' (2005) *Research Paper 2005/010* at 2.

The informal economy typically consists of small-scale businesses, where ‘the production of goods and services is labour-intensive’, and the skills needed for the relevant business undertakings are not acquired from formal education.<sup>112</sup>

The informal economy has several defining characteristics. Firstly, workers in the informal economy usually have lower levels of education and higher rates of illiteracy compared to those working in the formal sector.<sup>113</sup> Secondly, wages in the informal sector are generally much lower, with poverty rates higher among those workers and their families who directly rely on informal employment.<sup>114</sup> Thirdly, workers in the informal sector frequently work longer hours, and overall working conditions tend to be worse than conditions in the formal sector.<sup>115</sup> Lastly, the informal sector is made up of a heterogeneous group of people.<sup>116</sup> The informal economy is complex to navigate.<sup>117</sup> The informal sector is subdivided into ‘informal employers, informal employees, people who operate on their own account, casual wage workers and industrial outworkers or homeworkers.’<sup>118</sup>

The World Bank evaluated the size of the informal economy in sub-Saharan Africa, and the estimations were tabulated into a graph,<sup>119</sup> as seen in figure one below. Figure one ‘graphs the size of the informal economy as a percentage of the Gross National Income (GNI)’ of sub-Saharan African countries. The graph ranges from almost 60 per cent in Zimbabwe, Tanzania and Nigeria, to below 30 per cent in South Africa.<sup>120</sup> The size of the informal sector was estimated to be approximately 42.3 per cent of the

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<sup>112</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 6 and Verick *The Impact of Globalization of the Informal Sector in Africa* (2008) at 6-7.

<sup>113</sup> Hilson and Hilson (2015) *International Growth Center Working Paper* at 12 and Verick *The Impact of Globalization of the Informal Sector in Africa* (2008) at 7.

<sup>114</sup> Martha (2005) *Research Paper 2005/010* at 2 and Verick *The Impact of Globalization of the Informal Sector in Africa* (2008) at 7.

<sup>115</sup> Verick *The Impact of Globalization of the Informal Sector in Africa* (2008) at 8.

<sup>116</sup> S Sethuraman ‘The urban informal sector: concept, measurement and policy’ (1976) 114 *International Labour Review* 69 at 74 and M Chen ‘The informal economy: Definitions, theories and policies’ (2012) *Women in informal economy globalizing and organizing: WIEGO Working Paper 1* at 7.

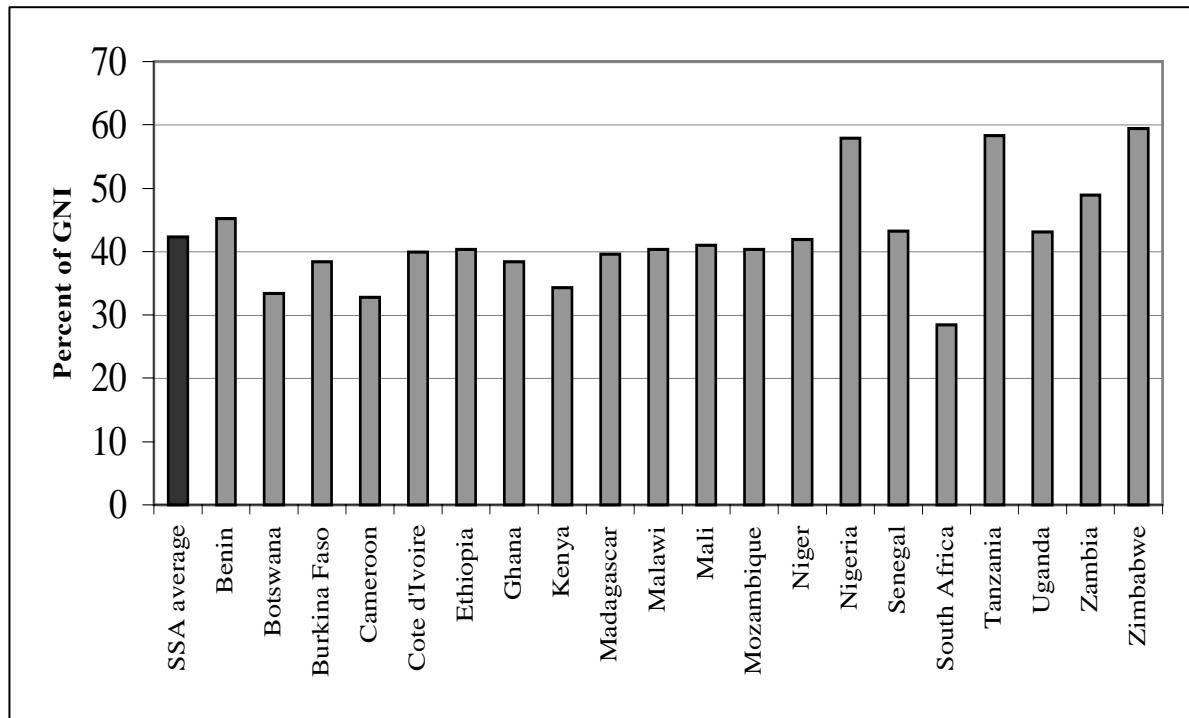
<sup>117</sup> M Chen ‘The Informal Economy: Recent Trends, Future Directions’ (2016) 26(2) *NEW SOLUTIONS: A Journal of Environmental and Occupational Health Policy* at 156 and Chen *WIEGO Working Paper 1* at 7-8

<sup>118</sup> Chen *WIEGO Working Paper 1* at 7-8

<sup>119</sup> Verick *The Impact of Globalization of the Informal Sector in Africa* (2008) at 4 and Autesserre (2012) 111 *African Affairs* 202 at 206.

<sup>120</sup> *Ibid.*

Gross National Income (GNI) of countries in sub-Saharan Africa.<sup>121</sup> Although the DRC is not specifically reflected on this graph, this chapter is purposefully trying to examine the extent of the informal sector in the sub-Saharan African context more generally. Chapter six of this dissertation undertakes an in-depth analysis of the significance of the informal economy – specifically the ASM sector – in the DRC.<sup>122</sup>



**Figure 1:** size of the informal sector in sub-Saharan Africa (ratio of GNI).<sup>123</sup>

Therefore, it is evident that the informal economy is not only an enormous contributing factor to the local economies within sub-Saharan Africa, but also ensures employment for a wide range of often-marginalised individuals.<sup>124</sup> The Informal economy not offers employment for millions of people, but it also is intrinsically linked to the formal economy, contributing greatly to a country's overall economy.<sup>125</sup>

Over the years, three dominant schools of thought have crystallised from the debate on the informal economy's nature and its composition, namely: the Dualist School, the

<sup>121</sup> V Tokman 'An exploration into the nature of the informal-formal sector relationship' (1978) 6 *World Development Journal* 1065 at 1069 and Verick *The Impact of Globalization of the Informal Sector in Africa* (2008) at 4.

<sup>122</sup> See discussion at chapter 6, section 3.

<sup>123</sup> This figure has been taken from an open source, which permits use of the figure for student research. See: Verick *The Impact of Globalization of the Informal Sector in Africa* (2008).

<sup>124</sup> Hilson and Hilson (2015) *International Growth Center Working Paper* at 2.

<sup>125</sup> Chen 26(2) *NEW SOLUTIONS: A Journal of Environmental and Occupational Health Policy* at 156.

Structuralist School and the Legalist School.<sup>126</sup> Each school of thought offers a unique and contrasting perspective on the reason behind the emergence of informal economies.<sup>127</sup>

The Dualist School argues that a distinction exists between the informal and formal economy, whereby the former comprises 'marginal activities' that provide income and a safety net for the poor.<sup>128</sup> The sector is completely separate from the formal sector.<sup>129</sup> Dualists argue that Informal operators work in their own 'space' away from the formal sector and are excluded from modern economic opportunities.<sup>130</sup> The ASM sector's growth is seen to be linked to broader economic changes.<sup>131</sup> The imbalance between employment growth and population growth helps drive informality, as not enough jobs are created.<sup>132</sup>

The Structuralist school views the informal and formal economy to be intrinsically linked and interdependent.<sup>133</sup> Structuralists argue that the informal economy exists because of the structure of the capitalist world economy.<sup>134</sup> People are driven to work in the informal sector because of the setup of firms in the formal sector, which is designed to reduce labour costs and increase competitiveness.<sup>135</sup> This school views both informal wage workers as well as informal enterprises to be a subordinate economic activity to the formal economy.<sup>136</sup>

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<sup>126</sup> Hilson, Goumandakoye and Diallo 80 *Land Use Policy* 259 at 259; H De Soto *The mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else* (2003) at 15; Hilson and Hilson (2015) *International Growth Center Working Paper* at 15 and Chen *WIEGO Working Paper 1* at 4.

<sup>127</sup> Hilson and Hilson (2015) *International Growth Center Working Paper* at 12.

<sup>128</sup> Sethuraman 114 *International Labour Review* 69 at 74; Chen *WIEGO Working Paper 1* at 12.

<sup>129</sup> K Hart 'Informal income opportunities and urban employment in Ghana' (1973) 11 *Journal of Modern African Studies* 61 at 63; Tokman (1978) 6 *World Development Journal* 1065 at 1069 and Chen *WIEGO Working Paper 1* at 4-5.

<sup>130</sup> Chen 26(2) *NEW SOLUTIONS: A Journal of Environmental and Occupational Health Policy* at 156.

<sup>131</sup> Sethuraman 114 *International Labour Review* 69 at 74 and Chen *WIEGO Working Paper 1* at 4-5.

<sup>132</sup> Tokman (1978) 6 *World Development Journal* 1065 at 1069 and Chen a *WIEGO Working Paper 1* t 11.

<sup>133</sup> R Bromley 'Organization, Regulation, and Exploitation in the So-Called Urban Informal Sector: The Street Traders of Cali, Colombia' (1978) 6 *World Development* 1161 at 1167; C Moser 'Informal sector or petty commodity production: dualism or independence in urban development' (1978) 6 *World Development Journal* 1041 at 1052.

<sup>134</sup> A Portes 'When More Can Be Less: Labor Standards, Development, and the Informal Economy in C Rakowski (ed) *Contrapunto: The Informal Sector Debate in Latin America* (1994) at 123 and Moser (1978) 6 *World Development Journal* 1041 at 1052.

<sup>135</sup> Bromley (1978) 6 *World Development* 1161 at 1167; Moser (1978) 6 *World Development Journal* 1041 at 1052 and Chen *WIEGO Working Paper 1* at 5.

<sup>136</sup> Portes *Contrapunto: The Informal Sector Debate in Latin America* (1994) at 124; Hilson and Hilson (2015) *International Growth Center Working Paper* at 15 and Chen *WIEGO Working Paper 1* at 5.

The Legalist school emphasises the relationship between the formal regulatory framework and people in the informal economy.<sup>137</sup> Legalists argue that the informal sector is made up of what De Soto calls daringly ‘plucky micro-entrepreneurs’.<sup>138</sup> According to De Soto, micro-entrepreneurs continue to produce informally until the government procedures are no longer cumbersome and costly.<sup>139</sup> People choose to enter the informal economy in an attempt to evade the costs, time and effort that come with formal registration.<sup>140</sup>

This school of thought contends that a ‘hostile legal system’ results in the self-employed operating informally ‘with their own informal extra-legal norms.’<sup>141</sup> Legalists argue that because many people in developing countries operate in *extra-legal* parts of the economy, they do not have legally acknowledged property rights.<sup>142</sup> Governments’ refusal to extend rights to the *extra-legal* parts of the economy results in economic freedom being denied to majority of people in the world.<sup>143</sup> Legalists believe that the poor would be empowered if their ‘informally-held assets were converted into real assets.’<sup>144</sup>

The informal economy is often associated with illegality. But this assumed relationship is usually not clearly defined or understood.<sup>145</sup> For one, it is not entirely clear which aspects of the informal economy are deemed to be illegal. As a result of the complex nature of ASM,<sup>146</sup> scholars have tried to clarify ASM’s definitional complexities by outlining the sector’s informal and illegal nature.<sup>147</sup>

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<sup>137</sup> Chen *WIEGO Working Paper 1* at 6.

<sup>138</sup> De Soto *The mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else* (2003) at 15 and Chen *WIEGO Working Paper 1* at 5.

<sup>139</sup> *Ibid*; Hart (1973) 11 *Journal of Modern African Studies* 61 at 63 and Chen 26(2) *NEW SOLUTIONS: A Journal of Environmental and Occupational Health Policy* at 156.

<sup>140</sup> De Soto *The mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else* (2003) at 15.

<sup>141</sup> Hilson and Hilson (2015) *International Growth Center Working Paper* at 15 and De Soto *The mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else* (2003) at 15.

<sup>142</sup> Hart (1973) 11 *Journal of Modern African Studies* 61 at 63; De Soto *The mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else* (2003) at 5.

<sup>143</sup> Chen 26(2) *NEW SOLUTIONS: A Journal of Environmental and Occupational Health Policy* at 157 and De Soto *The mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else* (2003) at 35.

<sup>144</sup> Hilson and Hilson (2015) *International Growth Center Working Paper* at 15.

<sup>145</sup> Buxton (2013) *IIED Sustainable Markets Paper* at 1.

<sup>146</sup> Hart (1973) 11 *Journal of Modern African Studies* 61 at 63; Chen 26(2) *NEW SOLUTIONS: A Journal of Environmental and Occupational Health Policy* at 156 and Buxton (2013) *IIED Sustainable Markets Paper* at 1.

<sup>147</sup> Buxton (2013) *IIED Sustainable Markets Paper* at 1.

The literature on ASM is extensive and often refers to ‘informal’ mining and ‘illegal’ mining, respectively. Understanding this difference is necessary to clarify the meaning of ASM and activities thereunder. In fact, the World Bank used both the terms ‘informal’ and ‘illegal’ when it initially spoke about artisanal mining at the *International Roundtable on Artisanal Mining* in 1995.<sup>148</sup> It is necessary to engage with the two different descriptions of artisanal mining for the purpose of this dissertation.

### 3. Informal vs. Illegal

The understanding and definitions of illegal and informal mining are often not well defined and clear-cut, varying across countries and regions.<sup>149</sup> There are, however, contextual distinctions that should be understood for the ASM sector to develop and apply good policies and laws.<sup>150</sup>

Illegality exists where an economic activity or unit is seen to be violating any existing regulation, statute or ordinance.<sup>151</sup> However, such a violation can vary from being a criminal activity, such as dealing in illicit goods, to non-compliance, such as selling goods without the appropriate licence.<sup>152</sup> On the other hand, the informal workplace comprises of informal economic units which are unincorporated (meaning that they are not distinct legal entities) and may not be registered with the relevant local authorities.<sup>153</sup> As it currently stands, illegality within the mining sectors covers all aspects of unpermitted mining.<sup>154</sup> This understanding, therefore, does not allow for one to differentiate between the informal mining community and invasive illegal mining.

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<sup>148</sup> The World bank referred to artisanal mining as: ‘the most primitive type of **informal**, small-scale mining, characterized by individuals or groups of individuals exploiting deposits – usually **illegally** – with the simplest equipment.’ See M Barry ‘Regularizing Informal Mining: A Summary of the Proceedings of the International Roundtable on Artisanal Mining’ (1996) *World Bank Industry and Energy Department Occasional Paper No. 6* at 17.

<sup>149</sup> Buxton (2013) *IIED Sustainable Markets Paper* at 1.

<sup>150</sup> Chen 26(2) *NEW SOLUTIONS: A Journal of Environmental and Occupational Health Policy* at 156.

<sup>151</sup> Chen *WIEGO Working Paper 1* at 6.

<sup>152</sup> Verick *The Impact of Globalization of the Informal Sector in Africa* (2008) at 4-5.

<sup>153</sup> Hart (1973) 11 *Journal of Modern African Studies* 61 at 63; Chen *WIEGO Working Paper 1* at 5.

<sup>154</sup> Chen 26(2) *NEW SOLUTIONS: A Journal of Environmental and Occupational Health Policy* at 156.

Most ASM activities form part of the informal sector.<sup>155</sup> There are two types of informal mining.<sup>156</sup> The first is when the miners operate *without* an ‘*applicable*’ legal framework.<sup>157</sup> Operating without an *applicable* framework occurs when the regulations and policies in place do not cater for artisanal mining specifically.<sup>158</sup> For example, at the time of writing, South Africa’s mining legislation, the Mining and Petroleum Resource Development Act (MPRDA),<sup>159</sup> only caters for small-scale mining and does not explicitly recognise artisanal mining as legal under small-scale mining operations.<sup>160</sup> Therefore, artisanal miners are operating in a space that does not have regulations that specifically cater for their activities, thus making their ASM activities illegal.<sup>161</sup>

The second type of informal mining is when miners operate *outside of* an existing ‘*appropriate*’ legal framework.<sup>162</sup> Two elements are relevant here: the first relates to the external nature of the mining operation, and the second element relates to the assumption that the legal framework which governs ASM activities is appropriate. It is this second type of informal mining where illegal mining activities take place. This occurs when mining operators do not comply with the legal obligations because the obligations are (seen to be) too onerous.<sup>163</sup> Hence, mining operators fail to acquire legal authorisation for their mining activities and, instead, operate informally without the required authorisation.<sup>164</sup> Without the mandatory legal authorisation, the mining operation is clearly illegal.<sup>165</sup> For example, the DRC’s Mining Code regulates artisanal

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<sup>155</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 1 and Hentschel, Hruschka and Priester (2003) *IIED Report* at 8.

<sup>156</sup> Buxton (2013) *IIED Sustainable Markets Paper* at 4.

<sup>157</sup> *Ibid.*

<sup>158</sup> B Marshall and M Veiga ‘Formalisation of artisanal miners: Stop the train, we need to get off!’ (2017) 4(2) *The Extractive Industries and Society* 300 at 301.

<sup>159</sup> Mineral and Petroleum Resource Development Act No. 28 of 2002 (hereafter MPRDA).

<sup>160</sup> P Ledwaba and N Mutemeri (2017) ‘Preliminary Study on Artisanal and Small-Scale Mining in South Africa’ Report prepared for Open Society Foundation for South Africa (OFS-SA) by the Centre for Sustainability in Mining and Industry (CSMI) at 7-8 and Buxton (2013) *IIED Sustainable Markets Paper* at 5.

<sup>161</sup> However, it should be noted that on 5 May 2021, the Department of Mineral Resources published a Draft Artisanal and Small-Scale Mining Policy 2021 for public comment, which seeks to address some of the regulatory gaps and shortfalls of the MPRDA.

<sup>162</sup> Buxton (2013) *IIED Sustainable Markets Paper* at 4.

<sup>163</sup> *Ibid.*

<sup>164</sup> In instances where there are basic formalisation frameworks that ensure some sort of legal recognition to ASM operators, the legal frameworks are often limited to entrepreneurs of ‘advanced’ small-scale mining activities and largely exclude the informal workforce. See B Verbrugge ‘The Economic Logic of Persistent Informality: Artisanal and Small-Scale Mining in the Southern Philippines’ (2015) 46(5) *Development and Change* 1023.

<sup>165</sup> Buxton (2013) *IIED Sustainable Markets Paper* at 4.

mining specifically and stipulates that no mining activity can occur without the requisite authorisation.<sup>166</sup> However, many ASM operators continue to operate without the requisite legal authorisation and thus operate illegally.<sup>167</sup>

Evidently, there is an overlap between informal mining and illegal mining, which is apparent in the second type of informal mining definition, i.e., when a miner contravenes the *appropriate* legal framework, thus intending to commit a crime.<sup>168</sup> When a miner operates outside the already established legal framework, he essentially chooses to operate illegally. This type of mining operator is juxtaposed to those legal operators who operate within the aforementioned legal framework.<sup>169</sup> Operating outside of the applicable legal framework is clearly illegal due to lack of authorisation.

However, one must question what would happen in a situation where the legal framework is regarded as *inappropriate* and simply does not cater for a particular kind of activity. Does this mean that without an appropriate legal framework and in instances where artisanal miners are not catered for effectively, they are entitled to operate outside of the formal system without the activity being rendered illegal? For example, some governments refrain from creating appropriate frameworks for legalising the ASM sector due to a lack of political will.<sup>170</sup>

Lack of political will is often driven by money laundering, tax evasion, personal interests linked to corruption and similar illegal activities, which are facilitated by the informal status of the ASM sector.<sup>171</sup> The informal status of the ASM sector has allowed an unregulated space to develop, wherein governments' actions go unscrutinised.<sup>172</sup> In countries where governments do not want to acknowledge ASM activities, mining operations predominately remain informal, and hence illegal.<sup>173</sup>

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<sup>166</sup> Mining Code Law no. 18/001 at Article 5.

<sup>167</sup> Geenen 37 *Resource Policy* 322 at 325-326.

<sup>168</sup> Buxton (2013) *IIED Sustainable Markets Paper* at 4.

<sup>169</sup> Chen 26(2) *NEW SOLUTIONS: A Journal of Environmental and Occupational Health Policy* at 156.

<sup>170</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 11.

<sup>171</sup> *Ibid.*

<sup>172</sup> Chen 26(2) *NEW SOLUTIONS: A Journal of Environmental and Occupational Health Policy* at 156 and Hentschel, Hruschka and Priester (2003) *IIED Report* at 11.

<sup>173</sup> Perks (2011) 23 *Journal of International Development* 1115 at 1125; Pact *PROMINES study* at 22 and Hentschel, Hruschka and Priester (2003) *IIED Report* at 9.

There are cases in sub-Saharan Africa where small-scale miners operate within a legal framework.<sup>174</sup> This occurs when mine operators comply with the legal conditions and obtain the necessary mining permits, pay taxes, hold land titles and are subject to certain environmental and social regulations.<sup>175</sup> This is known as 'legal' ASM. For example, in June 2018, many illegal diamond miners in Kimberley, South Africa, were granted mining permits by the Department of Mineral Resources as one of its first initiatives in formalising artisanal mining.<sup>176</sup> This milestone was reached as a result of lengthy negotiations between all relevant parties, which included the provincial government of the Northern Cape, Kimberley Artisanal Mineworkers and the site owners, being Kimberley Ekapa Mining JV. These permits have not only given the miners legal access to 500 hectares of land in Kimberley but also changed these miners' status from illegal to legal.<sup>177</sup> Artisanal Miners who have been granted a mining permit are now able to operate legally, which allows them to sell their diamonds openly on the market.<sup>178</sup>

A more recent example occurred in October 2019, when Petra Diamonds launched an ASM initiative in Koffiefontein, South Africa.<sup>179</sup> In this instance, Petra Diamonds made provisions for some of its tailings mineral resources, referred to as the Eskom dump, to be available for artisanal miners from the surrounding community.<sup>180</sup> This initiative is intended to regulate ASM activities properly, ensuring that ASM operators comply with the Kimberley Process Certification Scheme as well as other standards set by the UN.<sup>181</sup> This is an interesting scenario, as ASM will coexist with the regulated LSM in an area typically marginal for the LSM. This is because the area requires capital and

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<sup>174</sup> Geenen (2014) 40 *Resource Policy* 90 at 91 and Hentschel, Hruschka and Priester (2003) *IIED Report* at 8.

<sup>175</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 8 and Buxton (2013) *IIED Sustainable Markets Paper* at 5.

<sup>176</sup> M Swart 'More than 830 will be issued permits to mine' available at <https://www.dfa.co.za/news/more-than-830-will-be-issued-permits-to-mine/>, accessed on May 19 2018.

<sup>177</sup> Swart 'More than 830 will be issued permits to mine' available at <https://www.dfa.co.za/news/more-than-830-will-be-issued-permits-to-mine/>, accessed on May 19 2018.

<sup>178</sup> *Ibid.*

<sup>179</sup> Mining Technology 'Petra Diamonds launches ASM initiative in Koffiefontein, South Africa' available at <https://www.mining-technology.com/news/petra-diamonds-launches-asm-initiative-in-koffiefontein-south-africa/>, accessed on 5 November 2019.

<sup>180</sup> Rapaport News 'Petra Launches Artisanal mining at South African Site' available at <https://www.diamonds.net/news/NewsItem.aspx?ArticleID=64309>, accessed on 5 November 2019.

<sup>181</sup> Mining Technology 'Petra Diamonds launches ASM initiative in Koffiefontein, South Africa' available at <https://www.mining-technology.com/news/petra-diamonds-launches-asm-initiative-in-koffiefontein-south-africa/>, accessed on 5 November 2019.

overhead costs, yet it is highly conducive to labour intensive hand-picking of the ore by ASM.<sup>182</sup>

Informality continues to be one of the ASM sector's defining features.<sup>183</sup> After reviewing the literature, the term 'informal' for the purpose of this dissertation will be used when discussing those miners working outside of the legal regime.

#### 4. What is Formalisation

As a result of the ASM sector's pervasive informality, many sub-Saharan Africa governments have prioritised formalising their ASM sector.<sup>184</sup> Formalisation has been defined as a 'process of bringing informal income-earning activities and economies such as ASM into the formal sector through legal, regulatory and policy frameworks.'<sup>185</sup> Governments believe that bringing informal ASM activities into legal perimeters requires formalisation. Hilson and Maconachie point out that 'the push to formalise ASM has never been greater.'<sup>186</sup>

A consensus has emerged amongst scholars and practitioners that the ASM sector serves two main objectives.<sup>187</sup> Firstly, formalisation could help transform the ASM into a formal, organised and profitable activity.<sup>188</sup> This may allow for more efficient technologies to be used, which are environmentally and socially responsible.<sup>189</sup> Secondly, formalising the ASM sector could ensure that the sector develops within the

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<sup>182</sup> Rapaport News 'Petra Launches Artisanal mining at South African Site' available at <https://www.diamonds.net/news/NewsItem.aspx?ArticleID=64309>, accessed on 5 November 2019.

<sup>183</sup> Verbrugge (2015) 46(5) *Development and Change* 1023 at 1025; S Siegel and M Veiga 'Artisanal and Small-Scale Mining as an Extra-legal Economy: De Soto and the Redefinition of Formalisation' (2007) 34(1) *Resources Policy* 51 at 51.

<sup>184</sup> Hilson and McQuilken (2014) 1 *The Extractive Industries and Society* 104 at 105-106 and Hilson and Maconachie (2017) 49 *Area* 443 at 443; Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 49.

<sup>185</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) *Ibid* at 49.

<sup>186</sup> Hilson and Maconachie (2017) 49 *Area* 443 at 443.

<sup>187</sup> Siegel and Veiga (2007) 34(1) *Resources Policy* 51 at 52.

<sup>188</sup> E Fisher 'Occupying the Margins: Labour Integration and Social Exclusion in Artisanal Mining in Tanzania' (2007) 38 *Development and Change* 735 at 736 and Siegel and Veiga (2007) 34(1) *Resources Policy* 51 at 53.

<sup>189</sup> Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 20.

context of legality, good governance, effective participation and overall respect for diversity.<sup>190</sup>

However, formalisation efforts need to go beyond merely attempting to regulate and legalise economic activities. It must also ensure that regulations are activated, monitored and enforced and they are suitably in tune with local contexts and communities.<sup>191</sup> Formalisation should also ensure that marginalised miners are included in the process of trying to develop, adapt and revise legal frameworks and that these miners are supported in a way that enables them to meet such regulatory obligations.<sup>192</sup> An effective formalisation process should produce the enabling conditions in a sector, which allow the sector to be successfully incorporated into the formal economy.<sup>193</sup>

However, both the meaning of formalisation and the way it is able to specifically contribute to the livelihoods of miners is a misnomer as most formalisation efforts have yet to positively impact countries.<sup>194</sup> A disparity exists between what governments believe they are formalising and what ASM actually is. Many contradictions are inherent in the formalisation drive and governments have failed to recognise the different dimensions of ASM activities.

This primary problem with wanting to regulate any formal sector is that many governments believe that the answer lies in well-drafted legal legislation, without looking at the root of the problem. To date, most ASM licensing schemes implemented in sub-Saharan African are costly, overly complex and bureaucratic.<sup>195</sup> These regulatory barriers have created systems that are both inaccessible and do not speak to the realities on the ground.<sup>196</sup> Many policymakers fail to focus on the real

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<sup>190</sup> Fisher (2007) 38 *Development and Change* 735 at 736; Siwale and Siwale (2017) 4 *The Extractive Industries and Society* 191 at 191 and Hilson and Hilson (2015) *International Growth Center Working Paper* at 10-11.

<sup>191</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 49.

<sup>192</sup> *Ibid.*

<sup>193</sup> *Ibid* at 50.

<sup>194</sup> Fisher (2007) 38 *Development and Change* 735 at 736 and Marshall and Veiga (2017) 4(2) *The Extractive Industries and Society* 300 at 301.

<sup>195</sup> G Hilson, T Zolnikov, D Ortiz and C Kumah 'Formalizing artisanal gold mining under the Minamata convention: Previewing the challenge in Sub-Saharan Africa' (2018) 85 *Environmental Science and Policy* 123 at 128.

<sup>196</sup> *Ibid* at 129.

fundamental characteristics of ASM.<sup>197</sup> Most ASM legal frameworks do not take into account the diversity of ASM operations and are merely punitive in nature.<sup>198</sup> This notion that governments cannot solve the problems stemming from illegal ASM activities without addressing the underlying issue, will be discussed in more detail in part four of this dissertation.<sup>199</sup>

## 5. The Overlap Between Large-scale Mining and Artisanal and Small-scale Mining

To appreciate the nature and concept of artisanal mining, one needs to understand the dual nature of the mining sector. The interface of the large-scale mining (LSM) sector and the ASM sector cannot be overlooked. One cannot divorce LSM and ASM, as both mining sectors find themselves operating in a shared physical environment and competing for the same resources.<sup>200</sup>

Many countries with significant mineral resources and a large mining presence, especially developing countries, have seen a rise in the emergence of a dual economy within the mining sector.<sup>201</sup> This dual economy involves an economic segmentation that has LSM on the one hand and ASM on the other.<sup>202</sup> This economic segmentation of the mining sector is clearly illustrated in figure two below.

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<sup>197</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 51.

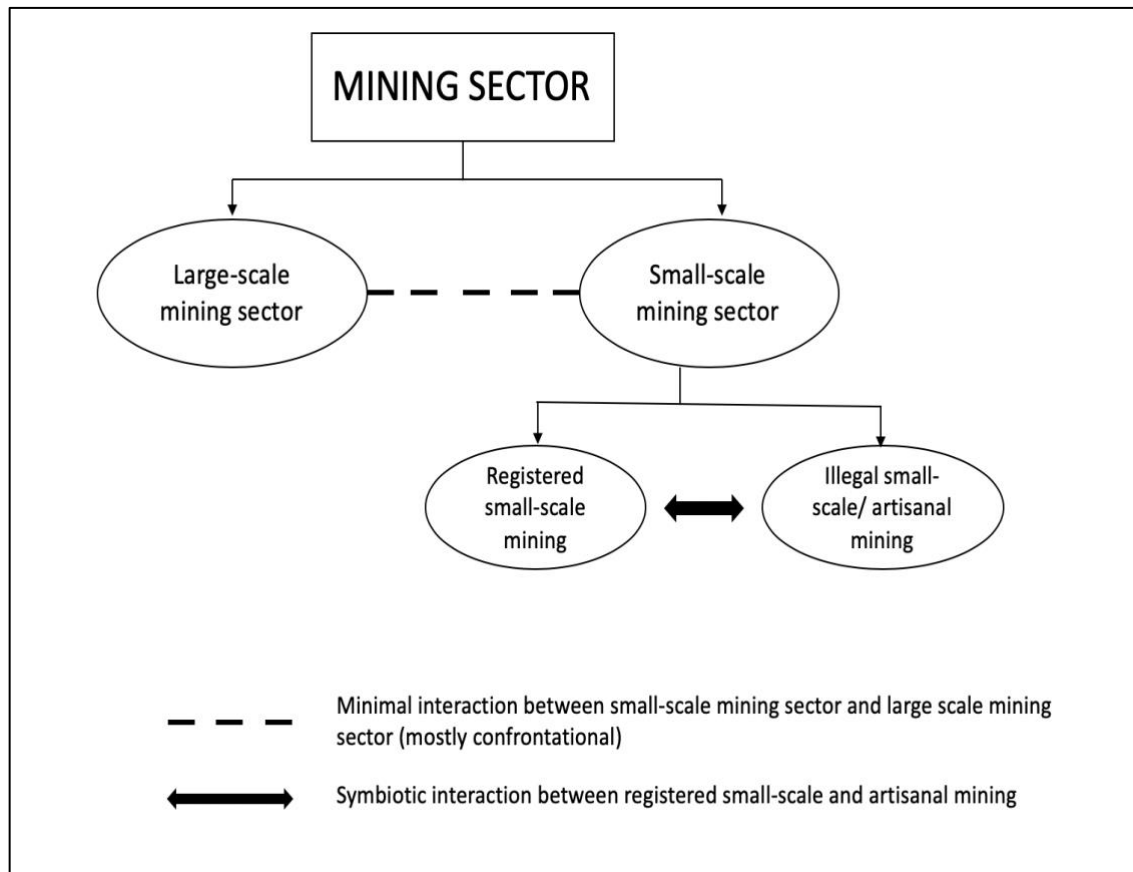
<sup>198</sup> Ibid.

<sup>199</sup> See discussion at part 4 of the thesis below.

<sup>200</sup> D Kemp and J Owen 'Characterising the interface between large and small-scale mining' (2019) 6 *The Extractive Industries and Society* 1091 at 1091.

<sup>201</sup> Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 9 and Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 52.

<sup>202</sup> Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 9 and Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 52.



**Figure 2:** economic segmentation of the mining sector

LSM is usually associated with ‘multi-national or multi-site companies, embedded in global capital and finance markets, and part of the international supply of mineral and metals commodities.’<sup>203</sup> Because of mining reforms across the globe, but specifically in sub-Saharan Africa (as will be discussed in the next chapter),<sup>204</sup> many ASM sectors remain socially excluded,<sup>205</sup> unable to participate fully in the formal economy.<sup>206</sup> While the LSM sector enjoys overwhelming government and other institutional support, including the World Bank and African Development Bank, ASM, by contrast, remains

<sup>203</sup> Kemp and Owen (2019) 6 *The Extractive Industries and Society* 1091at 1092.

<sup>204</sup> See discussion at chapter 3.

<sup>205</sup> Social exclusion occurs when a situation exists that prevents groups and individuals from asserting their rights. Such people are unable to fully participate in social, political or economic decisions that affect them.

<sup>206</sup> Banchirigah (2006) 31 *Resources Policy* 165 at 169 and Kemp and Owen (2019) 6 *The Extractive Industries and Society* 1091at 1093.

largely marginalised and ignored.<sup>207</sup> Consequently, the LSM sector and ASM sector have developed separately from one another.<sup>208</sup>

However, the ASM and LSM sectors are often brought together to compete for the same resources.<sup>209</sup> More often than not, licenced and unlicenced operators interact with each other by competing for and operating in the same areas of production, aspiring to obtain ‘the same support services.’<sup>210</sup> This informs the argument, as discussed above,<sup>211</sup> that both these sectors are ‘inextricably connected and interdependent.’<sup>212</sup> For example, in South Africa, many illegal miners will carry out their mining operations in abandoned mines that were once used for LSM.<sup>213</sup> Miners will enter an abandoned shaft to try and retrieve residual mineral ore.<sup>214</sup> Similarly, many LSM operations started by exploring areas and proving up resources that were initially discovered and explored by ASM.<sup>215</sup>

A case in point is noted at the Bisie tin mine in North Kivu, Eastern DRC. Artisanal miners discovered and exploited the surface and shallow tin ore (cassiterite).<sup>216</sup> The same deposit was then acquired by an LSM company, namely Alphamin Resources, which developed a mine on the deeper underground deposit.<sup>217</sup> The company came

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<sup>207</sup> Fisher (2007) 38 *Development and Change* 735 at 738; Banchirigah (2006) 31 *Resources Policy* 165 at 169.

<sup>208</sup> Chen *WIEGO Working Paper 1* at 4-5.

<sup>209</sup> R Kumar and D Amaratunga ‘Government policies towards small-scale mining’ (1994) 20 *Resource Policy* 15 at 16.

<sup>210</sup> Hilson and Hilson (2015) *International Growth Center Working Paper* at 12-1 and Kemp and Owen (2019) 6 *The Extractive Industries and Society* 1091 at 1093.

<sup>211</sup> See prior discussion at this section 5 (above).

<sup>212</sup> Hilson and Hilson (2015) *International Growth Center Working Paper* at 13.

<sup>213</sup> C Johnson ‘Lethal toll of informal gold mining’ available at <https://www.groundup.org.za/article/lethal-toll-informal-gold-mining/>, accessed on 20 May 2018.

<sup>214</sup> P Ledwaba and N Mutemeri ‘Institutional gaps and challenges in artisanal and small-scale mining in South Africa’ (2018) 56 *Resource Policy* 141 at 142 and Johnson ‘Lethal toll of informal gold mining’ available at <https://www.groundup.org.za/article/lethal-toll-informal-gold-mining/>, accessed on 20 May 2018.

<sup>215</sup> N Mutemeri and F Petersen ‘Small-scale mining in South Africa: Past, present and future’ (2002) 26 *Natural Resources Forum* 286 at 287 and Johnson ‘Lethal toll of informal gold mining’ available at <https://www.groundup.org.za/article/lethal-toll-informal-gold-mining/>, accessed on 20 May 2018.

<sup>216</sup> N Odendaal ‘Alphamin’s Bisie mine on track for 2019 production’ available at <https://alphaminresources.com/2017/10/26/alphamins-bisie-mine-on-track-for-2019-production/>, accessed on 9 January 2021.

<sup>217</sup> Mining Review Africa ‘Alphamin Resources; Bisie tin mine a beacon of hope’ available at <https://www.miningreview.com/battery-metals/alphamin-resources-bisie-tin-mine-a-beacon-of-hope/>, accessed on 9 January 2021.

to an arrangement with the artisanal miners, whereby they could continue to exploit the shallow surface workings adjacent to the mine.<sup>218</sup>

Figure two above reveals that a further duality exists within the Small-Scale Mining sector, which involves registered small-scale mining and illegal small-scale mining. Registered small-scale mining occurs when an operator has a registered business, which is usually, but not always, accompanied by the appropriate mining licences or legal titles to the land.<sup>219</sup> By contrast, illegal small-scale mining operators are often referred to as ‘artisanal miners,’ operating illegally on land to which they hold no legal title.<sup>220</sup> Nonetheless, registered small-scale miners and illegal small-scale mining frequently conduct their operations side by side, as ‘some informal operators rely mainly on tailing<sup>221</sup> from formal mining operations.’<sup>222</sup>

## 6. Conclusion

The artisanal mining sector is commonly associated with what is known as the ‘informal economy.’<sup>223</sup> Like those ASM activities found in the DRC, most ASM sectors in sub-Saharan Africa fall into this so-called ‘informal economy,’ operating outside of legal parameters.<sup>224</sup> Although illegality and informality differ, the two cannot be separated in the context of artisanal mining. Many miners within the informal economy operate illegally. When a miner operates outside the already established legal framework, he essentially chooses to operate illegally, sometimes with no other option.<sup>225</sup>

Informality, and hence illegality, within the artisanal mining sector, has the consequence of creating negative socio-economic, environmental and health

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<sup>218</sup> Ibid and Odendaal ‘Alphamin’s Bisie mine on track for 2019 production’ available at <https://alphaminresources.com/2017/10/26/alphamins-bisie-mine-on-track-for-2019-production/>, accessed on 9 January 2021.

<sup>219</sup> Hilson, Hilson, Maconachie, McQuilken and Goumandakoye (2017) 83 *Geoforum* 80 at 81 and Kumar and Amaratunga (1994) 20 *Resource Policy* 15 at 16.

<sup>220</sup> Kumar and Amaratunga (1994) 20 *Resource Policy* 15 at 16 and Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 5.

<sup>221</sup> Tailings are the residue of any product that has been mined. They are usually the ore waste of mines.

<sup>222</sup> Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 11.

<sup>223</sup> Verick *The Impact of Globalization of the Informal Sector in Africa* (2008) at 4.

<sup>224</sup> Ibid.

<sup>225</sup> Buxton (2013) *IIED Sustainable Markets Paper* at 4

implications.<sup>226</sup> Numerous scholars argue that the ASM sector's informality enables the sector to develop such that its negative social and environmental impacts overshadow its wealth-creating potential.<sup>227</sup> It is the informality of this sector which poses risks to the stability, security and good governance of a country.<sup>228</sup> This is a reflection of many artisanal miners operating without legal access to mineral rights or the land.<sup>229</sup>

In addition, one cannot talk about the nature of artisanal mining without a clear understanding of the relationship between LSM and ASM. The two compete for the same resources and cannot be divorced from one another. Nevertheless, a clear distinction has emerged between ASM and LSM, with the latter enjoying overwhelming support from the government and various institutions. Despite its illegal status, the ASM sector continues to grow. This is because ASM activities not only contribute to the national economies within sub-Saharan Africa but also provides employment for a wide variety of often-marginalised people.

A working definition of ASM is needed to gain a holistic understanding of the artisanal mining sector. To settle on such a definition, it is necessary to examine how ASM has been defined thus far by different global institutions. The next chapter will, therefore, examine the different workable definitions of ASM used by the World Bank and African Union and ascertain a suitable definition of ASM to be used throughout this dissertation.

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<sup>226</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 5.

<sup>227</sup> Hilson, Hilson, Maconachie, McQuilken and Goumandakoye (2017) 83 *Geoforum* 80 at 81; Hilson and McQuilken (2014) 1 *The Extractive Industries and Society* 104 at 105-106; Hilson and Hilson (2015) *International Growth Center Working Paper* at 3-5.

<sup>228</sup> Singo and Seguin (2018) *IMPACT* at 4 and Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 6.

<sup>229</sup> Singo and Seguin (2018) *IMPACT* at 5 and Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 6.

# CHAPTER 3: DEFINING ARTISANAL AND SMALL-SCALE MINING

## 1. Introduction

Numerous countries have defined ASM differently in their Mining Acts or Mining Codes.<sup>230</sup> Consequently, a plethora of definitions exist.<sup>231</sup> A commonly accepted definition of ASM is yet to be established across all jurisdictions.<sup>232</sup> Whilst some jurisdictions in sub-Saharan Africa provide a clear definition and acknowledge ASM activities in their Mining Codes or Charters, such as the DRC,<sup>233</sup> other jurisdictions do not. It is, therefore, difficult to provide a context-sensitive definition.

For example, one of the biggest problems in South Africa's mining legislation, the Mining and Petroleum Resource Development Act 28 of 2002 (MPRDA), is that artisanal mining is not clearly defined.<sup>234</sup> The MPRDA does not provide a distinction between skilled artisanal miners, who are 'not legally acknowledged in legislation, and miners involved in illegal syndicates.'<sup>235</sup> In terms of the MPRDA, mining activities conducted outside of the legal provisions are automatically seen to be illegal, resulting in most artisanal mining operations being deemed unlawful.<sup>236</sup> Even though there has been some recognition of artisanal mining in South Africa in the last two years,<sup>237</sup> the artisanal mining sector remains largely informal and unregulated.<sup>238</sup> The reality in

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<sup>230</sup> M Barreto, P Schein, J Hinton and F Hruschka 'The Impact of Small-Scale Mining Operations on Economies and Livelihoods in Low-to Middle-Income Countries' (2018) *EARF* at 4-7.

<sup>231</sup> *Ibid.*

<sup>232</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 5 and Singo and Seguin (2018) *IMPACT* at 4 and Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 6

<sup>233</sup> Mining Code Law no. 18/001 at Article 1.

<sup>234</sup> N Mutemeri, N Sellick, and M Hudson 'The Status of Small-scale Mining in South Africa: tracking progress' (2017) 117(1) *Journal of the Southern African Institute of Mining and Metallurgy* 33 at 34.

<sup>235</sup> MPRDA at section 5; Mutemeri and Petersen Report prepared for Open Society Foundation for South Africa (OFS-SA) at 286.

<sup>236</sup> *Ibid* and Z Mkubukeli and R Tengeh 'Small-scale mining in South Africa: an assessment of the success factors and support structures for entrepreneurs' (2015) 6 *Environmental Economics* 15 at 16.

<sup>237</sup> In June 2018, thousands of illegal diamond miners in Kimberley, South Africa, were granted mining permits by the department of mineral resources as one of the first SA initiative in formalizing artisanal mining. See Swart.

<sup>238</sup> Mkubukeli and Tengeh (2015) 6 *Environmental Economics* 15 at 16.

South Africa is in direct contrast with other African jurisdictions, where artisanal mining is explicitly given legal status.<sup>239</sup>

The absence of a common ASM definition is hardly surprising considering that each country has a different mining history and legal framework, as well as varied demographic landholding, geological conditions, political ideologies and macro-economic situations.<sup>240</sup> The fact that no universal definition of ASM has been established makes it challenging to outline a common understanding of exactly which activities qualify as ASM activities and who is generally seen to be an artisanal miner.<sup>241</sup> There have nevertheless been frequent attempts by global institutions to find a universal definition of ASM.<sup>242</sup> For the purpose of finding a workable definition to be used throughout this dissertation, these universal definitions of ASM will be discussed in more detail below.

## 2. Global Understanding of Artisanal and Small-scale Mining

Global institutions, such as the World Bank and African Union, have attempted to create their own workable definitions that have been recycled by various scholars throughout the years.<sup>243</sup> By evaluating two different types of institutions, which have different political views and opinions, a proper understanding of the concept of ASM can be ascertained for purposes of this dissertation.

### 2.1 The World Bank

The World Bank was one of the first institutions to highlight the importance of the ASM sector in developing countries.<sup>244</sup> Already in the late 1970s, the World Bank had started to allocate funds for formalising and assisting the ASM sector within developing

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<sup>239</sup> Barreto, Schein, Hinton and Hruschka (2018) *EARF* at 4-7.

<sup>240</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 6.

<sup>241</sup> N Mutemeri, J Walker, N Coulson and I Watson 'Capacity building for self-regulation of the Artisanal and Small-Scale Mining (ASM) sector: A policy paradigm shift aligned with development outcomes and a pro-poor approach' (2016) 3 *The Extractive Industries and Society* 653 at 654; Hentschel, Hruschka and Priester (2003) *IIED Report* at 7.

<sup>242</sup> Buxton (2013) *IIED Sustainable Markets Paper* at 1.

<sup>243</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 7.

<sup>244</sup> Banchirigah (2006) 31 *Resources Policy* 165 at 165 and Singo and Seguin (2018) *IMPACT* at 4 and Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 6.

countries.<sup>245</sup> The World Bank's actions were in response to a landmark UN report, 'Small-Scale Mining in Developing Countries', which was published in 1972.<sup>246</sup> This report was the first of its kind, ensuring that the ASM sector was put on the international development agenda.<sup>247</sup> It is for this reason that the World Bank's definition has gained such prominence.

In 1978 the World Bank exposed the dynamic nature of ASM and in the process highlighted the difficulty with creating a universal, all-encompassing definition of ASM.<sup>248</sup> According to the World Bank, ASM can 'vary from a one-man operation, involving handpicking of minerals from a waste dump, to a highly mechanised and efficient operation with good management.'<sup>249</sup> Furthermore, this type of mining is usually characterised by 'labour intensive and inefficient work methods, inefficient exploitation of deposits, substandard work conditions, poor management, and uncertain output.'<sup>250</sup> However, the World Bank notes that despite its nature, ASM can fundamentally contribute to the economy by offering a livelihood, especially in those remote regions where there are no other sources of employment.<sup>251</sup>

The World Bank tended to view the ASM sector as a sector engaged by businessmen looking to accumulate wealth.<sup>252</sup> For the World Bank, this is explained as the reason why people pursued employment in ASM.<sup>253</sup> This get-rich-quick narrative was only challenged in the mid-1990s at the 'International Roundtable on Artisanal Mining' in 1995.<sup>254</sup> However, by this time, the get-rich-quick narrative had already influenced

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<sup>245</sup> G Hilson 'Artisanal Mining, Smallholder Farming and Livelihood Diversification in Rural Sub-Saharan Africa: An Introduction' (2011) (23)(8) *Journal of International Development* 1031 at 1031.

<sup>246</sup> United Nations Department of Economic and Social Affairs *Small-Scale Mining in the Developing Countries* (1972) and Hilson (2011) (23)(8) *Journal of International Development* 1031 at 1032.

<sup>247</sup> Ibid.

<sup>248</sup> Hilson (2011) (23)(8) *Journal of International Development* 1031 at 1033 and Rupprecht (2017) 117 *The Journal of Southern African Institute of Mining and Metallurgy* at 45.

<sup>249</sup> R Bosson and B Varon *The Mining Industry and the Developing Countries* (1978) at 202.

<sup>250</sup> Buxton (2013) *IIED Sustainable Markets Paper* at 1 and Bosson and Varon *The Mining Industry and the Developing Countries* (1978) at 202.

<sup>251</sup> Ibid and Rupprecht (2017) 117 *The Journal of Southern African Institute of Mining and Metallurgy* at 46.

<sup>252</sup> R Noetstaller 'Small-Scale Mining: A Review of the Issues' (1987) *World Bank Technical Paper Number 75, Industry and Finance Series* 23 at 16.

<sup>253</sup> Hilson (2011) (23)(8) *Journal of International Development* 1031 at 1033 and Noetstaller (1987) *World Bank Technical Paper Number 75, Industry and Finance Series* 23 at 16.

<sup>254</sup> Barry (1996) *World Bank Industry and Energy Department Occasional Paper No. 6* at 17; Bosson and Varon *The Mining Industry and the Developing Countries* (1978) at 202 and Noetstaller (1987) *World Bank Technical Paper Number 75, Industry and Finance Series* 23 at 16.

many donor and policy-making circles.<sup>255</sup> This popular rhetoric was challenged by contesting that there was a direct link between the rise in ASM activities and household-level hardships.<sup>256</sup> At the Roundtable, the World Bank consolidated the concept of ASM and defined it as ‘manual, low-technology mining conducted on a small scale, predominantly in rural areas of the developing world.’<sup>257</sup>

Most Scholars continue to cite the World Bank’s definition of ASM in their papers.<sup>258</sup> This is hardly surprising, considering that the World Bank is well-known for being one of the largest participants of research and development data.<sup>259</sup> The World Bank plays an integral role in small-scale mining operations in developing countries.<sup>260</sup> The institution provides global knowledge, financing and long-term commitment to help end poverty in low – and middle – income countries.<sup>261</sup>

Ever since the 1970s, the World Bank has been deeply involved in the ASM sector, viewing it as ‘one of the most indispensable – if not *the* most important – rural nonfarm activity in the developing world.’<sup>262</sup> The World Bank has played an important role in assisting national governments in artisanal mining formalisation.<sup>263</sup> In 2002, the World Bank managed and funded an initiative called the Communities and Small-scale Mining (CASM).<sup>264</sup> CASM was created with the aim of reducing poverty by supporting

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<sup>255</sup> Hilson (2011) (23)(8) *Journal of International Development* 1031 at 1033.

<sup>256</sup> Hilson (2011) (23)(8) *Journal of International Development* 1031 at 1033.

<sup>257</sup> Rupprecht (2017) 117 *The Journal of Southern African Institute of Mining and Metallurgy* at 46 and Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 6.

<sup>258</sup> Buxton (2013) *IIED Sustainable Markets Paper* at 2; Banchirigah (2006) 31 *Resources Policy* 165 at 165; Geenen 37 *Resource Policy* 322 at 325-326 and Hilson and McQuilken (2014) 1 *The Extractive Industries and Society* 104 at 105-106.

<sup>259</sup> World Bank (2019) *2019 State of the Artisanal and Small-Scale Mining Sector*, available at <https://www.plataformaintegraldemineria.org/sites/default/files/2019-04/Delve-2019-State-of-the-Artisanal-and-Small-Scale-Mining-Sector.pdf>, accessed on 12 May 2020.

<sup>260</sup> Kumar and Amaratunga (1994) 20 *Resource Policy* 15 at 21.

<sup>261</sup> PACT ‘World Bank and Pact launch first “state of the sector” report for artisanal and small-scale mining’ available at <https://www.pactworld.org/news/world-bank-and-pact-launch-first-‘state-sector’-report-artisanal-and-small-scale-mining>, accessed on 20 May 2020.

<sup>262</sup> Kumar and Amaratunga (1994) 20 *Resource Policy* 15 at 21 and World Bank (2019) *2019 State of the Artisanal and Small-Scale Mining Sector*, available at <https://www.plataformaintegraldemineria.org/sites/default/files/2019-04/Delve-2019-State-of-the-Artisanal-and-Small-Scale-Mining-Sector.pdf>, accessed on 12 May 2020.

<sup>263</sup> World Bank ‘Artisanal and Small-Scale Mining’ available at <https://www.worldbank.org/en/topic/extractiveindustries/brief/artisanal-and-small-scale-mining>, accessed on 12 May 2020.

<sup>264</sup> *Ibid.*

‘the integrated sustainable development’ of communities that have been involved in or impacted by ASM in developing countries.<sup>265</sup>

In addition, a global platform for ASM data, known as Delve, was created by the World Bank’s Extractive Global Programmatic Support (EGPS) together with its partner, Pact.<sup>266</sup> The aim of Delve was to shine a light on the ASM sector and ensure that accurate and reliable ASM data was available.<sup>267</sup> Such data would help to improve both formalisation efforts and increase the livelihoods of the poor.<sup>268</sup> In April 2019, the Delve team published its first report on artisanal and small-scale mining, namely ‘2019 State of the Artisanal and Small-Scale Mining Sector.’<sup>269</sup> This report was created to explore the impact of what is known as the ‘global data gap’ on ASM and highlights the impact of narrowing the gap on formalisation efforts.<sup>270</sup>

## 2.2 The African Union

The African Union is an important pan-African institution, which focuses on poverty alleviation and achieving greater regional integration between African countries.<sup>271</sup> The African Union was founded in 2002, and its establishment led to a resurgence of Pan-African idealism.<sup>272</sup> During this time, there was a realisation that Africa needed to develop a policy framework which focused on the extractive industries, specifically integrating mineral sectors in Africa to broader development strategies.<sup>273</sup>

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<sup>265</sup> World Bank ‘Artisanal and Small-Scale Mining’ available at <https://www.worldbank.org/en/topic/extractiveindustries/brief/artisanal-and-small-scale-mining>, accessed on 12 May 2020.

<sup>266</sup> World Bank ‘Shining a light on a hidden sector’ available at <https://www.worldbank.org/en/news/feature/2019/06/19/shining-a-light-on-a-hidden-sector>, accessed on 10 May 2020.

<sup>267</sup> World Bank ‘Shining a light on a hidden sector’ available at <https://www.worldbank.org/en/news/feature/2019/06/19/shining-a-light-on-a-hidden-sector>, accessed on 10 May 2020; Ofori *Oxfam Briefing Paper* at 4 and Kumar and Amaratunga (1994) 20 *Resource Policy* 15 at 21

<sup>268</sup> World Bank (2019) *2019 State of the Artisanal and Small-Scale Mining Sector*, available at <https://www.plataformaintegraldemineria.org/sites/default/files/2019-04/Delve-2019-State-of-the-Artisanal-and-Small-Scale-Mining-Sector.pdf>, accessed on 12 May 2020.

<sup>269</sup> *Ibid* and Kumar and Amaratunga (1994) 20 *Resource Policy* 15 at 21.

<sup>270</sup> World Bank ‘Shining a light on a hidden sector’ available at <https://www.worldbank.org/en/news/feature/2019/06/19/shining-a-light-on-a-hidden-sector>, accessed on 10 May 2020.

<sup>271</sup> Ofori *Oxfam Briefing Paper* at 5.

<sup>272</sup> *Ibid*.

<sup>273</sup> *Ibid* at 6.

The African Union created a policy framework, known as the African Mining Vision (AMV), which was officially adopted in February 2009 at the African Union summit by the Heads of State.<sup>274</sup> The AMV promotes ‘equitable, broad-based development through prudent exploitation and utilisation of the continent’s natural wealth.’<sup>275</sup>

The AMV is seen as a pathway, formulated by African nations, for continental development through the mining sector.<sup>276</sup> The aim of the AMV is to formulate ‘Africa’s own response to tackling the paradox of great mineral wealth existing side by side with pervasive poverty’.<sup>277</sup> The AMV aspires to create sustainable and well-governed mining sectors that are safe, environmentally friendly and socially responsible.<sup>278</sup> The AMV also recognises the importance of the ASM sector and its ability to help alleviate poverty.<sup>279</sup>

A primary concern for the AMV is artisanal miners and their impact on the African Continent.<sup>280</sup> The main aim of the AMV is to promote equitable and transparent exploitation of Africa’s mineral wealth so as to foster broad-based sustainable socio-economic development and growth.<sup>281</sup>

The AMV speaks at length about ASM activities and its contribution to local economic development.<sup>282</sup> The AMV acknowledges that the ASM sector is a significant contributor to income generation and poverty alleviation.<sup>283</sup> Despite the ASM’s positive impact, the AMV recognises that ASM is beset with numerous challenges, which in turn inhibit the sector from reaching its full developmental potential.<sup>284</sup> These challenges stem from factors such as the limited technical capacity of miners; child

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<sup>274</sup> AMV.

<sup>275</sup> Ibid.

<sup>276</sup> Ibid.

<sup>277</sup> AMV and Kumar; Amaratunga (1994) 20 *Resource Policy* 15 at 21 and Ofori *Oxfam Briefing Paper* at 6.

<sup>278</sup> Ibid at 33 and Geenen and Radley (2014) 62 *Futures* 58 at 63.

<sup>279</sup> AMV at 26 and Kumar and Amaratunga (1994) 20 *Resource Policy* 15 at 21.

<sup>280</sup> Ibid at 27 and Ofori *Oxfam Briefing Paper* at 2.

<sup>281</sup> Ofori *Oxfam Briefing Paper* at 2 and Buxton (2013) *IIED Sustainable Markets Paper* at 2.

<sup>282</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 30 and Ofori *Oxfam Briefing Paper* at 7.

<sup>283</sup> AMV at 27 and Buxton (2013) *IIED Sustainable Markets Paper* at 4.

<sup>284</sup> African Union (2011) ‘African Mining Vision Plan’ available at [https://au.int/sites/default/files/documents/31003-doc-action\\_plan\\_final\\_version\\_jan\\_2012\\_2.pdf](https://au.int/sites/default/files/documents/31003-doc-action_plan_final_version_jan_2012_2.pdf), accessed on 4 May 2018 at 21 (hereafter the African Vision Plan).

labour issues, lack of access to adequate technologies and finance; and inadequate policy and regulatory frameworks.<sup>285</sup>

According to the AMV, governments and organisations attempting to formalise the ASM sector have been constrained by human and financial resources and lack of local infrastructure,<sup>286</sup> which ultimately limits the scope of their intervention and further frustrates their regulatory efforts.<sup>287</sup> The AMV recognises that these challenges create a situation in which small-scale miners are required to carry out subsistence mining operations to survive. Such mining operations have substantial negative consequences on human lives as well as the environment.<sup>288</sup>

The AMV notes that most miners in the ASM sector lack security of tenure as well as access to high-quality and mineable resources.<sup>289</sup> Consequently, artisanal miners are unable to generate sufficient revenue or use their mineral rights as a means of security to help fund or 'enter into joint ventures with other competent mining partners.'<sup>290</sup> The miners also have little or no access to financial resources, as banks and other financial institutions are reluctant to provide loans or financial assistance to an unregulated ASM sector.<sup>291</sup> It acknowledges that by mitigating the negative impacts flowing from the ASM sector, the sector will be able to contribute significantly to maximizing poverty reduction, thereby creating resilient communities.<sup>292</sup> This is in line with one of the AMV's ultimate goals of eradicating poverty.<sup>293</sup>

The AMV is formulated on the belief that, if the various ASM sectors throughout sub-Saharan Africa were to be formalised, these countries would be able to align themselves better with one another and collectively transform the sector.<sup>294</sup> Such a

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<sup>285</sup> African Union (2011) 'African Mining Vision Plan' available at [https://au.int/sites/default/files/documents/31003-doc-action\\_plan\\_final\\_version\\_jan\\_2012\\_2.pdf](https://au.int/sites/default/files/documents/31003-doc-action_plan_final_version_jan_2012_2.pdf), accessed on 4 May 2018 at 21 (hereafter the African Vision Plan).

<sup>286</sup> See discussion at chapter 6 below and Geenen and Radley (2014) 62 *Futures* 58 at 63.

<sup>287</sup> AMV at 27.

<sup>288</sup> African Mining Vision Plan.

<sup>289</sup> AMV at 27.

<sup>290</sup> AMV at 27.

<sup>291</sup> AMV at 27.

<sup>292</sup> AMV at 27.

<sup>293</sup> African Mining Vision Plan.

<sup>294</sup> *Ibid.*

move would directly maximise the potential of regional integration,<sup>295</sup> a concept which will be discussed in more detail below. The AMV notes that for this to happen, there is a need to formalise ASM activities throughout Africa, thereby promoting continental harmonization of mining regimes, a key objective in terms of the AMV.<sup>296</sup>

The abovementioned considerations pave the way for the definition of ASM coming out of the AMV. Like the World Bank, the AMV recognises ASM as an activity that is rudimentary in nature.<sup>297</sup> Miners work from a low capital and asset base with unsophisticated tools such as shovels, wheelbarrows and picks and limited mechanised equipment.<sup>298</sup> However, the AMV goes further and views artisanal mining as a ‘precursor’ to large-scale mines.<sup>299</sup> The AMV acknowledges that the ASM sector is often used by small-scale miners as a platform to exploit deposits, which are not usually amenable to LSM.<sup>300</sup>

### 2.3 Political Stances

It is evident that both the World Bank and AMV definitions have some similarities, in particular, the recognition that ASM activities are intrinsically linked to poverty and the developing world.<sup>301</sup> Both recognise the potential of ASM as a means of employment and financial growth for millions of impoverished people and both promote formalisation of the ASM sector.<sup>302</sup> The World Bank and African Union also acknowledge the difficulty in creating an all-inclusive definition of ASM and recognises the need for each country’s government to tailor artisanal mining formalisation.<sup>303</sup> However, the World Bank and the AMV, through the African Union, have different aims and a different focus on the various criteria. These differences can be attributed to varying political stances.

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<sup>295</sup> African Mining Vision Plan.

<sup>296</sup> AMV at 32-33.

<sup>297</sup> AMV at 27.

<sup>298</sup> AMV at 27.

<sup>299</sup> Ibid at 26.

<sup>300</sup> Ibid at 26.

<sup>301</sup> Ibid at 27 and Bosson and Varon *The Mining Industry and the Developing Countries* (1978) at 202.

<sup>302</sup> Ibid.

<sup>303</sup> Ofori *Oxfam Briefing Paper* at 46.

The AMV heavily focuses on the ASM sector's contribution to local economic development with an emphasis on regional integration between African countries and poverty alleviation.<sup>304</sup> The AMV promotes formalisation of ASM, but advocates - as the main objective - continental harmonization of all African mining frameworks.<sup>305</sup> The AMV's vision essentially wants to create a strategy for integrating the mining sector of the whole African continent into a wider socio-economic development plan.<sup>306</sup> In the past twenty years, the AMV has attempted to increase the efficiency and transparency of fiscal and legal regimes for the African Continent as a whole.<sup>307</sup>

In contrast to the above, the World Bank focuses on supporting fiscal and legal reforms in middle-to-low income, often conflict-torn countries, so as to attract increased investment in the mineral and exploitation sectors.<sup>308</sup> The World Bank aims to promote shared prosperity with environmental, social, and fiscal sustainability within each country.<sup>309</sup> They prioritise the granting of loans to help mining development and establish a strong foundation to enhance competitiveness by fostering domestic investment in the mining sector, bolstering key government institutions and improving information infrastructure and knowledge.<sup>310</sup>

The World Bank's approach to reform within the mining sector has evolved significantly over the past 25 years from an emphasis on increasing investment to promoting sustainable development.<sup>311</sup> This is seen by the following stages of the extractive industries value chain: (i) mineral legislation needs to be attractive to encourage investment; (ii) regulatory and legal framework is clear, and there is adequate capacity for enforcement; (iii) tax and royalty collection is clear and transparent; (iv) fiscal revenues are properly managed by the government; and (v) the mining sector contributes to the socio-economic growth of the country.<sup>312</sup>

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<sup>304</sup> Ofori *Oxfam Briefing Paper* at 5.

<sup>305</sup> AMV at 32-33.

<sup>306</sup> AMV at 32-33 and Ofori *Oxfam Briefing Paper* at 5.

<sup>307</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 30.

<sup>308</sup> G McMahon 'The World Bank's Evolutionary Approach to Mining Sector Reform' (2010) 19 *Extractive Industries for Development Series* 1 at 29.

<sup>309</sup> *Ibid* at 11.

<sup>310</sup> *Ibid*.

<sup>311</sup> McMahon (2010) 19 *Extractive Industries for Development Series* 1 at 29; Hilson and Hilson (2015) *International Growth Center Working Paper* at 12 and Buxton (2013) *IIED Sustainable Markets Paper* at 1

<sup>312</sup> *Ibid*.

### 3. Applying the Schools of Thought

The previous chapter introduced the different schools of thought that have crystallised from the debate on the informal economy's nature and its composition, namely: the Dualist School, the Structuralist School and the Legalist School.<sup>313</sup> From the above definitions on ASM, it is evident that each of these schools offer a unique and contrasting perspective on the reason behind the emergence of informal economies.<sup>314</sup> All of these narratives appear, in some capacity, to apply to sub-Saharan Africa's informal ASM sector, as is evident from the below discussion on the definition of ASM.

The Dualist school contributes to the literature on ASM as it explains why ASM activities in sub-Saharan Africa arise in the first place.<sup>315</sup> The Structuralist School considers the informal economy to comprise of unregistered workers and small companies, which are subordinate to large capitalists firms.<sup>316</sup> This is evident in the mining sector in sub-Saharan Africa, where Large-scale Mining development has been prioritised.<sup>317</sup> Legislation for ASM has generally only been overhauled by governments in sub-Saharan Africa as an afterthought and only after policy and investment frameworks for LSM have been created with signs of growth in the sector.<sup>318</sup>

The explanation given by Legalists relates largely to the informal ASM sector in sub-Saharan Africa.<sup>319</sup> Many operators avoid legal licensing because of bureaucracy and costs.<sup>320</sup> However, the reality is slightly more nuanced than what the legalist school provides. Many operators and informal workers want to obtain the requisite mining permits to have some sort of security of tenure, which the mining permits potentially

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<sup>313</sup> See discussion at chapter 2, section 2.

<sup>314</sup> Chen *WIEGO Working Paper 1* at 4

<sup>315</sup> Hilson and Hilson (2015) *International Growth Center Working Paper* at 12 and Chen *WIEGO Working Paper 1* at 4-5.

<sup>316</sup> Bromley (1978) 6 *World Development* 1161 at 1167 and Chen *WIEGO Working Paper 1* at 5.

<sup>317</sup> Hilson and Hilson (2015) *International Growth Center Working Paper* at 13 and D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 45

<sup>318</sup> Verbrugge (2015) 46(5) *Development and Change* 1023 at 1035 and Hilson and McQuilken (2014) 1 *The Extractive Industries and Society* 104 at 114.

<sup>319</sup> De Soto *The mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else* (2003) at 15.

<sup>320</sup> Buxton (2013) *IIED Sustainable Markets Paper* at 1 and Chen *WIEGO Working Paper 1* at 6.

provide.<sup>321</sup> However, they are unable to obtain the permits needed, due to the abovementioned arduous barriers to formalisation.<sup>322</sup>

In addition, there are more behavioural barriers to formalisation: The vast majority of people in sub-Saharan Africa, often coming from poor backgrounds, have usually never been involved in formal employment and continue to engage in the informal economy to survive.<sup>323</sup> Also, there is a tendency for informal employment to expand during economic downturns or crises, indicative of the fact that both necessity and choice drive informality.<sup>324</sup>

Due to the heterogeneous nature of the informal economy, there is merit to each school of thought. Each perspective explains the informal nature of the ASM sector.<sup>325</sup> However, the informal economy is far more complex than is suggested by the sum of these perspectives.<sup>326</sup>

#### 4. Working Artisanal and Small-scale Mining Definition

To find a working definition of ASM, various global institutions have criteria associated with it.<sup>327</sup> Such criteria include production, capital investment, mineral type, depth of working, use of machinery, size of concession and number of workers.<sup>328</sup> Several scholars have also started to identify the ASM sector<sup>329</sup> by focusing on the specific conditions evident in the sector.<sup>330</sup> Some of the most prominent conditions include: (i) exploiting marginal deposits that are too small to be economically exploited by

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<sup>321</sup> Siwale and Siwale (2017) 4 *The Extractive Industries and Society* 191 at 199 and Hilson and Hilson (2015) *International Growth Center Working Paper* at 15-16.

<sup>322</sup> Hilson and Hilson (2015) *International Growth Center Working Paper* at 15-16 and D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 45.

<sup>323</sup> Chen *WIEGO Working Paper 1* at 6 and Hilson and Hilson (2015) *International Growth Center Working Paper* at 15-16.

<sup>324</sup> Siegel and Veiga (2007) 34(1) *Resources Policy* 51 at 53 and Hilson and Hilson (2015) *International Growth Center Working Paper* at 15-16.

<sup>325</sup> Sinding 29 *Natural Resource Forum* 243 at 245 and G Hilson 'Poverty traps in small-scale mining communities: the case of sub-Saharan Africa' (2012) 33 *Canadian Journal of Development Studies/Revue canadienne d'études du développement* 180 at 184.

<sup>326</sup> Chen *WIEGO Working Paper 1* at 6.

<sup>327</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 45.

<sup>328</sup> *Ibid.*

<sup>329</sup> At the World Bank's international roundtable discussion in 1995, ASM was officially recognised as its own sector globally.

<sup>330</sup> Mutemeri, Walker, Coulson and Watson (2016) 3 *The Extractive Industries and Society* 653 at 654; Hentschel, Hruschka and Priester (2003) *IIED Report* at 6.

mechanised mining;<sup>331</sup> (ii) work required to extract resources that is physically demanding;<sup>332</sup> (iii) little or no use of mechanisation;<sup>333</sup> (iv) poor levels of health care and occupational safety;<sup>334</sup> (v) ineffective exploitation methods and rudimentary processing of mineral production; and (vi) a lack of qualified or limited qualification of personnel at all levels of mining operation.<sup>335</sup>

From the above analysis, it appears that there are similarities between the World Bank and the African Union's understanding of the ASM sector, which allows for a general understanding of ASM to be ascertained. However, when trying to define ASM, it is important to consider bottom-up definitions that consider the local realities. There is often a disparity between what is known about the ASM sector and what is actually happening on the ground.<sup>336</sup> Consequently, the definition of artisanal mining needs to consider definitions by international organisation that account for the lived experiences of artisanal miners.

The International Council on Mining and Metals (ICMM) is one such mining company that has developed a definition based off its experiences working with artisanal miners.<sup>337</sup> According to the ICMM, artisanal mining is generally seen as those mining activities that are labour-intensive and capital-poor, both in terms of its technology and mechanisation.<sup>338</sup> The ICMM also define ASM in terms of the miners' characteristics. According to ICMM, these types of miners usually do not pay royalties or taxes, which limits government's ability to enforce laws and provide services.<sup>339</sup> Miners are also often involved in funding corruption, laundering money, and supporting guerrilla activities, all of which undercuts the viability of legal mining.<sup>340</sup>

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<sup>331</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 7.

<sup>332</sup> Mutemeri, Walker, Coulson and Watson (2016) 3 *The Extractive Industries and Society* 653 at 655.

<sup>333</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 8.

<sup>334</sup> Mutemeri, Walker, Coulson and Watson (2016) 3 *The Extractive Industries and Society* 653 at 654.

<sup>335</sup> *Ibid* and Hentschel, Hruschka and Priester (2003) *IIED Report* at 8.

<sup>336</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 45.

<sup>337</sup> ICMM 'Collaborate on artisanal mining' available at <https://www.icmm.com/en-gb/social-performance/minings-contribution/contributing-to-communities/collaborate-artisanal-mining>, accessed on 24 January 2022.

<sup>338</sup> *Ibid*.

<sup>339</sup> *Ibid*.

<sup>340</sup> *Ibid*.

For purposes of this dissertation, artisanal mining involves activities which are labour-intensive and manual in nature.<sup>341</sup> Artisanal mining is the ‘smallest and simplest mining operation’ and is usually linked with rural subsistence farming families, as a means to supplement their income.<sup>342</sup> By contrast, small-scale mining is typically more mechanical as it uses rudimentary processing technology and basic mining equipment such as mechanised loading and hauling and mechanical drilling.<sup>343</sup> Traditional small-scale mining includes licenced and registered mining operations, which are run by individuals or organised cooperatives.<sup>344</sup>

The term ‘artisanal mining’ and ‘small-scale mining’ are often used interchangeably.<sup>345</sup> The two overlap and are frequently grouped together to form the umbrella term ‘ASM.’ For the purposes of this dissertation, the term ‘ASM’ in the context of sub-Saharan Africa generally, will refer to all those mining activities that occur below an industrial scale and often lack legal tenure.

## 5. Defining Artisanal and Small-scale Mining in the DRC Context

Because this dissertation focuses on the DRC’s ASM sector and the country’s formalisation efforts, it is necessary to assess the definition of ASM within the context of the DRC. The DRC is one such jurisdiction that provides clear definitions for both artisanal and small-scale mining in its amended new Mining Code (2018 Mining Code).<sup>346</sup> It should be borne in mind that the country’s 2018 Mining Code<sup>347</sup> refers to the old Mining Code (2002 Mining Code).<sup>348</sup> Therefore, those provisions in the 2002 Mining Code that have not been amended or supplemented are binding and must be considered for the purpose of this dissertation.

While both artisanal mining and small-scale mining in the DRC are recognised and considered legal once all the requirements are met, they are viewed as two separate

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<sup>341</sup> Rupprecht (2017) 117 *The Journal of Southern African Institute of Mining and Metallurgy* at 26.

<sup>342</sup> Ibid.

<sup>343</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 5.

<sup>344</sup> Rupprecht (2017) 117 *The Journal of Southern African Institute of Mining and Metallurgy* at 27.

<sup>345</sup> Hilson and Hilson (2015) *International Growth Center Working Paper* at 3 and D’Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 45

<sup>346</sup> Mining Code Law no. 18/001.

<sup>347</sup> Ibid.

<sup>348</sup> Mining Code Law no. 7 of 2002.

activities in the 2018 Mining Code.<sup>349</sup> Artisanal mining involves ‘non-industrial tools’, such as hand picks and shovels.<sup>350</sup> Small-scale mining, on the other hand, uses ‘semi-industrial or industrial processes.’<sup>351</sup> In the DRC, the machinery, therefore, has to be mechanical in nature for it to take the activity from artisanal to small-scale. In addition, only natural persons can undertake to do artisanal mining, whilst both natural and juristic persons can undertake to do small-scale mining.

It is clear that the DRC separates artisanal mining and small-scale mining into two distinct categories, which will be discussed further in part three of this dissertation when the DRC is examined.<sup>352</sup> For the purpose of this chapter, it is necessary to outline the definition of artisanal mining and small-scale mining in the context of the DRC specifically.

The 2018 Mining Code defines artisanal mining as: ‘any activity by which an artisanal miner, in an artisanal mining area, carries out the extraction and concentration of mineral substances using non-industrial tools, methods and processes, in accordance with the provisions of this Code.’<sup>353</sup> Unlike the 2002 Mining Code, the 2018 Mining Code recognises and defines ‘artisanal miners.’<sup>354</sup> The 2018 Mining Code defines an ‘artisanal miner’ as any natural person of Congolese nationality.<sup>355</sup> An artisanal miner in the DRC must be of legal age and must hold a valid ‘artisanal miner’s card’.<sup>356</sup> According to the 2018 Mining Code, an ‘artisanal miner’s card’ provides an artisanal miner with proper authorization to engage in the ASM activity.<sup>357</sup>

In addition, the 2018 Mining Code requires that the artisanal miner is a member of a ‘mining cooperative’.<sup>358</sup> According to the 2018 Mining Code, a ‘mining cooperative’ is a cooperative company that is governed in terms of the Uniform Act of 15 December

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<sup>349</sup> Mining Code Law no. 18/001 at Article 1.

<sup>350</sup> Ibid.

<sup>351</sup> Ibid.

<sup>352</sup> See discussion at part 3 below.

<sup>353</sup> Mining Code Law no. 18/001 at Article 1.21.

<sup>354</sup> Ibid.

<sup>355</sup> Ibid at Article 1.19.

<sup>356</sup> Mining Code Law no. 18/001 at Article 1.19.

<sup>357</sup> Ibid at Article 1.7

<sup>358</sup> Mining Code Law no. 18/001 at Article 1.19.

2010.<sup>359</sup> The mining cooperative must be engaged in artisanal mining of material substances within an ‘artisanal mining area’.<sup>360</sup>

The abovementioned definition of artisanal mining in the DRC refers to the activity of extracting and concentrating mineral substances through the use of non-industrial tools, methods and processes.<sup>361</sup> The 2002 Mining Code defines a ‘mineral substance’ as any naturally occurring inert or artificial substance that comprises of one or more minerals, which are of economic value.<sup>362</sup> Both the 2018 Mining Code and the 2002 Mining Code do not clarify what non-industrial tools, methods and processes are. However, looking at the World Bank and AMV definition of artisanal mining, it is evident that ‘non-industrial’ refers to tools, methods and processes that are rudimentary in nature and conducted with the use of hand-digging methods, involving little technology and mechanisation.<sup>363</sup>

The 2002 Mining Code referred to small-scale mining as ‘small-scale mining exploitation’.<sup>364</sup> However, this has been changed in the 2018 Mining Code.<sup>365</sup> The 2018 Mining Code defines ‘small-scale mining’ as: ‘any activity in which a legal person engages in small-scale and permanent mining, requiring a minimum of fixed facilities, using semi-industrial or industrial processes, after a mineral deposit has been identified.’<sup>366</sup> It is clear that small-scale mining activities must be carried out by a legal person.<sup>367</sup> The law defines a legal person as someone or something that can have legal rights and duties.<sup>368</sup> This includes both natural and juristic persons.<sup>369</sup> It is evident from the definition that for the mining activity to be considered small-scale, and not artisanal in nature, permanent/fixed installations must be present once the existence of an ore body is confirmed.<sup>370</sup>

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<sup>359</sup> Mining Code Law no. 18/001 at Article 1.10ter.

<sup>360</sup> Ibid at Article 1.19.

<sup>361</sup> Ibid at Article 1.21.

<sup>362</sup> Mining Code Law no. 7 of 2002 at Article 1.49.

<sup>363</sup> Rupprecht (2017) 117 *The Journal of Southern African Institute of Mining and Metallurgy* at 26.

<sup>364</sup> Mining Code Law no. 7 of 2002 at Article 1.21

<sup>365</sup> Mining Code Law no. 18/001 at Article 1.22

<sup>366</sup> Ibid.

<sup>367</sup> Mining Code Law no. 18/001 at Article 1.22

<sup>368</sup> A Barratt, W Domingo, J Mahler-Coetzee, M Olivier, R Denson *Law of Persons and the Family* (2012) at 7.

<sup>369</sup> Ibid.

<sup>370</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 4.

Once again, the same inference that was made for the term ‘non-industrial’ above can be made for the terms ‘semi-industrial’ and ‘industrial’.<sup>371</sup> For a process to be semi-industrial or industrial, it must be more mechanical in nature, involving rudimentary mining and processing technology.<sup>372</sup> In terms of the 2002 Mining Code, a ‘deposit’ is any naturally-occurring or abnormal concentration of mineral substances that lie on the surface or deep in the earth’s crust, which can be exploited at a profit.<sup>373</sup>

In addition, small-scale mining activities will only be recognised as legal in the DRC if a small-scale mining permit is obtained.<sup>374</sup> This permit is known as ‘a Permis d’Exploitation de Petite Mine’ (PEPM or an Exploitation Licence), which directly translates to ‘a Small-Scale Mining Exploitation Permit’.<sup>375</sup> A PEPM ‘is a real property and exclusive right, conveyable and transferable,’ which entitles the rights holder to explore and exploit a small-scale mineral deposit.<sup>376</sup> This right is acknowledged by the issuance of a ‘small-scale mining certificate,’ which has variable terms of validity, not exceeding ten years.<sup>377</sup> To qualify for a PEPM, the small-scale miner must prove that the deposit to be mined is not economically viable for industrial exploitation.<sup>378</sup> Furthermore, if a foreigner wants to apply for the abovementioned right, he or she is required to establish a Congolese company that is associated with ‘one or more Congolese nationals’, whose contribution to the capital of the company must amount to a minimum of 25 per cent.<sup>379</sup>

In the case of the DRC, there is a clear distinction between artisanal mining and small-scale mining.<sup>380</sup> However, for the purpose of this dissertation all artisanal mining and small-scale mining (excluding small-scale miners who have acquired a PEPM), as defined in the 2018 Mining Code, will be referred to under the collective terms ‘ASM’, unless the context demands otherwise.

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<sup>371</sup> Rupprecht (2017) 117 *The Journal of Southern African Institute of Mining and Metallurgy* at 27.

<sup>372</sup> *Ibid* at 28.

<sup>373</sup> Mining Code Law no. 7 of 2002 at Article 1.24

<sup>374</sup> *Ibid* at Article 101.

<sup>375</sup> *Ibid*.

<sup>376</sup> Wafwana, Diata, Mayifuila, van Kempen and Kasonga *The Mining Law Review* (2012) at 49-50.

<sup>377</sup> Mining Code Law no. 7 of 2002 at Article 101.

<sup>378</sup> Wafwana, Diata, Mayifuila, van Kempen and Kasonga *The Mining Law Review* (2012) at 50.

<sup>379</sup> Mining Code Law no. 7 of 2002 at Article 104.

<sup>380</sup> Mining Code Law no. 18/001.

## 6. Conclusion

This chapter has chosen a workable definition of artisanal and small-scale mining to help avoid confusion and contention, which is often the case when discussing artisanal mining. When the term 'ASM' is employed in this dissertation, it will describe the sector of a country's mining industry involving activities that are rudimentary and fall below an industrial scale. This does not imply that all countries view the types of mining activities as synonymous. For example, in the DRC artisanal mining and small-scale mining are two distinct mining activities and are seen as such under the country's Mining Codes.

However, for the sake of convenience, when referring to artisanal and small-scale mining in sub-Saharan Africa, the two will fall under the acronym 'ASM'. Despite this acronym, it should be understood throughout this dissertation that the range of artisanal and small-scale mining activities may vary, but because of their overlapping similarities, they can be grouped together.

Part two of this dissertation will move away from understanding the nature of the ASM sector and focus on the contextual background of the ASM sector in sub-Saharan Africa. This next section will consider the factors which contribute to the rise in ASM activities; the negative consequences that flow from the ASM sector; and the motivation behind effectively formalising the sector. Ultimately, questioning whether formalisation is indeed the way to go.

## PART TWO: ARTISANAL AND SMALL-SCALE MINING IN SUB-SAHARAN AFRICA

Delving into the case of ASM in the DRC specifically, it is instructive to provide a critical analysis of ASM in sub-Saharan Africa. Outlining ASM activities in the context of sub-Saharan Africa reveals the significance of such activities in developing countries and why ASM activities take place in countries such as the DRC. It furthermore exposes the many problems associated with the ASM sector and the motivation behind the need to formalise the sector.

This part two is separated into two chapters, namely: chapter four and five. Chapter four assesses the complex growth of ASM in sub-Saharan Africa, providing an overview of the relevant literature. It explores the reasons behind the rise in ASM as well as the significance that ASM activities have in this context. The chapter furthermore assesses the notion of the 'poverty-trap'<sup>381</sup> and the role it plays in the rise of ASM activities in that region.

To understand the difficulties that each country faces when attempting to regulate their ASM sector, an analysis of the negative impacts of ASM-related activities has been undertaken in chapter five. This chapter further outlines the motivation behind formalising the sector in response to these negative implications.

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<sup>381</sup> Barry (1996) *World Bank Industry and Energy Department Occasional Paper No. 6*; Hilson 33 *Canadian Journal of Development Studies/Revue canadienne d'études du développement* 180 at 180; Carter and Barrett (2006) 42(2) *Journal of development studies* 178 at 180; M Carter, P Little, T Mogues and W Negatu 'Poverty traps and natural disasters in Ethiopia and Honduras' (2007) 35 *World development* 835 at 838.

# CHAPTER 4: GROWTH OF ARTISANAL AND SMALL-SCALE MINING IN SUB-SAHARAN AFRICA

## 1. Introduction

Over the past three decades, the Artisanal and Small-Scale Mining (ASM) sector in sub-Saharan Africa has grown significantly.<sup>382</sup> National governments are gradually becoming aware of the ASM sector's rising importance as both a generator of national income and a means of poverty alleviation.<sup>383</sup> The past twelve years have seen the sub-Saharan African ASM sector gain greater prominence because of the role it plays with regards to addressing poverty alleviation and sustainable development.<sup>384</sup>

It is hardly a coincidence that ASM activities have flourished in the most impoverished of countries.<sup>385</sup> The ASM sector has earned the label 'poverty-driven activity' by organisations such as the UN and the World Bank.<sup>386</sup> The sector is not only used as a platform for the employment of impoverished people but also linked to the creation of jobs in downstream industries.<sup>387</sup> The ASM sector has more than ever become a critical livelihood option for millions of people that would otherwise be rendered unemployed.<sup>388</sup>

However, the ASM sector's rising importance in sub-Saharan Africa continues to be overshadowed by its adverse social and environmental implications.<sup>389</sup> This

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<sup>382</sup> O'Faircheallaigh and Corbett (2016) 3 *The Extractive Industries and Society* 961 at 961 and Hilson and McQuilken (2014) 1 *The Extractive Industries and Society* 104 at 105.

<sup>383</sup> Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 17; Hilson and Hilson (2015) *International Growth Center Working Paper* at 6 and Hentschel, Hruschka and Priester (2003) *IIED Report* at 413.

<sup>384</sup> *Ibid* at 14-19.

<sup>385</sup> G Hilson and C Potter 'Why is Illegal Gold mining Activity so Ubiquitous in Rural Ghana?' (2003) 15 *African Development Review* 237 at 240.

<sup>386</sup> *Ibid* at 241.

<sup>387</sup> Hilson and Hilson (2015) *International Growth Center Working Paper* at 3.

<sup>388</sup> Banchirigah (2006) 31 *Resources Policy* 165 at 165 and Hilson and Hilson (2015) *International Growth Center Working Paper* at 3.

<sup>389</sup> Hilson and Hilson (2015) *International Growth Center Working Paper* at 3.

dissertation acknowledges that the negative impacts flowing from the ASM sector are largely due to ASM activities being confined to the informal sector.<sup>390</sup>

## 2. Background: How Reforms Fuelled the Expansion of Artisanal and Small-scale Mining

Mining has been heralded as a crucial sector for socio-economic growth in sub-Saharan Africa.<sup>391</sup> The rapid growth of the ASM sector in this region is linked to broader economic changes.<sup>392</sup> The most notable economic reform came about under the auspices of Structural Adjustment Programs (SAPs), which included privatising state assets, increasing trade liberalisation, revaluing currencies and ‘rolling back’ the state.<sup>393</sup> Rolling back the state implies that the state withdraws or departs from economic and social spheres, allowing for services to be shifted to the private sector.<sup>394</sup> This means that any form of state intervention in the market is kept to a bare minimum.<sup>395</sup> Institutional frameworks are therefore characterised by ‘free trade, free markets and strong private property rights.’<sup>396</sup>

As a result of such reforms, a large number of people within sub-Saharan Africa were rendered economically redundant<sup>397</sup> and accordingly found themselves unemployed and in precarious financial positions.<sup>398</sup> Many retrenched large-scale miners, professionals and semi-skilled labourers relocated to the rural parts of the region where ASM is readily carried out.<sup>399</sup> As poverty became more entrenched, the ASM sector began to serve as a fundamental refuge for the unemployed.<sup>400</sup> In some instances, the ASM sector was seen as the only source of income that was attainable

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<sup>390</sup> See discussion at chapter 1, section 2.1.

<sup>391</sup> A Bebbington, L Hinojosa, D Bebbington, M Burneo and X Warnars ‘Contention and ambiguity: Mining and the possibilities of development’ (2008) 39(6) *Development and Change* 887 at 889.

<sup>392</sup> Hilson and Hilson (2015) *International Growth Center Working Paper* at 6.

<sup>393</sup> *Ibid.*

<sup>394</sup> J Peck and A Tickwell ‘Neoliberalizing space’ (2002) 34 *Antipode* 380 at 388-400.

<sup>395</sup> *Ibid.*

<sup>396</sup> *Ibid.*

<sup>397</sup> Economic Redundancy occurs when an employer must reduce the number of employees, usually due to economic downturn. See Hilson and Potter 2003) 15 *African Development Review* 237 at 114.

<sup>398</sup> Banchirigah (2006) 31 *Resources Policy* 165 at 165; Hilson and Hilson (2015) *International Growth Center Working Paper* at 7.

<sup>399</sup> Hilson and Potter 2003) 15 *African Development Review* 237 at 113.

<sup>400</sup> Hilson and Hilson (2015) *International Growth Center Working Paper* at 8; Banchirigah (2006) 31 *Resources Policy* 165 at 165.

in employment-constrained economies.<sup>401</sup> The sector helped various impoverished households to subsist in times that were increasingly uncertain.<sup>402</sup>

In 1981, the World Bank published the *Berg Report*.<sup>403</sup> It was written in response to a request made by the African Governors of the World Bank to examine the widespread economic crises that sub-Saharan African countries were experiencing in the late 1970s.<sup>404</sup> Some sub-Saharan African countries were on the brink of economic collapse.<sup>405</sup> The African Governors sought recommendations on a future plan that would help 'accelerate' development in the region.<sup>406</sup>

The Berg report was used as a catalyst for a key shift in development assistance to the sub-Saharan African region.<sup>407</sup> The report was one of the earliest official documents to highlight and expose the socio-economic crisis that many of the sub-Saharan African countries were beginning to experience in the mid-1970s.<sup>408</sup> The report argued that the main factors contributing to sub-Saharan Africa's crisis involved: (i) maladministration by state bureaucrats of both the economy and natural resources; (ii) corruption; (iii) lack of accountability; and (iv) political governance that was poorly managed.<sup>409</sup> The report was conveniently silent on the influence of international meddling in African affairs.

The Berg report maintained that the social and economic crisis in sub-Saharan Africa was characterised by negative trends in the growth of the economy.<sup>410</sup> These negative trends had great ramifications for most sub-Saharan African countries. The GDP per

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<sup>401</sup> Maconachie and Hilson (2011) 35 *Natural Resource Forum* 293 at 293.

<sup>402</sup> Ibid.

<sup>403</sup> The Berg report is named after the author who compiled the report, which was published by the World Bank in 1981. The full name of the report is 'Accelerated Development in Sub-Saharan Africa: an agenda for action.' See E Berg *Accelerated development in sub-Saharan Africa: an agenda for action* (1981).

<sup>404</sup> J Loxley 'The Berg Report and the Model of Accumulation in sub-Saharan Africa' (1983) 27 *Review of African Political Economy* 197 at 197.

<sup>405</sup> G Hilson 'Adjustment in Ghana: Assessing the Impacts of Mining-Sector Reform' (2004) 21 *Africa Today* 53 at 55.

<sup>406</sup> Loxley (1983) 27 *Review of African Political Economy* 197 at 197 and J Lugalla 'Globalization and structural adjustments in sub-Saharan Africa' (2005) 8 *The University Dialogue* 1 at 6.

<sup>407</sup> Berg *Accelerated development in sub-Saharan Africa: an agenda for action* (1981); Lugalla (2005) 8 *The University Dialogue* 1 at 6

<sup>408</sup> Ibid.

<sup>409</sup> Berg *Accelerated development in sub-Saharan Africa: an agenda for action* (1981) at 197.

<sup>410</sup> Loxley (1983) 27 *Review of African Political Economy* 197 at 200.

capita began to decline.<sup>411</sup> There was a decline in performance within the agricultural sector and, more specifically, the export sector, which resulted in a foreign exchange shortage.<sup>412</sup> All of this contributed to a deterioration of internal and external accounts as well as an increase of 'internal and external borrowing'.<sup>413</sup> As a result of these negative trends, overall development - seen in terms of overall social progress - halted in some countries and was reversed in others.<sup>414</sup> In most countries, poverty levels drastically augmented, and with it came the rise in informal settlements.<sup>415</sup> The report appealed to international aid organisations across the globe to back sub-Saharan African governments as they shifted their policies towards economic liberalisations.<sup>416</sup>

In response to the above-mentioned crisis in sub-Saharan Africa, the Berg report emphasised that countries within the region should adopt 'Structural Reforms' through SAPs in return for receiving aid.<sup>417</sup> The World Bank believed that countries within the region needed to be economically 'saved' and to do so, the structure of the economies had to be adjusted.<sup>418</sup> 'Structural Reforms' refer to the structural adjustment of the economy to manage 'the balance of payments, reduce fiscal deficits, increase economic efficiency by encouraging trade liberalisation, private sector investments and export-oriented production'.<sup>419</sup> In the eyes of the World Bank and IMF, Structural Reforms could only be achieved through measures such as: (i) privatising the economy's public sector; (ii) liberalising trade through the introduction of a free market system; (iii) devaluing local currency; (iv) reducing government expenditure in social services, such as health and education; and (v) downsizing by retrenching workers in the public sectors.<sup>420</sup>

Sub-Saharan African countries were required to adopt these aforementioned measures as a condition for receiving aid, loans and grants from the World Bank, IMF

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<sup>411</sup> Lugalla (2005) 8 *The University Dialogue* 1 at 7

<sup>412</sup> Loxley (1983) 27 *Review of African Political Economy* 197 at 198.

<sup>413</sup> Lugalla (2005) 8 *The University Dialogue* 1 at 7.

<sup>414</sup> *Ibid* at 6.

<sup>415</sup> *Ibid*.

<sup>416</sup> Loxley (1983) 27 *Review of African Political Economy* 197 at 202.

<sup>417</sup> Hilson and McQuilken (2014) 1 *The Extractive Industries and Society* 104 at 108 and Loxley (1983) 27 *Review of African Political Economy* 197 at 187.

<sup>418</sup> Lugalla (2005) 8 *The University Dialogue* 1 at 6.

<sup>419</sup> *Ibid*.

<sup>420</sup> Hilson and McQuilken (2014) 1 *The Extractive Industries and Society* 104 at 108 and Lugalla (2005) 8 *The University Dialogue* 1 at 6.

and other donor countries/agencies, such as the International Bank for Reconstruction and Development (IBRD).<sup>421</sup> In addition, free trade and the politics of liberalisation were entrenched in most government policies, whereby governments in sub-Saharan Africa were not allowed to intervene in the market.<sup>422</sup>

Throughout the 1990s, more than 90 countries across the globe, including the DRC,<sup>423</sup> re-wrote their mining and investment codes under immense pressure from the IMF and the World Bank.<sup>424</sup> The mining and investment codes were re-written in a way that ensured greater investor confidence, in line with SAPs. The hope was that reform within the mining sector would assist in paving the way for foreign investment.<sup>425</sup> The revising of mining and investment codes, in turn, allowed for LSM to undergo massive growth, allowing foreign companies to mine in Africa, particularly in Sub-Saharan Africa, during the course of the 1990s.<sup>426</sup>

While the ASM sector existed before the aforementioned reforms took place, the sector rapidly expanded with the introduction of such reforms.<sup>427</sup> This is because the reforms made it easier for big corporate entities to obtain mining rights, to the exclusion of smaller mining operations.<sup>428</sup> With the rise in big corporate entities, it became much more difficult for the locals and small businesses in the region to obtain mining rights legally.<sup>429</sup> These small businesses could not compete with large-scale mining corporations; neither financially nor in terms of expertise.<sup>430</sup> Consequently, those who could not obtain mining rights in the region pursued illegal mining, mainly through the ASM channel.<sup>431</sup>

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<sup>421</sup> Loxley (1983) 27 *Review of African Political Economy* 197 at 202.

<sup>422</sup> Lugalla (2005) 8 *The University Dialogue* 1 at 7.

<sup>423</sup> See discussion below.

<sup>424</sup> Bebbington, Hinojosa, Bebbington, Burneo and Warnaars (2008) 39(6) *Development and Change* 887 at 889.

<sup>425</sup> S Geenen 'Who Seeks, Finds' Artisanal Miners and Traders Benefit from Gold in Eastern Democratic Republic of Congo' (2013) 25 *European Journal of Development Research* 197 at 197-198.

<sup>426</sup> Geenen (2013) 25 *European Journal of Development Research* 197 at 197-198.

<sup>427</sup> G Hilson and N Yakovleva 'Strained relations: A critical analysis of the mining conflict in Prestea, Ghana' (2007) 26(1) *Political Geography* 98 at 115.

<sup>428</sup> Ibid.

<sup>429</sup> Hilson and Potter 2003) 15 *African Development Review* 237 at 118; Hilson and Hilson (2015) *International Growth Center Working Paper* and Hilson and Yakovleva (2007) 26(1) *Political Geography* 98 at 115.

<sup>430</sup> Hilson and Yakovleva (2007) 26(1) *Political Geography* 98 at 116.

<sup>431</sup> Hilson and McQuilken (2014) 1 *The Extractive Industries and Society* 104 at 108.

The reforms, therefore, expanded the so-called 'dual mining economy', as discussed in chapter two.<sup>432</sup> On the one hand, an LSM sector exists, which comprises of mostly large corporations and foreign players from first-world countries.<sup>433</sup> On the other hand, an expanding ASM sector exists that is usually controlled by local groups.<sup>434</sup> Even though the ASM sector has made a valuable contribution to foreign exchange, it is the LSM sector that has taken precedence within the World Bank's mining-sector-reform-programs and by its private-sector partners.<sup>435</sup> The growth of the large-scale mining sector was at the expense of ASM development.<sup>436</sup>

The above-mentioned reforms largely neglected broader issues, such as environmental protection as well as socio-economic development.<sup>437</sup> The focus of these policies has traditionally been on the LSM sector, as well as oil and gas extraction, with little attention being paid to ASM.<sup>438</sup> This has resulted in the ASM sector, becoming a largely unregulated sector, which has developed somewhat irrepressibly,<sup>439</sup> in a disordered and uncoordinated manner. As a result of the governments' neglect to regulate the ASM sector, many ASM activities have been rendered illegal and criminal.<sup>440</sup>

Today, those countries in sub-Saharan Africa that have undertaken to implement the mining-sector-reform-programs, appear to have the largest ASM activities.<sup>441</sup> Many people have been rendered unemployed because of industry privatisation, both in large-scale mining industry and other fundamental segments of the economy.<sup>442</sup> The incoming LSM activities are highly mechanised and require less manual labour, which

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<sup>432</sup> See discussion at chapter 2, section 5 above.

<sup>433</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 49.

<sup>434</sup> Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 9.

<sup>435</sup> Banchirigah (2006) 31 *Resources Policy* 165 at 166.

<sup>436</sup> *Ibid* at 167.

<sup>437</sup> Hilson and Yakovleva (2007) 26(1) *Political Geography* 98 at 116.

<sup>438</sup> P Collier 'The Political Economy of Natural Resources' (2010) 77(4) *Social Research* 1105 at 1110; Banchirigah (2006) 31 *Resources Policy* 165 at 165-166 and Maconachie and Hilson (2011) 35 *Natural Resource Forum* 293 at 293.

<sup>439</sup> E Fisher 'Occupying the Margins: Labour Integration and Social Exclusion in Artisanal Mining in Tanzania' (2007) 38 *Development and Change* 735 at 736-740.

<sup>440</sup> N Yakovleva 'Perspectives on female participation in artisanal and small-scale mining: A case study of Birim North District of Ghana' (2007) 32 *Resource Policy* 29 at 29.

<sup>441</sup> Banchirigah (2006) 31 *Resources Policy* 165 at 167.

<sup>442</sup> *Ibid*.

has the knock-on effect of securing limited employment prospects.<sup>443</sup> Therefore, many displaced people have little option but to pursue employment in ASM.<sup>444</sup>

The DRC is one of the many sub-Saharan African countries to be impacted by the mining-sector-reform-programs.<sup>445</sup> During the 1980s, the DRC experienced low levels of domestic commodity production along with a significant rise in unemployment.<sup>446</sup> In the late 1980s, commodity prices completely collapsed and the country was in desperate need of donor support.<sup>447</sup> In response, the government of the DRC, decided that the country had no choice but to implement a resolution which adopted a World Bank assisted SAP in 1990.<sup>448</sup> The main constituent of the SAP was macroeconomic policy reform as well as trade liberalisation, which required tariff reductions.<sup>449</sup> Like many of its neighbouring states, the reform program had a crippling effect on the DRC and has not been successful in helping to curb poverty and unemployment in the country.<sup>450</sup> With rising rates of unemployment and poverty, people in the DRC have had little choice but to secure employment in informal sectors such as ASM.<sup>451</sup>

The reforms driven by the World Bank and IMF in sub-Saharan Africa have resulted in major employment redundancies, particularly in the public sector.<sup>452</sup> It was only in 2003 that donor communities began to recognise these redundancies officially, when officers from the UN Economic Commission for Africa (UNECA) noted the rise in ASM activities in sub-Saharan Africa.<sup>453</sup> UNECA reported that the rise in ASM employment was prompted by 'growing economic crises, and the effects of structural adjustment, particularly in sub-Saharan Africa, thereby increasing unemployment.'<sup>454</sup> This next section will further explore the rise of ASM activities in sub-Saharan Africa.

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<sup>443</sup> Verick *The Impact of Globalization of the Informal Sector in Africa* (2008) at 7.

<sup>444</sup> Ibid.

<sup>445</sup> J Erero and L Bonga-Bonga 'Effects of Reducing Tariffs in the Democratic Republic of Congo (DRC): A CGE Analysis' (2018) 52(3) *The Journal of Developing Areas* 55 at 56.

<sup>446</sup> Ibid at 57

<sup>447</sup> At 21

<sup>448</sup> Hilson (2004) 21 *Africa Today* 53 at 55.

<sup>449</sup> Erero and Bonga-Bonga (2018) 52(3) *The Journal of Developing Areas* 55 at 56-57.

<sup>450</sup> Ibid.

<sup>451</sup> M Mazalto 'Governance, human rights and mining in the Democratic Republic of Congo' in B Campbell (ed) *Mining in Africa: Regulation and Development* (2009) at 197.

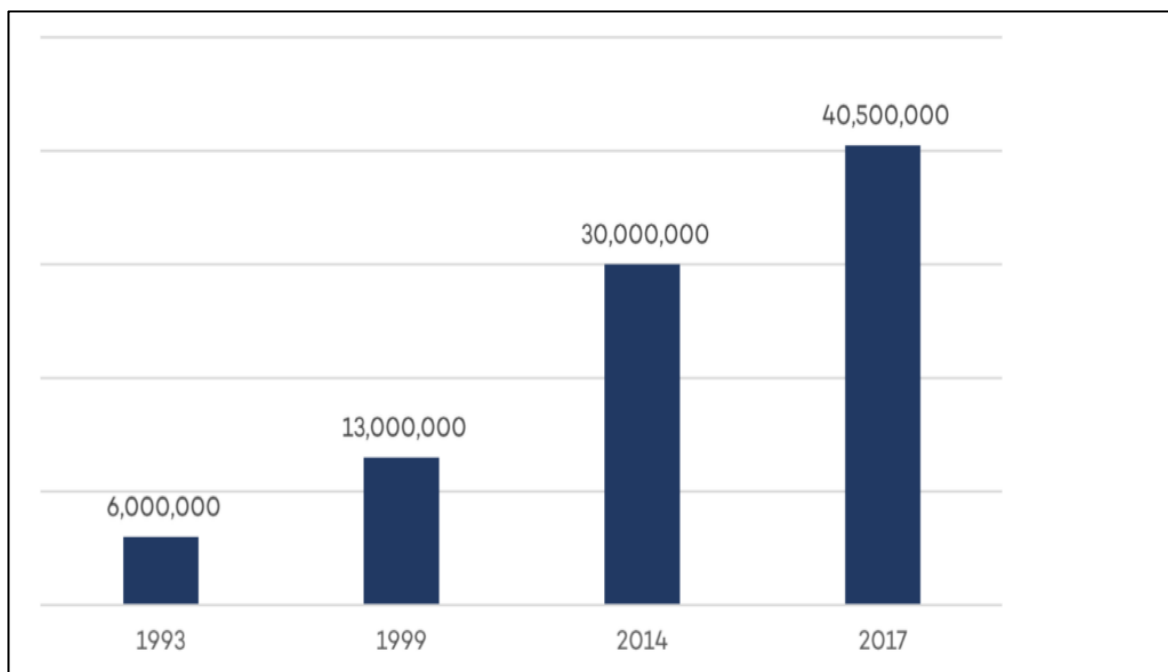
<sup>452</sup> Banchirigah (2006) 31 *Resources Policy* 165 at 167.

<sup>453</sup> Ibid at 168.

<sup>454</sup> Ibid at 169.

### 3. The Rise of Artisanal and Small-scale Mining in Sub-Saharan Africa

In the last three decades, the ASM sector has expanded as a global economic activity.<sup>455</sup> In many parts of sub-Saharan Africa, ASM has become as important as those activities relating to large-scale mining.<sup>456</sup> ASM activities occur in over 80 countries worldwide, taking place in diverse regions, predominantly in the global south: sub-Saharan Africa, Central and South America and Asia.<sup>457</sup> The ASM sector worldwide produces around fifteen per cent of the world's mined gold, 60 per cent of mined tin and twenty per cent of mined diamonds.<sup>458</sup>



**Figure 3:** number of ASM operators worldwide between 1993 and 2017.<sup>459</sup>

Figure three above depicts the growth in the number of ASM operators worldwide between 1993 and 2017. An estimated six million people were working within the ASM

<sup>455</sup> O'Faircheallaigh and Corbett (2016) 3 *The Extractive Industries and Society* 961 at 961.

<sup>456</sup> M Carter and C Barrett 'The economics of poverty traps and persistent poverty: an assets-based approach' (2006) 42(2) *Journal of development studies* 178 at 180 and Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 2.

<sup>457</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 2.

<sup>458</sup> Barreto, Schein, Hinton, Hruschka (2018) *EARF* at 9.

<sup>459</sup> This figure has been taken from an open source, which permits use of the figure for student research. See: Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 4.

sector in 1993.<sup>460</sup> In 1999, the International Labour Organization (ILO) revised this number to approximately thirteen million ASM miners, which included both women and children.<sup>461</sup> That same year, the ILO estimated that around 80 to 100 million people were dependant on ASM activities during that time.<sup>462</sup> In 2014, the number of people working in the sector reached around 30 million people.<sup>463</sup> If 80 to 100 million people were dependent on ASM activities in 1993, it is inferred that more than 150 million people were indirectly reliant on the ASM sector in 2014.<sup>464</sup> It is further estimated that the number of people directly involved in ASM reached between 40.5 to 100 million in 2017.<sup>465</sup> This is juxtaposed to only seven million people working in the industrial mining sector.<sup>466</sup>

The rise in involvement in the ASM sector in sub-Saharan Africa can be attributed to a number of factors which include: (i) increasing mineral commodity prices; (ii) difficulty of earning a livelihood from alternative activities, such as agriculture; (iii) corruption in the country; (iv) economic collapse in a country; and (v) increasing reliance on the ASM sector to help escape poverty.<sup>467</sup>

Furthermore, the presence of an abundance of mineral resources does not always prove to be a blessing.<sup>468</sup> Extensive research has been conducted on how mineral resource wealth in a country can result in a slower or negative economic growth. This 'paradox of plenty' is often referred to as the 'resource curse'.<sup>469</sup> In many sub-Saharan

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<sup>460</sup> Buxton (2013) *IIED Sustainable Markets Paper* at 3 and Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 4.

<sup>461</sup> *Ibid*; Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 5 and Banchirigah (2006) 31 *Resources Policy* 165 at 167

<sup>462</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 2-3 and Barreto, Schein, Hinton, Hruschka (2018) *EARF* at 10.

<sup>463</sup> *Ibid*.

<sup>464</sup> Levin 'Global trends in artisanal and small-scale mining: What do these mean for Mongolia?' available at <http://www.levinsources.com/blog/global-trends-in-artisanal-and-small-scale-mining-what-do-these-mean-for-mongolia>, accessed on 12 August 2018.

<sup>465</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 2-3; O'Faircheallaigh and Corbett (2016) 3 *The Extractive Industries and Society* 961 at 961 and Banchirigah (2006) 31 *Resources Policy* 165 at 167.

<sup>466</sup> Verick *The Impact of Globalization of the Informal Sector in Africa* (2008) at 7 and Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 2-3.

<sup>467</sup> Carter and Barrett (2006) 42(2) *Journal of development studies* 178 at 180 and Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 180 and Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 2-3.

<sup>468</sup> G Davis and E Tilton 'The resource curse' (2005) 29 *Natural Resources Forum* 29 233 at 235.

<sup>469</sup> *Ibid* at 235-236 and Banchirigah (2006) 31 *Resources Policy* 165 at 168.

African countries, people are unable to profit off alternative industries due to the 'resource curse'.<sup>470</sup> The resource curse involves a paradoxical situation in which natural resource-rich countries experience stagnant economic growth or even economic contraction and are unable to fully benefit from its natural resource wealth.<sup>471</sup>

The resource curse develops when governments neglect to invest in other major sectors and productive enterprises, instead begin concentrating their entire production means on a single industry, such as mining.<sup>472</sup> Those countries then become overly dependent on a single industry, focusing its capital, labour and economic resources on that industry, making it difficult for other industries to thrive.<sup>473</sup> Resource curses often occur in less developed countries which are mineral-rich and which usually have relatively concentrated and undiversified industrial sectors.<sup>474</sup> It is for this reason that many scholars have argued that mineral resources in developing countries can be a curse rather than a blessing.<sup>475</sup>

In addition, there is a direct correlation between ASM activities and low-income countries, hence the high prevalence of ASM in sub-Saharan Africa.<sup>476</sup> For the 2017 fiscal year, the World Bank defined 'economies' in terms of the 2015 GNI per capita.<sup>477</sup> According to the GNI, annual high-income is \$12,276 or more, annual middle-income is between \$1,026 and \$12,475, and annual low-income is \$1,025 or less.<sup>478</sup> It is estimated that 80 to 90 per cent of low-income countries are seen to have a high prevalence of ASM activities. The number of ASM activities decreases to 40 to 60 per

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<sup>470</sup> Carter and Barrett (2006) 42(2) *Journal of development studies* 178 at 180 and Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 180 and Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 2-3.

<sup>471</sup> E Nichols 'The Resource Curse: A look into the Implications of an Abundance of Natural Resources in the Democratic Republic of Congo' (2018) 5(2) *Scholarly Horizons: University of Minnesota, Morris Undergraduate Journal* 1 at 3.

<sup>472</sup> Ibid at 3-4.

<sup>473</sup> A Pessoa 'Natural resources and institutions: the natural resources curse revisited' (2008) *MPRA Paper No. 8640* at 4.

<sup>474</sup> Ibid and Davis and Tilton (2005) 29 *Natural Resources Forum* 29 233 at 236.

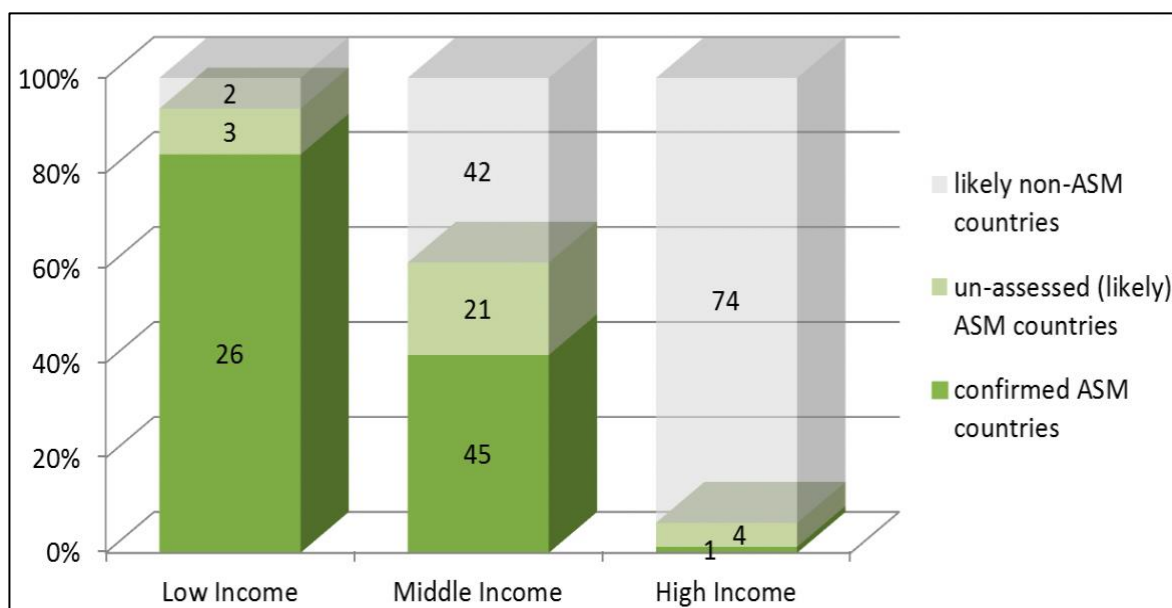
<sup>475</sup> F van der Ploeg 'Natural Resources: curse or blessing?' (2011) 49 *Journal of Economic Literature* 336 at 339.

<sup>476</sup> Barreto, Schein, Hinton, Hruschka (2018) *EARF* at 10.

<sup>477</sup> Ibid.

<sup>478</sup> Buxton (2013) *IIED Sustainable Markets Paper* at 3; Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 2 and Barreto, Schein, Hinton, Hruschka (2018) *EARF* at 11.

cent for annual middle-income countries and is less than 10 per cent for annual high-income countries.<sup>479</sup>



**Figure 4:** prevalence of ASM in countries at different income levels (2018)<sup>480</sup>

Figure four above shows the correlation between income levels and the prevalence of ASM and demonstrates some of the fundamental insights, as noted in the previous chapters.<sup>481</sup> Firstly, the ASM sector is a crucial economic sector for low-income countries.<sup>482</sup> In these countries, ASM mineral extraction creates income opportunities that far outperform income levels of other rural livelihoods.<sup>483</sup> Secondly, ASM activities are largely 'poverty driven', in that they are highly appealing to those poor people who are earning below the poverty line.<sup>484</sup> The sector provides an opportunity to escape poverty as it provides a chance to earn better incomes.<sup>485</sup> Any citizen with above-

<sup>479</sup> Barreto, Schein, Hinton, Hruschka (2018) *EARF* at 11-12.

<sup>480</sup> Permission has been granted for reuse of this figure. See: Barreto, Schein, Hinton, Hruschka (2018) *EARF* at 10.

<sup>481</sup> See discussion at chapter 1, section 2.1 and chapter 3.

<sup>482</sup> Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 16 and Hentschel, Hruschka and Priester (2003) *IIED Report* at 33.

<sup>483</sup> Hilson (2012) 33 *Canadian Journal of Development Studies/Revue canadienne d'études du développement* 180 at 181.

<sup>484</sup> *Ibid* at 184 and Barreto, Schein, Hinton, Hruschka (2018) *EARF* at 12.

<sup>485</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 33; Barreto, Schein, Hinton, Hruschka (2018) *EARF* at 12 and Buxton (2013) *IIED Sustainable Markets Paper* at 3.

average earnings ultimately contributes to elevating the GNI, thus advancing the national economy to a higher level through his earnings and spending.<sup>486</sup>

For many poor households, the ASM sector ensures their subsistence during increasingly uncertain times.<sup>487</sup> Consequently, the rise in ASM is particularly noticeable in countries that are victim to falling social instability and economic collapse.<sup>488</sup> ASM therefore functions as a crucial social survival net for the indigent.<sup>489</sup> The sector has become a primary livelihood activity for many of sub-Saharan Africa's poor populations.<sup>490</sup>

The mining industry, just like many other economic sectors, has also been directly affected by the COVID-19 global pandemic (the Pandemic), which came to the forefront in the beginning of 2020.<sup>491</sup> The Pandemic has brought about unprecedented disruption to the global economy and greatly impacted the livelihoods across the globe by increasing poverty and unemployment.<sup>492</sup> Many mines across sub-Saharan Africa have been halted or even temporarily closed to protect mine workers and their local communities' health and safety.<sup>493</sup> During this time, the cost of basic goods has inflated and income has significantly reduced, with many miners and their families facing food insecurity.<sup>494</sup>

With a surge in unemployment, the obvious consequence of the Pandemic is growth in informal employment.<sup>495</sup> Miners who were previously employed in the LSM sector and have lost jobs because of the Pandemic will have little choice but to carry on

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<sup>486</sup> Barreto, Schein, Hinton, Hruschka (2018) *EARF* at 10.

<sup>487</sup> Maconachie and Hilson (2011) 35 *Natural Resource Forum* 293 at 294.

<sup>488</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 4.

<sup>489</sup> Banchirigah (2006) 31 *Resources Policy* 165 at 165-166; Maconachie and Hilson (2011) 35 *Natural Resource Forum* 293 at 295 and Siwale and Siwale (2017) 4 *The Extractive Industries and Society* 191 at 191.

<sup>490</sup> Banchirigah (2006) 31 *Resources Policy* 165 at 165-166; Maconachie and Hilson (2011) 35 *Natural Resource Forum* 293 at 296 and Siwale and Siwale (2017) 4 *The Extractive Industries and Society* 191 at 192.

<sup>491</sup> A Hebli and F Said 'The Impact of COVID-19 on Tourism Consumption Behaviour: A Perspective Article' (2020) 7(2) *Journal of Tourism Management Research* 196 at 199.

<sup>492</sup> T Laing 'The economic impact of the Coronavirus 2019 (Covid-2019): Implications for the mining industry' (2020) 7(2) *Extractive industries and Society* 580 at 580.

<sup>493</sup> Deloitte 'Understanding COVID-19's Impact on the Mining and Metals Sector' available at <https://www2.deloitte.com/global/en/pages/about-deloitte/articles/covid-19/understanding-covid-19-s-impact-on-the-mining---metals-sector---.html>, accessed on 14 April 2021.

<sup>494</sup> Hebli and Said (2020) 7(2) *Journal of Tourism Management Research* 196 at 199.

<sup>495</sup> International Labour Organization and United Nations Children's Fund 'COVID-19 and Child Labour: A time of crises, a time to act' (2020) *ILO and UNICEF* 1 at 11.

activities illegally. It is inevitable that the ASM sector will see a sharp rise due to the consequences of the Pandemic. The Pandemic has once again reinforced the link between the ASM sector and the so-called 'poverty trap'.

#### 4. The Artisanal and Small-scale Mining Poverty Trap

The idea of a 'poverty trap' was first expressed in Washington DC almost three decades ago at the 'International Roundtable on Informal Mining' (the Roundtable), hosted by the World Bank.<sup>496</sup> It was the first time that the idea of ASM being largely poverty-driven was populated.<sup>497</sup> At the Roundtable, it was argued that 'the growth and organisation of ASM are linked with family-level hardship, and that once immersed in activities, numerous people find themselves trapped in vicious cycles of poverty.'<sup>498</sup> This notion of a 'poverty trap' being linked to ASM activities was long overdue and has since garnered attention from a number of scholars and policymakers.<sup>499</sup>

Nowhere has this notion of ASM being a poverty-driven activity been clearer than in the case of sub-Saharan Africa.<sup>500</sup> Years of 'debilitating structural adjustment loans' have resulted in heightened poverty and desolation, specifically in the rural areas.<sup>501</sup> In sub-Saharan Africa, many families have had to deal with the damaging changes which have been made as a result of structural adjustment. These changes include 'the dismantling of agricultural support services and the removal of subsidies on crop inputs, such as fertilisers.'<sup>502</sup> With little alternatives and increased hardships, most people have had to find alternative sources of income.<sup>503</sup>

Even though many families throughout rural sub-Saharan Africa have attempted to increasing their earnings and improve their standard of living, most families remain

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<sup>496</sup> Hilson (2012) 33 *Canadian Journal of Development Studies/Revue canadienne d'études du développement* 180 at 180 and Carter and Barrett (2006) 42(2) *Journal of development studies* 178 at 180 and Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 180.

<sup>497</sup> Hilson and Hilson (2015) *International Growth Center Working Paper* at 8.

<sup>498</sup> Ibid and Hebli and Said (2020) 7(2) *Journal of Tourism Management Research* 196 at 199

<sup>499</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 4; Banchirigah (2006) 31 *Resources Policy* 165 at 165-166; Maconachie and Hilson (2011) 35 *Natural Resource Forum* 293 at 296 and Siwale and Siwale (2017) 4 *The Extractive Industries and Society* 191 at 192.

<sup>500</sup> Barry (1996) *World Bank Industry and Energy Department Occasional Paper No. 6*.

<sup>501</sup> Hilson (2011) 23(8) *Journal of International Development* 1031 at 1033.

<sup>502</sup> Ibid.

<sup>503</sup> Ibid at 1034.

highly impoverished.<sup>504</sup> A minimum asset threshold is necessary to successfully ensure and maintain sufficient or 'non-poor' living standards.<sup>505</sup> This threshold determines whether someone is considered to be poor or not.<sup>506</sup> Below this threshold, a person is unable to improve his productive assets effectively, educate his children and advance economically over time.<sup>507</sup> Those families that lie below this asset threshold do not have any viable economic prospects for improvement and are merely surviving.<sup>508</sup> Those people that lie above the threshold can be expected to productively accumulate, invest and advance.<sup>509</sup>

Carter defines the poverty trap as being a vicious cycle of poverty, whereby generations of poor persons are unable to breach this minimum asset threshold because of global economic structuring.<sup>510</sup> Parents cannot afford education for the children, the children remain stuck in the same socio-economic conditions as their parents, and so the cycle continues.<sup>511</sup>

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<sup>504</sup> Hilson (2012) 33 *Canadian Journal of Development Studies/Revue canadienne d'études du développement* 180 at 181.

<sup>505</sup> M Adato, M Carter and J May 'Exploring poverty traps and social exclusion in South Africa using qualitative and quantitative data' (2006) 42(2) *Journal of Development Studies* 226 at 232.

<sup>506</sup> Carter, Little, Mogues and Negatu (2007) 35 *World development* 835 at 838.

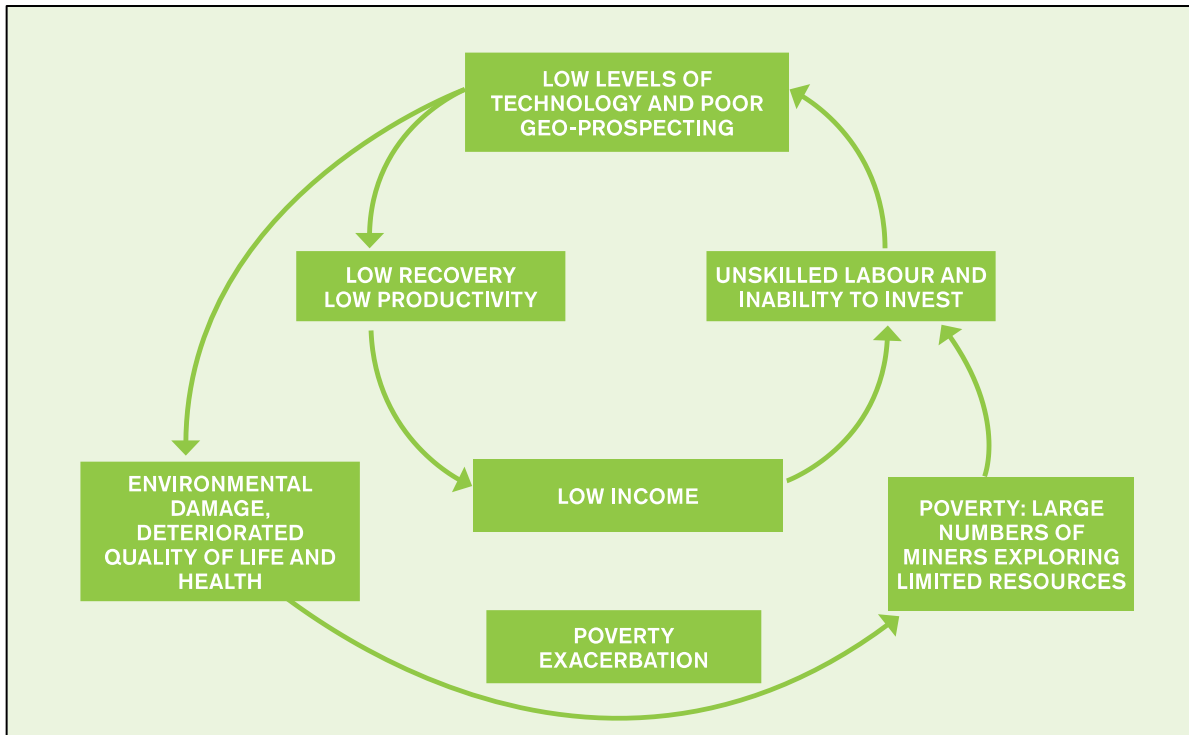
<sup>507</sup> Ibid and Hilson (2012) 33 *Canadian Journal of Development Studies/Revue canadienne d'études du développement* 180 at 181.

<sup>508</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 5; Banchirigah (2006) 31 *Resources Policy* 165 at 165-166 and Carter, Little, Mogues and Negatu (2007) 35 *World development* 835 at 838.

<sup>509</sup> Carter, Little, Mogues and Negatu (2007) 35 *World development* 835 at 837.

<sup>510</sup> Ibid at 838.

<sup>511</sup> Ibid and Siwale and Siwale (2017) 4 *The Extractive Industries and Society* 191 at 193.



**Figure 5:** AMS poverty trap.<sup>512</sup>

Figure five highlights certain factors that have been identified at the Roundtable, including: geological uncertainty with limited resources, inappropriate technology, and low levels of environmental awareness.<sup>513</sup> Many artisanal miners are unschooled and do not have an in-depth understanding of geological exploitation and prospecting.<sup>514</sup> The miners are also often cash strapped and unable to afford proper prospecting tools and equipment.<sup>515</sup> As a result, the artisanal miners tend to engage in rudimentary mining, with very limited, low metal recovery from the ore body, which in turn causes excessive chemical and physical environmental damage.<sup>516</sup> The artisanal miners often sell their ore to middlemen and buyers who pay them poor prices usually below the market price.<sup>517</sup> Consequently, the miners remain poor with an inability to further invest

<sup>512</sup> Permission has been granted for reuse of this figure. See: J McQuilken and G Hilson *Artisanal and small-scale gold mining in Ghana: Evidence to inform an 'action dialogue'* (2016) at 16.

<sup>513</sup> Hilson (2012) 33 *Canadian Journal of Development Studies/Revue canadienne d'études du développement* 180 at 183.

<sup>514</sup> Barry (1996) *World Bank Industry and Energy Department Occasional Paper No. 6* and Hebli and Said (2020) 7(2) *Journal of Tourism Management Research* 196 at 200.

<sup>515</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 6.

<sup>516</sup> *Ibid.*

<sup>517</sup> Barry (1996) *World Bank Industry and Energy Department Occasional Paper No. 6*.

in better mining equipment.<sup>518</sup> The cycle of poverty is thus further exacerbated and continues undebated.

These factors have further perpetuated hardships of artisanal miners in rural sub-Saharan Africa and have fashioned an environment that has forced people to pursue work in the ASM sector out of pure desperation.<sup>519</sup> The UNECA published a report that explains in-depth how each identified factor has a knock-on effect, which ultimately exacerbates poverty and, in turn, creates poverty trap conditions.<sup>520</sup>

According to the UNECA, the productivity and income per head are lowered when the country has a large number of artisanal miners in a given area who have limited and marginal resources, with inadequate human and social capital.<sup>521</sup> The decrease in productivity and income has the consequence of affecting the technology choices that are available to the miners.<sup>522</sup> Working with limited capital, most artisanal miners' are involved in activities that are rudimentary in nature, with little mechanisation.<sup>523</sup> Without proper mechanisation, mining activities and processing techniques can be highly inefficient, with low returns.<sup>524</sup> Furthermore, without adequate techniques and equipment, there is a greater possibility that the environment will be badly degraded and miners will face more hazardous situations.<sup>525</sup>

The poverty trap is reinforced by poor quality of life and health as a result of dangerous working conditions.<sup>526</sup> Consequently, productivity, ore recovery and yields remain low and income continues at a subsistence level.<sup>527</sup> A combination of the above-

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<sup>518</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 6.

<sup>519</sup> Barry (1996) *World Bank Industry and Energy Department Occasional Paper No. 6* and Hilson (2012) 33 *Canadian Journal of Development Studies/Revue canadienne d'études du développement* 180 at 183.

<sup>520</sup> United Nations Economic Commission for Africa *Reports on selected themes in natural resources development in Africa: artisanal and small-scale mining and technology challenges in Africa* (2003) at 2.

<sup>521</sup> Hilson (2012) 33 *Canadian Journal of Development Studies/Revue canadienne d'études du développement* 180 at 184.

<sup>522</sup> United Nations Economic Commission for Africa *Reports on selected themes in natural resources development in Africa: artisanal and small-scale mining and technology challenges in Africa* (2003) at 2.

<sup>523</sup> *Ibid* and Hentschel, Hruschka and Priester (2003) *IIED Report* at 7.

<sup>524</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 7 and Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 50.

<sup>525</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 7 and United Nations Economic Commission for Africa at 2.

<sup>526</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 50.

<sup>527</sup> United Nations Economic Commission for Africa *Reports on selected themes in natural resources development in Africa: artisanal and small-scale mining and technology challenges in Africa* (2003) at 2.

mentioned factors ultimately hinders re-capitalisation and prevents mining operations from upgrading, thus trapping artisanal miners in a vicious cycle of poverty.<sup>528</sup> These miners are thus unable to escape from hazardous and arduous work to which they seem wedded.<sup>529</sup>

The AMV acknowledges the correlation between the rise in ASM activities and the deeply entrenched poverty trap. The AMV recognises that the ASM sector is ‘both a poverty-driven and a poverty alleviating, finite activity.’<sup>530</sup> In terms of the AMV, the poverty cycle can be stopped if alternative livelihoods to ASM are developed and diversified.<sup>531</sup> For example, people need to be trained in alternative skills, such as farming, bricklaying and carpentry.<sup>532</sup> An increase in alternative livelihoods will ensure that income sources are diversified, and non-mining incomes are broadened.<sup>533</sup> The AMV notes that growth in alternative livelihoods will ultimately facilitate ‘ASM transition from artisanal to small small-scale mining; from gold and gemstones to industrial minerals; and from mining to farming and other businesses.’<sup>534</sup> The consequence of an increase in alternative livelihoods is that some artisanal miners will abandon their mining activities altogether.<sup>535</sup> This will result in fewer miners per unit of the area mined; an increase in income for the remaining artisanal miners; and finally reduced exploitation on the already limited resources.<sup>536</sup>

The AMV further acknowledges that to stop the poverty trap; there is a need to mitigate the ASM sector’s negative consequences.<sup>537</sup> Instead, the focus should be placed on the sector’s positive benefits to transform the sector and ensure that its contribution towards poverty alleviation and the creation of resilient communities is maximised.<sup>538</sup>

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<sup>528</sup> United Nations Economic Commission for Africa *Reports on selected themes in natural resources development in Africa: artisanal and small-scale mining and technology challenges in Africa* (2003) at 2

<sup>529</sup> Hilson (2012) 33 *Canadian Journal of Development Studies/Revue canadienne d'études du développement* 180 at 184.

<sup>530</sup> AMV at 28.

<sup>531</sup> Ibid.

<sup>532</sup> AMV at 28.

<sup>533</sup> Ibid.

<sup>534</sup> Ibid.

<sup>535</sup> Ibid.

<sup>536</sup> Ibid.

<sup>537</sup> Ibid at 27.

<sup>538</sup> AMV at 27.

Importantly, the AMV maintains that any changes to the artisanal mining sector must be made in direct consultation with artisanal miners.<sup>539</sup>

## 5. Conclusion

The rise in ASM activities across sub-Saharan Africa has risen dramatically in the past three decades.<sup>540</sup> The correlation between ASM activities and poverty is illustrated in this chapter, highlighting that the highest prevalence of the ASM sector is found in poor, lower-income countries. The ASM poverty trap is a vicious cycle which perpetuates these activities and the loop of extreme poverty. With the rise of the ASM sectors across the continent, there has been an increase in socio-economic and environmental impacts. Governments across sub-Saharan Africa have started to react to these negative implications by focusing their efforts on attempting to formalise their ASM sector.

The next chapter examines the role and negative implications of the ASM sector in sub-Saharan Africa. Evaluating ASM's negative consequences will enhance understanding as to why governments are so eager to bolster formalisation efforts.

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<sup>539</sup> AMV at 28.

<sup>540</sup> Banchirigah (2006) 31 *Resources Policy* 165 at 169; Maconachie and Hilson (2011) 35 *Natural Resource Forum* 293 at 297 and Siwale and Siwale (2017) 4 *The Extractive Industries and Society* 191 at 191.

# CHAPTER 5: THE NEED TO ADDRESS THE NEGATIVE CONSEQUENCES OF THE ARTISANAL AND SMALL-SCALE MINING SECTOR

## 1. Introduction

As discussed, the ASM sector plays a pivotal role in diversifying informal rural economies in sub-Saharan Africa. ASM activities help improve local economies by promoting growth in areas of the economy outside of mainstream economic activities.<sup>541</sup> However, the negative environmental and social consequences flowing from the sector continue to undermine the sector's credibility as a forerunner to locally and nationally based socio-economic development.<sup>542</sup>

## 2. The Negative Consequences of Artisanal and Small-scale Mining

The problems stemming from the ASM sector have provoked much debate and controversy amongst interest groups.<sup>543</sup> In particular, the ASM sector's adverse environmental and socio-economic impacts have gained a lot of attention in the literature.<sup>544</sup> Many people have voiced their concern around the sustainability, or unsustainability, of the ASM sector. They have questioned the advantages associated with the sector.<sup>545</sup> For example, the government of the DRC was pressured by the World Bank into addressing the negative impacts flowing from the country's ASM sector.<sup>546</sup> In response to this pressure, the government formalised the Service d'Assistance et d'Encadrement d'Artisanal et Small Scale Mining (SAESSCAM) in

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<sup>541</sup> Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 19.

<sup>542</sup> Gibb *Small-Scale Mining, Rural Subsistence and Poverty in West Africa* (2006) at 42.

<sup>543</sup> McQuilken and Hilson *Artisanal and small-scale gold mining in Ghana: Evidence to inform an 'action dialogue'* (2016) at 17.

<sup>544</sup> Ibid.

<sup>545</sup> Gibb *Small-Scale Mining, Rural Subsistence and Poverty in West Africa* (2006) at 43.

<sup>546</sup> See discussion at chapter 7, section 3.4 below and Pact *PROMINES study* at 37.

2003.<sup>547</sup> The SAESSCAM was created as a government vehicle to address, *inter alia*, the negative consequences associated with the country's ASM sector.<sup>548</sup>

Despite these many negative implications, sub-Saharan African governments have nevertheless acknowledged the significance of the ASM sector as it serves as an income-generating activity.<sup>549</sup> Despite the fact that every ASM site is unique and has specific characteristics, there are common factors that have accentuated the general environmental and social impacts of ASM activities.<sup>550</sup> The main factors can be attributed to the ASM sector's 'lack of mechanisation, use of rudimentary techniques, low levels of occupational health and safety practices, lack of a skilled workforce, lack of social security and lack of awareness about environmental, health and safety issues.'<sup>551</sup> This section will briefly examine a few of these associated negative consequences.

## 2.1 Environmental Implications

One of the biggest problems associated with ASM is the effect it has on both the physical and social environment.<sup>552</sup> Environmental degradation is the most visible of the negative impacts associated with the ASM sector. An example of some of the most significant environmental problems within the ASM sector include: mercury pollution, acid rock drainage, soil erosion damage and deforestation.<sup>553</sup> Although it may be argued that LSM activities are as complicit as ASM in destroying the environment, the scale of destruction emanating from ASM activities is still higher than that caused by

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<sup>547</sup> Pact *PROMINES study* at 37.

<sup>548</sup> *Ibid* at 38.

<sup>549</sup> The Geological Society 'Artisanal mining training in Africa' available at <https://www.geolsoc.org.uk/Geoscientist/Archive/April-2017/Artisanal-mining-training-in-Africa>, accessed on 3 August 2018.

<sup>550</sup> *Ibid*.

<sup>551</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 13.

<sup>552</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 7 and United Nations Economic Commission for Africa *Reports on selected themes in natural resources development in Africa: artisanal and small-scale mining and technology challenges in Africa* (2003) at 48.

<sup>553</sup> M Hoadley and D Limpitlaw 'The Artisanal and Small-Scale Mining Sector and Sustainable Livelihoods' (2004) A paper presented at the *Mintek Small Scale Mining Conference* on 9 September 2004, Nasrec, Johannesburg, Book of Proceedings at 4.

LSM activities.<sup>554</sup> This is because ASM activities are ‘dirtier per unit output’ than LSM operations.<sup>555</sup> This means that for every mining activity that takes place in ASM sites, their production is more detrimental to the environment than that of LSM activities.

Furthermore, in almost every country in sub-Saharan Africa, LSM companies are required by law to abide by health and safety regulations and rehabilitate the land.<sup>556</sup> For example, the MPRDA<sup>557</sup> in South Africa provides an obligation on mining right holders to rehabilitate the land.<sup>558</sup> In terms of section 38(1) of the MPRDA a mining rights holder must ‘as far as reasonably practicable’ rehabilitate the land affected by the mining operations ‘to its natural or predetermined state, or to a land use which conforms to the generally accepted principles of sustainable development.’<sup>559</sup>

The ASM sites are also often mined on unauthorised sites and the land is not properly rehabilitated after mining activities have completed.<sup>560</sup> Consequently, the land becomes altered and cannot be used for other purposes, such as farming.<sup>561</sup> ASM also spans over large areas of a region.<sup>562</sup> Many artisanal miners choose to move from site to site, in search of new mineral deposits. As these miners move from one site to the next, they usually leave a trail of destruction behind.<sup>563</sup>

Furthermore, many artisanal operators dispose faecal waste and tailings. The ASM villages are often transitory with no proper health complaint waste disposal

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<sup>554</sup> Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 14 and Pact *PROMINES study* at 38.

<sup>555</sup> For full list of most severe environmental damages see: Hentschel, Hruschka and Priester (2003) *IIED Report* at 7 and United Nations Economic Commission for Africa *Reports on selected themes in natural resources development in Africa: artisanal and small-scale mining and technology challenges in Africa* (2003) at 48-49.

<sup>556</sup> United Nations Economic Commission for Africa *Reports on selected themes in natural resources development in Africa: artisanal and small-scale mining and technology challenges in Africa* (2003) at 48.

<sup>557</sup> MPRDA.

<sup>558</sup> *Ibid* at section 38.

<sup>559</sup> *Ibid* at section 38(1).

<sup>560</sup> Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 13 and Pact *PROMINES study* at 37.

<sup>561</sup> Hoadley and Limpitlaw (2004) A paper presented at the *Mintek Small Scale Mining Conference* at 4.

<sup>562</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 7 and United Nations Economic Commission for Africa *Reports on selected themes in natural resources development in Africa: artisanal and small-scale mining and technology challenges in Africa* (2003) at 48.

<sup>563</sup> Buxton (2013) *IIED Sustainable Markets Paper* at 9.

arrangements. These communities also often contaminate water bodies and soils.<sup>564</sup> ASM activities generate a greater individual number of polluters than LSM. These polluters are usually concentrated in a certain area, causing significant implications for the locals.<sup>565</sup> One of the greatest problems with regard to environmental degradation stems from the use of mercury during the illegal artisanal gold mining process.<sup>566</sup> It is estimated by the UN Environment Programme that 30 to 40 per cent of the mercury released into the environment worldwide is caused from artisanal gold mining.<sup>567</sup> The ASM sector releases around 640 to 1350 tonnes of mercury annually from at least 70 countries, making ASM one of the world's worst polluters.<sup>568</sup>

It is extremely challenging for governments in the region to monitor or control environmental violations stemming from ASM operations or ensure regulations are enforced. This is because the ASM activities are spread throughout different countries, often in remote areas that remain unknown to public officials.<sup>569</sup> Because of the economic and political failings in sub-Saharan Africa, governments do not usually have the resources and finances to monitor and control every ASM operation.<sup>570</sup>

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<sup>564</sup> Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 13 and Hoadley and Limpitlaw (2004) A paper presented at the *Mintek Small Scale Mining Conference* at 4.

<sup>565</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 7 and United Nations Economic Commission for Africa *Reports on selected themes in natural resources development in Africa: artisanal and small-scale mining and technology challenges in Africa* (2003) at 48.

<sup>566</sup> United Nations Interregional Crime and Justice Research Institute (UNICRI) 'Strengthening the Security and Integrity of the Precious Metals Supply Chain' (May 2016) Technical Report presented at the International strategy to combat illicit trafficking in precious metals Meeting held in Cape Town (March 2016), available at [http://files.unicri.it/PM\\_draft\\_onlinev.pdf](http://files.unicri.it/PM_draft_onlinev.pdf) at 36.

<sup>567</sup> United Nations Environmental Programme (UNEP) *Global Mercury Assessment 2013: sources, emissions, releases and environmental transport* (2013) Report compiled by the UNEP Chemicals Branch, Geneva.

<sup>568</sup> Buxton (2013) *IIED Sustainable Markets Paper* at 9.

<sup>569</sup> Garrett *Artisanal Cassiterite Mining and Trade in North Kivu: Implications for Poverty Reduction and Security* (2008) at 21 and Hentschel, Hruschka and Priester (2003) *IIED Report* at 7 and United Nations Economic Commission for Africa *Reports on selected themes in natural resources development in Africa: artisanal and small-scale mining and technology challenges in Africa* (2003) at 48.

<sup>570</sup> Gibb *Small-Scale Mining, Rural Subsistence and Poverty in West Africa* (2006) at 42 and Hentschel, Hruschka and Priester (2003) *IIED Report* at 7 and United Nations Economic Commission for Africa *Reports on selected themes in natural resources development in Africa: artisanal and small-scale mining and technology challenges in Africa* (2003) at 48.

## 2.2 Occupational Health and Safety

Another problem associated with ASM activities is the occupational health and safety of the miners.<sup>571</sup> The overall standard of occupational health and safety in the ASM sector is extremely low.<sup>572</sup> Many artisanal miners have to work with hazardous gasses and liquid substances, such as mercury, zinc vapour and other acids.<sup>573</sup> Exposure to such substances puts both the miners and their communities at risk.<sup>574</sup> In addition, artisanal miners seldom wear helmets and usually mine without the appropriate safety gear, such as gloves, masks and earplugs.<sup>575</sup> Without proper ear protection, the miners cannot filter noise from equipment, such as hand drills, and therefore experience hearing loss and speech interference.<sup>576</sup>

Most artisanal miners are subject to appalling life-threatening working conditions and related diseases.<sup>577</sup> It is estimated that while the ASM sector employs around one per cent of the world's overall workforce, the sector is accountable for at least eight per cent of the world's industrial accidents.<sup>578</sup> Such a high rate of accidents in the ASM sector is hardly surprising considering the low levels of technology and mechanisation used as well as lack of safety precautions.<sup>579</sup>

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<sup>571</sup> Buxton (2013) *IIED Sustainable Markets Paper* at 9; Rupprecht (2017) 117 *The Journal of Southern African Institute of Mining and Metallurgy* at 26 and Hentschel, Hruschka and Priester (2003) *IIED Report* at 7 and United Nations Economic Commission for Africa *Reports on selected themes in natural resources development in Africa: artisanal and small-scale mining and technology challenges in Africa* (2003) at 48.

<sup>572</sup> Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 15.

<sup>573</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 13.

<sup>574</sup> *Ibid.*

<sup>575</sup> Buxton (2013) *IIED Sustainable Markets Paper* at 9.

<sup>576</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 14.

<sup>577</sup> J Love 'Report of the SAHRC Investigative Hearing: Issues and Challenges in relation to Unregulated Artisanal Underground and Surface Mining Activities in South Africa' (2015) available at <https://www.sahrc.org.za/home/21/files/Unregulated%20Artisanal%20Underground%20and%20Surface%20Mining%20Activities%20electronic%20version.pdf> (the SAHRC Report) at 24; Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 15.

<sup>578</sup> Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 15.

<sup>579</sup> Buxton (2013) *IIED Sustainable Markets Paper* at 9.

Despite using a wide range of skills when exploiting various mineral deposits, most artisanal miners have a low level of appreciation for safety compliance.<sup>580</sup> Most artisanal miners have little or no guidance on how to use and handle explosives and other toxic chemicals like mercury and cyanide.<sup>581</sup> Consequently, they often misuse the explosives and chemicals, thereby subjecting themselves, and their communities, to many hazards.<sup>582</sup>

As discussed above, ASM sites often have poor sanitation. Due to the transient nature of ASM activities, artisanal miners do not have the time or means to ensure proper sanitary facilities are contracted.<sup>583</sup> As a result of poor sanitation, infectious water-borne diseases, such as diarrhoea and bilharzia, are rampant in resident mining communities.<sup>584</sup>

ASM is far more hazardous than LSM operations.<sup>585</sup> Most artisanal miners direct their attention towards their immediate socio-economic concerns, rather than focusing on the long-term consequences of their activities.<sup>586</sup> The short-sightedness of such choices may be explained by the dire needs of those having to make such choice, but it would be far more beneficial for all if this pressure could be relieved to give better consideration to long-term consequences.<sup>587</sup> Artisanal miners therefore operate outside of the occupational health and safety obligations as well as the environmental obligations that have been mandated for LSM practices.<sup>588</sup>

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<sup>580</sup> Rupprecht (2017) 117 *The Journal of Southern African Institute of Mining and Metallurgy* at 26.

<sup>581</sup> Ibid.

<sup>582</sup> Full list of occupational health and safety problems at: Hentschel, Hruschka and Priester (2003) *IIED Report* at 7 and United Nations Economic Commission for Africa *Reports on selected themes in natural resources development in Africa: artisanal and small-scale mining and technology challenges in Africa* (2003) at 50-51.

<sup>583</sup> Buxton (2013) *IIED Sustainable Markets Paper* at 9.

<sup>584</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 4 and Buxton (2013) *IIED Sustainable Markets Paper* at 9.

<sup>585</sup> Rupprecht (2017) 117 *The Journal of Southern African Institute of Mining and Metallurgy* at 26.

<sup>586</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 4 and Hentschel, Hruschka and Priester (2003) *IIED Report* at 7 and United Nations Economic Commission for Africa *Reports on selected themes in natural resources development in Africa: artisanal and small-scale mining and technology challenges in Africa* (2003) at 48.

<sup>587</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 48 and Rupprecht (2017) 117 *The Journal of Southern African Institute of Mining and Metallurgy* at 27.

<sup>588</sup> Gibb *Small-Scale Mining, Rural Subsistence and Poverty in West Africa* (2006) at 42.

### 2.3 Child Labour

The third negative implication this dissertation will briefly address is child labour. It is in the informal economy where child labour is most prevalent, as children can easily step in as unskilled cheap labourers.<sup>589</sup> Most countries in sub-Saharan Africa have joined the global fight to end child labour by ratifying the International Labour Organization (ILO) Convention 182 'Eliminating Worst Forms of Child Labour'.<sup>590</sup> Nevertheless, child labour remains rife in most sub-Saharan African countries where ASM exists.<sup>591</sup>

It is estimated that at least two million children across the world are involved in some form of ASM.<sup>592</sup> As a result of ASM being a poverty-driven activity, many families are involved in the ASM sector for pure survival tactics.<sup>593</sup> Family incomes are low in most sub-Saharan African countries and, therefore, they have no choice but to require children as young as three years old to work.<sup>594</sup> The obvious consequence of child labour is that children are prevented from attending school.<sup>595</sup> In addition, children working in the mines often have physical and psychological development problems.<sup>596</sup> The children also suffer from health problems, such as injuries from carrying heavy loads or mercury poisoning.<sup>597</sup>

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<sup>589</sup> International Labour Organization and United Nations Children's Fund 'COVID-19 and Child Labour: A time of crises, a time to act' (2020) ILO and UNICEF at 11.

<sup>590</sup> International Labour Organization (ILO) *Worst Forms of Child Labour Convention* (1999) Convention no. 182.

<sup>591</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 7 and United Nations Economic Commission for Africa *Reports on selected themes in natural resources development in Africa: artisanal and small-scale mining and technology challenges in Africa* (2003) at 32.

<sup>592</sup> Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 16 and Hentschel, Hruschka and Priester (2003) *IIED Report* at 8 and United Nations Economic Commission for Africa *Reports on selected themes in natural resources development in Africa: artisanal and small-scale mining and technology challenges in Africa* (2003) at 33.

<sup>593</sup> Gibb *Small-Scale Mining, Rural Subsistence and Poverty in West Africa* (2006) at 42.

<sup>594</sup> Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 16; Hentschel, Hruschka and Priester (2003) *IIED Report* at 33.

<sup>595</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 4.

<sup>596</sup> Maconachie and Hilson (2011) 35 *Natural Resource Forum* 293 at 293.

<sup>597</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 7 and United Nations Economic Commission for Africa *Reports on selected themes in natural resources development in Africa: artisanal and small-scale mining and technology challenges in Africa* (2003) at 33.

As noted by the ILO, 'greater informal employment coupled with economic hardship could push many children out of school and into the labour market',<sup>598</sup> and this is exactly what is happening with the recent COVID-19 pandemic (the Pandemic). It has been reported by various organisations that child labour in rural areas is increasing because of the Pandemic.<sup>599</sup> The Pandemic has heightened economic insecurity and caused losses in household income.<sup>600</sup> The situation has been exacerbated with the temporary closure of schools, as households look for new ways to allocate children's time and find other sources of income.<sup>601</sup> Children have either had to move to mine sites with their parents due to movement restrictions or have been directly involved in mine work to help support their families.<sup>602</sup>

The reality is that ASM is a poverty-driven activity and any attempt to ban ASM activities due to the sector's negative consequences is likely to prove futile. As long as poverty prevails, the ASM sector is likely to exist.<sup>603</sup> In fact, shutting down artisanal mines would only result in more illegality as artisanal miners would find ways to operate in a way that makes contact with government impossible.<sup>604</sup> Regardless of all these negative attributes, the ASM sector continues to play a fundamental role in economic development in many sub-Saharan African countries.<sup>605</sup> Governments across the region are beginning to acknowledge the importance of ASM, and have been prompted to formalise the sector.<sup>606</sup> The question which has been raised is whether formalisation would ultimately assist in the ASM sector being operated in a co-ordinated and organised way.<sup>607</sup>

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<sup>598</sup> International Labour Organization and United Nations Children's Fund 'COVID-19 and Child Labour: A time of crises, a time to act' (2020) ILO and UNICEF at 11.

<sup>599</sup> Ibid.

<sup>600</sup> Hebli and Said (2020) 7(2) *Journal of Tourism Management Research* 196 at 199.

<sup>601</sup> International Labour Organization and United Nations Children's Fund 'COVID-19 and Child Labour: A time of crises, a time to act' (2020) ILO and UNICEF at 3.

<sup>602</sup> Ibid.

<sup>603</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 4; Banchirigah (2006) 31 *Resources Policy* 165 at 165-166.

<sup>604</sup> Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 29.

<sup>605</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 7 and United Nations Economic Commission for Africa *Reports on selected themes in natural resources development in Africa: artisanal and small-scale mining and technology challenges in Africa* (2003) at 28

<sup>606</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 4

<sup>607</sup> Gibb *Small-Scale Mining, Rural Subsistence and Poverty in West Africa* (2006) at 45 and Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 29.

### 3. Conclusion

With the rise in ASM activities, many countries have seen an increase in negative socio-economic and environmental implications. Consequently, many governments across sub-Saharan Africa have sought to formalise their ASM sectors in an attempt to mitigate these negative implications.

The question that follows is whether formalising the ASM sector in the region will effectively help mitigate the negative implications flowing from the sector. To answer this question, this dissertation looks at the case study of the DRC, one such country in sub-Saharan Africa that has attempted to formalise its ASM sector. Such an analysis will clarify whether the negative impacts are mere expressions of the sector's informality, or whether the negative impacts persist despite the country's attempt to formalise its ASM sector. Therefore, part three of this dissertation will examine the case-study of the DRC and its ASM sector.

## PART THREE: CASE STUDY OF THE DEMOCRATIC REPUBLIC OF CONGO

Part three of this dissertation consists of chapter six, seven and eight. This section uses the DRC as a case study to ASM. The purpose of this section is to highlight and evaluate one sub-Saharan African country that has attempted to formalise its ASM sector. Part three assess the extent and success of such formalisation efforts in the context of the DRC. Examining the case study of DRC's ASM, is an instructive task as one is able to apply lessons learnt from the DRC and use them to help other countries, like South Africa, develop a well-regulated ASM sector.

Chapter six introduces the idea of ASM in the DRC context, by examining the rise and significance of ASM on both the Congolese population and its economy. Chapter six further assesses the proliferation of ASM in the DRC by examining the historical events which assisted to shape DRC's ASM sector. These events include: the rise of the Belgian Colony, DRC's independence in 1960, and the two Congo wars, which took place between 1996 and 2003.

After having assessed the significant role that the ASM sector plays in the DRC, chapter seven consists of an examination of the DRC's artisanal mining legislation, which includes the 2002 Mining Code,<sup>608</sup> as well as the Mining Regulations.<sup>609</sup> This chapter will also address the changes made in the legal framework that have been introduced by the 2018 Mining Code,<sup>610</sup> in an attempt to formalise DRC's mining sector. Such an examination will clarify the extent to which the ASM sector has been formalised in the DRC and the challenges faced in the DRC in light of these regulations. This chapter will further investigate four initiatives implemented by the DRC's government to assist with regulating and bringing the ASM sector under state control and formalise it.

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<sup>608</sup> Mining Code Law no. 7 of 2002.

<sup>609</sup> Mining Regulation decree no. 38 of 2003.

<sup>610</sup> Mining Code Law no. 18/001.

Lastly, chapter eight assess whether the formalisation efforts mentioned in chapter seven have actually managed to yield the expected results by addressing the negative socio-economic and environmental implications flowing from the DRC's ASM sector. Such an analysis will clarify whether the negative impacts are mere expressions of the sector's informality, or whether the negative impacts persist despite the country's attempt to formalise its ASM sector.

# CHAPTER 6: HISTORY OF ARTISANAL AND SMALL-SCALE MINING IN THE DRC

## 1. Introduction

The DRC is greatly known for its mining industry, being one of the most mineral rich countries on the Continent.<sup>611</sup> The DRC is well-endowed with mineral resources that include copper, cobalt, diamonds, niobium, gold, silver, tin, coal, uranium, manganese and zinc.<sup>612</sup> The country produces around 80 per cent of the world's columbite-tantalite (coltan), over 10 per cent of the world's copper and 49 per cent of global cobalt output.<sup>613</sup> The DRC also houses 30 per cent of the world's diamond reserves.<sup>614</sup> In 2018, it was estimated that the country has about 24 trillion US dollars' worth of untapped raw mineral deposits.<sup>615</sup>

Despite the DRC's abundance of resource wealth, the country remains one of the poorest worldwide.<sup>616</sup> It is estimated that more than 87 per cent of the DRC's total population live on less than 1.25 US dollars per day, which is below the poverty line.<sup>617</sup> Whilst conducting some prospecting work in 1892 in the Katanga province of the DRC, a Belgian geologist, René Jules Cornet, dubbed the DRC territory a 'veritable geological scandal,'<sup>618</sup> a term that is still used to describe the DRC today.<sup>619</sup> This term came about because the rich abundance of mineral resources, which should improve the lives of millions of Congolese by ensuring a healthy economy, has instead contributed greatly to under-development, war and misery in the country.<sup>620</sup>

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<sup>611</sup> Nichols (2018) 5(2) *Scholarly Horizons: University of Minnesota, Morris Undergraduate Journal* 1 at 7.

<sup>612</sup> Ibid at 7-8.

<sup>613</sup> Geenen (2014) 40 *Resource Policy* 90 at 91 and D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 1.

<sup>614</sup> Nichols (2018) 5(2) *Scholarly Horizons: University of Minnesota, Morris Undergraduate Journal* 1 at 7.

<sup>615</sup> N Stoop, M Verpoorten and P van der Windt 'Artisanal or industrial conflict minerals? Evidence from Eastern Congo' (2019) 122 *World Development* 660 at 662 and Nichols (2018) 5(2) *Scholarly Horizons: University of Minnesota, Morris Undergraduate Journal* 1 at 8.

<sup>616</sup> Geenen and Radley (2014) 62 *Futures* 58 at 59.

<sup>617</sup> United Nations Development Programme (UNDP) 'The Rise of the South: Human Progress in a Diverse World' (2013) *Human Development Report* 1 at 160.

<sup>618</sup> Nzongola-Ntalaja *The Congo: From Leopold to Kabila: A People's History* (2002) at 15.

<sup>619</sup> J Pham 'In Congo, third time's no charm' available at <https://thehill.com/blogs/pundits-blog/international/209544-in-congo-third-times-no-charm>, accessed on 15 June 2019.

<sup>620</sup> Ibid.

The 110 years of mineral extraction in the DRC has yet to improve the lives of the people.<sup>621</sup> Since the days of King Leopold II, the wealth of the country has primarily served the interests of rulers in the DRC as well as their international business and political partners.<sup>622</sup> This situation has been exacerbated by the atrocities of colonial exploitation, which set the country up for bad governance and state failure.<sup>623</sup> As will be discussed below in more detail, the culmination of events which took place in the DRC has shaped the ASM sector and ultimately enhanced informality.

## 2. The DRC Mining Context

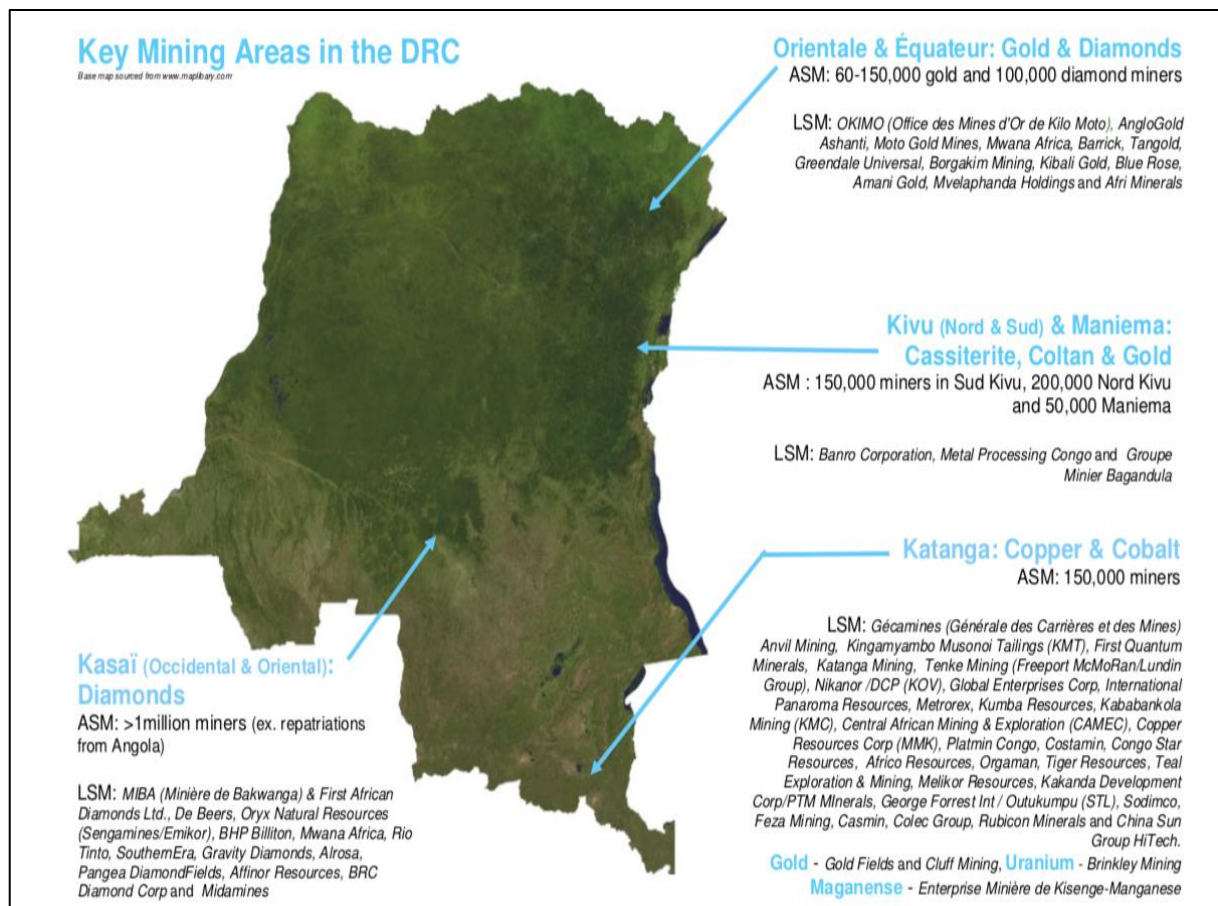


Figure 6: key mining areas in the DRC.<sup>624</sup>

<sup>621</sup> Stoop, Verpoorten and van der Windt (2019) 122 *World Development* 660 at 662.

<sup>622</sup> Nzongola-Ntalaja *The Congo: From Leopold to Kabila: A People's History* (2002) at 28.

<sup>623</sup> Ibid and Stoop, Verpoorten and van der Windt (2019) 122 *World Development* 660 at 662.

<sup>624</sup> This figure has been taken from an open source, which permits use of the figure for student research. See: D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 2.

Figure six above illustrates the scale of ASM activities and where major LSM activities take place in the DRC, such as the famous mining company Gécamines in Katanga region. Importantly, the figure depicts the number of artisanal miners in each region of the DRC and what type of mineral exploration takes place therein. Most of the ASM activities take place in eastern DRC, such as in the Kivu Lake region.<sup>625</sup> Nevertheless, there are more than one million artisanal miners in Kasai region alone, a region that is located in western DRC and is well-known for its diamond exploration.<sup>626</sup>

Since the colonial era, the DRC's economy has been reliant on the industrial extraction and exportation of raw materials.<sup>627</sup> The country has been victim to intermittent economic crises (from the middle of the 1970s onwards) and violent conflicts during the two Congo Wars (1996-2003).<sup>628</sup> These events have resulted in a weak economy as well as industrial output being seriously affected, as will be discussed in more detail below.<sup>629</sup> In the mid-eighties, the collapse of world tin markets as well as the instability of other commodity markets together with the rapidly failing state, resulted in the demise of industrial exploitation in the DRC.<sup>630</sup> Such events have ultimately led to an expansion of ASM activities in the DRC.<sup>631</sup>

The DRC is a good example of one such country in the sub-Saharan African region that has attempted to formalise its ASM sector.<sup>632</sup> It therefore still remains besieged by the ASM poverty trap.<sup>633</sup> The DRC case study furthers the debate around how the ASM sector's rising importance in sub-Saharan Africa continues to be overshadowed by its adverse social and environmental implications.<sup>634</sup>

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<sup>625</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 2.

<sup>626</sup> Ibid and Nzongola-Ntalaja *The Congo: From Leopold to Kabila: A People's History* (2002) at 28.

<sup>627</sup> Geenen (2014) 40 *Resource Policy* 90 at 91.

<sup>628</sup> Ibid and B Maclin, J Kelly, R Perks, P Vinck and P Pham 'Moving to the mines: Motivations of men and women for migration to artisanal and small-scale mining sites in Eastern Democratic Republic of the Congo' (2017) 51 *Resource Policy* 115 at 118.

<sup>629</sup> Ibid.

<sup>630</sup> M Rafaelli *Rise and demise of commodity agreements: An investigation into the breakdown of international economy agreements* (1995) at 181-185 and 201-203.

<sup>631</sup> Maclin, Kelly, Perks, Vinck and Pham (2017) 51 *Resource Policy* 115 at 119.

<sup>632</sup> Geenen (2014) 40 *Resource Policy* 90 at 91 and Nzongola-Ntalaja *The Congo: From Leopold to Kabila: A People's History* (2002) at 28.

<sup>633</sup> See discussion at chapter 4, section 4.

<sup>634</sup> Hilson and Hilson (2015) *International Growth Center Working Paper* at 3.

### 3. Significance of Artisanal and Small-scale Mining in the DRC

The DRC is a sub-Saharan African country that has experienced unprecedented high levels of unemployment exacerbating poverty in the region.<sup>635</sup> The country has a high unemployment rate of 73 per cent with almost 80 per cent of the Congolese population operating in the informal sector.<sup>636</sup> The DRC, where foreign trade represents around 60 per cent of its economy, has also been severely affected by the COVID-19 pandemic (the Pandemic).<sup>637</sup> In 2020 and 2021, the country's economy experienced its first economic recession in 18 years.<sup>638</sup> The economy has been greatly impacted by the different measures taken to combat the Pandemic, such as restrictions on transportation and the implementation of various lockdowns.<sup>639</sup> There is no doubt that the impact of COVID-19 will have long-term negative consequences on the country's employment rate.

There is a clear need to find a workable solution in the DRC to solve the high rate of unemployment. Many locals have little choice but to turn to the ASM sector as a form of livelihood.<sup>640</sup> As Geenen notes, ASM is the most vital livelihood in the DRC.<sup>641</sup> Many desperate rural and urban Congolese citizens are lured into the ASM sector in the belief that they will find fortune and rise above their subsistence levels.<sup>642</sup>

The statistics relating to the ASM sector indicate the impact ASM has on the DRC and its people. ASM activities in the DRC alone constitute over 80 per cent of the country's

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<sup>635</sup> KPMG Global Mining Institute 'Democratic Republic of Congo: Country mining guide' available at <https://assets.kpmg/content/dam/kpmg/pdf/2014/09/democratic-republic-congo-mining-guide.pdf>, accessed on 20 July 2019 at 18.

<sup>636</sup> KPMG Global Mining Institute 'Democratic Republic of Congo: Country mining guide' available at <https://assets.kpmg/content/dam/kpmg/pdf/2014/09/democratic-republic-congo-mining-guide.pdf>, accessed on 20 July 2019 at 18.

<sup>637</sup> C Pinshi 'What impact does COVID-19 have on the Congolese economy and international trade?' (2020) 6 *H8 Think Tank* 1 at 3.

<sup>638</sup> *Ibid.*

<sup>639</sup> African Development Bank Group 'Democratic Republic of Congo Economic Outlook' available at <https://www.afdb.org/en/countries-central-africa-democratic-republic-congo/democratic-republic-congo-economic-outlook>, accessed on 3 May 2021.

<sup>640</sup> Banchirigah (2006) 31 *Resources Policy* 165 at 165 and Hilson and Hilson (2015) *International Growth Center Working Paper* at 3.

<sup>641</sup> Geenen and Radley (2014) 62 *Futures* 58 at 59.

<sup>642</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 4 and Nzongola-Ntalaja *The Congo: From Leopold to Kabila: A People's History* (2002) at 28.

mining sector production.<sup>643</sup> The ASM sector provides employment for almost two million people.<sup>644</sup> For many people living in the DRC, the ASM sector is seen as a promising path, if not the only path, for income opportunity.<sup>645</sup> The sector provides an important source of cash flow into local communities across the country.<sup>646</sup> It is estimated that between eight and ten million Congolese people depend indirectly on the ASM sector.<sup>647</sup>

A large portion of mineral production in the DRC can be attributed to the ASM sector.<sup>648</sup> For example, the impact of ASM on the DRC economy can be seen in the country's cobalt production. The DRC is the world's leading producer of cobalt, a commodity that has tripled in demand over the last decade.<sup>649</sup> Cobalt is extremely sought after as it is not only used to produce magnets and electronics, such as cell phones, but it is also used to produce brilliant blue colours in paint, glass and porcelain.<sup>650</sup> Cobalt is further used in the treatment of cancer and it has the ability to irradiate food so as to preserve it.<sup>651</sup> In 2010, the cobalt located in the Katanga Province in the DRC was responsible for half of the world's primary cobalt production.<sup>652</sup> It is estimated that over the last decade, between 60 per cent and 90 per cent of this cobalt came directly from the ASM sector.<sup>653</sup>

In 2017, it was estimated that almost 90 per cent of ASM activities are performed by impoverished and largely illegal artisanal miners, operating in the informal sector beyond state control.<sup>654</sup> Scholars have argued that with an improved legal regime and

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<sup>643</sup> Ibid and Perks (2011) 23 *Journal of International Development* 1115 at 1115.

<sup>644</sup> Bryceson and Geenen (2016) 111(459) *African Affairs* 296 at 300 and Perks (2011) 23 *Journal of International Development* 1115 at 1121.

<sup>645</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 7 and United Nations Economic Commission for Africa *Reports on selected themes in natural resources development in Africa: artisanal and small-scale mining and technology challenges in Africa* (2003) at 1.

<sup>646</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 7.

<sup>647</sup> Geenen and Radley (2014) 62 *Futures* 58 at 59.

<sup>648</sup> Maclin, Kelly, Perks, Vinck and Pham (2017) 51 *Resource Policy* 115 at 115.

<sup>649</sup> N Tsurukawa, S Prakash and A Manhart *Social impacts of artisanal cobalt mining in Katanga, Democratic Republic of Congo* (2011) at 1.

<sup>650</sup> Royal Society of Chemistry 'Cobalt' available at <https://www.rsc.org/periodic-table/element/27/cobalt>, accessed on 3 June 2020.

<sup>651</sup> Ibid.

<sup>652</sup> Tsurukawa, Prakash and Manhart *Social impacts of artisanal cobalt mining in Katanga, Democratic Republic of Congo* (2011) at 1.

<sup>653</sup> Ibid.

<sup>654</sup> Maclin, Kelly, Perks, Vinck and Pham (2017) 51 *Resource Policy* 115 at 118 and Geenen 37 *Resource Policy* 322 at 322.

proper implementation, the ASM sector has the potential to empower poor and vulnerable people economically as well as contribute to the country's development strategies.<sup>655</sup> It is imperative to explore the history of ASM in the DRC to understand why ASM activities are so prominent in the country.

#### 4. Setting the Stage for Artisanal and Small-scale Mining in the DRC

ASM has a long and complicated history in the DRC, which dates back to colonial times.<sup>656</sup> Since the 1980s, the DRC's ASM sector has risen considerably, with ASM activities being most prominent in the eastern part of the country.<sup>657</sup> By the 1990s, the value and volume of ASM production exceeded industrial production.<sup>658</sup> Although attempts have been made to formalise the ASM sector, the sector remains largely informal, with many artisanal mines not being officially registered.<sup>659</sup> This means that their mining activities remain illegal.<sup>660</sup>

Although artisanal mining in the DRC has existed for hundreds of years, the rapid expansion of artisanal mining in the country can be attributed to various legacy events.<sup>661</sup> These events have not only contributed to creating a country that is both economically and politically unstable, but has also heightened poverty in the region. It is the nature of this failing state that has ultimately caused a rise in ASM activities in the DRC. To understand the country's growing ASM sector it is imperative for the purpose of this dissertation to discuss these events in more detail.

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<sup>655</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 4 and Tsurukawa, Prakash and Manhart *Social impacts of artisanal cobalt mining in Katanga, Democratic Republic of Congo* (2011) at 1.

<sup>656</sup> Matthysen and Montejano 'Conflict Minerals' initiative in DR Congo: Perceptions of local mining communities' (2013) at 8.

<sup>657</sup> Ibid.

<sup>658</sup> Geenen 37 *Resource Policy* 322 at 322 and Matthysen and Montejano 'Conflict Minerals' initiative in DR Congo: Perceptions of local mining communities' (2013) at 8.

<sup>659</sup> Bryceson and Geenen (2016) 111(459) *African Affairs* 296 at 302-303 and Tsurukawa, Prakash and Manhart *Social impacts of artisanal cobalt mining in Katanga, Democratic Republic of Congo* (2011) at 3.

<sup>660</sup> Maclin, Kelly, Perks, Vinck and Pham (2017) 51 *Resource Policy* 115 at 120 and Bryceson and Geenen (2016) 111(459) *African Affairs* 296 at 302-303.

<sup>661</sup> Matthysen and Montejano 'Conflict Minerals' initiative in DR Congo: Perceptions of local mining communities' (2013) at 9.

## 4.1 DRC as a Belgian Colony

Prior to colonisation, between the period of the fourteenth and early nineteenth centuries, the Kingdom of Kongo (as DRC was known) existed in the region.<sup>662</sup> In the mid-1800s, the DRC remained one of the few areas of the African Continent not colonised by a European power.<sup>663</sup> However, around 1885, King Leopold II of Belgium was looking to acquire a colony for Belgium.<sup>664</sup> Leopold II disguised his colonial enterprise 'as a humanitarian venture for scientific research and economic development in Central Africa.'<sup>665</sup> He manipulated Belgium into thinking that he sought to 'civilise' the country and help bring an end to the Arab slave trade in Africa.<sup>666</sup> Consequently, he founded the basis for a Belgian colonisation of Central Africa, mostly comprising of the Congo Basin.<sup>667</sup> In 1885, the Berlin Conference authorised Leopold II to found the 'Congo Free State' and in 1886, the country became a corporate state controlled by Leopold II.<sup>668</sup>

However, Leopold II's actions were driven by the desire for wealth from the very beginning of his reign.<sup>669</sup> He sought to extract natural resources as cheaply as possible and immediately began exploiting the country's ivory, rubber and minerals.<sup>670</sup> By 1891, it was mandatory for all Congolese people to supply labour, rubber and ivory to the King.<sup>671</sup> Many people could not meet the daily quotas of production.<sup>672</sup> This resulted

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<sup>662</sup> H André-Dumont 'Mining in the Democratic Republic of Congo: A Case Study' (2011) *Proceedings of 57<sup>th</sup> Annual Rocky Mountain Mineral Law Institute* available at <https://www.rmmlf.org/publications/digital-library/mining-in-the-democratic-republic-of-congo-a-case-study>, accessed on 25 August 2019.

<sup>663</sup> Ibid.

<sup>664</sup> Ibid.

<sup>665</sup> Nzongola-Ntalaja *The Congo: From Leopold to Kabila: A People's History* (2002) at 15.

<sup>666</sup> Ibid at 15 and 21.

<sup>667</sup> André-Dumont 'Mining in the Democratic Republic of Congo: A Case Study' (2011) *Proceedings of 57<sup>th</sup> Annual Rocky Mountain Mineral Law Institute* available at <https://www.rmmlf.org/publications/digital-library/mining-in-the-democratic-republic-of-congo-a-case-study>, accessed on 25 August 2019

<sup>668</sup> Ibid and Nzongola-Ntalaja *The Congo: From Leopold to Kabila: A People's History* (2002) at 17-18.

<sup>669</sup> Maclin, Kelly, Perks, Vinck and Pham (2017) 51 *Resource Policy* 115 at 120 and Bryceson and Geenen (2016) 111(459) *African Affairs* 296 t 302-303.

<sup>670</sup> M Ewans *European Atrocity, African Catastrophe: Leopold II, the Congo Free State and its Aftermath* (2002) at 88.

<sup>671</sup> Nzongola-Ntalaja *The Congo: From Leopold to Kabila: A People's History* (2002) at 22.

<sup>672</sup> B de Mesquita 'Leopold II and the Selectorate: An Account in Contrast to a Racial Explanation' (2007) 32 *Historical Social Research* 203 at 215 and Nzongola-Ntalaja *The Congo: From Leopold to Kabila: A People's History* (2002) at 15.

in mass murders of entire villages, slavery and the ‘perpetration of heinous crimes against humanity’ in the Belgian Congo.<sup>673</sup>

The exploitation and atrocities by Leopold II was seen to be one of the first instances where the Congolese State had failed its citizens, a trend that has continued throughout history.<sup>674</sup> The exploitation set the stage for the country’s ongoing entrenched poverty, as his reign cultivated a population that were left economically dependent, without being able to rule over themselves.<sup>675</sup> The colony was totally run by foreigners.<sup>676</sup> Few positions, out of some five thousand management-level positions in civil society, were occupied by local Africans.<sup>677</sup> Most local Congolese people were forced into slave labour, greatly contributing towards a significant part of Belgium’s economic growth and development.<sup>678</sup> Most of the supposedly ‘vacant land’ had become the ‘Crown domain’ or the ‘public domain of the state’.<sup>679</sup> Consequently, the King and the State were seen as the landowners and became the main beneficiaries of the revenue that was derived from the collection of ivory, rubber and minerals.<sup>680</sup> Leopold II managed to exploit the wealth of the people and the country with impunity.<sup>681</sup>

Devastating as Leopold II’s reign was, it was short-lived. In 1908 the country was renamed ‘Belgian Congo’ and was taken over by the Belgian parliament and the Ministry of Colonies.<sup>682</sup> The Belgian government invested significantly into the DRC to help improve the colony’s transport and health infrastructure as well as ensure a mid-

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<sup>673</sup> G Nzongola-Ntalaja ‘From Zaire to the Democratic Republic of the Congo’ (2004) 28 *Current African Issues* 1 at 22.

<sup>674</sup> H André-Dumont ‘Mining in the Democratic Republic of Congo: A Case Study’ (2011) *Proceedings of 57<sup>th</sup> Annual Rocky Mountain Mineral Law Institute* available at <https://www.rmmlf.org/publications/digital-library/mining-in-the-democratic-republic-of-congo-a-case-study>, accessed on 25 August 2019 and Nzongola-Ntalaja *The Congo: From Leopold to Kabila: A People’s History* (2002) at 21-22.

<sup>675</sup> Nzongola-Ntalaja *The Congo: From Leopold to Kabila: A People’s History* (2002) at 21-22.

<sup>676</sup> Ewans *European Atrocity, African Catastrophe: Leopold II, the Congo Free State and its Aftermath* (2002) at 88 and Nzongola-Ntalaja (*The Congo: From Leopold to Kabila: A People’s History* (2002) at 21-22.

<sup>677</sup> Ibid.

<sup>678</sup> Ewans *European Atrocity, African Catastrophe: Leopold II, the Congo Free State and its Aftermath* (2002) at 88.

<sup>679</sup> Nzongola-Ntalaja *The Congo: From Leopold to Kabila: A People’s History* (2002) at 22.

<sup>680</sup> Ibid at 22.

<sup>681</sup> de Mesquita (2007) 32 *Historical Social Research* 203 at 215

<sup>682</sup> H André-Dumont ‘Mining in the Democratic Republic of Congo: A Case Study’ (2011) *Proceedings of 57<sup>th</sup> Annual Rocky Mountain Mineral Law Institute* available at <https://www.rmmlf.org/publications/digital-library/mining-in-the-democratic-republic-of-congo-a-case-study>, accessed on 25 August 2019 and Nzongola-Ntalaja *The Congo: From Leopold to Kabila: A People’s History* (2002) at 22.

level degree of education.<sup>683</sup> The government supported the exploration and extraction of the colony's mineral resources. Large Belgian companies were encouraged to continue developing and investing in the mineral resources.<sup>684</sup> Unfortunately, the Belgian government's actions were all self-motivated to increase its own wealth.<sup>685</sup> The building of infrastructure was improved merely to help move the DRC's mineral resources out of the country.<sup>686</sup> During the first half of the century, the Colony's administration supported and developed LSM.<sup>687</sup> Already by 1910, cassiterite<sup>688</sup> and coltan<sup>689</sup> were discovered in the eastern parts of the DRC and shortly after, DRC's tin sector was being managed and owned by private Belgian companies.<sup>690</sup> The production of cassiterite generated over 10 000 tons per year and supplied almost 73 000 people with employment by the first half of the 1940s.<sup>691</sup>

During DRC's colonisation, the country's national development relied heavily on industrial mining, along with subsidiary economies, to support its primary mineral export economy.<sup>692</sup> Commercial and small-hold agriculture merely played a secondary role by providing economic support to main mining areas throughout the country.<sup>693</sup> This mineral-dependent model was not unique to the Belgian Congo as the same type of model was used in numerous mineral-rich British colonies, such as Zambia and Sierra Leone.<sup>694</sup> DRC's production figures grew throughout the 1900s.<sup>695</sup> In the late

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<sup>683</sup> Nzongola-Ntalaja *The Congo: From Leopold to Kabila: A People's History* (2002) at 22.

<sup>684</sup> André-Dumont 'Mining in the Democratic Republic of Congo: A Case Study' (2011) *Proceedings of 57<sup>th</sup> Annual Rocky Mountain Mineral Law Institute* available at <https://www.rmmf.org/publications/digital-library/mining-in-the-democratic-republic-of-congo-a-case-study>, accessed on 25 August 2019.

<sup>685</sup> Nzongola-Ntalaja *The Congo: From Leopold to Kabila: A People's History* (2002) at 22 and H André-Dumont 'Mining in the Democratic Republic of Congo: A Case Study' (2011) *Proceedings of 57<sup>th</sup> Annual Rocky Mountain Mineral Law Institute* available at <https://www.rmmf.org/publications/digital-library/mining-in-the-democratic-republic-of-congo-a-case-study>, accessed on 25 August 2019.

<sup>686</sup> *Ibid.*

<sup>687</sup> Geenen and Radley (2014) 62 *Futures* 58 at 58.

<sup>688</sup> Cassiterite is an economically important mineral, being the primary ore of the metal tin.

<sup>689</sup> Coltan is used primarily for the production of tantalum capacitors, used in many electronic devices, such as mobile phones.

<sup>690</sup> G Vanthemsche *Belgium and the Congo, 1885-1980* (2012) at 30.

<sup>691</sup> International Alert 'The Role of the Exploitation of Natural Resources in Fuelling and Prolonging Crises in the Eastern DRC' (2010) *International Alert Report 1* at 13–14.

<sup>692</sup> Perks (2011) 23 *Journal of International Development* 1115 at 1118.

<sup>693</sup> Vanthemsche *Belgium and the Congo, 1885-1980* (2012) at 30.

<sup>694</sup> Perks (2011) 23 *Journal of International Development* 1115 at 1118.

<sup>695</sup> Vanthemsche *Belgium and the Congo, 1885-1980* (2012) at 29.

1940s and up until the 1970s, companies started to invest in industrial exploitation in the DRC.<sup>696</sup>

Whilst under Belgium rule, the DRC accumulated wealth through mineral extraction, which only benefitted a small minority of people in the country.<sup>697</sup> Since Leopold II's rule, the mineral wealth served the rulers of the country as well as foreign political allies and partners,<sup>698</sup> with little regard being had for the majority of people living in the DRC.<sup>699</sup> The social and economic consequences for the people were devastating.<sup>700</sup> The Belgian colonial period set the stage for the country's economic downturn and creation of severe poverty.

## 4.2 DRC as an Independent State

In 1960, the Belgian Congo eventually gained independence as a sovereign African State.<sup>701</sup> The new nation was given the name 'Republic of Congo'.<sup>702</sup> Initially, the 1960 independence of the Republic of Congo did not seem to have much of an effect on Belgian power over the DRC's mineral wealth.<sup>703</sup> Belgian private companies continued to dominate the mining sector.<sup>704</sup> However, the Head of State, Patrice Lumumba was overthrown by the then commander-in-chief of the army, Colonel Mobutu Sese Seko in 1965.<sup>705</sup> He was a patrimonial ruler,<sup>706</sup> who believed that he was the rightful owner of the country and its abundant resources.<sup>707</sup>

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<sup>696</sup> G Mthembu-Salter 'Social and economic dynamics of mining in Kalima, DRC' (2009) *Institute for Security Studies* 185 at 2.

<sup>697</sup> G Kabwit 'Zaire: The Roots of the Continuing Crisis' (1979) 17(3) *The Journal of Modern African Studies* 381 at 385

<sup>698</sup> Vanthemsche *Belgium and the Congo, 1885-1980* (2012) at 30 and Nzongola-Ntalaja *The Congo: From Leopold to Kabila: A People's History* (2002) at 27.

<sup>699</sup> Nzongola-Ntalaja *The Congo: From Leopold to Kabila: A People's History* (2002) at 27-28.

<sup>700</sup> *Ibid* at 28.

<sup>701</sup> W Radmann 'The Nationalization of Zaire's Copper: From Union Minière to Gécamines' (1978) 25(4) *Africa Today* 25 at 26 and Kabwit (1979) 17(3) *The Journal of Modern African Studies* 381 at 385.

<sup>702</sup> Mthembu-Salter (2009) *Institute for Security Studies* 185 at 2 and Stoop, Verpoorten and van der Windt (2019) 122 *World Development* 660 at 662.

<sup>703</sup> *Ibid*.

<sup>704</sup> Radmann (1978) 25(4) *Africa Today* 25 at 26 and Mthembu-Salter (2009) *Institute for Security Studies* 185 at 2.

<sup>705</sup> Kabwit (1979) 17(3) *The Journal of Modern African Studies* 381 at 385 and Nzongola-Ntalaja (2004) 28 *Current African Issues* 1 at 7.

<sup>706</sup> *Ibid* and Mthembu-Salter (2009) *Institute for Security Studies* 185 at 3.

<sup>707</sup> Stoop, Verpoorten and van der Windt (2018) 13(8) *PLoS ONE* 1 at 662.

Mobutu, funded by the US, relocated large portions of the State's resources for himself as well as to those people that helped reinforce his hold on power.<sup>708</sup> In 1966, Mobutu passed the Bakajika Law,<sup>709</sup> which stipulated that 'all public land was a domain of the state.'<sup>710</sup> This meant that all wealth above and below the land belonged to the State.<sup>711</sup> The Bakajika Law also paved the way for nationalising the country's mining sector in 1967.<sup>712</sup> Mobutu nationalised the famous Belgian mining company, Union Minière du Haut Katanga (UMHK) - a powerful player in the DRC since the colonial era - and renamed it Gécomin.<sup>713</sup> Today, the mining company is known as Gécamines and it is one of the largest State-owned metal mining and producing companies in the DRC.<sup>714</sup>

The DRC was seen to be one of the richest countries in sub-Saharan Africa at the time of independence in 1960.<sup>715</sup> However, Mobutu's regime had a seriously damaging impact on the country's economy.<sup>716</sup> Mobutu discouraged private investment and nationalised major industries in the country, contributing to an overall decline in the economy from 1970s onwards.<sup>717</sup> Mobutu was accused of mismanaging and corrupting the government.<sup>718</sup> The Mobutu regime created an economic and financial crisis, which gradually dismantled DRC's industrial mining infrastructure.<sup>719</sup>

With the collapse in the industrial mining sector, thousands of people throughout the country began to engage in ASM and smuggling in an attempt to make a living.<sup>720</sup> Under Mobutu's regime, the DRC gradually started to breakdown and artisanal mining

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<sup>708</sup> E Kisangani *Historical Dictionary of the Democratic Republic of the Congo* 4ed (2016) at 15.

<sup>709</sup> Ibid at 36; Bakajika Law was promulgated on 7 June 1966 as Ordinance-Law No. 66-343, 1996 (hereafter Bakajika Law).

<sup>710</sup> Kisangani *Historical Dictionary of the Democratic Republic of the Congo* 4ed (2016) at 15.

<sup>711</sup> Ibid at 36 and Kabwit (1979) 17(3) *The Journal of Modern African Studies* 381 at 385.

<sup>712</sup> Ibid at 16.

<sup>713</sup> H André-Dumont 'Mining in the Democratic Republic of Congo: A Case Study' (2011) *Proceedings of 57<sup>th</sup> Annual Rocky Mountain Mineral Law Institute* available at <https://www.rmmlf.org/publications/digital-library/mining-in-the-democratic-republic-of-congo-a-case-study>, accessed on 25 August 2019 and Mthembu-Salter (2009) *Institute for Security Studies* 185 at 3.

<sup>714</sup> Ibid.

<sup>715</sup> Kabwit (1979) 17(3) *The Journal of Modern African Studies* 381 at 401.

<sup>716</sup> Kisangani *Historical Dictionary of the Democratic Republic of the Congo* 4ed (2016) at 14-18 and Mthembu-Salter at 4.

<sup>717</sup> Ibid at 15-16; Bakajika Law.

<sup>718</sup> Ibid at 16.

<sup>719</sup> Ibid and Kisangani *Historical Dictionary of the Democratic Republic of the Congo* 4ed (2016) at 15.

<sup>720</sup> Stoop, Verpoorten and van der Windt (2019) 122 *World Development* 660 at 663 and Kisangani *Historical Dictionary of the Democratic Republic of the Congo* 4ed (2016) at 17.

slowly began to replace industrial-scale mining.<sup>721</sup> ASM was only practiced on a small and limited scale before Mobutu came into power.<sup>722</sup> The disorganised and failing economy and deteriorating infrastructure resulting from Mobutu's rule in 1974, caused a rapid drop in industrial production, with most of the productive activities in the economy becoming informal in nature.<sup>723</sup>

It was only after 1982 that the drastic expansion of the ASM occurred, when Mobutu liberalised the production of and trade in minerals under the 1982 Law.<sup>724</sup> Even though the State had maintained tight control of the country's mining sector, the 1982 Law allowed all Congolese citizens to apply for mining and trading licences.<sup>725</sup> This opened up the possibility for small-scale mining ventures and export opportunities was used as the catalyst for the development of ASM activities.<sup>726</sup> The Law, as suggested by Mobutu, authorised informal mining exploitation to encourage Congolese citizens to 'fend for themselves' during economic difficulty by directly exploiting and trading in minerals.<sup>727</sup> However, the small-scale mining sector was poorly regulated and many people began to mine outside of the legal framework.<sup>728</sup> This in turn created a proliferation in the ASM sector.<sup>729</sup> By the 1990s, eastern DRC's industrial LSM sector was almost non-existent, whilst mineral exploitation became entirely artisanal in nature.<sup>730</sup>

### 4.3 International Meddling and Post-Colonial Rule

Much like other countries in Africa, the DRC has a long history of foreign interference, which has brought about endless conflict and socio-economic instability.<sup>731</sup> The

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<sup>721</sup> International Alert (2010) *International Alert Report 1* at 15.

<sup>722</sup> Ibid.

<sup>723</sup> Geenen and Radley (2014) 62 *Futures* 58 at 58 and International Alert (2010) *International Alert Report 1* at 15.

<sup>724</sup> Law no. 82/039 of 5 November 1982 and J Buraye, N Stoop and M Verpoorten 'Defusing the social minefield of gold sites in Kamituga, South Kivu: From legal pluralism to the re-making of institutions?' (2017) 53 *Resource Policy* 356 at 357.

<sup>725</sup> Bryceson and Geenen (2016) 111(459) *African Affairs* 296 at 303.

<sup>726</sup> Perks (2011) 23 *Journal of International Development* 1115 at 1120 and Geenen and Radley (2014) 62 *Futures* 58 at 58.

<sup>727</sup> Ibid.

<sup>728</sup> Perks (2011) 23 *Journal of International Development* 1115 at 1120.

<sup>729</sup> Ibid.

<sup>730</sup> Nzongola-Ntalaja (2004) 28 *Current African Issues* 1 at 14.

<sup>731</sup> Ibid at 14.

Belgium colonial rule in the DRC set the stage for the long and complicated history of international presence in the DRC.<sup>732</sup>

Following the country's independence on 30 June 1960, the DRC experienced a period of political upheaval and conflict between 1960 and 1965, known as the 'Congo Crisis'.<sup>733</sup> The chaos which erupted was initiated by the lifting of Belgian tutelage.<sup>734</sup> On 11 July 1960, politician, Moïse Tshombé, declared the southernmost region of the DRC to be an independent state from the DRC and called it the Province of Katanga.<sup>735</sup> Katanga, as the richest province in the DRC, has lucrative mining operations and a world class copper belt.<sup>736</sup> The Katanga movement was supported by the Belgians, French and British, all of which wanted influence in DRC's wealthiest region.<sup>737</sup> Although the UN regulations prevented other states from directly supporting Katanga secessionists, Belgium continued to support Katanga by deploying armed forces.<sup>738</sup>

During this time, the Prime Minister, Patrice Lumumba, began to reach out for support from international players in an attempt to suppress the Belgian-supported Katanga secessionists.<sup>739</sup> Lumumba sought support from the Soviet Union after his plea for support from the US and the UN had fallen on deaf ears.<sup>740</sup> The Soviet Union eagerly supported Lumumba by sending military advisors and Soviet weapons.<sup>741</sup> The Soviet Union presence in the DRC not only angered various western nations, but also caused great tension within the Congolese government.<sup>742</sup> The US did not want the Soviet Union to benefit from the rich abundance of minerals and other natural resources in

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<sup>732</sup> Geenen 37 *Resource Policy* 322 at 322 and Matthysen and Montejano 'Conflict Minerals' initiative in DR Congo: Perceptions of local mining communities' (2013) at 9.

<sup>733</sup> Nichols (2018) 5(2) *Scholarly Horizons: University of Minnesota, Morris Undergraduate Journal* 1 at 16.

<sup>734</sup> M Stanard 'Revisiting Bula Matari and the Congo Crisis: Successes and Anxieties in the Belgium's late Colonial State' (2018) 46 *The Journal of Imperial and Commonwealth History* 144 at 145.

<sup>735</sup> A Iandolo 'The Soviet Union and the Congo Crisis, 1960-1961' (2014) 16(2) *Journal of Cold War Studies* 32 at 32.

<sup>736</sup> Stanard (2018) 46 *The Journal of Imperial and Commonwealth History* 144 at 145.

<sup>737</sup> Nichols (2018) 5(2) *Scholarly Horizons: University of Minnesota, Morris Undergraduate Journal* 1 at 16.

<sup>738</sup> Iandolo (2014) 16(2) *Journal of Cold War Studies* 32 at 32.

<sup>739</sup> Nichols (2018) 5(2) *Scholarly Horizons: University of Minnesota, Morris Undergraduate Journal* 1 at 16.

<sup>740</sup> Ibid.

<sup>741</sup> Iandolo (2014) 16(2) *Journal of Cold War Studies* 32 at 39-41.

<sup>742</sup> Ibid.

the DRC.<sup>743</sup> Against the will of Lumumba, Mobutu, with the support of the US, expelled the Soviet Union, which caused a deeper divide within the government.<sup>744</sup>

In 1961, the US, under the Eisenhower administration, organised the kidnapping and execution of Lumumba, despite the fact that he was democratically elected by the people in an effort to stop the spread of communism.<sup>745</sup> The Eisenhower administration saw the start of the US presence in the DRC.<sup>746</sup> The UN passed Resolution 161, authorising armed forces to take all necessary measures against the Katangan Province and prevent civil war in the DRC. In January 1963, the US and UN forces successfully took control of the Katangan military and Tshombe stepped down as President of Katanga.<sup>747</sup>

Mobutu's loyalty to the West resulted in the US supporting the Mobutu regime, which lasted over thirty years.<sup>748</sup> During the Cold War, the US funded Mobutu with over 300 million US dollars in weapons and 100 million US dollars in military training.<sup>749</sup> Most of the money provided to Mobutu landed up in his own pockets.<sup>750</sup> The Congo Crisis played a proxy in the Cold War and was seen to be one of the first instances in which the Soviet Union and US competed for influence in the Third World.<sup>751</sup>

In 1996 President Mobutu became terminally ill and he could no longer keep the different government fractions under control.<sup>752</sup> Mobutu led one of the most corrupt regimes in Africa, using his dictatorial powers to funnel the wealth of the DRC into his own pockets.<sup>753</sup> The Congolese population became resentful of the corrupt and inept regime, whose military was in a disastrous condition.<sup>754</sup> Many of the neighbouring

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<sup>743</sup> Iandolo (2014) 16(2) *Journal of Cold War Studies* 32 at 41.

<sup>744</sup> Nichols (2018) 5(2) *Scholarly Horizons: University of Minnesota, Morris Undergraduate Journal* 1 at 16.

<sup>745</sup> Stanard (2018) 46 *The Journal of Imperial and Commonwealth History* 144 at 145.

<sup>746</sup> Iandolo (2014) 16(2) *Journal of Cold War Studies* 32 at 33.

<sup>747</sup> Ibid.

<sup>748</sup> Nichols (2018) 5(2) *Scholarly Horizons: University of Minnesota, Morris Undergraduate Journal* 1 at 16.

<sup>749</sup> Ibid.

<sup>750</sup> Stanard (2018) 46 *The Journal of Imperial and Commonwealth History* 144 at 145.

<sup>751</sup> Iandolo (2014) 16(2) *Journal of Cold War Studies* 32 at 32.

<sup>752</sup> Nzongola-Ntalaja *The Congo: From Leopold to Kabila: A People's History* (2002) at 27-28 and International Alert (2010) *International Alert Report* 1 at 15. and T Turner *The Congo Wars: Conflict, Myth and Reality* (2007) at 3-4.

<sup>753</sup> Nichols (2018) 5(2) *Scholarly Horizons: University of Minnesota, Morris Undergraduate Journal* 1 at 16.

<sup>754</sup> Turner *The Congo Wars: Conflict, Myth and Reality* (2007) at 3-4.

states became enemies of the DRC.<sup>755</sup> In 1996, Rwanda invaded the DRC, which finally set the stage for the first Congo war, which took place between 1996-1997.<sup>756</sup> Most of the conflict was fought in eastern DRC, which is where a large part of the country's strategic minerals are located and most of the ASM activities take place.<sup>757</sup>

#### 4.4 The Impact of the Congo Wars on the ASM Sector

During the two Congo wars, occupying forces fought to gain control of eastern DRC's mining sector as a means to raise revenue to finance their operations.<sup>758</sup> The armed forces would systematically export the ore, mined by the local artisans, to Uganda and Rwanda.<sup>759</sup> They would also engage with large mining companies by negotiating contracts and selling off vast concessions at a reduced market price.<sup>760</sup> However, it was not just occupying forces that exploited minerals in the DRC.<sup>761</sup> All the different parties to the conflict, including Congo's officials and rebels, allies as well as invaders, took part in extorting and pillaging DRC's natural resources.<sup>762</sup> Those Congolese people caught up in the Congo war chaos, during its increasingly uncertain times, turned to artisanal mining and mineral exploitation to survive.<sup>763</sup>

Both Congo wars destroyed what was left of the formal economy and the control of mineral resources became a major issue, which in turn caused regional conflict, a legacy that is still present today.<sup>764</sup> In June 2000, the UN Secretary General was requested by the President of the UN Security Council to create a 'Panel of Experts on the illegal exploitation of natural resources and other forms of wealth from the DRC'.<sup>765</sup> The UN Panel of Experts finalised this report in 2002 in which they highlighted that the DRC was riddled with 'systematic exploitation, illegal trafficking, corruption

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<sup>755</sup> Turner *The Congo Wars: Conflict, Myth and Reality* (2007) at 4.

<sup>756</sup> Nzongola-Ntalaja (2004) 28 *Current African Issues* 1 at 13.

<sup>757</sup> Nichols (2018) 5(2) *Scholarly Horizons: University of Minnesota, Morris Undergraduate Journal* 1 at 14.

<sup>758</sup> Geenen and Radley (2014) 62 *Futures* 58 at 58.

<sup>759</sup> Perks (2011) 23 *Journal of International Development* 1115 at 1120 and Geenen and Radley (2014) 62 *Futures* 58 at 58.

<sup>760</sup> Geenen and Radley (2014) 62 *Futures* 58 at 58.

<sup>761</sup> Nzongola-Ntalaja (2004) 28 *Current African Issues* 1 at 16.

<sup>762</sup> *Ibid.*

<sup>763</sup> Geenen and Radley (2014) 62 *Futures* 58 at 58.

<sup>764</sup> International Alert (2010) *International Alert Report* 1 at 15.

<sup>765</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 1.

and profiteering in natural resources by foreign armies.<sup>766</sup> The UN Panel of Experts furthermore emphasised that DRC's private sector was just as much to blame for the exploitation of natural resources as the Belgian colonialists.<sup>767</sup>

The UN Panel of Experts noted that the high levels of mineral exploitation in the DRC would not be possible without the collusion of senior government officials, who provided export permits and mining licences in return for personal gain.<sup>768</sup> The Panel maintained that illegal exploitation was one of the primary sources that funded armed groups and in turn perpetuated conflict in the region.<sup>769</sup> They found that the illegal exploitation of natural resources was partly a cause of the four years of war in the DRC.<sup>770</sup>

Conflict in the DRC did not subside after the end of the second Congo war.<sup>771</sup> Rebel groups, such as the Mai Mai and Lord's Resistance Army from Uganda, continued to fight in the eastern provinces of the DRC.<sup>772</sup> These rebel forces exploited and plundered the natural resources in the region.<sup>773</sup> Over the years, mineral exploitation has resulted from various political and military players competing with one another to maintain, and in some instances even expand, their control over territory.<sup>774</sup> These players continue to exploit and plunder mineral resources in many parts of the DRC today.<sup>775</sup>

#### 4.5 Corruption from Within

In 1997, Mobutu was ousted from power and his reign finally came to an end.<sup>776</sup> A new leader, Laurent-Désiré Kabila, took control and changed the country's name to the

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<sup>766</sup> United Nations Security Council 'Final report of the Panel of Experts on Illegal Exploitation of Natural Resources and Other Forms of Wealth of the Democratic Republic of the Congo' (2001) *United Nations Report 1146* at 9 and Nzongola-Ntalaja (2004) 28 *Current African Issues* 1 at 16.

<sup>767</sup> Ibid.

<sup>768</sup> Ibid.

<sup>769</sup> United Nations Security Council (2001) *United Nations Report 1146* at 28.

<sup>770</sup> Ibid and Nzongola-Ntalaja (2004) 28 *Current African Issues* 1 at 16.

<sup>771</sup> Nichols (2018) 5(2) *Scholarly Horizons: University of Minnesota, Morris Undergraduate Journal* 1 at 15.

<sup>772</sup> Ibid at 15-16.

<sup>773</sup> Ibid.

<sup>774</sup> United Nations Security Council (2001) *United Nations Report 1146* at 28.

<sup>775</sup> United Nations Security Council (2001) *United Nations Report 1146* at 28.

<sup>776</sup> Nzongola-Ntalaja (2004) 28 *Current African Issues* 1 at 14.

'Democratic Republic of Congo'.<sup>777</sup> Unfortunately, the change of leadership of the Congolese government did not result in the end of corruption.<sup>778</sup> DRC's mineral rights continued to land in the hands of the president's military associates and while these parties profited significantly, the country's economy fell apart.<sup>779</sup>

The tradition of corruption within the DRC did not end with the reign of President Laurent-Désiré Kabila. The country's natural resource sector is riddled with corruption, which has allowed for the embezzlement of public resources.<sup>780</sup> According to the Organisation for Economic Co-operation and Development (OECD): 'corruption destroys market mechanism like fair competition and deters domestic and foreign investments, thus stifling future business opportunities for all stakeholders.'<sup>781</sup>

A large amount of this corruption is associated with the lack of transparency that occurs when the government manages the natural resources.<sup>782</sup> The extractive industries sector is predominately dominated by state-owned companies, which have resulted in an arbitrary process when exploration and exploitation licences are allocated.<sup>783</sup> DRC's ruling elite continue to use the revenue from the natural resources sector to fund their lavish lifestyles.<sup>784</sup>

It is estimated that the DRC loses roughly a fifth of all of its mining revenue as a result of government mismanagement and corruption.<sup>785</sup> Around 750 million US dollars have disappeared between 2013 and 2015 whilst in the hands of the state-owned mining company, Gécamines, and the country's tax agencies.<sup>786</sup> More than 20 per cent of DRC's mining revenue is unaccounted for due to mismanagement and corruption.<sup>787</sup>

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<sup>777</sup> Nzongola-Ntalaja (2004) 28 *Current African Issues* 1 at 14.

<sup>778</sup> Nichols (2018) 5(2) *Scholarly Horizons: University of Minnesota, Morris Undergraduate Journal* 1 at 11.

<sup>779</sup> Ibid.

<sup>780</sup> A Matti 'The Democratic Republic of the Congo? Corruption, patronage, and competitive authoritarianism in the DRC' (2010) 56(4) *Africa Today* 42 at 49.

<sup>781</sup> OECD 'The Digital Economy' available at <https://www.oecd.org/daf/competition/The-Digital-Economy-2012.pdf>, accessed on 12 May 2020.

<sup>782</sup> Matti (2010) 56(4) *Africa Today* 42 at 49.

<sup>783</sup> Nichols (2018) 5(2) *Scholarly Horizons: University of Minnesota, Morris Undergraduate Journal* 1 at 12.

<sup>784</sup> Ibid.

<sup>785</sup> Nzongola-Ntalaja (2004) 28 *Current African Issues* 1 at 16.

<sup>786</sup> Turner *The Congo Wars: Conflict, Myth and Reality* (2007) at 4.

<sup>787</sup> Geenen 37 *Resource Policy* 322 at 327.

Such revenue has deprived the country of funding which was supposed to be allocated to public services.<sup>788</sup>

The DRC serves as a casebook example of the 'resource curse'.<sup>789</sup> The revenue generated from DRC'S mineral exploitation has not only impeded long-term economic development, but has also had little impact on the livelihood of the Congolese populations.<sup>790</sup> The 'resource curse' is generally attributed to the country's poor governance and corruption.<sup>791</sup> According to the UN Economic Commission, corruption is detrimental for society because 'the real development priorities of a country are often neglected in favour of those that generate the greatest personal gains for the decision makers.'<sup>792</sup>

Western industrialised countries have enabled corruption in Africa by facilitating bribery related to acquiring selective exploitation licences and resource mining deals. It is not uncommon for multinational corporations to capitalise on weak institutional mechanisms, enabling them to bribe state officials, secure unwarranted benefits and gain political privileges in state policies.<sup>793</sup> The UN Economic Commission for Africa (UNECA) Report estimates that around 50 billion US dollars a year illicitly flows out of Africa as a result of both African governments and foreign sectors corrupt within the mining sector.<sup>794</sup>

## 5. The Proliferation of Artisanal and Small-scale Mining in the DRC

From the above analysis of the history of the DRC, there appears to be a strong correlation between the abundance of natural resources in the country and political and economic insecurity.<sup>795</sup> The atrocities of colonial exploitation, unstable and corrupt

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<sup>788</sup> Nichols (2018) 5(2) *Scholarly Horizons: University of Minnesota, Morris Undergraduate Journal* 1 at 12-13.

<sup>789</sup> See discussion at chapter, 4, section 3 and Geenen 37 *Resource Policy* 322 at 327.

<sup>790</sup> Ibid.

<sup>791</sup> Ibid.

<sup>792</sup> United Nations Economic Commission for Africa 'Measuring corruption in Africa: the International Dimension Matters' (2016) *African Governance Report IV* 1 at 1.

<sup>793</sup> United Nations Economic Commission for Africa *Reports on selected themes in natural resources development in Africa: artisanal and small-scale mining and technology challenges in Africa* (2003) at 22.

<sup>794</sup> Ibid at 78.

<sup>795</sup> Nichols (2018) 5(2) *Scholarly Horizons: University of Minnesota, Morris Undergraduate Journal* 1 at 20.

governmental regimes and consistent conflicts within the country is directly linked to misconduct within the mining sector, which has set the country up for state failure.<sup>796</sup> Despite having an estimated 24 trillion US dollars in untapped resources, the country has been victim to endless economic instability and an onslaught of conflicts.<sup>797</sup>

The two DRC wars between 1996 and 2003 greatly contributed to the country's instability with occupying armed forces, corrupt Congolese mining officials and warlords gaining control of DRC's mineral resources.<sup>798</sup> With an abundance of mineral resources and a history of colonialism and corruption within the Congolese government, citizens of the DRC throughout the decades have had little choice but to fend for themselves.<sup>799</sup> The country's state failure has ultimately enhanced informality within the ASM sector as people sought refuge against economically vulnerable times.<sup>800</sup> This chaotic situation contributed to the country's instability with an increase in slave labour and illegal mining activities, ultimately leading to the proliferation of the ASM sector.<sup>801</sup>

## 6. Towards Artisanal and Small-scale Mining Formalisation in the DRC

Laurent-Désiré Kabila was assassinated in 2001 by his bodyguard and his son, Joseph Kabila, took office ten days thereafter.<sup>802</sup> In an attempt to improve DRC's failing economy, Joseph Kabila's government implemented a range of legal reforms in the early 2000s.<sup>803</sup> Because mineral exploitation had drastically expanded in the DRC, one of the main focuses of the legal reform was on the mining sector.<sup>804</sup> DRC's

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<sup>796</sup> Nzongola-Ntalaja *The Congo: From Leopold to Kabila: A People's History* (2002) at 28 and Stoop, Verpoorten and van der Windt (2019) 122 *World Development* 660 at 662.

<sup>797</sup> Ibid and Nichols (2018) 5(2) *Scholarly Horizons: University of Minnesota, Morris Undergraduate Journal* 1 at 8.

<sup>798</sup> CBS News 'Joseph Kabila Takes Power in Congo' available at <https://www.cbsnews.com/news/joseph-kabila-takes-power-in-congo/>, accessed on 3 December 2019.

<sup>799</sup> Geenen 37 *Resource Policy* 322 at 325.

<sup>800</sup> M Mazalto 'Governance, human rights and mining in the Democratic Republic of Congo' in B Campbell (ed) *Mining in Africa: Regulation and Development* (2009) at 197.

<sup>801</sup> Nichols (2018) 5(2) *Scholarly Horizons: University of Minnesota, Morris Undergraduate Journal* 1 at 20-21.

<sup>802</sup> CBS News 'Joseph Kabila Takes Power in Congo' available at <https://www.cbsnews.com/news/joseph-kabila-takes-power-in-congo/>, accessed on 3 December 2019.

<sup>803</sup> Geenen 37 *Resource Policy* 322 at 325.

<sup>804</sup> Ibid.

artisanal mining sector was recognised and regulated under the country's Constitution.<sup>805</sup>

In 2002, under the guidance of the World Bank and the IMF, the DRC government established a Mining Code (the 2002 Mining Code).<sup>806</sup> Despite 80 per cent of DRC's mineral wealth being produced from the country's ASM sector, the 2002 Mining Code gave priority to LSM projects and foreign private-sector development.<sup>807</sup> Contrasted with the focus on public enterprise during Mobutu's reign, the 2002 Mining Code aimed at attracting private investment in exploration and exploitation.<sup>808</sup> DRC's artisanal mining sector is further governed by the 2003 Mining Regulation, which will be discussed in more detail in the next chapter.<sup>809</sup>

## 7. Conclusion

The above chapter illustrates the history of the rise of the DRC's ASM sector. Since the time of colonisation in the DRC, rulers have governed the country in a way that has benefitted only a handful of people.<sup>810</sup> Mineral exploitation was used to further personal gain and DRC, with its vast mineral wealth, was seen as an ideal country for economic exploitation.<sup>811</sup> The social and economic consequences for the people were devastating.<sup>812</sup> The way the DRC was governed throughout modern history, the nepotism, corruption, interference from the foreign actors and colonial atrocities set the stage for the country's economic downturn and humanitarian suffering. Increased poverty, a collapse in the mining industry and armed conflict, resulted in thousands of Congolese people seeking economic refuge in the ASM sector.<sup>813</sup>

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<sup>805</sup> The Constitution of the Democratic Republic of Congo, 2005.

<sup>806</sup> Mining Code Law no. 7 of 2002.

<sup>807</sup> Mazalto *Mining in Africa: Regulation and Development* (2009) at 197 and S Geenen, D Fahey, F Mukotanyi 'The future of artisanal gold mining and miners under an increasing industrial presence in South Kivu and Ituri, eastern Democratic Republic of Congo' (2013) *IOB Discussion Paper* at 12.

<sup>808</sup> Geenen 37 *Resource Policy* 322 at 325 and Mazalto *Mining in Africa: Regulation and Development* (2009) at 191.

<sup>809</sup> Mining Regulation decree no. 38 of 2003.

<sup>810</sup> Kabwit (1979) 17(3) *The Journal of Modern African Studies* 381 at 385

<sup>811</sup> Nzongola-Ntalaja *The Congo: From Leopold to Kabila: A People's History* (2002) at 28.

<sup>812</sup> *Ibid.*

<sup>813</sup> Mazalto *Mining in Africa: Regulation and Development* (2009) at 197.

Up until the early 2000s, DRC's ASM sector was largely unregulated. The sector developed irrepressibly throughout the country, with many people viewing ASM operations as the only option for a sustainable livelihood.<sup>814</sup> In 2002 and 2003, Kabila's government implemented the Mining Code<sup>815</sup> and Mining Regulations respectively,<sup>816</sup> in an attempt to repair the damaged mining sector of the DRC and improve the appetite for international investors.<sup>817</sup> To evaluate the effectiveness of DRC's formalisation efforts, the next chapter will examine the various provisions relating to artisanal mining and small-scale mining in the DRC.

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<sup>814</sup> Mazalto *Mining in Africa: Regulation and Development* (2009) at 197.

<sup>815</sup> Mining Code Law no. 7 of 2002.

<sup>816</sup> Mining Regulation decree no. 38 of 2003.

<sup>817</sup> Perks (2011) 23 *Journal of International Development* 1115 at 1120-1121.

# CHAPTER 7: FORMALISING DRC'S ARTISANAL AND SMALL-SCALE MINING SECTOR

## 1. Introduction

As discussed in the previous chapter, the primary national legislation governing the ASM sector in the DRC is (i) the 2002 Mining Code<sup>818</sup> and (ii) the 2003 Mining Regulations.<sup>819</sup> In 2018, the President of the DRC, once again under the guidance of the World Bank, amended the 2002 Mining Code, which was subsequently passed by Congress and signed into law on the 9 March 2018.<sup>820</sup> In addition, various initiatives were implemented by the DRC government to further regulate the artisanal mining sector in the DRC.<sup>821</sup>

This dissertation will assess the DRC's Mining Codes and Regulations as well as four initiatives undertaken by the DRC government in an attempt to regulate its ASM sector. The first initiative involves the Dodd-Frank Wall Street Reform and Consumer Protection Act (the Dodd-Frank Act), which was passed in US legislation and welcomed in the DRC.<sup>822</sup> The second initiative relates to the 'Presidential Mining Ban', which involves the September 2010 policy measure undertaken by the DRC government to ban all artisanal mining activities for a six month period.<sup>823</sup>

A third initiative involves the multifaceted program called 'PROMINES', a program funded by the World Bank and the UK Department for International Development (DFID) to cover a broad range of research areas, in an attempt to connect 'best practices in the artisanal mining sector with good governance and development.'<sup>824</sup> The fourth initiative relates to SAESSCAM, which was established as a technical

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<sup>818</sup> Mining Code Law no. 7 of 2002.

<sup>819</sup> Mining Regulation decree no. 38 of 2003.

<sup>820</sup> Mining Code Law no. 18/001.

<sup>821</sup> Pact *PROMINES study* at 5.

<sup>822</sup> Stoop, Verpoorten and van der Windt (2018) 13(8) *PLoS ONE* 1 at 1.

<sup>823</sup> Geenen 37 *Resource Policy* 322 at 326; International Peace Information Services (2012) *CIFOR Report* at 19.

<sup>824</sup> *Ibid.*

service within the Ministry of Mines to help manage the DRC's mining sector.<sup>825</sup> SAESSCAM is responsible for assisting and supervising the ASM sector in the DRC.<sup>826</sup> The last initiative involves the United Nations Organisation Stabilisation Mission in the DRC, known as MONUSCO (formerly known as MONUC).<sup>827</sup> MONUSCO is responsible for assisting the country in reforming its security sector and most importantly bringing armed groups in eastern DRC under control.<sup>828</sup>

In light of the above-mentioned ASM legislation and regulatory initiatives, it is necessary to assess to what extent the DRC's ASM sector has been successfully formalised and whether these efforts have in fact helped push the sector into the formal economy. Such an inquiry will further determine if the DRC's formalisation efforts have been able to mitigate the negative social and economic implications that flow from the ASM sector. The lessons learnt from the assessment of the DRC case-study can be used to help other countries within sub-Saharan Africa regulate their own ASM sectors, such as South Africa.

## 2. The DRC'S Artisanal and Small-scale Mining legislation

Before 2002, the mining sector in the DRC was regulated by several pieces of legislations.<sup>829</sup> One of the first pieces of mining legislation to be enacted by the DRC was the 'Mining Law of 1967' and its regulations under 'Ordinance-Law no.67/516'.<sup>830</sup> Although ASM issues existed in the DRC well before 2002,<sup>831</sup> no real legislation was enacted to regulate artisanal mining activities. As discussed above,<sup>832</sup> this dissertation will be limited to DRC's mining legislation from 2002 onwards, as the 2002 Mining Code was the first piece of legislation in the DRC that created provisions which formalised the country's artisanal mining sector.<sup>833</sup>

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<sup>825</sup> Mining Regulation decree no. 38 of 2003 at Article 1.19.

<sup>826</sup> Ibid.

<sup>827</sup> International Crisis Group 'A New Approach for the UN to Stabilise the DR Congo' available at <https://www.crisisgroup.org/africa/central-africa/democratic-republic-congo/b148-new-approach-un-stabilise-dr-congo>, accessed on 20 January 2022.

<sup>828</sup> Ibid.

<sup>829</sup> G Morgan, K Connor and B Kornhauser *Zaire* (2016) at 26.

<sup>830</sup> Ordinance-Law no.67/516 of 23 September 1967.

<sup>831</sup> See discussion at chapter 4, section 3.

<sup>832</sup> See discussion at Chapter 1, section 4.

<sup>833</sup> International Peace Information Services (2012) *CIFOR Report* at 12.

The World Bank played a very active role in assisting the DRC in its preparation of the 2002 Mining Code.<sup>834</sup> The World Bank teamed up with mining experts to identify key issues in DRC's mining sector. Once key issues were identified, the World Bank prepared a draft of the 2002 Mining Code. The draft eventually submitted and approved by Parliament.<sup>835</sup> The World Bank used the 2002 Mining Code to 'relaunch the industrial mining sector following the Congo Wars of 1996 to 2003 by opening it up to foreign investors.'<sup>836</sup>

The 2002 Mining Code established an attractive environment for foreign investors and the end of 2003 saw LSM companies regain interest in the DRC's mineral deposits.<sup>837</sup> The 2002 Mining Code tried to revive LSM, by attracting foreign investment with the support of the IMF and World Bank.<sup>838</sup> The government wanted to take control of the already chaotic mining sector and understood that by prioritising LSM, revenues from exploitation of mineral resources would be far easier to control than revenue emanating from millions of artisanal miners.<sup>839</sup>

Whilst the 2002 Mining Code has been relatively successful in achieving this goal, it is difficult to see how it has fully benefitted the Congolese people.<sup>840</sup> The 2002 Mining Code content was criticised by many Congolese citizens as having been influenced by the World Bank with an emphasis on attracting foreign private investment with the aim of increasing state revenue through taxation.<sup>841</sup> Whilst an investor-friendly mining code made sense at the time<sup>842</sup> - and was in line with other legislation at the time<sup>843</sup> -

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<sup>834</sup> World Bank and International Finance Corporation 'Mining Reform and the World Bank: providing a Policy Framework for Development' (2003) *Mining and Development* 1 at 13.

<sup>835</sup> *Ibid.*

<sup>836</sup> The Conversation 'The DRC is revisiting its mining code. Why reform is long overdue' available at <https://theconversation.com/the-drc-is-revisiting-its-mining-code-why-reform-is-long-overdue-79937>, accessed on 20 January 2022.

<sup>837</sup> Bryceson and Geenen (2016) 111(459) *African Affairs* 296 at 303.

<sup>838</sup> K Karaki 'Artisanal gold mining in DRC: time to get down to earth' (2018) *ECDPM discussion paper no. 223* at 2.

<sup>839</sup> *Ibid.*

<sup>840</sup> Mining Technology 'Overhauling the DRC's mining code' available at <https://www.mining-technology.com/features/overhauling-drcs-mining-code/>, accessed on 23 January 2022.

<sup>841</sup> J Maria and M Taka 'The human rights of artisanal miners in the Democratic Republic of the Congo' (2012) 3 *African Journal of Economics and Management Studies* 137 at 142.

<sup>842</sup> The DRC wanted to relaunch its industrial mining sector as it had just been victim to Congo Wars (1996-2003) – see discussion at chapter 6, section 4.4.

<sup>843</sup> Around 2001, right after the end of second Congo war, DRC's government tried to modify its economic and political approach and thus decided to adapt various pieces of legislation to be streamlined with the new strategies and vision for the economic development of the country. Much of the DRC's legislation during this time was centered around promoting foreign investment. The 2002 Mining Code was therefore in line with other legislation, such as the 2002 Investment Code (Law no. 004.2002).

many people were under the impression that the 2002 Mining Code included provisions that were too generous in favour of foreign mining companies.<sup>844</sup> Although ASM was formally recognised in the 2002 Mining Code, the emphasis clearly favoured LSM.<sup>845</sup>

ASM activities were legally acknowledged in the DRC through the introduction of 'artisanal exploitation zones' or '*zone d'exploitation artisanale*' (ZEA).<sup>846</sup> In terms of the 2002 Mining Code, an artisanal miner must mine within a ZEA.<sup>847</sup> This is a geographical area, both underground and on the surface, that has been delineated by geographical coordinates of latitude and longitude and approved by the Minister in charge of Mines and Quarries.<sup>848</sup> The March 2018 Mining Code continues to use ZEA's as the main conduit for providing the ASM sector with access to exploitable land.<sup>849</sup> However, artisanal miners found the process of obtaining these ZEA's arduous and costly.<sup>850</sup> In practice, therefore, artisanal miners began operating illegally, without any official mining licence.<sup>851</sup> Scholars have argued that the 2002 Mining Code and 2018 Mining Code appear to have been largely incapable of regulating the ASM sector and ensuring better accountability.<sup>852</sup>

## 2.1 The DRC's 2002 Mining Code and Amended 2018 Mining Code

Prior to 2018, when the 2002 Mining Code was amended, the DRC's domestic statutory legal basis for both LSM and ASM was the 2002 Mining Code<sup>853</sup> and its accompanying 2003 Mining Regulations.<sup>854</sup> Importantly, schedule five of the Mining Regulations includes the *Code de Conduite de l'Exploitant Artisanal*,<sup>855</sup> the Artisanal

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<sup>844</sup> Mining Technology 'Overhauling the DRC's mining code' available at <https://www.mining-technology.com/features/overhauling-drcs-mining-code/>, accessed on 23 January 2022.

<sup>845</sup> Banchirigah (2006) 31 *Resources Policy* 165 at 166.

<sup>846</sup> Bryceson and Geenen (2016) 111(459) *African Affairs* 296 at 303.

<sup>847</sup> Mining Code Law no. 7 of 2002 at Article 109.

<sup>848</sup> Mining Code Law no. 18/001 at Article 1.32 and 1.56.

<sup>849</sup> *Ibid.*

<sup>850</sup> Perks (2011) 23 *Journal of International Development* 1115 at 1120-1121.

<sup>851</sup> Bryceson and Geenen (2016) 111(459) *African Affairs* 296 at 303.

<sup>852</sup> Perks (2011) 23 *Journal of International Development* 1115 at 1120-1121.

<sup>853</sup> Mining Code Law no. 7 of 2002.

<sup>854</sup> Mining Regulation decree no. 38 of 2003.

<sup>855</sup> *Ibid* at Annexure 5: '*Code de Conduite de l'Exploitant Artisanal*'.

Miners' Code of Conduct.<sup>856</sup> The *Code de Conduite de l'Exploitant Artisanal* sets out the rules for artisanal miners, which includes their relationship with land owners, prohibited transactions and processing of minerals.<sup>857</sup> The 2002 Mining Code attempted to 'define and better regulate the ASM sector in favour of artisanal miners.'<sup>858</sup>

On 9 March 2018, President Kabila signed into law a new mining code.<sup>859</sup> This mining code was introduced by law number 18/001, known as the 2018 Mining Code.<sup>860</sup> Importantly, the 2018 Mining Code refers to the amended 2002 Mining Code,<sup>861</sup> as the former mining code does not replace the entire latter mining code, but instead modifies and amends it.<sup>862</sup> Consequently, the 2002 Mining Code is still in force and the 2018 Mining Code merely amends it. Those provisions in the 2002 Mining Code that have not been amended or supplemented are, therefore, binding and must be considered for the purpose of this dissertation. This dissertation will evaluate the 2002 Mining Code and will only assess those provisions that have been amended in the 2018 Mining Code, which relate to artisanal mining.

Chapter three of this dissertation defines artisanal mining and assesses the differences in the definition between the 2002 Mining Code and the 2018 Mining Code.<sup>863</sup> However, both the 2002 Mining Code as well as the amended 2018 Mining Code differentiate between three modes of exploitation procedures: industrial mining (also known as LSM), small-scale mining and artisanal mining.<sup>864</sup> These three areas are subject to different permit systems and tax regimes.<sup>865</sup> Whilst both artisanal mining and small-scale mining are recognised and considered legal if all the requirements are

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<sup>856</sup> Garrett *Artisanal Cassiterite Mining and Trade in North Kivu: Implications for Poverty Reduction and Security* (2008) at 18.

<sup>857</sup> Mining Regulation decree no. 38 of 2003 at Annexure 5: '*Code de Conduite de l'Exploitant Artisanal*'.

<sup>858</sup> Perks (2011) 23 *Journal of International Development* 1115 at 1120-1121.

<sup>859</sup> P Finan 'A new mining code for the DRC' *DLA Piper Publications* 10 August 2018, available at <https://www.dlapiper.com/en/morocco/insights/publications/2018/08/democratic-republic-of-congo-mining-code/>, accessed on 28 November 2018.

<sup>860</sup> *Ibid*

<sup>861</sup> Mining Code Law no. 7 of 2002.

<sup>862</sup> Stoop, Verpoorten and van der Windt (2019) 122 *World Development* 660 at 662.

<sup>863</sup> See discussion at chapter 3, section 2 and section 5.

<sup>864</sup> Geenen (2014) 40 *Resource Policy* 90 at 91.

<sup>865</sup> Geenen 37 *Resource Policy* 322 at 325.

met, they are viewed as two separate activities in the 2018 Mining Code.<sup>866</sup> In the DRC, the machinery therefore has to be somewhat mechanical in nature for it to take the activity from artisanal to small-scale.<sup>867</sup> For the purpose of this dissertation and for the avoidance of doubt, all mining that is not industrial in nature will fall under the broad category of ASM.

The 2002 Code further sets out comprehensive rules that are applicable to all aspects of exploration and mining, from the 'acquisition, transfer, operation and termination of mining rights' to the environmental provisions and affected communities.<sup>868</sup> According to the aforementioned legislation, all land in the DRC is vested in the State.<sup>869</sup> The State is the owner of all mineral resources, where a clear distinction is made between surface rights and mining rights.<sup>870</sup> A holder of a surface right does not have a claim over mineral resources that may exist over that same area.<sup>871</sup> The State grants land for mining in the form of concessions, which are approximately one square kilometer in size and can be divided into demarcated surface areas known as 'perimeters'.<sup>872</sup> In addition, two types of mining Licences can be granted to a party, namely the 'Exploration Licence'<sup>873</sup> and the 'Exploitation Licence'.<sup>874</sup> Both the Exploration and the Exploitation Licences entitles the holder to an exclusive right to carry out the exploration or exploitation work.<sup>875</sup>

The 2002 Mining Code tries to promote an equal playing field for all industrial mining in the DRC.<sup>876</sup> In terms of the 2002 Mining Code, article eight stipulates that the State has the role of promoting and regulating private mineral exploration.<sup>877</sup> Any natural

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<sup>866</sup> Mining Code Law no. 7 of 2002 at Article 1.

<sup>867</sup> Rupprecht (2017) 117 *The Journal of Southern African Institute of Mining and Metallurgy* at 26.

<sup>868</sup> KPMG Global Mining Institute 'Democratic Republic of Congo: Country mining guide' available at <https://assets.kpmg/content/dam/kpmg/pdf/2014/09/democratic-republic-congo-mining-guide.pdf>, accessed on 20 July 2019 at 19.

<sup>869</sup> Mining Code Law no. 7 of 2002 at Article 3.

<sup>870</sup> *Ibid* at Article 3.

<sup>871</sup> Mining Code Law no. 7 of 2002 at Article 3.

<sup>872</sup> *Ibid* at Article 28-31.

<sup>873</sup> *Ibid* at Article 50-63.

<sup>874</sup> *Ibid* at Article 64-80.

<sup>875</sup> *Ibid* at Article 50 and 64.

<sup>876</sup> Garrett *Artisanal Cassiterite Mining and Trade in North Kivu: Implications for Poverty Reduction and Security* (2008) at 19.

<sup>877</sup> Mining Code Law no. 7 of 2002 at Article 8.

and legal person may apply for an Exploration Licence. The Exploration Licence gives its holder:

*‘the exclusive right, within the perimeter on which it is granted and for the terms of its validity, to carry out mineral exploration work for mineral substances classified as mines substances for which the licence has been granted, and associated substances if the holder applies for the licence to be extended to include these substances.’*<sup>878</sup>

However, in terms of article 56 of the 2002 Mining Code, to obtain an Exploration Licence, minimal financial capacity must be proven.<sup>879</sup> This condition consequently excludes the majority of poorly stricken Congolese citizens and artisanal miners, favouring those investors who have access to monetary resources.<sup>880</sup> Application for an Exploration Licence therefore favours investors and LSM operators.

### 2.1.1 Small-Scale Mining Exploitation Licence

Mineral deposits in the DRC that are unsuitable for industrial mining may be exploited by small-scale mining operations.<sup>881</sup> However, this does not include artisanal mining, as it is a requirement for the exploitation to be ‘semi-industrial or industrial’ in nature and artisanal mining is non-industrial in nature.<sup>882</sup> The scope of the Small-scale Mining Exploitation Licence is governed by the provisions of article 64 of the 2002 Mining Code.<sup>883</sup> It is therein stipulated that any person wishing to carry out small-scale mining operations is required to apply for and obtain a Small-scale Mining Exploitation Licence.<sup>884</sup>

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<sup>878</sup> Mining Code Law no. 7 of 2002 at Article 50 and Geenen 37 *Resource Policy* 322 at 325 and Garrett *Artisanal Cassiterite Mining and Trade in North Kivu: Implications for Poverty Reduction and Security* (2008) at 19.

<sup>879</sup> Mining Code Law no. 7 of 2002 at Article 56 and Geenen 37 *Resource Policy* 322 at 325.

<sup>880</sup> Ibid and Garrett *Artisanal Cassiterite Mining and Trade in North Kivu: Implications for Poverty Reduction and Security* (2008) at 19.

<sup>881</sup> Perks (2011) 23 *Journal of International Development* 1115 at 1120-1121 and Geenen 37 *Resource Policy* 322 at 326.

<sup>882</sup> Geenen Ibid at 327.

<sup>883</sup> Mining Code Law no. 7 of 2002 at Article 64.

<sup>884</sup> Ibid at Article 64.

Like the aforementioned Exploration Licence, the Small-scale Mining Exploitation Licence allows its holder the exclusive right to carry out mineral exploration work as per the Licence requirements.<sup>885</sup> In addition, the holder of the Small-Scale Mining Exploration Licence is entitled to ‘upgrade’ his licence into an Exploration Licence ‘if the technical conditions of exploration warrant it.’<sup>886</sup> The Small-Scale Mining Exploration Licence is a real exclusive property right which is transferable.<sup>887</sup>

### 2.1.2 Artisanal Exploitation Zones (ZEA)

The 2002 Mining Code dedicates an entire section to regulating artisanal exploration in the DRC.<sup>888</sup> Artisanal exploration is defined by the 2002 Mining Code as any activity carried out by an eligible person (as defined below) that involves extracting and concentrating mineral substances using artisanal tools, methods and processes.<sup>889</sup>

As mentioned above, the 2002 Mining Code requires artisanal miners to operate in ZEA’s.<sup>890</sup> The 2002 Mining Code stipulates that the ZEA consists of an area where technical and economic factors make it impossible or not suitable for industrial exploitation, and instead permits artisanal mining activities.<sup>891</sup> These artisanal deposits are intended to be established within the limits of a pre-determined geological area.<sup>892</sup> The amended 2018 Mining Code has changed this provision slightly by stipulating that the deposits must be established within a geological area that covers no more than two squares<sup>893</sup> in an artisanal mining area (one square is roughly equal to one square kilometer).<sup>894</sup> The extraction must take place in a ZEA, which is limited to the specified surface area and depth of down to a maximum of thirty meters.<sup>895</sup>

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<sup>885</sup> Mining Code Law no. 7 of 2002 at Article 98.

<sup>886</sup> Ibid at Article 99.

<sup>887</sup> Ibid.

<sup>888</sup> Mining Code Law no. 7 of 2002 at Title IV.

<sup>889</sup> Ibid at Article 1.21.

<sup>890</sup> Geenen (2014) 40 *Resource Policy* 90 at 91.

<sup>891</sup> D’Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 7 and Geenen (2014) 40 *Resource Policy* 90 at 91-92

<sup>892</sup> Mining Code Law no. 7 of 2002 at Article 109.

<sup>893</sup> One square is approximately equal to one square kilometer.

<sup>894</sup> Mining Code Law no. 18/001 at Article 109.

<sup>895</sup> Mining Code Law no. 7 of 2002 at Article 1.21.

The creation, authorisation and closure of a ZEA is subject to an order from the Minister in charge of mines and quarries (the Minister).<sup>896</sup> Before issuing an order, the Minister must ensure that the Directorate of Mines as well as the Governor of the province concerned gives their own recommendation.<sup>897</sup> Once the ZEA is created, the Mining Registry is notified and the artisanal mining area is inserted into the registry survey map.<sup>898</sup> Importantly, those areas that are covered by industrial mining titles may not be downgraded and converted to a ZEA.<sup>899</sup> Likewise, once the ZEA has been created, no commercial mining title may legally be granted over that area. The 2002 Mining Code allowed artisanal miners to apply for the conversion of a ZEA to an Exploration Licence,<sup>900</sup> however, this has been amended in the 2018 Mining Code.

A further stipulation in the 2002 Mining Code is that the Geology Directorate had the power at any time to prospect and carry out exploration work in the ZEA.<sup>901</sup> In the 2018 Mining Code, the Geology Directorate's power to prospect and carry out exploitation work at any time has been changed to the specialised research body, called SAESSCAM.<sup>902</sup> The SAESSCAM is 'a technical public service with administrative and financial autonomy, whose purpose is to assist and supervise artisanal and small-scale mining of minerals', which will be discussed in more detail below.<sup>903</sup>

Article 110 of the 2002 Mining Code provides for the closure of a ZEA.<sup>904</sup> There are two situations that warrant the closure of a ZEA by the Minister.<sup>905</sup> The first situation occurs when the factors that justified the creation of the original ZEA, cease to exist.<sup>906</sup> The second situation warranting the closure of a ZEA occurs when a new deposit is discovered in that ZEA, which does not lend itself to artisanal mining activities, but

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<sup>896</sup> Mining Code Law no. 7 of 2002 at Article 109, 110 and 111 and Garrett *Artisanal Cassiterite Mining and Trade in North Kivu: Implications for Poverty Reduction and Security* (2008) at 20.

<sup>897</sup> Mining Code Law no. 7 of 2002 at Article 109.

<sup>898</sup> *Ibid* at Article 109.

<sup>899</sup> *Ibid* at Article 109 and D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 7.

<sup>900</sup> Mining Code Law no. 7 of 2002 at Article 109 and D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 8.

<sup>901</sup> *Ibid* at Article 109.

<sup>902</sup> Mining Code Law no. 18/001 at Article 109.

<sup>903</sup> *Ibid* at Article 1.46ter

<sup>904</sup> Mining Code Law no. 7 of 2002 at Article 110.

<sup>905</sup> *Ibid* at Article 110 and Geenen (2014) 40 *Resource Policy* 90 at 91-92.

<sup>906</sup> Mining Code Law no. 7 of 2002 at Article 110 and Geenen (2014) 40 *Resource Policy* 90 at 92.

rather requires large-scale exploitation.<sup>907</sup> The artisanal miners are then obliged to vacate the area within 60 days from the date on which the Mining Registry is notified about the closure.<sup>908</sup>

The 2002 Mining Code does not elaborate on the exact details of how or when a deposit is no longer suitable for artisanal mining activities. In practice, it is usually the mining companies that carry out their own feasibility studies and evaluate whether profitable exploitation can be made in a certain deposit.<sup>909</sup> Industrial mining companies therefore have the power to influence the State to remove artisanal miners from the area.<sup>910</sup> This simple mechanism to close a ZEA leaves the LSM sector with the upper hand, whilst artisanal miners have little tenure security.<sup>911</sup> The only protection is that the artisanal miners are given a priority right to request an upgrade to a Small-scale Mining Licence.<sup>912</sup> The miners are required to exercise their right to upgrade within 180 days following the closure notification.<sup>913</sup> This is an amendment from the 2002 Mining Code which gave artisanal miners the option to also upgrade to an Industrial Mining Licence within a limited period of only 30 days post closure notification.<sup>914</sup>

The fact that the 2018 Mining Code changes the upgrading period from 30 days to 180 days is seen as a positive amendment.<sup>915</sup> To expect the artisanal miners to apply for a mining title within 30 days of closure of a ZEA was unrealistic, considering that the application would require, among other things, 'proof of financial capacities, a feasibility study and an environmental impact assessment.'<sup>916</sup> In addition, logistical challenges exist for the artisanal miners when one bears in mind that the miners need to get to the relevant government office within the 30-day period.<sup>917</sup> ASM activities are

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<sup>907</sup> Mining Code Law no. 7 of 2002 at Article 110 and Geenen (2014) 40 *Resource Policy* 90 at 93.

<sup>908</sup> Ibid.

<sup>909</sup> Geenen, Fahey, Mukotanyi (2013) *IOB Discussion Paper* at 12.

<sup>910</sup> Geenen (2014) 40 *Resource Policy* 90 at 91-92.

<sup>911</sup> Geenen 37 *Resource Policy* 322 at 325.

<sup>912</sup> Mining Code Law no. 18/001 at Article 110.

<sup>913</sup> Ibid.

<sup>914</sup> Mining Code Law no. 7 of 2002 at Article 110 and Garrett *Artisanal Cassiterite Mining and Trade in North Kivu: Implications for Poverty Reduction and Security* (2008) at 20.

<sup>915</sup> Mining Code Law no. 18/001 at Article 110.

<sup>916</sup> Garrett *Artisanal Cassiterite Mining and Trade in North Kivu: Implications for Poverty Reduction and Security* (2008) at 20.

<sup>917</sup> Ibid.

often in rural areas with limited accessibility, far off the beaten track of government buildings.<sup>918</sup>

The exclusion of upgrading to an Industrial Mining Licence in the 2018 Mining Code is more in line with the realities of the ASM sector. In practice, most artisanal miners in the DRC do not have the capital, skills or equipment necessary to commence LSM operations.<sup>919</sup> It would be quite unrealistic, but not impossible, for an artisanal miner to go from operating on an artisanal level to carrying out LSM operations. The limitation of upgrading artisanal mining to small-scale mining and not LSM, may also be related to the government's attempt to prevent the misappropriation and misuse of power by the bigger mining houses and unscrupulous international players from acquiring those ZEAs in highly prospective mining areas.<sup>920</sup> By 2016, the DRC had granted 250 ZEA's throughout the country, although the majority of those sites remain unexploited for various reasons,<sup>921</sup> which will be discussed in more detail in chapter eight.<sup>922</sup>

### 2.1.3 Eligibility for Artisanal Mining

In terms of the 2002 Mining Code, those Congolese who qualify or are eligible to carry out artisanal mining in a ZEA, must possess an artisanal miners' card.<sup>923</sup> A person may obtain and hold an artisanal miners' card if they are older than eighteen.<sup>924</sup> They must also be a Congolese national.<sup>925</sup> This renders the DRC's immigrant or youth population unable to participate in artisanal mining.<sup>926</sup> The 2002 Mining Code further lists those individuals who are eligible to be authorised traders for mineral substances from artisanal miners.<sup>927</sup> These include: (i) a Congolese national older than eighteen;

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<sup>918</sup> Garrett *Artisanal Cassiterite Mining and Trade in North Kivu: Implications for Poverty Reduction and Security* (2008) at 20.

<sup>919</sup> Geenen 37 *Resource Policy* 322 at 328.

<sup>920</sup> Garrett *Artisanal Cassiterite Mining and Trade in North Kivu: Implications for Poverty Reduction and Security* (2008) at 21.

<sup>921</sup> Garrett *Artisanal Cassiterite Mining and Trade in North Kivu: Implications for Poverty Reduction and Security* (2008) at 21.

<sup>922</sup> See discussion at chapter 8 below.

<sup>923</sup> Mining Code Law no. 7 of 2002 at Article 26.

<sup>924</sup> *Ibid.*

<sup>925</sup> *Ibid.*

<sup>926</sup> Garrett *Artisanal Cassiterite Mining and Trade in North Kivu: Implications for Poverty Reduction and Security* (2008) at 21.

<sup>927</sup> Mining Code Law no. 7 of 2002 at Article 26.

(ii) foreign nationals who are over the age of eighteen and have a domicile in the DRC; and (iii) 'any legal entity incorporated pursuant to Congolese law which has its administrative registered office in National Territory, and whose corporate purpose is the purchase and sale of mineral substances from artisanal mining.'<sup>928</sup>

The 2002 Mining Code also sets out a list of persons who are not eligible to apply for or obtain an artisanal miners' card or traders' card.<sup>929</sup> This list includes: 'government employees and civil servants, magistrates, members of the Armed Forces, the Police and Security Services, and the employees of public entities which are authorised to carry out mining activities.'<sup>930</sup> The amended 2018 Mining Code sets out the exact same requirements as the 2002 Mining Code with regards to the eligibility for artisanal mining.<sup>931</sup> However, the only difference is that the 2018 Mining Code changes the wording from 'individuals' to a 'natural persons'.<sup>932</sup> The change of wording suggest that only natural persons can be eligible for artisanal mining and not juristic persons.

#### 2.1.4 Artisanal Miners' Cards

The 2002 Mining Code sets out the requirements for an artisanal miners' card, also known as an artisanal exploitation card (*carte d'exploitant artisanal*).<sup>933</sup> The artisanal miners' card is a document that authorises any aforementioned eligible person, in whose name the card is issued, to 'extract and concentrate the mineral substances by using artisanal tools, methods and processes pursuant to the provisions of the 2002 Mining Code'.<sup>934</sup> Only holders of artisanal miners' cards, which are valid for the relevant artisanal mining area, are authorised to extract mineral substances that are to be mined artisanally.<sup>935</sup>

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<sup>928</sup> Mining Code Law no. 7 of 2002 at Article 26 and D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 9.

<sup>929</sup> Ibid at Article 27.

<sup>930</sup> Ibid and D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 9.

<sup>931</sup> Mining Code Law no. 18/001 at Article 26 par 1.

<sup>932</sup> Ibid at Article 26 par 1.

<sup>933</sup> Mining Code Law no. 7 of 2002 at Article 1.7

<sup>934</sup> Ibid at Article 111

<sup>935</sup> Ibid and D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 10.

The artisanal miners' card is issued by the Head of the Provincial Division of Mines in the area.<sup>936</sup> The cards are given to those aforementioned eligible people, who apply for them and who agree to comply with environmental, health and safety regulations in accordance with the *Code de Conduite de l'Exploitant Artisanal* (set out in the Mining Regulations).<sup>937</sup> Considering the prevalent conditions in the ASM sector, it is highly unrealistic that many artisanal miners can comply with the environmental, health and safety regulations.<sup>938</sup> This is because the ASM areas and proximal communities are poor and generally lack public health facilities.<sup>939</sup> Many artisanal miners are unaware of basic occupational health and safety requirements and have little regard for basic safety precautions.<sup>940</sup> Furthermore, most ASM operations in the DRC are 'clandestine subsistence activities that struggle to survive from day to day.'<sup>941</sup> Consequently, the artisanal miners are obliged to focus on more urgent concerns, such as survival, instead of the long-term consequences of their own health and mining operations.<sup>942</sup>

In terms of the 2002 Mining Code, no duplications will be issued if an artisanal miners' card is lost, destroyed or stolen.<sup>943</sup> The holder may only apply for a new artisanal miners' card once he has put a stop to the old card.<sup>944</sup> This is another expense for artisanal miners, decreasing the attractiveness of the cards.<sup>945</sup> In addition, many artisanal mining areas are in remote parts of the DRC, which further impedes the widespread adoption of the artisanal miners' card.<sup>946</sup>

Finally, artisanal miners are restricted to selling their mining products to 'traders, exchange markets, trading houses or entities approved or created by the State.'<sup>947</sup>

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<sup>936</sup> Mining Code Law no. 7 of 2002 at Article 111.

<sup>937</sup> Ibid and D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 10.

<sup>938</sup> Garrett *Artisanal Cassiterite Mining and Trade in North Kivu: Implications for Poverty Reduction and Security* (2008) at 21.

<sup>939</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 6.

<sup>940</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 13 and Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 15.

<sup>941</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 14.

<sup>942</sup> Gibb *Small-Scale Mining, Rural Subsistence and Poverty in West Africa* (2006) at 42 and D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 14.

<sup>943</sup> Mining Code Law no. 7 of 2002 at Article 111

<sup>944</sup> Ibid.

<sup>945</sup> Garrett *Artisanal Cassiterite Mining and Trade in North Kivu: Implications for Poverty Reduction and Security* (2008) at 21.

<sup>946</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 21.

<sup>947</sup> Mining Code Law no. 7 of 2002 at Article 116

Some of the provisions relating to the artisanal miners' card in the 2002 Mining Code bring about direct barriers to ASM's promulgation and enforcement.<sup>948</sup> The unfortunate reality is that very few artisanal miners follow the regulations set out in the 2002 Mining Code and carry the required artisanal miners' card, therefore continue the cycle of operating illegally.<sup>949</sup>

## 2.2 The Mining Regulations

The DRC's artisanal mining regulations are specifically provided for in the Mining Regulations.<sup>950</sup> The regulations are to be read in conjunction with the 2002 Mining Code and 2018 amended Mining Code, as the regulations further elaborate on the provisions in these Mining Codes and sets out various conditions that must be followed. For example, whilst the 2002 Mining Code prescribes the regulations with regards to the artisanal miners' Card,<sup>951</sup> the Mining Regulations further elaborate on the ambit of and application for the artisanal miners' card in an artisanal mining area.<sup>952</sup>

The Mining Regulations stipulate that an application for an artisanal miners' card must be made in French or any other national language.<sup>953</sup> Furthermore, the Mining Regulations specify what details must be recorded in the artisanal miners' card application form, such as where the applicant resides and what additional documentation are required.<sup>954</sup> In terms of the Mining Regulations, the 'Provincial Division/Department of Mines' determines if the artisanal miners' card application is admissible.<sup>955</sup> The application will be rendered admissible if it is properly filled out, signed by the applicant and submitted with the required documents.<sup>956</sup> If the application is admissible, the aforementioned government bodies are required to investigate the application, furnishing positive or negative recommendations.<sup>957</sup> In the

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<sup>948</sup> Garrett *Artisanal Cassiterite Mining and Trade in North Kivu: Implications for Poverty Reduction and Security* (2008) at 21.

<sup>949</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 7.

<sup>950</sup> Mining Regulation decree no. 38 of 2003 at Article 223-233.

<sup>951</sup> Mining Code Law no. 7 of 2002 at Article 111

<sup>952</sup> Mining Regulation decree no. 38 of 2003 at Article 223 and 224.

<sup>953</sup> *Ibid* at Article 224.

<sup>954</sup> *Ibid*.

<sup>955</sup> *Ibid* at Article 227.

<sup>956</sup> *Ibid*.

<sup>957</sup> *Ibid* at Article 227 and 228.

case where an application is rendered inadmissible, the application must be returned to the applicant along with reasons specifying what was lacking.<sup>958</sup>

The 'Head of the Provincial Division/Department of Mines' has twenty business days from when the application was filed to decide whether to accept or reject the granting of an artisanal miners' card.<sup>959</sup> The artisanal miners' card can only be rejected if: (i) the applicant is not eligible; or (ii) the applicant fails to pass the test assessing his understanding of the regulations relating to the environment, health and safety.<sup>960</sup> If the application is accepted, a fixed amount must be paid by the applicant, which is 'determined by an inter-ministerial Decree of the Ministers responsible for Mines and Finance.'<sup>961</sup> The lifespan of the artisanal miners' card is one year and can be renewed under the same conditions as the initial artisanal miners' card.<sup>962</sup>

Importantly, an artisanal miner is obliged to undergo technical training 'prior to and during the execution of their mining activities.'<sup>963</sup> This training ensures that the artisanal miners comply with the rules with regards to sustainable mining practices, safety and hygiene.<sup>964</sup> Artisanal miners are taught artisanal mining techniques and how to implement measures in terms of safety and environmental protection.<sup>965</sup> It is the responsibility of the Specialised Technical Services of the Ministry of Mines to organise the training courses in artisanal mining techniques.<sup>966</sup>

In addition, Schedule five of the DRC's Mining Regulations contain the *Code de Conduite de l'Exploitant Artisanal*,<sup>967</sup> which is translated to mean the 'Artisanal Miners' Code of Conduct' (the Code of Conduct).<sup>968</sup> In terms of Article 416 of the Mining Regulations read with Article 112 of the 2002 Mining Code, all artisanal miners are

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<sup>958</sup> Mining Regulation decree no. 38 of 2003 at Article 227.

<sup>959</sup> Ibid at Article 229.

<sup>960</sup> Ibid.

<sup>961</sup> Ibid at Article 230.

<sup>962</sup> Ibid at Article 231.

<sup>963</sup> Ibid at Article 232.

<sup>964</sup> Ibid at Article 232 and Annexure 5, article 12.

<sup>965</sup> Ibid at Article 233 and Annexure 5, article 12.

<sup>966</sup> Ibid.

<sup>967</sup> Ibid at Annexure 5: '*Code de Conduite de l'Exploitant Artisanal*'.

<sup>968</sup> Garrett *Artisanal Cassiterite Mining and Trade in North Kivu: Implications for Poverty Reduction and Security* (2008) at 18.

required to comply with the Code of Conduct.<sup>969</sup> The Code of Conduct establishes various rules for artisanal miners, which must be followed at all times if an artisanal miner wants his operations to be deemed legal.<sup>970</sup> In terms of the Code of Conduct, an artisanal miner is required to maintain any improvements that were made by the land-occupants, concessionaires or local authorities on the land surface of the artisanal mining area.<sup>971</sup> The artisanal miner is also required to comply with any relevant land regulations and applicable law of that area.<sup>972</sup>

In addition, all artisanal miners in the DRC are obliged to operate in such a way that has the least impact on the environment.<sup>973</sup> This includes mitigating the impact of artisanal activities on fauna and flora, as well as on the watercourses and water points.<sup>974</sup> Artisanal miners are further required to complete and sign an artisanal miners' declaration.<sup>975</sup> Two copies of the declaration are required, one is filed at the Provincial Division of Mines and the other at the office of the local authority of administration where the artisanal miner site is located.<sup>976</sup>

The Code of Conduct further states that only open-air mining is allowed<sup>977</sup> and the use of explosives and mercury are strictly prohibited.<sup>978</sup> An artisanal miner is also prohibited from transforming the products from mined rock, unless he has obtained prior authorisation in terms of Article 113 of the 2002 Mining Code.<sup>979</sup> Transforming a product refers to an industrial process which alters the form and nature of the processed mineral substance in a way that creates a finished or semi-finished product, which can be sold.<sup>980</sup> In addition, the Code of Conduct prohibits artisanal miners from excavating and digging underground tunnels that are more than thirty meters deep.<sup>981</sup>

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<sup>969</sup> Mining Regulation decree no. 38 of 2003 at Article 416 and Mining Code Law no. 7 of 2002 at Article 112.

<sup>970</sup> Ibid at Annexure 5: '*Code de Conduite de l'Exploitant Artisanal*'.

<sup>971</sup> Mining Regulation decree no. 38 of 2003 at Annexure 5, article 1(a).

<sup>972</sup> Ibid at Annexure 5, article 1(b).

<sup>973</sup> Ibid at article 1(d).

<sup>974</sup> Ibid at Annexure 5, article 1€.

<sup>975</sup> Mining Regulation decree no. 38 of 2003 at Annexure 5, article 1€.

<sup>976</sup> Ibid at Annexure 5, article 1€.

<sup>977</sup> Mária and Taka (2012) 3 *African Journal of Economics and Management Studies* at 143.

<sup>978</sup> Mining Regulation decree no. 38 of 2003 at Article 575 and Annexure 5, article 2.

<sup>979</sup> Ibid at Annexure 5, article 2.

<sup>980</sup> Mining Code Law no. 7 of 2002 at Article 1.55.

<sup>981</sup> Mining Regulation decree no. 38 of 2003 at Annexure 5, article 9.

Article 3 of the Code of Conduct sets out various regulations that must be followed when mining on the land.<sup>982</sup> This article requires artisanal miners to look after the environment when carrying out their artisanal mining operations. The artisanal miner is also required to carry out his operations in a way that does not pollute water resources used for agricultural purposes, livestock watering or feeding.<sup>983</sup> One such regulation requires the artisanal miner to rehabilitate each portion of the artisanal mining site once the miners have stopped working in that area, even if other portions of the mining site are still actively in use.<sup>984</sup>

Artisanal miners are also required to contribute to what is known as the 'Rehabilitation Fund', which has been created with the aim of ensuring environmental rehabilitation of artisanally mined areas.<sup>985</sup> The rate of this contribution is set at ten per cent of the amount fixed for obtaining the artisanal miners' card.<sup>986</sup> For example, in 2008, the cost of an artisanal miners' card was 25 US dollars for that year. This meant that an additional cost of 2.5 US dollars was required from the artisanal miner to contribute towards the Rehabilitation Fund.

Once an area in the DRC has been determined as a 'prohibited area,' no mining activities, including artisanal mining, may take place therein.<sup>987</sup> An area is declared off-limits by the President, either on his own accord or 'on the proposal of the Minister in charge of mines and quarries', only after having obtained the Mining Registry's opinion.<sup>988</sup> The President will take into account national security, public safety, protection of the environment and whether the mining activity is incompatible with any other existing or planned uses of the soil or sub-soil.<sup>989</sup> Once an area has been declared as a 'prohibited area,' the country's Official Gazette will publish the declaration.<sup>990</sup>

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<sup>982</sup> Mining Regulation decree no. 38 of 2003 at Annexure 5, article 3.

<sup>983</sup> Ibid at Annexure 5, article 10.

<sup>984</sup> Ibid at Annexure 5, article 3.

<sup>985</sup> Mining Regulation decree no. 38 of 2003 at Article 417.

<sup>986</sup> Ibid.

<sup>987</sup> Mining Regulation decree no. 38 of 2003 at Article 4.

<sup>988</sup> Mining Code Law no. 7 of 2002 at Article 6.

<sup>989</sup> Ibid.

<sup>990</sup> Ibid.

The Code of Conduct stipulates that certain measures need to be in place with regards to occupational health and safety.<sup>991</sup> In terms of Article 11 of the 2002 Mining Code, the artisanal mining site is required to have some sort of signage and fencing around the mine to demarcate and indicate the existence of the mine.<sup>992</sup> This is to ensure that no person or animal accidentally falls into the mine.<sup>993</sup> In addition, the artisanal operator is obliged to inform local authorities immediately of any accidents, disease or epidemic outbreak that occurs in the artisanal mining area.<sup>994</sup>

### 2.3 Non-Compliance

Any person who undertakes mineral exploration or exploitation work without permission is in violation of the 2002 Mining Code.<sup>995</sup> Such activity is punishable by fine in the amount equivalent to between 10,000 US dollars and 250,000 US dollars.<sup>996</sup> Those mineral substances which have been illegally extracted shall be seized and confiscated 'by a competent court in favour of the State or the holder of the mining exploitation right concerned.'<sup>997</sup> In addition, any person who transports or organises the forwarding of mineral resources without permission, shall be punished by two months imprisonment and/or a fine of between 2,000 US dollars and 20,000 US dollars.<sup>998</sup>

The 2002 Mining Code also provides general sanctions for non-compliance with the environmental, health and safety regulations which apply to that artisanal miner's mining activity.<sup>999</sup> A holder of an artisanal miners' card is required to compensate a farmer for any damage that may have resulted from his activity.<sup>1000</sup> In addition, a person who infringes any mining regulation provision relating to public health and

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<sup>991</sup> Mining Regulation decree no. 38 of 2003 at Annexure 5, article 11.

<sup>992</sup> Ibid.

<sup>993</sup> Ibid.

<sup>994</sup> Mining Regulation decree no. 38 of 2003 at Annexure 5, article 11.

<sup>995</sup> Mining Code Law no. 7 of 2002 at Article 299.

<sup>996</sup> Mining Code Law no. 7 of 2002 at Article 299.

<sup>997</sup> Ibid.

<sup>998</sup> Ibid at Article 304.

<sup>999</sup> Ibid at Article 112.

<sup>1000</sup> Ibid.

safety shall be punished by a fine of between 5,000 US dollars to 10,000 US dollars.<sup>1001</sup>

In terms of the Mining Regulations, if a holder of the artisanal miners' card breaches any of the regulations, the Head of the Provincial Division/Department of Mines may confiscate that person's artisanal miners' card.<sup>1002</sup> Furthermore, if an artisanal miner does not comply with the Code of Conduct, set out in Schedule five of the Mining Regulations, the artisanal miners' card will also be confiscated and withdrawn.<sup>1003</sup>

### 3. Other Initiatives

Various initiatives have been taken at national and provincial levels to help better regulate and formalise the artisanal mining sector in the DRC.<sup>1004</sup> This dissertation will focus on the following five initiatives: the Dodd-Frank Act, the Presidential mining ban, PROMINES, SAESSCAM and MONUSCO.

#### 3.1 The Dodd-Frank Act

Years of conflict in the DRC has been centred around the illegal exploitation of minerals (known as conflict minerals), most of which flow from the ASM sector.<sup>1005</sup> These conflict minerals create competition between various rebel groups in the DRC and help provide armed groups with enough money to be able to purchase weapons.<sup>1006</sup> In an attempt to break the cycle of violence that was created by conflict minerals, it was deemed necessary to stop the illegal trade in natural resources.<sup>1007</sup> Numerous advocacy groups, such as the Global Witness and Enough Project, petitioned for policies to be put in place that would stop revenue from minerals flowing to the rebel groups.<sup>1008</sup>

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<sup>1001</sup> Mining Code Law no. 7 of 2002 at Article 306.

<sup>1002</sup> Mining Regulation decree no. 38 of 2003 at Article 231.

<sup>1003</sup> Ibid at Article 416.

<sup>1004</sup> Pact *PROMINES study* at 5.

<sup>1005</sup> Autesserre (2012) 111 *African Affairs* 202 at 204.

<sup>1006</sup> Ibid at 204.

<sup>1007</sup> Nichols (2018) 5(2) *Scholarly Horizons: University of Minnesota, Morris Undergraduate Journal* 1 at 17.

<sup>1008</sup> Stoop, Verpoorten and van der Windt (2018) 13(8) *PLoS ONE* 1 at 4.

In light of the above, Section 1052 of the Dodd-Frank Act was passed in US legislation in July 2010.<sup>1009</sup> The aim of the Dodd-Frank Act is to reduce the natural resources black market which helps fund violence, whilst addressing governance, security and peace issues.<sup>1010</sup> More specifically, Section 1502 tries to stop the link between conflict and minerals in the Eastern DRC.<sup>1011</sup> Section 1502 makes it mandatory for all US listed companies to trace the origins of any minerals used in their supply chain which were sourced from conflict areas such as the DRC.<sup>1012</sup> These companies are required to disclose to the US Securities and Exchange Commission whether the minerals are conflict-free or not.<sup>1013</sup> Section 1502 specifically focuses on those mineral resources that come from the DRC, targeting four main minerals: tantalum, tungsten and tin (known as the 3Ts) as well as gold.<sup>1014</sup>

Although the Dodd-Frank Act does not legally penalise companies for non-compliance, companies who fail to comply with Section 1502 risk being publicly named and shamed.<sup>1015</sup> The DRC government welcomed and enforced Section 1502 of the Dodd-Frank Act, in an attempt to fight the ongoing war against conflict minerals which largely emanated from the ASM sector. In response to Section 1502 and the mounting pressure to tackle conflict minerals in the Eastern DRC, the DRC's president, Joseph Kabila, further implemented a mining ban to crack down on illegal mining and corruption.<sup>1016</sup>

### 3.2 The Presidential Mining Ban

In September 2010, the DRC's President suspended all mining activity in the Walikale territory, which was extended further into three more provinces in the eastern part of the country: North Kivu, South Kivu and Maniema.<sup>1017</sup> The suspension of mining

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<sup>1009</sup> Whitney (2015) 14(2) *Journal of Human Rights* 183 at 184.

<sup>1010</sup> Ibid.

<sup>1011</sup> Autesserre (2012) 111 *African Affairs* 202 at 204.

<sup>1012</sup> Stoop, Verpoorten and van der Windt (2018) 13(8) *PLoS ONE* 1 at 4.

<sup>1013</sup> Whitney (2015) 14(2) *Journal of Human Rights* 183 at 184.

<sup>1014</sup> Stoop, Verpoorten and van der Windt (2018) 13(8) *PLoS ONE* 1 at 2.

<sup>1015</sup> J Cuvelier, S Van Bockstael, K Vlassenroot and C Iguma 'Analyzing the Impact of the Dodd-Frank Act on Congolese Livelihoods' (2014) *SSRC Conflict Prevention and Peace Forum* at 4.

<sup>1016</sup> Geenen 37 *Resource Policy* 322 at 326 and International Peace Information Services (2012) *CIFOR Report* at 19.

<sup>1017</sup> Ibid.

activities was seen to be a response to the heightened insecurity in those provinces that had resulted from unspecified armed groups who had financed themselves through illegal mineral exploitation.<sup>1018</sup> Mounting international pressure was exerted on the DRC to tackle the link between natural resources and conflict in the region.<sup>1019</sup> The mining ban intended to address the problem of armed groups as well as members of the country's army, known as *Forces Armées de la République Démocratique du Congo* (FARDC), involvement in illegal mineral exploitation.<sup>1020</sup> The suspension tried to reduce the ensuing levels of insecurity in certain regions of the DRC.<sup>1021</sup>

A ministerial decree was issued that formulated accompanying measures. The decree ordered the mining administration to 'make an inventory of all mineral stocks' and to conduct field visits to identify all operational sites and actors.<sup>1022</sup> The miners affected by the mining ban were forced to suspend their mining activities and further required to register their mining activities.<sup>1023</sup> Another ministerial decree was later issued, which stated the four official reasons for the mining ban. These include: 'cutting the financing of non-state armed groups, re-establishing state control, fighting against fraud and fighting against the implication of 'non-authorised persons' in the sector.'<sup>1024</sup> The four reasons were connected to the 'conflict minerals' problem as well as the increasing levels of informality in the artisanal mining sector.<sup>1025</sup> The mining ban was eventually lifted in March 2011, a year and a half after its inception.<sup>1026</sup>

On the face of it, the mining ban appeared to be a good initiative to tackle the problem of conflict minerals and reduce levels of informality within the mining sector. However, this ban was clearly aimed at the artisanal mining sector, as all industrial mining companies were exempt.<sup>1027</sup> Even those legal artisanal miners who possessed an

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<sup>1018</sup> Geenen 37 *Resource Policy* 322 at 326.

<sup>1019</sup> Matthysen and Montejano 'Conflict Minerals' initiative in DR Congo: Perceptions of local mining communities' (2013) at 8.

<sup>1020</sup> *Ibid.*

<sup>1021</sup> *Ibid.*

<sup>1022</sup> Geenen 37 *Resource Policy* 322 at 326.

<sup>1023</sup> *Ibid.*

<sup>1024</sup> *Ibid.*

<sup>1025</sup> International Peace Information Services (2012) *CIFOR Report* at 19.

<sup>1026</sup> *Ibid.*

<sup>1027</sup> Geenen 37 *Resource Policy* 322 at 326 and International Peace Information Services (2012) *CIFOR Report* at 19.

artisanal miners' card were banned from carrying out their artisanal mining activities.<sup>1028</sup>

It is questionable whether a widespread ban can ensure greater regulation. Surely the mining ban encouraged those legal artisanal miners who could not afford to stop their mining operations to peruse illegal channels. This possibly increased criminal activity and unregulated artisanal mining within the DRC. In addition, those legal artisanal miners who were forced to stop their artisanal mining operations because of the mining ban were deprived of a secure source of employment, thus contributing to the already high rate of unemployment in the DRC.<sup>1029</sup> It is, therefore, doubtful that the blanket ban implemented in September 2010 on artisanal mining operations helped to prevent illegal mining and criminal activities. Chapter eight examines the effectiveness of the mining ban in more detail.<sup>1030</sup>

### 3.3 PROMINES

PROMINES is a multifaceted program, which attempts to shed light on the artisanal mining sector in the DRC and help further develop the sector in line with good governance.<sup>1031</sup> PROMINES aims to heighten the working practices, legal status and economic return of the DRC's artisanal mining sector.<sup>1032</sup> It further establishes various mechanisms that are used to help sustainably reduce the artisanal mining sector's negative socio-economic and environmental impacts.<sup>1033</sup> PROMINES attempts to meet these objectives by increasing investment in the capacities, resources and structures of the artisanal mining sector and by supporting regulated, safe artisanal mining.<sup>1034</sup> The Program envisages addressing issues of child labour, insecurity, environmental degradation, gender and health and safety.<sup>1035</sup>

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<sup>1028</sup> Pact *PROMINES study* at 39.

<sup>1029</sup> Geenen 37 *Resource Policy* 322 at 327.

<sup>1030</sup> See discussion at chapter 8, section 3.3.

<sup>1031</sup> International Peace Information Services (2012) *CIFOR Report* at 20.

<sup>1032</sup> Pact *PROMINES study* at 37.

<sup>1033</sup> International Peace Information Services (2012) *CIFOR Report* at 20.

<sup>1034</sup> *Ibid.*

<sup>1035</sup> *Ibid.*

PROMINES has various projects that are aimed at improving the artisanal mining sector of the DRC.<sup>1036</sup> One such project endeavours to increase tax revenue in the artisanal mining sector.<sup>1037</sup> PROMINES envisages that increased tax revenue will help improve the livelihoods and welfare of artisanal miners in the DRC and further act as an incentive to prevent illegal exploitation on private concessions.<sup>1038</sup> Another project is aimed at offering financial support to the government to improve the artisanal mining sector in the DRC.<sup>1039</sup>

PROMINES is an important initiative for the ASM sector in the DRC as it appears to target the ASM sector specifically, unlike many other World Bank projects. It is also clear that through this project, the World Bank can put some pressure on the government to improve and fund the ASM sector. It is imperative that those ASM initiatives undertaken by PROMINES are linked to the broader process of improving governance, growth, security, human rights and investment in the region.

### 3.4 SAESSCAM

SAESSCAM is a government body dedicated to overseeing and improving ASM in the DRC.<sup>1040</sup> It was formally established on 28 March 2003 by Decree 047-C/2003.<sup>1041</sup> SAESSCAM was created with the intention to serve as an extension service for small-scale as well as artisanal miners,<sup>1042</sup> by providing focused technical and organisational assistance.<sup>1043</sup> SAESSCAM was formally recognised by Decree 17/009 on April 4, 2017.<sup>1044</sup> SAESSCAM is an important institution that has been used as a vehicle by government in an attempt to formalise the artisanal mining sector in the DRC.<sup>1045</sup> The

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<sup>1036</sup> International Peace Information Services (2012) *CIFOR Report* at 31.

<sup>1037</sup> *Ibid.*

<sup>1038</sup> *Ibid.*

<sup>1039</sup> *Ibid* at 20.

<sup>1040</sup> See discussion at chapter 5, section 2 above.

<sup>1041</sup> Pact *PROMINES study* at 37.

<sup>1042</sup> *Ibid*

<sup>1043</sup> *Ibid.*

<sup>1044</sup> *Ibid.*

<sup>1045</sup> N Garrett 'Preliminary observations from the DRC' (2007) *The Extractive Industries Transparency Initiative (EITI) and Artisanal and Small-Scale Mining (ASM) Report* at 35.

objectives of SAESSCAM are wide-ranging,<sup>1046</sup> providing, *inter alia*, legal awareness, training in mining techniques, health and safety advice and social services.<sup>1047</sup>

Importantly, SAESSCAM encourages all Congolese involved in the ASM sector to operate in accordance with the 2002 and 2018 Mining Codes and Mining Regulations.<sup>1048</sup> The technical service ensures that the well-being of local communities, which are affected by ASM activities, are maintained.<sup>1049</sup> SAESSCAM also tries to increase the number of middle class people in the ASM sector, through training and technical assistance; and endeavours to support the creation of artisanal mining cooperatives.<sup>1050</sup> The technical service further monitors the trading chain flow of materials produced by the ASM sector and records each ASM site.<sup>1051</sup> It ensures that these minerals flow through the official chain of commercialisation.<sup>1052</sup> In addition, SAESSCAM essentially acts as a watchdog, ensuring that correct artisanal mining taxes are collected for the State.<sup>1053</sup>

SAESSCAM furthermore collaborates with public administration and other services of the Mining Ministry to help improve the quantity and quality of artisanal and small-scale miners' production.<sup>1054</sup> For example, selective governmental bodies are working together to improve the design, production and acquisition of suitable equipment for artisanal and small-scale miners.<sup>1055</sup> SAESSCAM also tries to get the miners from the ASM sector to invest in other economic sectors and helps create funds and credit sources that promote the sector.<sup>1056</sup> SAESSCAM appears to play a key role in organising the ASM sector and ensuring that artisanal miners are structured into

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<sup>1046</sup> Garrett (2007) *The Extractive Industries Transparency Initiative (EITI) and Artisanal and Small-Scale Mining (ASM) Report* at 35.

<sup>1047</sup> *Ibid* at 36.

<sup>1048</sup> Pact *PROMINES study* at 37.

<sup>1049</sup> *Ibid*.

<sup>1050</sup> *Ibid* at 38.

<sup>1051</sup> Garrett (2007) *The Extractive Industries Transparency Initiative (EITI) and Artisanal and Small-Scale Mining (ASM) Report* at 35.

<sup>1052</sup> Pact *PROMINES study* at 37.

<sup>1053</sup> Garrett (2007) *The Extractive Industries Transparency Initiative (EITI) and Artisanal and Small-Scale Mining (ASM) Report* at 35

<sup>1054</sup> Pact *PROMINES study* at 38.

<sup>1055</sup> *Ibid*.

<sup>1056</sup> *Ibid*.

effective cooperatives.<sup>1057</sup> This initiative is a positive step towards ensuring a well-regulated ASM sector, whilst providing artisanal miners with the assistance and training needed to help further their own operations.<sup>1058</sup> The effectiveness of SAESSCAM initiative will be discussed in more detail in the next chapter.<sup>1059</sup>

### 3.5 MONUSCO

As depicted in figure six of this dissertation, most of the ASM activities take place in eastern DRC because of the high volume of untapped mineral wealth.<sup>1060</sup> Since the 1990s, natural resources in eastern DRC have played an important role in the dynamic of conflict and violence at play in the DRC.<sup>1061</sup> The ASM sector is known for its close role with armed conflict and organised crime.<sup>1062</sup> Many of these ‘conflict minerals’ come from ASM sites.<sup>1063</sup> It is estimated that about 56 per cent of ASM sites in eastern DRC are controlled by armed actors who make a profit from ASM activities through illegal taxation.<sup>1064</sup>

International organisations have tried to address the exploitation of natural resources and its link to conflict.<sup>1065</sup> One such initiative is MONUSCO.<sup>1066</sup> MONUSCO was established on 1 July 2010 in accordance with UN Security Council resolution 1925.<sup>1067</sup> It took over from an earlier UN peacekeeping operation known as MONUC, which was initially established in 1999 in accordance with the UN Security Council resolution 1279<sup>1068</sup> and resolution 1291.<sup>1069</sup> MONUSCO is a mission designed by the UN to protect civilians under threat of physical violence in eastern DRC and to support

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<sup>1057</sup> Garrett (2007) *The Extractive Industries Transparency Initiative (EITI) and Artisanal and Small-Scale Mining (ASM) Report* at 35.

<sup>1058</sup> Ibid.

<sup>1059</sup> See discussion at chapter 8, section 3.1.

<sup>1060</sup> See discussion at chapter 6, section 2.

<sup>1061</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 2

<sup>1062</sup> IISD ‘Reversing Conflict Minerals: let/s Formalize Artisanal mining for Peaceful, Just and Inclusive Societies’ available at <https://sdg.iisd.org/commentary/guest-articles/reversing-conflict-minerals-lets-formalize-artisanal-mining-for-peaceful-just-and-inclusive-societies/>, accessed on 20 January 2022.

<sup>1063</sup> Mineral resources that have been extracted in conflict area and sold to continue the cycle of violence is what are known as ‘conflict minerals’

<sup>1064</sup> Stoop, Verpoorten and van der Windt (2019) 122 *World Development* 660 at 670.

<sup>1065</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 2.

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<sup>1067</sup> United Nations Security Council Resolution 1925 of 2010.

<sup>1068</sup> United Nations Security Council Resolution 1279 of 1999.

<sup>1069</sup> United Nations Security Council Resolution 1291 of 2000.

DRC's government in its stabilisation and peace consolidation efforts.<sup>1070</sup> The effectiveness of MONUSCO will be examined in more detail in the next chapter.<sup>1071</sup>

## 4. Conclusion

The above chapter sets out the different legislative and other initiatives undertaken by the DRC to help bring the country's ASM sector into the formal domain. It would be difficult to argue that the DRC has not tried to prioritise regulating its ASM sector. On the contrary, the DRC has not only attempted to regulate its ASM sector extensively under their Mining Codes and Regulations, but has also established various ASM initiatives and governmental bodies in an attempt to bolster formalisation.

Artisanal miners in the DRC are regulated in terms of their: (i) eligibility; (ii) the areas where they are permitted to mine; (iii) how they permitted to access these mining sites; (iv) and how they must observe both the environment as well as occupational health and safety. Such regulations, policy reforms and effective support initiatives are essential for any country wanting to take control of a sector which is renowned for being somewhat unruly and disorderly.

Despite the DRC's aforementioned rollout of numerous formalisation efforts, the country continues to struggle with formalising artisanal mining, as most artisanal miners continue to operate outside of the legal framework.<sup>1072</sup> The next chapter examines whether the DRC has yielded the expected results when it comes to formalising its ASM sector. By examining the effectiveness of the DRC's formalisation efforts, other sub-Saharan African countries can learn from the DRC's successes and failures and improve their own ASM sectors.

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<sup>1070</sup> United Nations Peacekeeping 'MONUSCO' available at <https://monusco.unmissions.org/en/background>, accessed on 20 January 2022.

<sup>1071</sup> See discussion at chapter 8, section 3.1.

<sup>1072</sup> *PROMINES study: Artisanal Mining in the Democratic Republic of Congo* (2010) at 22

# CHAPTER 8: EFFECTIVENESS OF THE DRC'S ARTISANAL AND SMALL-SCALE MINING FORMALISATION EFFORTS

## 1. Introduction

The reality in the DRC is that the current legal mechanisms used to regulate the ASM sector continue to be flouted in virtually every respect.<sup>1073</sup> Most artisanal miners in the country continue to operate outside of the legal framework.<sup>1074</sup> To be able to understand and apply the lessons learnt from the case-study of the DRC to other sub-Saharan African countries, it is necessary to determine whether the negative socio-economic and environmental implications flowing from the DRC's ASM sector have been addressed effectively through the various legal mechanisms. Such an analysis will clarify whether the negative impacts are mere expressions of the sector's informality, or whether the negative impacts persist despite the country's attempt to formalise its ASM sector.

## 2. Addressing The Negative Environmental and Socio-Economic Implications

The call to formalise the ASM sector has mostly been in response to the sector's various environmental and socio-economic impacts.<sup>1075</sup> Chapter five of this dissertation outlines the various negative impacts associated with the ASM sector.<sup>1076</sup> Therefore, it is imperative to evaluate whether the negative socio-economic and environmental consequences flowing from the ASM sector in the DRC have been mitigated as a result of the country's attempted formalisation efforts.

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<sup>1073</sup> Geenen (2014) 40 *Resource Policy* 90 at 91 and Perks (2011) 23 *Journal of International Development* 1115 at 1125.

<sup>1074</sup> Pact *PROMINES study* at 22 and Geenen 37 *Resource Policy* 322 at 325.

<sup>1075</sup> Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 13.

<sup>1076</sup> See discussion at chapter 5, section 2.

## 2.1 Environmental Implications

With the adoption of the DRC's Constitution on 18 February 2006, national legal developments in environmental protection commenced.<sup>1077</sup> This was the first Constitution in the DRC that introduced environmental rights and obligations,<sup>1078</sup> such as the obligation of the State to ensure that the environment is protected,<sup>1079</sup> and that the population has the right to clean drinking water.<sup>1080</sup>

The Constitution entrenches environmental rights as fundamental human rights:<sup>1081</sup> everyone has the right to a healthy environment.<sup>1082</sup> The DRC's Constitution is progressive, as it not only enforces various environmental rights, but also places environmental duties on both the State and its citizens in their Bill of Rights.<sup>1083</sup> Citizens in the DRC have a duty to protect the environment to give effect and meaning to the environmental rights guaranteed by the Constitution.<sup>1084</sup> The Constitution further compels the State to take measures to protect the environment.<sup>1085</sup>

To give effect to the Constitution, the DRC government has regulated the ASM sector's impact on the environment.<sup>1086</sup> One way the government has attempted to protect the environment is by requiring that only holders of artisanal miners' cards are authorised to mine in the DRC.<sup>1087</sup> In terms of the 2002 Mining Code, an authorised artisanal miner must comply with the regulations relating to the use of water and the protection of the environment when carrying out its mining activity.<sup>1088</sup> An artisanal miner is only

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<sup>1077</sup> O Ruppel and D Bwiza 'Environment under Reconstruction: Environmental Law and Policy in the Democratic Republic of Congo' (2013) 46 *Law and Politics in Africa, Asia and Latin America* 473 at 475.

<sup>1078</sup> *Ibid.*

<sup>1079</sup> The Constitution of the Democratic Republic of Congo at Article 48.

<sup>1080</sup> *Ibid* at Article 54.

<sup>1081</sup> *Ibid* at Article 53.

<sup>1082</sup> *Ibid.*

<sup>1083</sup> Ruppel and Bwiza (2013) 46 *Law and Politics in Africa, Asia and Latin America* 473 at 475.

<sup>1084</sup> The Constitution of the Democratic Republic of Congo at Article 53.

<sup>1085</sup> *Ibid.*

<sup>1086</sup> See discussion at chapter 7, section 2.2.

<sup>1087</sup> Mining Regulation decree no. 38 of 2003 at Article 111.

<sup>1088</sup> Mining Code Law no. 7 of 2002 at Article 111 and 112.

eligible for an artisanal miners' card if one complied with the regulations on the protection of the environment in the artisanal mining area.<sup>1089</sup>

The regulations relating to environmental protection are set out in the Artisanal Miners' Code of Conduct,<sup>1090</sup> which was discussed in the previous chapter.<sup>1091</sup> For example, prior to and during mining activities, artisanal miners must undergo technical training with regard to compliance with the rules in respect of environmental responsibilities and suitable mining practices.<sup>1092</sup> In addition, an artisanal miner could be denied an artisanal miners' card if the miners do not pass an assessment test based on their knowledge of the environmental responsibilities and regulations.<sup>1093</sup> Furthermore, in terms of these regulations, artisanal miners must rehabilitate each portion of the mining site once work has stopped in that area.<sup>1094</sup>

Despite legal provisions governing the protection of the environment,<sup>1095</sup> a gap exists between those provisions and practice.<sup>1096</sup> This gap is particularly evident in artisanal mining sites.<sup>1097</sup> In practice, meeting the environmental imperatives can be quite costly and largely requires special expertise.<sup>1098</sup> The ASM sector in the DRC comprises mostly of individuals with low levels of education, who are highly impoverished.<sup>1099</sup> The reality is that most of these miners have limited resources and expertise.<sup>1100</sup> Consequently, the miners cannot meet these environmental regulations.<sup>1101</sup> Artisanal mining operations in the DRC continue to perpetuate deforestation, toxic emissions and contamination of water sources.<sup>1102</sup> Although use of explosives, cyanide and

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<sup>1089</sup> Mining Regulation decree no. 38 of 2003 at Article 111.

<sup>1090</sup> Mining Regulation decree no. 38 of 2003 at Annexure 5

<sup>1091</sup> See discussion at chapter 7, section 2.2.

<sup>1092</sup> Mining Regulation decree no. 38 of 2003 at Article 232.

<sup>1093</sup> *Ibid* at Article 229.

<sup>1094</sup> *Ibid* at Annexure 5, article 3 and Mining Code Law no. 7 of 2002 at Article 111 and 112.

<sup>1095</sup> The Constitution of the Democratic Republic of Congo at Article 53; Mining Regulation decree no. 38 of 2003 at Article 111.

<sup>1096</sup> Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 32 and Pact *PROMINES study* at 96.

<sup>1097</sup> Mutemeri and Petersen Report prepared for Open Society Foundation for South Africa (OFS-SA) at 96.

<sup>1098</sup> *Ibid* at 29.

<sup>1099</sup> Maclin, Kelly, Perks, Vinck and Pham (2017) 51 *Resource Policy* 115 at 118 and Geenen 37 *Resource Policy* 322 at 322.

<sup>1100</sup> Mutemeri and Petersen Report prepared for Open Society Foundation for South Africa (OFS-SA) at 29.

<sup>1101</sup> *Ibid*.

<sup>1102</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 49 and Pact *PROMINES study* at 96.

mercury for artisanal mining is strictly prohibited,<sup>1103</sup> all of these continue to be used indiscriminately by artisanal miners for excavating and processing.<sup>1104</sup> Non-compliance is concomitantly rife.

As previously discussed, artisanal miners must pay a tax, earmarked by government to rehabilitate the artisanal mining site.<sup>1105</sup> The tax is set at ten per cent of the cost required for purchasing an artisanal miner's card.<sup>1106</sup> However, in practice this tax requirement does not incentivize artisanal miners to rehabilitate the environment. Most miners are not even aware of this requirement.<sup>1107</sup> This is compounded by the fact that most miners do not even own an artisanal miners' card.<sup>1108</sup> The remoteness of the artisanal mining areas, together with the price of the artisanal miners' card and the ten per cent tax requirement, has resulted in less than ten per cent of miners actually owning an artisanal miners' card.<sup>1109</sup> Government, does not ensure the tax requirement is properly enforced.<sup>1110</sup> In most artisanal mining sites, environmental regulations are not respected and rehabilitation is rarely carried out by artisanal mining operators.<sup>1111</sup>

The 2002 Mining Code as well as the Mining Regulations prohibit the creation of artisanal mining sites in protected areas.<sup>1112</sup> A protected area is defined as 'any delimited geographical area constituting a national park, hunting grounds, zoo and/or botanical garden or other protected area.'<sup>1113</sup> The Mining Regulations set out specific areas that are considered to be protected.<sup>1114</sup> Regardless of these regulations, many artisanal mining sites are strategically located in protected areas around the DRC.<sup>1115</sup> Bribery of state officials is common in these protected zones.<sup>1116</sup> Often artisanal miners are able to access these protected areas by working undetected, below the

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<sup>1103</sup> Mining Regulation decree no. 38 of 2003 at Annexure 5, article 2.

<sup>1104</sup> Pact *PROMINES study* at 30.

<sup>1105</sup> See discussion at chapter 7, section 3.4.

<sup>1106</sup> Mining Regulation decree no. 38 of 2003 at Article 417.

<sup>1107</sup> *Ibid.*

<sup>1108</sup> Mutemeri and Petersen Report prepared for Open Society Foundation for South Africa (OFS-SA) at 97.

<sup>1109</sup> Nichols (2018) 5(2) *Scholarly Horizons: University of Minnesota, Morris Undergraduate Journal* 1 at 17.

<sup>1110</sup> Pact *PROMINES study* at 97.

<sup>1111</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 48-49 and Pact *PROMINES study* at 30.

<sup>1112</sup> Mining Code Law no. 7 of 2002 at Article 6 at Article 3.

<sup>1113</sup> Mining Regulation decree no. 38 of 2003 at Article 2.31

<sup>1114</sup> See list of protected areas at Mining Regulation decree no. 38 of 2003 at Article 3

<sup>1115</sup> Pact *PROMINES study* at 97.

<sup>1116</sup> Nichols (2018) 5(2) *Scholarly Horizons: University of Minnesota, Morris Undergraduate Journal* 1 at 17.

radar.<sup>1117</sup> For example, coltan and cassiterite are mined illegally in the protected area of the Kahuzi Biéga National Park (KBNP).<sup>1118</sup> Another legally protected area is the Maïko National Park, an area that is inhabited by artisanal miners who continue to mine gold and coltan illegally.<sup>1119</sup> Although these regulations exist, authorities are criticised for not doing enough to prevent artisanal miners from mining in these protected areas.<sup>1120</sup>

## 2.2 Occupational Health and Safety

The DRC recognises that the health and safety of all miners in the country are paramount and must not be taken for granted.<sup>1121</sup> The DRC Constitution guarantees individuals the right to health, and it is the State that is required to give effect to this right.<sup>1122</sup> The Constitution does not make reference to individuals' safety in the workplace. However, the DRC has a Labour Code, which regulates the health, hygiene and security at work and further outlines the employer's obligations.<sup>1123</sup> For example, an employer must establish a monitoring committee for health and safety.<sup>1124</sup> Nevertheless, because many of the artisanal miners operate illegally, they are not seen as employees and are, therefore, not protected under the country's Labour Code.<sup>1125</sup>

In terms of the 2002 Mining Code, an artisanal miners' card may only be issued if the miner agrees to comply with the regulations on health and safety in artisanal mining areas.<sup>1126</sup> In addition, the Artisanal Miners' Code of Conduct regulates artisanal miners' occupational health and safety.<sup>1127</sup> Article 11 and 12 set out various measures that must be taken in the artisanal mining sites to ensure that the occupational health

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<sup>1117</sup> Pact *PROMINES study* at 97.

<sup>1118</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 14.

<sup>1119</sup> *Ibid.*

<sup>1120</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 48-49 and D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 14.

<sup>1121</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 14.

<sup>1122</sup> The Constitution of the Democratic Republic of Congo at Article 47 and 53.

<sup>1123</sup> Labour Code, Law No. 15 of 2002 at Article 159-169.

<sup>1124</sup> *Ibid.*

<sup>1125</sup> *Ibid.*

<sup>1126</sup> Mining Code Law no. 7 of 2002 at Article 111 and 112.

<sup>1127</sup> Mining Regulation decree no. 38 of 2003 at Annexure 5, article 11.

and safety of those working in the area are upheld.<sup>1128</sup> These measures are set out in the previous chapter.<sup>1129</sup> For example, an artisanal miner is required to cordon off and delineate the periphery of the mine or work area.<sup>1130</sup>

In addition, the Mining Regulations stipulate that an artisanal miner could be denied an artisanal miners' card if the miner does not pass an assessment test based on his knowledge of the safety and hygiene.<sup>1131</sup> Artisanal miners must partake in technical training prior to and during the execution of their mining activities, to become familiar with the rules in respect of safety and hygiene.<sup>1132</sup> The Directorate of Mines is also obliged to inspect and supervise mining activities, ensuring that health and safety is maintained.<sup>1133</sup>

However, as with environmental regulations, occupational health and safety regulations are not enforced in practice. For example, article 9 of the Artisanal Miners' Code of Conduct states that an artisanal miner is prohibited from making tunnels and excavating beyond 30 meters in depth.<sup>1134</sup> Yet, many artisanal miners have argued that the 30 meters requirement is unrealistic as it is not always deep enough to reach hard rock minerals.<sup>1135</sup> In practice, most of the tunnels at artisanal mining sites are much deeper than 30 meters.<sup>1136</sup> A current example of this is the Bisie operation in North Kivu. Recent exploration and development during commissioning of this mine has intercepted tunnels which are in excess of 60 meters.<sup>1137</sup>

The reality is that less than ten per cent of artisanal miners are aware of the aforementioned regulations. Consequently the health conditions in artisanal mining

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<sup>1128</sup> Mining Regulation decree no. 38 of 2003 at Annexure 5, Article 11 and 12.

<sup>1129</sup> See discussion at chapter 7, section 2.2.

<sup>1130</sup> Mining Regulation decree no. 38 of 2003 at Annexure 5, Article 11.

<sup>1131</sup> *Ibid* at Article 229.

<sup>1132</sup> *Ibid* at Article 232

<sup>1133</sup> Mining Code Law no. 7 of 2002 at Article 14.

<sup>1134</sup> Mining Regulation decree no. 38 of 2003 at Annexure 5, article 9.

<sup>1135</sup> Pact *PROMINES study* at 35.

<sup>1136</sup> *Ibid* at 30.

<sup>1137</sup> Alphamin Resource Corporation 'NI 43-101 Technical Report- 19 June 2016 Updated Feasibility Study Report' available at [https://www.miningdataonline.com/reports/Bisie\\_Tin\\_Project\\_6162016\\_FS.pdf](https://www.miningdataonline.com/reports/Bisie_Tin_Project_6162016_FS.pdf), accessed on 12 February 2020.

sites remain very poor.<sup>1138</sup> Although artisanal miners are required to take safety measures, for example to indicate the existence of a mine and cordon it off, there have been numerous incidents of people and animals falling into mining pits and being trapped underground in mining tunnels.<sup>1139</sup> Artisanal miners continue to dig in unregulated areas, often leading to dangerous landslides, suffocation and drowning.<sup>1140</sup> In addition, the remoteness of the artisanal mines has resulted in authorities not being properly informed of accidents and illnesses.<sup>1141</sup> Consequently, the exact number of accidents is unknown, as health and safety records are poorly managed or non-existent.<sup>1142</sup>

The DRC is often in the spotlight because of deaths occurring at artisanal mines.<sup>1143</sup> In 2009, the DRC came under scrutiny when 18 people were killed as a result of an artisanal diamond mine collapsing in the area of Mbuji-Mayi.<sup>1144</sup> In 2010, six artisanal miners were killed when an old mine collapsed in Katanga region.<sup>1145</sup> In 2018, 40 people in the region of South Kivu were killed when a landslide occurred at an artisanal gold mine.<sup>1146</sup> In October 2019, 15 people died at an illegal gold mine in Kampene in Eastern DRC.<sup>1147</sup> The sidewall of the mine collapsed and dozens of people, including children and pregnant women were buried under the rubble.<sup>1148</sup> Despite the many health and safety provisions emanating from DRC's Mining Code and Mining Regulations, there is still an extremely high number of deaths occurring at artisanal mining sites.<sup>1149</sup> This raises the question whether these provisions have been successfully implemented.

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<sup>1138</sup> Tsurukawa, Prakash and Manhart *Social impacts of artisanal cobalt mining in Katanga, Democratic Republic of Congo* (2011) at 27.

<sup>1139</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 33.

<sup>1140</sup> Tsurukawa, Prakash and Manhart *Social impacts of artisanal cobalt mining in Katanga, Democratic Republic of Congo* (2011) at 28.

<sup>1141</sup> Pact *PROMINES study* at 33.

<sup>1142</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 33.

<sup>1143</sup> Tsurukawa, Prakash and Manhart *Social impacts of artisanal cobalt mining in Katanga, Democratic Republic of Congo* (2011) at 28.

<sup>1144</sup> Pact *PROMINES study* at.

<sup>1145</sup> *Ibid*

<sup>1146</sup> V Leotaud 'Local media report 40 people killed at DRC mine' available at <http://www.mining.com/local-media-report-40-people-killed-drc-mine/>, accessed on 25 December 2018.

<sup>1147</sup> Al Jazeera News 'More than a dozen killed as unlicensed mine collapses in DRC' 2 October 2019, available at <https://www.aljazeera.com/news/2019/10/dozen-killed-informal-collapses-drc-191002172046483.html>, accessed on 2 November 2019.

<sup>1148</sup> *Ibid*.

<sup>1149</sup> V Leotaud 'Local media report 40 people killed at DRC mine' available at <http://www.mining.com/local-media-report-40-people-killed-drc-mine/>, accessed on 25 December 2018.

## 2.3 Child Labour

The Constitution of the DRC obliges ‘public powers to protect the youth against any infringement of their health, education or integral development.’<sup>1150</sup> In 2001, the DRC ratified the UN International Labour Organization (ILO) Convention No. 182 on the Worst Forms of Child Labor (1999).<sup>1151</sup> In terms of this Convention, the DRC must take ‘immediate and effective measures to secure the prohibition and elimination of the worst forms of child labour as a matter of urgency.’<sup>1152</sup> The term ‘child’ applies to any individual under the age of eighteen.<sup>1153</sup> A list of the worst forms of child labour is included in this ILO Convention.<sup>1154</sup> This list includes: (i) any form of slavery or similar practice, such as child trafficking, forced child labour, compulsory child recruitment for armed conflicts and debt bondage; (ii) child prostitution; (iii) the use of a child for illegal activities, specifically to traffic drugs; and (iv) requiring the child to undertake activities or work which, by its very nature, is likely to harm the safety, health or morals of a child.<sup>1155</sup>

This last item on the list, hazardous work, is particularly relevant for children in the ASM sector.<sup>1156</sup> The ASM sector is known to be an industry that harbours some of the worst forms of child labour.<sup>1157</sup> Children working in the ASM sector often come from poverty and risk their lives to help contribute financially in their families.<sup>1158</sup> These children are often sent to help underground as they can easily fit through small holes and narrow spaces.<sup>1159</sup> They often work with dangerous machinery and tools and are usually exposed to harmful substances and damaging noise levels.<sup>1160</sup>

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<sup>1150</sup> The Constitution of the Democratic Republic of Congo, 2005 at Article 42.

<sup>1151</sup> G Hilson ‘Child Labour in African Artisanal Mining Communities: Experiences from North Ghana’ (2010) 41(3) *Development and Change* 445 at 447 and Pact *PROMINES study* at 97

<sup>1152</sup> ILO Convention No. 182 on the Worst Forms of Child Labor, 1999 at Article 1.

<sup>1153</sup> *Ibid* at Article 2.

<sup>1154</sup> *Ibid* at Article 3.

<sup>1155</sup> ILO Convention No. 138 on the Minimum Age for Admission to Employment, 1976 at Article 3.

<sup>1156</sup> Hilson (2010) 41(3) *Development and Change* 445 at 448.

<sup>1157</sup> *Ibid*.

<sup>1158</sup> G André and M Godin ‘Child labour, agency and family dynamics: The case of mining in Katanga (DRC)’ (2014) 21(2) *Childhood* 161 at 165.

<sup>1159</sup> Tsurukawa, Prakash and Manhart *Social impacts of artisanal cobalt mining in Katanga, Democratic Republic of Congo* (2011) at 31.

<sup>1160</sup> Hilson (2010) 41(3) *Development and Change* 445 at 448.

The DRC further tried to protect children when they ratified the ILO Convention No. 138 on the Minimum Age for Admission to Employment (1976).<sup>1161</sup> This Convention specifies a threshold for employment of 14 years of age.<sup>1162</sup> Therefore, children under the age of 14 are forbidden from being employed in the DRC.<sup>1163</sup> However, the DRC's Mining Code attempts to protect children wanting to work in the mines to the highest degree by prescribing a higher minimum age threshold than the ILO Convention No. 138 on the Minimum Age for Admission to Employment as well as the Labour Code.

The DRC's Labour Code raises this threshold to 16 years old.<sup>1164</sup> Nevertheless, children from the age of 15 may be entrusted to carry out work that is light and salubrious in nature.<sup>1165</sup> The child must have parental authorisation and must further get derogation from the Minister responsible for Labour and Social Welfare.<sup>1166</sup> In terms of the Labour Code, a child younger than 15 is strictly forbidden from working.<sup>1167</sup> Importantly, the DRC's 2002 Mining Code maintains that only those individuals who are 18 years and older are eligible to work as artisanal miners in the DRC.<sup>1168</sup>

In spite of the various laws and Conventions, thousands of children under the age of 18 continue to work in the artisanal mining sector in the DRC.<sup>1169</sup> Child labour is commonly used in the DRC to carry out artisanal mining activities, where children as young as eight years old are forced to work in artisanal mines.<sup>1170</sup> According to a UN Children's Emergency Fund (UNICEF) study, it is estimated that at least 40 000 Congolese working in the artisanal mining sector are children.<sup>1171</sup> Children continue to

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<sup>1161</sup> Tsurukawa, Prakash and Manhart *Social impacts of artisanal cobalt mining in Katanga, Democratic Republic of Congo* (2011) at 31.

<sup>1162</sup> ILO Convention No. 138 on the Minimum Age for Admission to Employment (1976), Article 2.

<sup>1163</sup> *Ibid.*

<sup>1164</sup> Labour Code, Law No. 15 of 2002 at Article 38.

<sup>1165</sup> *Ibid.*

<sup>1166</sup> *Ibid.*

<sup>1167</sup> *Ibid* at Article 133.

<sup>1168</sup> Mining Code Law no. 7 of 2002 at Article 26.

<sup>1169</sup> Tsurukawa, Prakash and Manhart *Social impacts of artisanal cobalt mining in Katanga, Democratic Republic of Congo* (2011) at 31.

<sup>1170</sup> KPMG Global Mining Institute 'Democratic Republic of Congo: Country mining guide' available at <https://assets.kpmg/content/dam/kpmg/pdf/2014/09/democratic-republic-congo-mining-guide.pdf>, accessed on 20 July 2019 at 91-92.

<sup>1171</sup> KPMG Global Mining Institute 'Democratic Republic of Congo' (2014) *UNICEF Annual Report 2015* at 18 and Pact *PROMINES study* at 91-92.

work in the artisanal mining sector for a variety of economic and social reasons. Many of these children begin working at mines at a very young age, usually accompanying their parents and offering a spare hand.<sup>1172</sup> Over time, families with limited income and economic opportunities begin to depend on the money their children earn to help cover the basic necessities.<sup>1173</sup> Even with sanctions and regulations in place prohibiting child labour, desperate families have no choice but to prioritise putting food on the table over ensuring their child's education.

It appears that despite the fact that the DRC has attempted to address the negative implications flowing from the ASM sector by implementing various regulations and initiatives, the sector continues to be overshadowed by these negative impacts. It seems that fundamental problems exist in the manner in which the DRC has brought artisanal miners into the formal domain. One must question how effective the country's formalisation efforts have really been.

### 3. Effectiveness Of the Formalisation Efforts

This section sheds some light on why such negative socio-economic and environmental implications continue to escalate and why the DRC has to a large extent failed to regulate artisanal miners. There are various factors that exist which help to explain why formalisation efforts in the DRC have largely failed. These factors include lack of political will, lack of knowledge of the law and incentives for artisanal miners, lack of operational ZEAs and problems with the dichotomy that exists between customary and statutory law in the DRC.

#### 3.1 Lack of Political Will

There is a lack of oversight by the DRC government in terms of implementing and enforcing the laws governing the formalisation of the ASM sector.<sup>1174</sup> Despite the fact that stringent ASM legislative provisions exist in the DRC, these legislative provisions

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<sup>1172</sup> PACT 'To Stem Child Labor in Mining, It Takes a Village' available at <https://www.pactworld.org/features/stem-child-labor-mining-it-takes-village>, accessed on 20 January 2022.

<sup>1173</sup> Ibid.

<sup>1174</sup> Geenen (2014) 40 *Resource Policy* 90 at 92.

are often not strictly enforced by government.<sup>1175</sup> In addition, the control of the ASM regulations are often said to be corrupt and poorly monitored.<sup>1176</sup> For example, there are often significant delays in issuing artisanal mining cards to artisanal miners.<sup>1177</sup> Reasons for the delay include: (i) not enough printed cards; (ii) lack of manpower to issue the cards; (iii) lack of monitoring systems ensuring that artisanal miners are operating within the legal framework; and (iv) artisanal miners' refusal to participate in the system, preferring to operate outside of the law.<sup>1178</sup> Without these cards, artisanal miners cannot operate legally.

In addition, the DRC government's progress towards addressing the ASM sector's most basic negative consequences remains slow.<sup>1179</sup> Some of these negative impacts include: continued health and safety issues, environmental degradation, increase in child labour, lack of long-term capital savings by ASM operators, limited professional mobility, and high levels of migration between ASM sites, which significantly impacts communities.<sup>1180</sup> Such slow progress by the government only further exacerbates efforts to improve the quality of life for people trapped in the poverty cycle.<sup>1181</sup>

Furthermore, lack of political will is often viewed as the reason for the DRC government's reluctance to increase control over its ASM sector.<sup>1182</sup> Government's lack of political will can be explained with reference to the imbalance between the effort required to control a large ASM sector and the lack of financial incentive or return on such an effort.<sup>1183</sup> This is especially true when one considers the taxes that could be

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<sup>1175</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 97.

<sup>1176</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 4

<sup>1177</sup> Pact *PROMINES study* at 26.

<sup>1178</sup> Pact *PROMINES study* at 26.

<sup>1179</sup> Perks (2011) 23 *Journal of International Development* 1115 at 1116.

<sup>1180</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 39-59; Matthysen and Montejano 'Conflict Minerals' initiative in DR Congo: Perceptions of local mining communities' (2013) at 38; Geenen (2014) 40 *Resource Policy* 90 at 92 and Perks (2011) 23 *Journal of International Development* 1115 at 1116.

<sup>1181</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 4 and Perks (2011) 23 *Journal of International Development* 1115 at 1116.

<sup>1182</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 44 and Matthysen and Montejano 'Conflict Minerals' initiative in DR Congo: Perceptions of local mining communities' (2013) at 38.

<sup>1183</sup> Matthysen and Montejano 'Conflict Minerals' initiative in DR Congo: Perceptions of local mining communities' (2013) at 38.

generated from the industrial mining sector, compared to the small amounts that can be collected from the ASM sector, a significant financial benefit for the government.<sup>1184</sup>

Many of the country's local state officials lack the knowledge and financial means to put formalisation provisions into practice.<sup>1185</sup> Government agencies need the capacity and correct resources to understand these tasks. Such constraints are a result of 'capacity issues, lack of government commitment and widespread corruption.'<sup>1186</sup> Corruption permeates all levels of the state apparatus, from the very low ranking civil servants of the country to the most senior members of government.<sup>1187</sup> Lack of political transparency and difference interest by corrupt LSM and mining ministry players, often contribute to this lack of political will.<sup>1188</sup> It has been suggested that this lack of political will causes the Congolese people to believe their grievances are rooted in bad governance, violation of a democratic regime, incompetence and mismanagement of resources.<sup>1189</sup>

Lack of political will in the DRC is linked to the country's broader political crisis. The previous president of the DRC, Joseph Kabila, stayed in power from 2001 until 2019, breaching his constitutionally mandated two-term limit.<sup>1190</sup> During President Kabila's reign concurrent provincial elections were consistently delayed and local elections did not taken place altogether.<sup>1191</sup> During this time, the senate, parliament, as well as other executive institutions operated 'beyond' their mandate.<sup>1192</sup> As a result, many of the Congolese citizens view the local and provincial administration as being 'ambiguous, arbitrary and hybrid.'<sup>1193</sup> Civil servants often prioritise the fulfilment of personal expectations over the execution of public services.<sup>1194</sup> Services, due process and

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<sup>1184</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 4 and Matthyssen and Montejano 'Conflict Minerals' initiative in DR Congo: Perceptions of local mining communities' (2013) at 38.

<sup>1185</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 56.

<sup>1186</sup> Matthyssen and Montejano 'Conflict Minerals' initiative in DR Congo: Perceptions of local mining communities' (2013) at 39.

<sup>1187</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 49-50.

<sup>1188</sup> *Ibid* at 39.

<sup>1189</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 5.

<sup>1190</sup> The Conversation 'Stability in the DRC: s look beyond political agreements' available at <https://theconversation.com/stability-in-the-drc-a-look-beyond-political-agreements-75705>, accessed on 25 January 2022.

<sup>1191</sup> *Ibid*.

<sup>1192</sup> *Ibid*.

<sup>1193</sup> T Trefon 'Public Service provisions in a Failed State: Looking Beyond Predation in the Democratic Republic of Congo' (2009) 119 *Review of African Political Economy* 9 at 14.

<sup>1194</sup> *Ibid* at 17.

other responsibilities are provided to those individuals who either have friends in high places or strong bargaining capacity.<sup>1195</sup> The lack of political will on the part of DRC's government has impacted those institutions that have been created with the intention of addressing illegal ASM activities.<sup>1196</sup>

As discussed in the previous chapter, SAESSCAM has the potential to be an important institution that is used by government in an attempt to train artisanal miners and help formalise the ASM sector in the DRC.<sup>1197</sup> However, in practice there is 'a major gap between their mandate, their resources and the reality on the ground.'<sup>1198</sup> Major challenges face SAESSCAM. Firstly, because artisanal mines are so widely spread throughout the DRC, SAESSCAM has to cover an extensive and primarily remote geographic area.<sup>1199</sup> Access to these isolated areas is often extremely difficult, as SAESSCAM agents lack funds and the roads to these areas are often only poorly maintained inaccessible dirt tracks.<sup>1200</sup> Secondly, there are not enough agents employed by SAESSCAM to cover all the artisanal mining sites around the DRC.<sup>1201</sup> Many of the SAESSCAM agents do not have the professional and logistical capacity to act as technical advisors to artisanal miners and are overwhelmed by the workload as well as the magnitude of the SAESSCAM's elaborate mandate.<sup>1202</sup>

Furthermore, the SAESSCAM agents have been accused of being corrupt and that the service as a whole lacks transparency and accountability.<sup>1203</sup> There have been allegations that the SAESSCAM agents demand extra-legal payments from artisanal miners.<sup>1204</sup> Lastly, there are often conflicts between SAESSCAM and other actors on the artisanal mining sites, such as the mine owners, cooperatives and security

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<sup>1195</sup> Trefon (2009) 119 *Review of African Political Economy* 9 at 18.

<sup>1196</sup> See discussion at chapter 7, section 3.

<sup>1197</sup> See discussion at chapter 7, section 3.4.

<sup>1198</sup> Garrett (2007) *The Extractive Industries Transparency Initiative (EITI) and Artisanal and Small-Scale Mining (ASM) Report* at 35 and Pact *PROMINES study* at 5.

<sup>1199</sup> Pact *PROMINES study* at 39.

<sup>1200</sup> Garrett (2007) *The Extractive Industries Transparency Initiative (EITI) and Artisanal and Small-Scale Mining (ASM) Report* at 35

<sup>1201</sup> Pact *PROMINES study* at 39.

<sup>1202</sup> Ibid and Garrett (2007) *The Extractive Industries Transparency Initiative (EITI) and Artisanal and Small-Scale Mining (ASM) Report* at 35.

<sup>1203</sup> Pact *PROMINES study* at 39.

<sup>1204</sup> Garrett (2007) *The Extractive Industries Transparency Initiative (EITI) and Artisanal and Small-Scale Mining (ASM) Report* at 35.

personnel.<sup>1205</sup> There is often limited access to the ASM mining sites, due to barricades by rebels and armed forces as well as lack of government security. SAESSCAM clearly needs to be restructured so that it becomes part of a wider governance reform.<sup>1206</sup> As noted by Geenen ‘indeed, so urgent is the need to reform SAESSCAM that a recently published report has called for it to either be reorganised or closed down.’<sup>1207</sup>

PROMINES is another important initiative that has experienced countless issues along the way.<sup>1208</sup> PROMINES has largely failed to make substantial progress and as a result significant donors, such as the Department for International Development (DFID) in the United Kingdom, have decided to exit the program.<sup>1209</sup> Without major funding, there are concerns about whether PROMINE will ultimately be able to deliver on its objectives.<sup>1210</sup> Although it should be noted that PROMINES has been met with some success, such as: (i) supporting the proposed revision of the 2002 Mining Code; (ii) conducting social and environmental assessments within DRC’s mining sector; and (iii) audited various institutions in the mining sector.<sup>1211</sup> Only time will tell whether PROMINES will have a positive impact on DRC’s ASM sector.

A third important initiative which this dissertation discusses is MONUSCO, a UN peacekeeping mission designed to stabilise the fragile eastern provinces of DRC.<sup>1212</sup> The UN mission’s effectiveness in protection has varied widely and has produced a mixed record.<sup>1213</sup> Where MONUSCO has made a concerted effort to safeguard the locals and prevent violent conflicts, it has made a significant impact. However, the mission has to a large extent failed to act, both proactively and in reaction to reports of attacks on the locals in the region.<sup>1214</sup> MONUSCO has also experienced financial

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<sup>1205</sup> Pact *PROMINES study* at 39.

<sup>1206</sup> Geenen and Radley (2014) 62 *Futures* 58 at 63.

<sup>1207</sup> *Ibid.*

<sup>1208</sup> Development Tracker ‘Mining Sector Reform Project’ available at <https://devtracker.fcdo.gov.uk/projects/GB-1-105844/documents>, accessed on 19 January 2022.

<sup>1209</sup> *Ibid.*

<sup>1210</sup> *Ibid.*

<sup>1211</sup> Press Reader ‘Promines, a major player in support of the mining sector in the Democratic Republic of Congo’ available at <https://www.pressreader.com/france/the-africa-report/20171204/284932430572025>, accessed on 19 January 2022.

<sup>1212</sup> See discussion at chapter 7, section 3.5.

<sup>1213</sup> Effectiveness of Peace Operations Network ‘Assessing the Effectiveness of the United Nations Mission in the DRC / MONUCO – MONUSCO’ (2019) *EPSON Report 3* at 14.

<sup>1214</sup> *Ibid.*

pressure by the UN Security Council, which has tainted its vision and lessened its protection capacity.<sup>1215</sup> In addition, neighbouring states continue to fuel instability by supporting illegal armed groups in the DRC, which has created further complications for MONUSCO.<sup>1216</sup>

MONUSCO has been the target of heavy criticism for its credibility, impartiality, and legitimacy, which has oscillated significantly over the years.<sup>1217</sup> The mission has failed to meet local expectations and cooperate with the Congolese government.<sup>1218</sup> A strong tension exists between the government and the UN.<sup>1219</sup> MONUSCO has had to work alongside a fragile and reluctant government that has to a large extent continued to support armed groups for politically motivated reasons.<sup>1220</sup> The mission is also limited by its geographical reach, which has hindered its capacity to tackle ongoing or emerging threats in remote areas.<sup>1221</sup> MONUSCO has neither the capability nor the mandate to control the Congolese borders and it is through these borders that rebel groups move and ‘conflict minerals’ are traded.<sup>1222</sup> Despite MONUSCO’s influence, armed groups in eastern DRC continue create instability, financing themselves with the control of artisanal mining areas.<sup>1223</sup>

DRC’s Directorate of Mines, which is authorised to monitor the ASM sector, further hinders formalisation efforts.<sup>1224</sup> In practice, this department cannot fulfil its duties properly due to logistical and technical capacity constraints.<sup>1225</sup> Sources attribute this shortcoming to the fact that the Department suffers from a lack of human and financial resources.<sup>1226</sup> It is further argued that the Directorate of Mines does not focus its attention on understanding the local micro-dynamics of the different mining

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<sup>1215</sup> Effectiveness of Peace Operations Network ‘Assessing the Effectiveness of the United Nations Mission in the DRC / MONUCO – MONUSCO’ (2019) *EPSON Report 3* at 15 and A Barrera ‘The Congo Trap: MONUSCO Islands of Stability in the Sea of Instability’ (2015) 4(1) *Stability: International Journal of Security & Development* 1 at 4.

<sup>1216</sup> United Nations Peacekeeping ‘MONUSCO’ available at <https://monusco.unmissions.org/en/background>, accessed on 20 January 2022.

<sup>1217</sup> Effectiveness of Peace Operations (2019) *EPSON Report 3* at 17.

<sup>1218</sup> *Ibid* at 22.

<sup>1219</sup> United Nations Peacekeeping ‘MONUSCO’ available at <https://monusco.unmissions.org/en/background>, accessed on 20 January 2022.

<sup>1220</sup> Barrera (2015) 4(1) *Stability: International Journal of Security & Development* 1 at 4.

<sup>1221</sup> Effectiveness of Peace Operations (2019) *EPSON Report 3* at 82.

<sup>1222</sup> Barrera (2015) 4(1) *Stability: International Journal of Security & Development* 1 at 5.

<sup>1223</sup> *Ibid*.

<sup>1224</sup> Mining Code Law no. 7 of 2002 at Article 14

<sup>1225</sup> Pact *PROMINES study* at 26.

<sup>1226</sup> *Ibid* at 34.

communities throughout the DRC.<sup>1227</sup> It is common for Ministries at national level to coordinate and communicate without taking provincial realities into account.<sup>1228</sup>

Artisanal mining regulation and policy implementation occurs at the local level, with a variety of approaches and results tailored for that specific region.<sup>1229</sup> However, the local and regional regulation and policy are almost always divorced from both National Government formal legislation and policy, and the rhetoric of national politics.<sup>1230</sup> Consequently, there appears to be a lack of transparent governance, as a wide gap exists between the legislation's content and the practices or policies that are implemented and enforced on the ground by government actors and agencies.<sup>1231</sup>

### 3.2 Dodd-Frank Act

Seven years after the Obama Administration enacted 'Section 1502 of the Dodd-Frank Act', there was a call by the US President at the time, Donald Trump, to suspend the Dodd-Frank Act temporarily.<sup>1232</sup> However, on 8 February 2017, the Guardian Newspaper managed to leak the President's draft executive order suspending Section 1502, which resulted in various reactions.<sup>1233</sup> The DRC's Minister of Mines publicly condemned Trump's actions, arguing that the suspension of Section 1502 'will jeopardize the stability and security of the DRC by encouraging an escalation in the activities of non-state armed groups.'<sup>1234</sup> Those activists that lobbied for the conflict minerals legislation also deplored Trump's suspension, believing that resultant increased conflict in the DRC would further encourage companies to do business with criminal syndicates.<sup>1235</sup> To date, Section 1502 has not been suspended.<sup>1236</sup>

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<sup>1227</sup> Garrett (2007) *The Extractive Industries Transparency Initiative (EITI) and Artisanal and Small-Scale Mining (ASM) Report* at 35.

<sup>1228</sup> Pact *PROMINES study* at 34.

<sup>1229</sup> O'Faircheallaigh and Corbett (2016) 3 *The Extractive Industries and Society* 961 at 964.

<sup>1230</sup> Ibid and Hentschel, Hruschka and Priester (2003) *IIED Report* at 41-42.

<sup>1231</sup> O'Faircheallaigh and Corbett (2016) 3 *The Extractive Industries and Society* 961 at 964.

<sup>1232</sup> Stoop, Verpoorten and van der Windt (2018) 13(8) *PLoS ONE* 1 at 2.

<sup>1233</sup> E Pilkington 'Proposed Trump Executive Order Would Allow Us Firms to Sell Conflict Minerals' *The Guardian* 8 February 2017.

<sup>1234</sup> T Wilson 'Congo Sees Trump Roll-Back of Dodd-Frank Stoking Insecurity' *Bloomberg* 20 March, available at <https://www.bloomberg.com/news/articles/2017-03-20/congo-sees-trump-roll-back-of-dodd-frank-law-stoking-insecurity>, accessed on 15 August 2019.

<sup>1235</sup> Stoop, Verpoorten and van der Windt (2018) 13(8) *PLoS ONE* 1 at 2.

<sup>1236</sup> Ibid.

However, many scholars have argued that Section 1502 has failed to achieve its intended purpose.<sup>1237</sup> Whilst the legislation raised awareness of the negative aspects of illegal and artisanal mining in the DRC and shone the light on transparency, Section 1502 appeared to create more problems than solutions. It is argued that the legislation led to a widespread ban on artisanal mining in the DRC, which deprived many people in the artisanal mining sector from their livelihoods.<sup>1238</sup>

In addition, many scholars believed that Section 1502 was unsuccessful in addressing the root causes of violence in the DRC.<sup>1239</sup> In September 2014, numerous experts and academics wrote in an open letter that the campaign against conflict minerals 'fundamentally misunderstands the relationship between minerals and conflict in the Eastern DRC.'<sup>1240</sup> The misunderstanding is two-fold. Firstly, despite the fact that minerals in the DRC contribute to ongoing conflicts in the region, they are not the main cause.<sup>1241</sup> Only eight per cent of all conflicts are estimated to arise out of conflict over natural resources.<sup>1242</sup> Instead, conflict in the DRC has resulted from enduring economic and political grievances as well as clashes over who controls the land and trade routes.<sup>1243</sup> Secondly, most armed groups are involved in activities which include alternative sources of income and do not solely rely on accessing mineral revenues.<sup>1244</sup> The UN confirmed that armed groups in the DRC are more often than not additionally involved in numerous non-mineral income-generating activities, which include the trade in palm oil, timber, cannabis and charcoal.<sup>1245</sup>

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<sup>1237</sup> Autesserre (2012) 111 *African Affairs* 202 at 210.

<sup>1238</sup> Ibid.

<sup>1239</sup> Stoop, Verpoorten and van der Windt (2018) 13(8) *PLoS ONE* 1 at 3.

<sup>1240</sup> An Open Letter 'Dear Governments, Companies, Non-Governmental Organisations, and Other Stakeholders Implicated in Efforts of Various Kinds Related to the Issue of Conflict Minerals' 2014, available at <https://ethuin.files.wordpress.com/2014/09/09092014-open-letter-final-and-list.pdf>, accessed on 15 August 2019.

<sup>1241</sup> Autesserre (2012) 111 *African Affairs* 202 at 210.

<sup>1242</sup> Ibid.

<sup>1243</sup> A Laudati 'Beyond Minerals: Broadening 'Economies of Violence' in Eastern Democratic Republic of Congo' (2013) 40 *Review of African Political Economy* 32 at 44 and Autesserre (2012) 111 *African Affairs* 202 at 210.

<sup>1244</sup> Ibid.

<sup>1245</sup> KPMG Global Mining Institute 'Democratic Republic of Congo' (2014) *UNICEF Annual Report 2015* at 18 and Pact *PROMINES study* at 91-92.

Perhaps one of the greatest consequences of the Section 1502 is the impact it has had on DRC's artisanal mining community and their livelihoods.<sup>1246</sup> Section 1502 prompted the President of the DRC to implement a national ban on all artisanal mining between September 2010 and March 2011.<sup>1247</sup> Local civil society activists estimate that between five and twelve million civilians directly and indirectly involved in the ASM sector have been impacted by Section 1502.<sup>1248</sup> It has been argued that the myopic approach of Section 1502 has, albeit unintentionally, so far resulted in more problems than solutions.<sup>1249</sup>

### 3.3 The Failure of the Presidential Mining Ban

One of the main consequences of Section 1502 was the institution of the 'Mining Ban' in three provinces in Eastern DRC.<sup>1250</sup> The official motive for the ban was to tackle the problem of conflict minerals and reduce the degree of informality within the mining sector.<sup>1251</sup> Ironically, artisanal mining in many areas of the DRC actually increased during the period of the mining ban.<sup>1252</sup> Many people have questioned the effectiveness, impact, feasibility and motives of the DRC's presidential mining ban.<sup>1253</sup>

The mining ban was not effectively enforced from its inception.<sup>1254</sup> This is because the State lacked authority in the DRC and did not have the capacity to carry out its supervising task.<sup>1255</sup> Furthermore, many miners ignored the ban and its accompanying measures, continuing to mine illegally.<sup>1256</sup> Despite the mining ban's objective of tackling the problem of conflict miners, undercover criminal networks which had manifested during the ban continued to operate when the ban was eventually lifted.<sup>1257</sup>

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<sup>1246</sup> International Peace Information Services (2012) *CIFOR Report* at 30.

<sup>1247</sup> L Seay 'What's Wrong with Dodd-Frank 1502? Conflict Minerals, Civilian Livelihoods, and the Unintended Consequences of Western Advocacy' (2012) *Center for Global Development Working Paper 284* at 11.

<sup>1248</sup> *Ibid* at 12.

<sup>1249</sup> Seay (2012) *Center for Global Development Working Paper 284* at 12-13.

<sup>1250</sup> See discussion at chapter 7, section 3.2.

<sup>1251</sup> Geenen and Radley (2014) 62 *Futures* 58 at 61-62 and International Peace Information Services (2012) *CIFOR Report* at 30.

<sup>1252</sup> International Peace Information Services (2012) *CIFOR Report* at 30.

<sup>1253</sup> *Ibid* and See discussion at chapter 7, section 3.2.

<sup>1254</sup> Geenen and Radley (2014) 62 *Futures* 58 at 61-62.

<sup>1255</sup> International Peace Information Services (2012) *CIFOR Report* at 31.

<sup>1256</sup> *Ibid* and Geenen and Radley (2014) 62 *Futures* 58 at 61-62.

<sup>1257</sup> Geenen and Radley (2014) 62 *Futures* 58 at 61-62.

The ban, therefore, failed to restructure the informal mining sector in a way that enticed these criminal networks to work within legal routes.<sup>1258</sup>

Not only was the ban counterproductive, but it also created further unintended consequences. One of the biggest impacts of the mining ban was that it targeted the weakest sector of society, by depriving many people of their livelihoods.<sup>1259</sup> The ban on artisanal mining immediately affected artisanal miners and their families as they suddenly found themselves without a job and a source of income.<sup>1260</sup> Local petty traders, transporters, school teachers and farmers in and around the mining sites were indirectly affected.<sup>1261</sup> The knock-on effect of the mining ban was that theft in mining areas as well as school drop-outs increased significantly, as parents could no longer afford school fees.<sup>1262</sup> Large migration occurred as many artisanals who did not originate from the workplace, migrated back to their own hometowns and villages.<sup>1263</sup>

The impact of the mining ban was not confined to the mining sites. Many of the surrounding agricultural regions began to feel the effects of the mining ban with farmers and traders no longer being able to sell their products on the mining sites.<sup>1264</sup> State military control, corrupt government officials and other militia groups intensified their control over ASM, further indicating the ineffectiveness of this mining ban.<sup>1265</sup>

An embargo on Eastern DRC conflict minerals resulted in international buyers refusing to purchase tin, tungsten and tantalum. It is estimated that up to two million artisanals were rendered jobless.<sup>1266</sup> The ban is an example of a miscalculated decision which was implemented in the continued drive to formalise ASM but proved to be disastrous in its outcomes.<sup>1267</sup> The mining ban was lifted quickly, and it became apparent that this

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<sup>1258</sup> Geenen and Radley (2014) 62 *Futures* 58 at 30.

<sup>1259</sup> *Ibid* at 32.

<sup>1260</sup> Geenen 37 *Resource Policy* 322 at 327.

<sup>1261</sup> Geenen and Radley (2014) 62 *Futures* 58 at 63 and Geenen 37 *Resource Policy* 322 at 327.

<sup>1262</sup> International Peace Information Services (2012) *CIFOR Report* at 30-31.

<sup>1263</sup> Geenen 37 *Resource Policy* 322 at 327.

<sup>1264</sup> *Ibid*.

<sup>1265</sup> S Wimmer and F Hilgert *Bisie. A one-year snapshot of the DRC's principal cassiterite mine* (2011) at 8.

<sup>1266</sup> *Ibid*.

<sup>1267</sup> Geenen 37 *Resource Policy* 322 at 326.

type of an *ad hoc* mining ban on artisanal workings is not the answer to controlling the source of minerals in the DRC.<sup>1268</sup>

### 3.4 Poor Incentive

The reality in the DRC is that the artisanal mining sector remains largely informal, with many miners not being officially registered.<sup>1269</sup> These miners continue to operate outside of the legal framework.<sup>1270</sup> Lack of incentive for artisanal miners to enter the formal sector is one of the main reasons why formalisation efforts in the DRC have been unsuccessful.<sup>1271</sup> For many artisanal miners, the cost to register and formalise their mining activities far outweigh the benefits.<sup>1272</sup> Many artisanal miners do not see any benefit in purchasing an artisanal miner's card, deeming the card too expensive and believing they get nothing in return for card ownership.<sup>1273</sup> In practice, owning a card does not guarantee the card holder better infrastructure or security at the mines, nor does it provide any technical assistance, which is supposed to be carried out by the SAESSCAM.<sup>1274</sup> Many artisanal miners see no perceived benefit to owning one.<sup>1275</sup>

Furthermore, every time an artisanal miner's card is issued, a fixed fee is charged.<sup>1276</sup> The fee is determined by the Mining Regulations.<sup>1277</sup> The card is renewable annually, without restrictions.<sup>1278</sup> This annual fee is a deterrent for the artisanal miners, resulting in them either not renewing the cards or they simply do not purchase the cards in the first place.<sup>1279</sup> The restriction on the licence to one year means that security of tenure for artisanal miners is inadequate, ultimately undermining the ASM sector as a

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<sup>1268</sup> International Peace Information Services (2012) *CIFOR Report* at 30.

<sup>1269</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 44.

<sup>1270</sup> Geenen (2014) 40 *Resource Policy* 90 at 93.

<sup>1271</sup> *Ibid*

<sup>1272</sup> Geenen 37 *Resource Policy* 322 at 326.

<sup>1273</sup> Pact *PROMINES study* at 26; International Peace Information Services (2012) *CIFOR Report* at 12-13.

<sup>1274</sup> *Ibid*.

<sup>1275</sup> *Ibid*.

<sup>1276</sup> Mining Code Law no. 7 of 2002 at Article 111 and D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 7.

<sup>1277</sup> *Ibid*.

<sup>1278</sup> *Ibid*.

<sup>1279</sup> Garrett (2007) *The Extractive Industries Transparency Initiative (EITI) and Artisanal and Small-Scale Mining (ASM) Report* at 21.

whole.<sup>1280</sup> Those few artisanal miners who own an artisanal miners' card often do not comply with the regulations concerning safety, health and protection of the environment.<sup>1281</sup>

For many artisanal miners travelling back and forth to the Divisions of Mines from their remote workplaces, to apply for an artisanal miner's card is time consuming, expensive and practically not always possible.<sup>1282</sup> Often there are significant delays in issuing the cards.<sup>1283</sup> These card delays can be costly to the artisanal miners. Travel expenses become excessive and loss of income is critical. Most artisanal miners come from the poorest sectors of society and greatly rely on the daily wages from artisanal mining as their only source of income to support themselves and their families.<sup>1284</sup>

### 3.5 Lack of Operational ZEAs

As discussed in chapter seven of this dissertation,<sup>1285</sup> artisanal miners are only permitted to operate in legal designated ZEA.<sup>1286</sup> However, one of the problems in the DRC's ASM sector is the lack of sufficient operational ZEAs.<sup>1287</sup> It appears that many of the designated ZEAs do not exist in certain provinces or are located far away from urban areas.<sup>1288</sup> Those few ZEAs that do exist, are largely abandoned by artisanal miners.<sup>1289</sup> The designated ZEAs are often ill-suited to prospective mining sites, usually with very limited potential.<sup>1290</sup> Consequently, many artisanal miners operate on the fringes of industrial concessions that are owned by LSM companies, where artisanal mining extraction is legally prohibited.<sup>1291</sup> Although the government has established ZEAs for artisanal mining in various areas of the DRC, there are still large

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<sup>1280</sup> Geenen 37 *Resource Policy* 322 at 325 and Garrett (2007) *The Extractive Industries Transparency Initiative (EITI) and Artisanal and Small-Scale Mining (ASM) Report* at 20.

<sup>1281</sup> Pact *PROMINES study* at 29.

<sup>1282</sup> *Ibid* at 47.

<sup>1283</sup> *Ibid* at 26.

<sup>1284</sup> Hilson and Hilson (2015) *International Growth Center Working Paper* at 6; Banchirigah (2006) 31 *Resources Policy* 165 at 165.

<sup>1285</sup> See discussion at chapter 7, section 2.

<sup>1286</sup> Mining Code Law no. 7 of 2002 at Article 109.

<sup>1287</sup> Pact *PROMINES study* at 4.

<sup>1288</sup> Mária and Taka (2012) 3 *African Journal of Economics and Management Studies* at 143.

<sup>1289</sup> See discussion at chapter 7, section 2.1.2.

<sup>1290</sup> Pact *PROMINES study* at 4.

<sup>1291</sup> International Peace Information Services (2012) *CIFOR Report* at 12-13.

areas, which contain significant shallow, surface mineral deposits, where not a single ZEA exists.<sup>1292</sup>

In 2012, it was estimated that only about 60 official ZEAs were established in the whole of the DRC and many of these zones are situated in very remote unsuitable areas, which are often not endowed with shallow, easily-extractable minerals.<sup>1293</sup> Consequently, very few of the designated ZEAs are operational, as artisanal miners do not see any benefit in mining in these areas.<sup>1294</sup> The more prospective mining sites are usually reserved for LSM companies.<sup>1295</sup> The government often excludes artisanal and small-scale miners from tracts of land that could be more suitable for ASM operations than for LSM operations.<sup>1296</sup> This enhances tension and resentment between industrial miners and artisanal miners.<sup>1297</sup> To exacerbate the problem further, many of the sites reserved for artisanal miners are already occupied or controlled by other groups in the area, which is a major cause of conflict in the region.<sup>1298</sup>

Those operational ZEAs where artisanal miners are actually active, provide very little security of tenure. This is because the Ministry of Mines is authorised to close any ZEA legally within 60 days if the zone is deemed to be suitable for small-scale mining or LSM.<sup>1299</sup> As discussed in chapter seven,<sup>1300</sup> artisanal miners are given a priority right to request to upgrade to a Small-scale Mining Licence.<sup>1301</sup> They have 180 days, following the closure notification, to indicate whether they intend to exercise their right to upgrade.<sup>1302</sup> However, in practice, few artisanal miners have the skills, capital or equipment necessary to carry out mining beyond the artisanal mining level.<sup>1303</sup> Even if artisanal miners wanted to 'upgrade' their mining activities, miners would still need

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<sup>1292</sup> International Peace Information Services (2012) *CIFOR Report* at 12-13.

<sup>1293</sup> International Peace Information Services (2012) *CIFOR Report* at 14.

<sup>1294</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 26.

<sup>1295</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 7.

<sup>1296</sup> *Ibid* and Pact *PROMINES study* at 28.

<sup>1297</sup> Pact *PROMINES study* at 28.

<sup>1298</sup> Pact *PROMINES study* at 28.

<sup>1299</sup> Mining Code Law no. 7 of 2002 at Article 110.

<sup>1300</sup> See discussion at chapter 7, section 2.1.2.

<sup>1301</sup> Mining Code Law no. 18/001 at Article 110; D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 7 and Garrett (2007) *The Extractive Industries Transparency Initiative (EITI) and Artisanal and Small-Scale Mining (ASM) Report* at 20.

<sup>1302</sup> Mining Code Law no. 18/001 at Article 110.

<sup>1303</sup> Pact *PROMINES study* at 29.

to prove that they have the financial capacity and they would have to provide a feasibility study as well as an environmental impact assessment.<sup>1304</sup>

In addition, DRC's Mining Code does not make provision for LSM to allow artisanal miners to mine on any of their concessions.<sup>1305</sup> In terms of the Mining Code, 'a mining perimeter covered by a valid mining title cannot be transformed into an artisanal mining area.'<sup>1306</sup> This provision is problematic for a number of reasons: firstly, in practice, it is common for artisanal mining to operate on sites that have been granted for LSM.<sup>1307</sup> Sometimes, artisanal miners have been working on that site for a very long time and conflict arises when industrial miners try to remove them.<sup>1308</sup> However, even if an LSM corporation is prepared to work together with artisanal miners on their sites, the aforementioned provision effectively prohibits them from doing so.<sup>1309</sup> The Mining Code does not provide for an artisanal miner to be legally granted the part of the LSM site, which is deemed unsuitable for LSM operations but is suitable for artisanal mining.<sup>1310</sup>

#### 4. Dichotomy in the Law

Lastly, Regional and local customary laws and traditions still hold a lot of sway in the DRC, especially in rural areas.<sup>1311</sup> A dichotomy exists in the DRC between customary law and property law governed by statute.<sup>1312</sup> Statutory law and customary law naturally differ and in turn cause further complications when it comes to regulating the country's ASM sector.<sup>1313</sup> For example, in terms of the 2002 Mining Code, DRC's State owns all of the 'soil and subsoil', which naturally includes any mineralisation.<sup>1314</sup>

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<sup>1304</sup> Garrett (2007) *The Extractive Industries Transparency Initiative (EITI) and Artisanal and Small-Scale Mining (ASM) Report* at 20.

<sup>1305</sup> Pact *PROMINES study* at 34.

<sup>1306</sup> Mining Code Law no. 7 of 2002 at Article 109.

<sup>1307</sup> Pact *PROMINES study* at 28.

<sup>1308</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 45.

<sup>1309</sup> Pact *PROMINES study* at 28.

<sup>1310</sup> Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 32.

<sup>1311</sup> Garrett (2007) *The Extractive Industries Transparency Initiative (EITI) and Artisanal and Small-Scale Mining (ASM) Report* at 19.

<sup>1312</sup> *Ibid* and Matthysen and Montejano *Conflict Minerals' initiative in DR Congo: Perceptions of local mining communities'* (2013) at 39

<sup>1313</sup> Mining Code Law no. 7 of 2002 at Article 3.

<sup>1314</sup> *Ibid*.

However, customary law does not grant the State custodianship of the country's mineral rights. Instead, in terms of the DRC's customary law, 'first right of occupation and user rights' are granted to customary chiefs.<sup>1315</sup> Customary law is recognised as a legitimate authority in the DRC's Constitution.<sup>1316</sup> The Constitution subordinates customary laws to state laws, where local custom may 'not be contrary to the Constitution, the law, public order and morality.'<sup>1317</sup>

In terms of the Artisanal Miners' Code of Conduct, an artisanal miner is obliged 'to abide by the relevant territorial regulations and legislation including the local customary laws and traditions.'<sup>1318</sup> Because artisanal miners move en masse between sites, there is usually a breakdown of traditional structures.<sup>1319</sup> In practice, the person in charge of the artisanal mining site negotiates a deal with the local chief.<sup>1320</sup> However, the deal usually only benefits the chief and has little regard for the broader needs of the community in that area, often down playing customary law and hierarchy of the local clan in that area.<sup>1321</sup>

In addition, it is common for the local community's environment to be damaged or destroyed upon the depletion of the mineral resource.<sup>1322</sup> Excluding the environmental damage, the country's customary laws are not codified in the existing statutory laws and the government is often not sympathetic to the current realities of the ASM sector.<sup>1323</sup>

## 5. Conclusion

The case study of the DRC demonstrates the difficulties that can be experienced by a country when attempting to formalise their ASM sector.<sup>1324</sup> It is apparent that despite

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<sup>1315</sup> Garrett (2007) *The Extractive Industries Transparency Initiative (EITI) and Artisanal and Small-Scale Mining (ASM) Report* at 77.

<sup>1316</sup> The Constitution of the Democratic Republic of Congo.

<sup>1317</sup> *Ibid* at Article 207.

<sup>1318</sup> Mining Regulation decree no. 38 of 2003 at Annexure 5, article 1.b.

<sup>1319</sup> Pact *PROMINES study* at 30.

<sup>1320</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 7 and Pact *PROMINES study* at 30.

<sup>1321</sup> Pact *PROMINES study* at 30.

<sup>1322</sup> *Ibid*.

<sup>1323</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 7.

<sup>1324</sup> See discussion at chapter 6.

the many laws regulating artisanal mining in the DRC, most artisanal miners continue to operate outside of the legal framework.<sup>1325</sup> Some of the legal provisions formalising ASM are problematic and further hinder the empowerment of the ASM sector. This is a consequence of the DRC's legal provisions creating significant barriers for artisanal miners' entry to the formal economy.<sup>1326</sup>

One must question whether DRC's formalisation initiatives are in touch with the complex realities and power dynamics of the country's artisanal mining sector. These formalisation initiatives and sanctions imposed by the government appear to provide simplified answers to complex socio-political phenomena and tend to overlook local politics and state relations with the ASM sector.<sup>1327</sup> In practice, the law is poorly implemented and as Siegel and Veiga point out, 'a policy of formalisation is only as effective as its implementation methodology.'<sup>1328</sup> It appears that the State has limited control over its territory as well as restricted capacities to enforce its own law.<sup>1329</sup> In addition, statutory law does not seem to take into account the local realities of the ASM sector and its corresponding customary law.<sup>1330</sup> Many Congolese find it difficult to work within the legal framework as artisanal mining activities remain at an all-time high.<sup>1331</sup>

The rules around artisanal mining appear to discourage compliance.<sup>1332</sup> Although on the face of it, the sanctions imposed by the government for non-compliance appear intimidating,<sup>1333</sup> these sanctions do not appear to deter illegal artisanal miners from engaging in illegal artisanal mining activities. As discussed at length in this dissertation,<sup>1334</sup> the reality is that most people in the DRC are desperately poor and, therefore, are forced to turn to the informal sector as a means for some financial stability.<sup>1335</sup> It appears that for many people working in the informal sector, the need

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<sup>1325</sup> See discussion at chapter 7.

<sup>1326</sup> Garrett (2007) *The Extractive Industries Transparency Initiative (EITI) and Artisanal and Small-Scale Mining (ASM) Report* at 20.

<sup>1327</sup> Geenen and Radley (2014) 62 *Futures* 58 at 60.

<sup>1328</sup> Siegel and Veiga (2007) 34(1) *Resources Policy* 51 at 54.

<sup>1329</sup> Geenen 37 *Resource Policy* 322 at 327.

<sup>1330</sup> Garrett (2007) *The Extractive Industries Transparency Initiative (EITI) and Artisanal and Small-Scale Mining (ASM) Report* at 21.

<sup>1331</sup> Geenen (2013) 25 *European Journal of Development Research* 197 at 199.

<sup>1332</sup> Geenen 37 *Resource Policy* 322 at 328.

<sup>1333</sup> See discussion at chapter 7.

<sup>1334</sup> See discussion at chapter 4, section 3.

<sup>1335</sup> Banchirigah (2006) 31 *Resources Policy* 165 at 165-166; Maconachie and Hilson (2011) 35 *Natural Resource Forum* 293 at 295 and Siwale and Siwale (2017) 4 *The Extractive Industries and Society* 191 at 191.

for a secure livelihood far outweighs the threat of any sanction for non-compliance. Consequently, artisanal mining continues to take place despite the repressive legislation.<sup>1336</sup>

Considering the important role artisanal mining has on millions of people in the DRC and the amount of money it generates for the country, it would be irrational to ban artisanal mining outright. Such an option would be impractical, as most miners would continue to operate illegally in a desperate attempt to secure a livelihood and support their families. Stopping artisanal mining completely would only worsen the problem, especially when one considers the detrimental effect the Mining Ban had on the country and its artisanal mining sector.

It is also apparent that government in the DRC lack the ability to maintain control over its territory and ensure that the laws are properly adhered to.<sup>1337</sup> This is because the State lack's political will;<sup>1338</sup> most of the institutions implemented to help regulated the ASM sector continue to operate fraudulently or without the proper funding and support;<sup>1339</sup> artisanal miners lack incentive or financial capacity to comply with the relevant laws;<sup>1340</sup> and there is mounting tension between customary and statutory law.<sup>1341</sup> The weakness of the Congolese State, created from years of international meddling, corruption and instability, and its failing institutions with limited implementation capacities has created a platform for unregulated artisanal mining in the DRC.<sup>1342</sup>

It is imperative that countries in the same position as the DRC engage with the problems and look for ways to improve the situation. Like the DRC, most countries in sub-Saharan Africa deal with failing states that are incapable of monitoring the ASM sectors. The challenge lies in trying to formalise a sector that appears to be incapable of being formalised. The final section of this dissertation will therefore consider this

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<sup>1336</sup> Ibid.

<sup>1337</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 97.

<sup>1338</sup> Geenen (2014) 40 *Resource Policy* 90 at 92.

<sup>1339</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 4.

<sup>1340</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 41.

<sup>1341</sup> Mining Code Law no. 7 of 2002 at Article 3.

<sup>1342</sup> Geenen 37 *Resource Policy* 322 at 328.

dilemma and outline recommendations for how countries in the same position as the DRC can move forwards to control and monitor their own ASM sectors better.

## PART FOUR: THE FORMALISATION DILEMMA: CONCLUSION AND RECOMMENDATIONS

Part four, which is the final part of this dissertation, consists of chapters nine, ten and eleven. This section concludes with what this dissertation terms the ‘formalisation dilemma’. Although countries have attempted to bring their ASM sector into the legal domain by implementing various laws and regulations, they have been met with little success. The formalisation dilemma concerns the paradox of a country wanting to formalise its sector despite the fact that it appears to be incapable of doing so. A case in point is the study of the DRC, which has been examined in the previous part of this dissertation to acquire an understanding of the problems associated with ASM formalisation.<sup>1343</sup>

An analysis of the DRC has shown that governments remain hopeful that the ASM situation will change through formalisation.<sup>1344</sup> This is despite the fact that the formalisation efforts in the DRC have largely been a failed strategy.<sup>1345</sup> Sub-Saharan African countries facing this so-called ‘formalisation dilemma’ remain positive and continue advocating for ASM to be legalised and brought into the formal domain.<sup>1346</sup> They believe that successful formalisation efforts should not only be able to reduce the socio-economic and environmental impacts flowing from the ASM sector, but also ensure that the artisanal miners are legally protected.<sup>1347</sup> By legally protecting artisanal miners, a large amount of the most vulnerable people in society will be looked after and given real economic security. The question that remains is how do governments overcome this formalisation dilemma and incentivise artisanal miners to comply with the ASM legal frameworks?

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<sup>1343</sup> See discussion at part 3 of this thesis above.

<sup>1344</sup> See discussion at chapter 7.

<sup>1345</sup> See discussion at chapter 8.

<sup>1346</sup> Hilson and Hilson (2015) *International Growth Center Working Paper* at 1.

<sup>1347</sup> *Ibid.*

Formalisation efforts as well as its failure or success are closely connected to the reasons that underpinned the initiatives in the first place. Chapter nine looks at the impetus behind sub-Saharan African countries' drive to continue formalising their ASM sectors despite the many associated adversities.<sup>1348</sup> The motivation to formalise ASM activities is broken up into four considerations: (i) government's continued incentive to drive forward formalisation efforts; (ii) the African Mining Vision (AMV)'s goal for economic prosperity through regional integration; (iii) the International Labour Organization's (ILO) Recommendation 204, which encourages countries to transition from the informal to formal economy; and (iv) the need to ensure property rights for artisanal miners.

Despite the motivation behind formalisation, it is apparent from the case study of the DRC that the benefits assumed to flow from formalisation have not actually materialised in contexts where it has taken place. Governments keep hoping that the ASM situation will change through formalisation. However, it seems that ASM-formalisation has largely been a failed strategy. It would appear that successful formalisation cannot take place without a proper functioning state and professional civil society. The state needs to be able to induce compliance; ensure access to finance; create a platform for all interested stakeholders to be able to participate in the formalisation strategy and decentralising the ASM system. Chapter ten, therefore, highlights the reasons as to why formalisation efforts in sub-Saharan African have generally not worked. The chapter exposes the correlation that exists between institutional failure and the rise in ASM together with its negative implications.

Chapter eleven consequently concludes by considering more innovative solutions to this formalisation dilemma from the lessons learnt in the DRC's endeavours. This last chapter assesses ways in which failed states can try to get around the formalisation dilemma and induce artisanal miners to comply with the different ASM legislation and formalisation initiatives. Some recommendations in which artisanal miners could comply are discussed. These recommendations include: (i) developing a procedurally efficient legal framework; (ii) creating strong property rights for artisanal miners; and (iii) acknowledging customary tenure practices. Chapter eleven further recommends

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<sup>1348</sup> See discussion at chapter 9 below.

various other solutions to the formalisation dilemma, such as ensuring access to capital, enabling dialogue between ASM stakeholders, and increasing education.

# CHAPTER 9: THE PARADOX OF THE 'FORMALISATION DILEMMA'

## 1. Introduction

The problem of illegal artisanal mining is not unique to the DRC.<sup>1349</sup> Illegal ASM activities continue to take place in various countries across sub-Saharan Africa, despite many of these countries having regulated their ASM sectors.<sup>1350</sup> Various scholars have written about the rise of illegal ASM in countries such as Ghana,<sup>1351</sup> Uganda,<sup>1352</sup> Zimbabwe<sup>1353</sup> and Zambia.<sup>1354</sup> It is estimated that almost 90 per cent of ASM activities in sub-Saharan Africa take place beyond legal frameworks.<sup>1355</sup> Despite efforts to formalise the ASM sector, it appears that informality continues to persist unabated.<sup>1356</sup>

Much of the legislation legalising ASM activities thereunder, require ASM operators to obtain a permit or licence before they are allowed to commence work.<sup>1357</sup> However, many of these regulations appear to be an 'add-on' to existing mineral governance frameworks, often as an afterthought and consequently do not account for the ASM sector's poverty-driven characteristics.<sup>1358</sup> In practice, many of the ASM activities remain poorly licensed and mostly unregulated in sub-Saharan Africa,<sup>1359</sup> resulting in an unmonitored sector that tends to be financed by way of illicit channels.<sup>1360</sup> ASM operators usually focus their attention on ensuring that their daily needs are met instead of addressing what the government, policymakers and the general public view

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<sup>1349</sup> See discussion at chapter 6, section 3.

<sup>1350</sup> Siwale and Siwale (2017) 4 *The Extractive Industries and Society* 191 at 191.

<sup>1351</sup> Hilson and Hilson (2015) *International Growth Center Working Paper* at 1.

<sup>1352</sup> Siegel and Veiga (2007) 34(1) *Resources Policy* 51 at 53.

<sup>1353</sup> S Spiegel 'Shifting Formalisation Policies and Recentralizing Power: The Case of Zimbabwe's Artisanal Gold Mining Sector' (2015) 28 *Society and Natural Resources* 543 at 543.

<sup>1354</sup> Siwale and Siwale (2017) 4 *The Extractive Industries and Society* 191 at 191.

<sup>1355</sup> F Clausen, M Barreto and A Attaran 'Property Rights Theory and the Reform of Artisanal and Small-Scale Mining in Developing Countries' (2011) 4(1) *Journal of Politics and Law* 15 at 16.

<sup>1356</sup> Siwale and Siwale (2017) 4 *The Extractive Industries and Society* 191 at 191.

<sup>1357</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 51.

<sup>1358</sup> Hilson and McQuilken (2014) 1 *The Extractive Industries and Society* 104 at 113-114.

<sup>1359</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 4

<sup>1360</sup> Hilson and McQuilken (2014) 1 *The Extractive Industries and Society* 104 at 106.

as the negative impacts of their activities.<sup>1361</sup> Many people immersed in the ASM sector cannot secure formal finance and proper equipment, finding themselves caught up in a vicious cycle of poverty.<sup>1362</sup>

One must question whether the various ASM laws and formalisation initiatives undertaken by the different countries in sub-Saharan Africa have truly been effective in their implementation. Have these countries been successful in integrating their informal actors into the formal sector and is formalisation really the answer? The challenge of these countries wanting to formalise a sector that appears to be incapable of being formalised is what this dissertation terms the 'formalisation dilemma'.

## 2. Motivation to Formalise the Artisanal and Small-scale Mining Sector

The motivation behind formalising the ASM sector in the sub-Saharan region has long been recognised.<sup>1363</sup> In fact, over three decades ago, Davidson acknowledged that by formalising and rationalising the ASM sector, it can be 'made more efficient, economic, safe and environmentally benign.'<sup>1364</sup> In doing so, the sector can be constructively transformed to ensure that its benefit potential is increased and its disadvantages are minimised.<sup>1365</sup> The problem with this type of thinking is that it assumes that those practicing ASM want the ASM sector to be formalised, which is not always the case.

Despite the many challenges faced by sub-Saharan African countries, the motive by governments to formalise the ASM sector continues to gain impetus.<sup>1366</sup> It appears that despite this so-called 'formalisation dilemma', governments in the region and African regional bodies remain focused on regulating ASM activities. One must question why countries remain determined to regulate a sector that seems incapable of being regulated.

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<sup>1361</sup> Sinding 29 *Natural Resource Forum* 243 at 245.

<sup>1362</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 14 and 19 and Sinding 29 *Natural Resource Forum* 243 at 245.

<sup>1363</sup> Davidson 17(4) *Natural Resource Forum* 315 at 317.

<sup>1364</sup> *Ibid.*

<sup>1365</sup> Hilson, Goumandakoye and Diallo 80 *Land Use Policy* 259 at 260.

<sup>1366</sup> Hilson and Hilson (2015) *International Growth Center Working Paper* at 1.

## 2.1 Government motivation

The obvious reason as to why sub-Saharan African governments continue to regulate the ASM sector through formalisation is because they strive for greater control over the sector to meet their desired ends.<sup>1367</sup> Informality in the mining industry can negatively impact ‘the development of sustainable enterprises, public revenues and government’s scope of action, particularly with regard to the economic, social and environmental policies.’<sup>1368</sup> Governments are aware that if they are able to regulate the ASM sector, they will gain better control of their mining structures and most importantly, generate additional taxes.<sup>1369</sup> Informality generally equals loss of important tax revenues.<sup>1370</sup>

Informality further opens the ASM sector to greater embezzlement, corruption and criminality.<sup>1371</sup> History has shown that the informal nature of the ASM sector has engendered high levels of criminal activities, with many of the minerals having been used by armed groups as a source of conflict financing and directly backing civil wars.<sup>1372</sup> An increase in criminal activity ultimately affects both local and national government.<sup>1373</sup> It can often be challenging for these countries to attract international investment and mineral offtakes because of the stigma attached to these conflict minerals.<sup>1374</sup> Governments in sub-Saharan Africa are therefore pressured to regulate their ASM sectors to ensure that they meet the standards of the international market as well as to attract foreign investment.<sup>1375</sup> It is thought that formalising ASM promises more organised and coordinated mining with the possibility of curbing and eliminating illegal mining/trading and smuggling.<sup>1376</sup>

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<sup>1367</sup> Siwale and Siwale (2017) 4 *The Extractive Industries and Society* 191 at 195.

<sup>1368</sup> L Matee ‘Moving Towards a Formal Economy: Implementing Recommendation 204 of the ILOP in Lesotho’ (2017) 25(2) *Lesotho Law Journal* 153 at 160.

<sup>1369</sup> Maconachie and Hilson (2011) 35 *Natural Resource Forum* 293 at 294.

<sup>1370</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 49-50 and Hentschel, Hruschka and Priester (2003) *IIED Report* at 9.

<sup>1371</sup> *Ibid* at 49-50.

<sup>1372</sup> X Weng ‘The rural informal economy: Understanding drivers and livelihood impacts in agriculture, timber and mining’ (2015) *IIED Working Paper* at 18-19.

<sup>1373</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 49-50.

<sup>1374</sup> Singo and Seguin (2018) *IMPACT* at 8.

<sup>1375</sup> *Ibid*.

<sup>1376</sup> Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 24-25.

Governments clearly recognise that the informal mining sector is widespread and besides enhancing the states' mineral production portfolios, it is a lifeline for tens of millions of people in need of protecting.<sup>1377</sup> It, therefore, remains the view of most sub-Saharan African governments that ASM formalisation efforts need to be put at the heart of the mining development agenda if they are to be successfully integrated into the formal economy.<sup>1378</sup>

Government's motivation to formalise the ASM sector should be seen in a positive light as it highlights their awareness that change in the sector is required. The importance of the ASM sector and its impact on society and the economy is gaining recognition and renewed interest. However, the situation is such that although many governments in sub-Sahara Africa strive towards formalisation, they appear to achieve the paradoxical effect of not actually implementing these initiatives in practice. Similarly, many artisanal miners continue to flout ASM regulations and ignore any government initiatives.

## 2.2 Regional Integration through the AMV

Governments in the region are desperate to enhance local development and, therefore, seek ways to improve their countries engagement in the global economy.<sup>1379</sup> One such way in which sub-Saharan African governments have attempted to develop their country and the continent more generally is to align the different countries through regional integration.<sup>1380</sup> There has, therefore, been a renewed commitment by institutions such as the African Union (AU) and the Organisation of African Unity (OAU) towards regional integration to help ensure continental success.<sup>1381</sup>

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<sup>1377</sup> See discussion at chapter 4, section 3.

<sup>1378</sup> G Hilson and A Gatsinzi 'A rocky road ahead? Critical reflections on the future of small-scale mining in sub-Saharan Africa' (2014) 62 *Futures* 1 at 7.

<sup>1379</sup> T Hartzenberg '*Regional Integration in Africa*' (2011) *Staff Working Paper ERS 2011-14* at 4.

<sup>1380</sup> *Ibid* at 5.

<sup>1381</sup> S Allison 'Africa's free trade fairy tale' available at <https://mg.co.za/article/2018-03-22-africas-free-trade-fairy-tale>, accessed on 1 May 2018 and AMV at 36

A main driving force behind sub-Saharan African countries efforts to formalise the ASM sector is the belief that formalisation will ensure economic prosperity through regional integration.<sup>1382</sup> Regional integration is defined as a process whereby neighbouring countries in a particular region decide to merge with one another to form a larger whole.<sup>1383</sup> The process is aimed at increasing regional cooperation in respect of security, political, economic and cultural issues.<sup>1384</sup> The degree of integration is dependent upon the commitment and willingness of independent sovereign nations to unite and share their sovereignty.<sup>1385</sup>

Regional integration is an important goal of the African Mining Vision (AMV).<sup>1386</sup> Through the AMV, the AU and OAU acknowledge that most sub-Saharan African countries continue to engage at the periphery of the global economy.<sup>1387</sup> One only needs to look at Africa's declining share in global trade and production to see this.<sup>1388</sup> The AMV is a shared vision, supported by African States to construct and transform a sustainable mining industry.<sup>1389</sup> The AMV believes that one such way of mitigating the sector's negative consequences is through formalisation of ASM.

The AMV is informed by the outcomes of several initiatives, one of which is the 2002 Yaoundé Vision on Artisanal and Small-Scale Mining.<sup>1390</sup> The 2002 Yaoundé Vision was adopted in 2005 by the Communities and Small-Scale Mining (CASM) Africa Initiative.<sup>1391</sup> The 2002 Yaoundé Vision emphasis, *inter alia*, the need for an inclusive ASM development strategy which focuses on formalising the ASM sector so as to

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<sup>1382</sup> Allison 'Africa's free trade fairy tale' available at <https://mg.co.za/article/2018-03-22-africas-free-trade-fairy-tale>, accessed on 1 May 2018.

<sup>1383</sup> H Van Ginkel and L Van Langenhove 'Introduction and Context' in H Van Ginkel, J Court and L Van Langenhove (eds) *Integrating Africa: Perspectives on Regional Integration and Development* (2003) at 1.

<sup>1384</sup> A Samson and A Halidu 'Regional integration and socio-political and economic development in East Africa: Focus on the Intergovernmental Authority on Development (IGAD)' (2014) 2(8) *Merit Research Journal of Art, Social Science and Humanities* 101 at 102.

<sup>1385</sup> Van Ginkel and Van Langenhove *Integrating Africa: Perspectives on Regional Integration and Development* (2003) at 1.

<sup>1386</sup> AMV at 36

<sup>1387</sup> Hartzenberg (2011) *Staff Working Paper ERS 2011-14* at 3-4.

<sup>1388</sup> Gibb *Small-Scale Mining, Rural Subsistence and Poverty in West Africa* (2006) at 42 and Hartzenberg (2011) *Staff Working Paper ERS 2011-14* at 3-4

<sup>1389</sup> P Ledwaba and K Nhlengetwa 'When Policy is not Enough: Prospects and Challenges of Artisanal and Small-Scale Mining in South Africa' (2016) 7 *Journal of Sustainable Development Law and Policy* 26 at 36.

<sup>1390</sup> AMV at 1.

<sup>1391</sup> Ofori *Oxfam Briefing Paper* at 10.

ensure that the sector is integrated into local and regional economic development.<sup>1392</sup> The AMV acknowledges the imperative role that civil society advocacy plays in highlighting the issues in the ASM sector and encourages ‘the inclusion of civil society in the integration of ASM into national mineral-based development strategies.’<sup>1393</sup> Thus, according to the AMV, one of the driving forces behind formalising the ASM sector is that it will enable African countries to integrate with one another more easily.

The desire for closer regional integration is generally as a consequence of countries wanting to achieve broader socio-political and security objectives.<sup>1394</sup> Countries also want to open themselves up to the outside world to ensure an environment that is free and open for global trade and investment.<sup>1395</sup> For many governments in sub-Saharan Africa, regional integration is viewed as a rational answer to the many problems experienced by a continent that is comprised of many landlocked countries with small domestic markets.<sup>1396</sup> Sub-Saharan African governments believe that ASM sector formalisation would enable better alignment with one another and collectively transform illegal mining.<sup>1397</sup> Such a move would directly maximise the potential of regional integration.<sup>1398</sup>

### 2.3 ILO Recommendation 204

Calls for formalising the ASM sector have recently received new impetus through the International Labour Organization (ILO).<sup>1399</sup> Many countries in sub-Saharan Africa had implemented legal frameworks and policy schemes with the intent to formalise ASM or had created technical institutions to facilitate this.<sup>1400</sup> However, by the early 2000’s

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<sup>1392</sup> Ofori *Oxfam Briefing Paper* at 10.

<sup>1393</sup> *Ibid.*

<sup>1394</sup> Van Ginkel and Van Langenhove *Integrating Africa: Perspectives on Regional Integration and Development* (2003) at 1.

<sup>1395</sup> Samson and Halidu at (2014) 2(8) *Merit Research Journal of Art, Social Science and Humanities* 101 at 102.

<sup>1396</sup> Hartzenberg (2011) *Staff Working Paper ERS 2011-14* at 5.

<sup>1397</sup> Allison ‘Africa’s free trade fairy tale’ available at <https://mg.co.za/article/2018-03-22-africas-free-trade-fairy-tale>, accessed on 1 May 2018.

<sup>1398</sup> *Ibid.*

<sup>1399</sup> To see which sub-Saharan African countries are party to the International Labour Organization (ILO) see <https://www.ilo.org/public/english/standards/reIm/country.htm>. and Matee (2017) 25(2) *Lesotho Law Journal* 153 at 160.

<sup>1400</sup> Siwale and Siwale (2017) 4 *The Extractive Industries and Society* 191 at 191.

these policy and administrative schemes had failed to regularise their ASM sectors.<sup>1401</sup> The ILO, therefore, held an International Labour Conference in 2015, which resulted in the establishment of the ILO's Recommendation 204 concerning 'the transition from the informal to formal economy.'<sup>1402</sup>

Recommendation 204 is an international labour standard which focuses on the informal economy and its workers.<sup>1403</sup> Importantly, Recommendation 204 offers governments the chance to regulate the unregulated economy, thereby helping to provide a revenue base from tax collection, improving conditions for workers and securing vital social security benefits.<sup>1404</sup>

Recommendation 204 acknowledges that the majority of people entering the informal economy do so not by choice, but rather because they lack opportunities in the formal economy and are unable to find other means of livelihood.<sup>1405</sup> This transition from the informal to the formal economy further confirms the view of what is required to 'achieve inclusive development and to realise decent work for all.'<sup>1406</sup> The preamble of Recommendation 204 acknowledges that informality in the workplace results from multiple causes which include, *inter alia*, governance and structural issues and that such a transition requires appropriate integrated policies.<sup>1407</sup>

Recommendation 204 attempts to provide guidance to its members to bring the informal economy into the formal sector by prescribing three objectives.<sup>1408</sup> Firstly, Recommendation 204 aims to 'facilitate the transition of workers and economic units from the informal to formal economy', whilst simultaneously ensuring that workers' fundamental rights are respected and that income security is upheld.<sup>1409</sup> Secondly, it promotes members to create, preserve and sustain enterprises and decent jobs in the formal economy as well as to ensure that there is coherence between employment,

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<sup>1401</sup> Siwale and Siwale (2017) 4 *The Extractive Industries and Society* 191 at 191.

<sup>1402</sup> ILO Recommendation No. 204 concerning the Transition from the Informal to the Formal Economy, 2015 at 2.

<sup>1403</sup> Matee (2017) 25(2) *Lesotho Law Journal* 153 at 160.

<sup>1404</sup> *Ibid.*

<sup>1405</sup> International Labour Organization (ILO) at 2 and Matee (2017) 25(2) *Lesotho Law Journal* 153 at 160.

<sup>1406</sup> *Ibid* at 2 and Matee (2017) 25(2) *Lesotho Law Journal* 153 at 160-161.

<sup>1407</sup> *Ibid.*

<sup>1408</sup> Matee (2017) 25(2) *Lesotho Law Journal* 153 at 161.

<sup>1409</sup> International Labour Organization (ILO) at 4 and Matee (2017) 25(2) *Lesotho Law Journal* 153 at 161.

social protection and other social policies.<sup>1410</sup> Lastly, Recommendation 204 aims to inhibit formal economy jobs from becoming informal in nature.<sup>1411</sup>

## 2.4 Property Rights

The push to provide a miner with legal tenure is often at the top of the formalisation drive.<sup>1412</sup> The majority of artisanal miners do not have stakes in the land they mine because they lack ownership rights.<sup>1413</sup> Governments are often under the impression that access to property rights allows for accountability and incentivises responsible mining.<sup>1414</sup> This in turn would encourage outside investment and better control by government monitoring.<sup>1415</sup>

Banks and credit agencies generally do not want to extend credit to artisanal miners because of the illegality associated with ASM.<sup>1416</sup> Governments believe that legal tenure through formalisation would render legitimacy of the ASM sector's existence, thus enabling miners to acquire better financial assistance for their ASM activities.<sup>1417</sup> Some governments believe that well-defined property rights could be extremely advantageous to artisanal miners as they could 'use their rights as collateral to access credit,' which would contribute to creating a healthy economy in the region.<sup>1418</sup>

Numerous scholars believe that if artisanal miners had secure rights, they would be encouraged to manage their projects better.<sup>1419</sup> This would ensure that miners are more responsive to the socio-economic, health and environmental impact of their

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<sup>1410</sup> International Labour Organization (ILO) at 4 and Matee (2017) 25(2) *Lesotho Law Journal* 153 at 161-162.

<sup>1411</sup> Ibid.

<sup>1412</sup> L Phillips *Why formalise artisan miners?* (2017) in Conference on Enterprise Formalisation in Africa, Accra, Ghana, January 10-11, 2007, Presentation, Washington, DC, International Finance Corporation, unpaginated.

<sup>1413</sup> G Gyan-Baffour *Artisanal mining and poverty* (2003) Presented at Communities and Small-Scale Mining Annual General Meeting, Elmina: Ghana at 4.

<sup>1414</sup> Ibid.

<sup>1415</sup> Ibid.

<sup>1416</sup> G McMahon, L Evia, A Pasco-Font and M Sanchez 'An Environmental Study of Artisanal, Small, and Medium Mining in Bolivia, Chile, and Peru' (1999) *World Bank Technical Paper No. 429* at 10.

<sup>1417</sup> Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 21-22.

<sup>1418</sup> McMahon, Evia, Pasco-Font and Sanchez (1999) *World Bank Technical Paper No. 429* at 10.

<sup>1419</sup> Siwale and Siwale (2017) 4 *The Extractive Industries and Society* 191 at 195.

activities, by increased accountability.<sup>1420</sup> Penalties for degrading the environment would be stipulated in the legal agreements.<sup>1421</sup> This in turn would have the potential to catapult the ASM industry on to a more sustainable development trajectory.<sup>1422</sup>

This view, with regard to acquiring legal tenure, is not supported by all scholars. There is a school of thought that believes that the reciprocal demands of increased accountability do not always hold.<sup>1423</sup> It is believed that formal tenure can become very complex and bureaucratic as this process involves greater costs and legal compliance.<sup>1424</sup> Furthermore, acquiring legal tenure does not always take into account the relevant situational aspects and informal manner of local mining practices.<sup>1425</sup> Nevertheless, the author of this dissertation is supportive of this initiative.

### 3. Why Formalisation Efforts Have Not Worked

By the mid-1990s, almost 36 countries in sub-Saharan Africa had committed to ensuring that their ASM sectors were formalised.<sup>1426</sup> These countries implemented various pieces of legislation or policy frameworks and created technical and administrative institutions.<sup>1427</sup> It is beyond the scope of this dissertation to evaluate all those countries that have had similar experiences to the DRC. What is important to take away from the example of the DRC is that there appears to be a pervasive problem regarding ASM-regulation.<sup>1428</sup> This problem extends beyond the DRC.<sup>1429</sup> Despite comprehensive legal ASM frameworks existing in some sub-Saharan African countries, most of the laws are overlooked by artisanal miners.<sup>1430</sup>

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<sup>1420</sup> Gyan-Baffour *Artisanal mining and poverty* (2003) at 4.

<sup>1421</sup> Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 21-22.

<sup>1422</sup> Hilson and Hilson (2015) *International Growth Center Working Paper* at 10-11.

<sup>1423</sup> M Salo, J Hiedanpää, T Karlsson, L Ávila, J Kotilainen, P Jounela and R Gracia 'Local perspectives on formalization of artisanal and small-scale mining in the Madre de Dios gold fields, Peru' (2016) 3 *The Extractive Industries and Society* 1058 at 1059.

<sup>1424</sup> Salo, Hiedanpää, Karlsson, Ávila, Kotilainen, Jounela and Gracia at 1059.

<sup>1425</sup> *Ibid.*

<sup>1426</sup> Hilson, Goumandakoye and Diallo 80 *Land Use Policy* 259 at 260.

<sup>1427</sup> *Ibid.*

<sup>1428</sup> Clausen, Barreto and Attaran (2011) 4(1) *Journal of Politics and Law* 15 at 19.

<sup>1429</sup> Siwale and Siwale (2017) 4 *The Extractive Industries and Society* 191 at 192.

<sup>1430</sup> Maconachie and Hilson (2011) 35 *Natural Resource Forum* 293 at 293.

The laws and regulations on ASM are frequently over-technical, over-bureaucratic and inaccessible for the majority of uneducated artisanal miners.<sup>1431</sup> Hilson and Gatsinzi argue that to date, with few exceptions, governments in the region have only further confined the ASM sector to the informal economy.<sup>1432</sup> The rigidity of many of these policy frameworks has ultimately brought about the unregulated informal spaces where most of these ASM sectors are found today.<sup>1433</sup>

The ASM regulations also often stifle, instead of encourage, the formalisation of ASM.<sup>1434</sup> More often than not informal artisanal miners are not able to adhere to the ASM legal requirements and as a result they are rendered illegal miners.<sup>1435</sup> This is because ASM legal framework usually requires ASM operators to follow a bureaucratic licence and permit system.<sup>1436</sup> Although many artisanal miners would like to obtain a mining licence or permit, they are prevented from doing so because of the range of administrative and fiscal barriers.<sup>1437</sup> To qualify for a licence or permit, artisanal miners are usually required to comply with a seemingly endless list of requirements.<sup>1438</sup> Usually the period of validity for an artisanal miner's card is only one or two years and most miners are against the process of having to renew it annually or bi-annually.<sup>1439</sup> The process to renew a card is both time consuming and administrative.<sup>1440</sup>

Furthermore, many allocated artisanal mining zones are deemed to be inadequate both in their ore potential and accessibility, resulting in them often being abandoned or rejected by artisanal miners.<sup>1441</sup> Governments in sub-Saharan Africa appear to prioritise LSM over ASM activities, awarding large zones of mineral-rich land to LSM

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<sup>1431</sup> Siwale and Siwale (2017) 4 *The Extractive Industries and Society* 191 at 192 and Carter, Little, Mogues and Negatu (2007) 35 *World development* 835 at 838.

<sup>1432</sup> Hilson and Gatsinzi at 5.

<sup>1433</sup> Hilson and Maconachie (2017) 49 *Area* 443 at 445.

<sup>1434</sup> Hilson, Goumandakoye and Diallo 80 *Land Use Policy* 259 at 260 and Hilson and Hilson and Gatsinzi at 5.

<sup>1435</sup> Salo, Hiedanpää, Karlsson, Ávila, Kotilainen, Jounela and Gracia at 1059.

<sup>1436</sup> See discussion at chapter 8, section 3.4 and Hilson and Hilson (2015) *International Growth Center Working Paper* at 10.

<sup>1437</sup> See discussion at chapter 8, section 3.4 and Verbrugge (2015) 46(5) *Development and Change* 1023 at 1035.

<sup>1438</sup> See discussion at chapter 7, section 2.

<sup>1439</sup> See discussion at chapter 7, section 2.1.4.

<sup>1440</sup> See discussion at chapter 7, section 2.1.4 and Hilson, Zolnikovb, Ortiz and Kumah (2018) 85 *Environmental Science and Policy* 123 at 131.

<sup>1441</sup> Hilson and Maconachie (2017) 49 *Area* 443 at 445.

companies, who bring in large sums of foreign capital to develop mines.<sup>1442</sup> These LSM operators often take the line of least resistance and are consequently reluctant to condone ASM presence inside their concession.<sup>1443</sup> There are cases where mining rights have been issued over areas which are already permitted as artisanal mining zones.<sup>1444</sup> This fuels increased tension between LSM, ASM and controlling military factions which are often already established on these sites.<sup>1445</sup>

In addition, the declaration of artisanal mining zones is often selected without taking the tribal chief and customary laws of that specific area into consideration.<sup>1446</sup> This results in artisanal miners from different tribes and clans not wanting to operate in those areas.<sup>1447</sup> Thus, the legal formalising of ASM sites in the form of inadequately prescribed artisanal mining zones is often another fight against formalisation.

Despite the fact that ASM activities differ economically and organisationally from LSM activities, ASM operators are often subjected to the same policy treatment as LSM.<sup>1448</sup> In many countries in sub-Saharan Africa, the ASM legal frameworks have been amended and inappropriately tagged onto the country's LSM mineral governance framework.<sup>1449</sup> In most cases the LSM sector has been developed essentially to attract foreign direct investment, leaving the ASM sector to be no more than a policy afterthought.<sup>1450</sup>

Most ASM regulations in sub-Saharan Africa are largely inappropriate as they do not ensure systems which are in tune with the realities and socio-economic status of the sub-Saharan African ASM sectors.<sup>1451</sup> The DRC is an example of where ASM formalisation efforts are hampered by a taxation system that is essentially too high and incentivises illegal trade.<sup>1452</sup> This causes the DRC government to lose out on

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<sup>1442</sup> Verbrugge (2015) 46(5) *Development and Change* 1023 at 1034 and Hilson, Zolnikov, Ortiz and Kumah (2018) 85 *Environmental Science and Policy* 123 at 129.

<sup>1443</sup> Ibid.

<sup>1444</sup> Verbrugge (2015) 46(5) *Development and Change* 1023 at 1035.

<sup>1445</sup> Hilson and Hilson (2015) *International Growth Center Working Paper* at 10.

<sup>1446</sup> See discussion at chapter 8, section 4.

<sup>1447</sup> Verbrugge (2015) 46(5) *Development and Change* 1023 at 1035.

<sup>1448</sup> Hilson and Hilson (2015) *International Growth Center Working Paper* at 10.

<sup>1449</sup> Hilson and McQuilken (2014) 1 *The Extractive Industries and Society* 104 at 113-114.

<sup>1450</sup> Ibid.

<sup>1451</sup> Hilson, Goumandakoye and Diallo 80 *Land Use Policy* 259 at 260.

<sup>1452</sup> See discussion at chapter 8, section 2.1.

revenues through official channels.<sup>1453</sup> Many artisanal miners claim that the upstream taxes and fees required to be paid to cooperative leaders and government officials are unrealistic and contribute to continued informality.<sup>1454</sup> To date, many of the ASM licensing schemes implemented in sub-Saharan African are overly complex.<sup>1455</sup> Over the past three decades, repeated calls have been made asking governments to make these systems more accessible and pro-poor.<sup>1456</sup> However, not much has changed and regulatory barriers still exist.<sup>1457</sup>

Nevertheless, it would be premature to assume that once artisanal miners are granted legal titles, the benefits of formalisation will be realised.<sup>1458</sup> Furthermore, it would be presumptuous to suppose that ASM actors' behavioural conduct and socio-environmental responsibilities will be address by solely acquiring legal tenure. The problems associated with formalising the ASM sector go beyond the negative implications associated with the sector. There is surely no point in trying to fix ASM's informality if governments and profession civil services in sub-Saharan Africa are not adequately functioning. One must only look at the example of the DRC to understand that regulating the ASM sector through legal frameworks has not worked.

This dissertation maintains that the problems associated with ASM lie at the heart of state or institutional failure in most sub-Saharan African countries. The author of this dissertation argues that there needs to be strong state capacity with proper human and financial resources in place. It is difficult for governments to monitor and control the ASM sector and this is exacerbated by the sector's transient nature and the presence of different armed groups, which are mostly hostile towards government actors.<sup>1459</sup> In the case of sub-Saharan Africa, if governments want to ensure that the ASM sector progresses along a path of formalisation, they will need to apply more innovative solutions and policies. More importantly, states will need to address their institutional weaknesses.

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<sup>1453</sup> Yakovleva (2007) 32 *Resource Policy* 29 at 29 and Singo and Seguin (2018) *IMPACT* at 22.

<sup>1454</sup> Hilson, Zolnikovb, Ortiz and Kumah (2018) 85 *Environmental Science and Policy* 123 at 132.

<sup>1455</sup> Ibid.

<sup>1456</sup> Ibid.

<sup>1457</sup> Hilson and Maconachie (2017) 49 *Area* 443 at 445.

<sup>1458</sup> Siwale and Siwale (2017) 4 *The Extractive Industries and Society* 191 at 199.

<sup>1459</sup> Verbrugge (2015) 46(5) *Development and Change* 1023 at 1033.

## 4. Conclusion

This chapter acknowledges that more and more countries within sub-Saharan Africa are attempting to regulate their ASM sectors, despite facing numerous obstacles along the way. Many countries have endeavoured to formalise their ASM sectors in an attempt to mitigate the negative consequences which flow therefrom.<sup>1460</sup> The DRC is a good example of a country that has implemented legislation and introduced numerous initiatives to ensure that the ASM sector is brought into the legal domain.<sup>1461</sup> The unfortunate reality in the DRC, is that the country seems to be trapped in what this dissertation terms the ‘formalisation dilemma’, as thousands of artisanal miners continue to operate outside of the legal framework.<sup>1462</sup>

The DRC is not the only country to experience this formalisation dilemma.<sup>1463</sup> Most formalisation efforts in sub-Saharan Africa have only contributed on a micro scale to improving productivity and helping to reduce localised environmental impacts.<sup>1464</sup> Many of the past formalisation efforts in these countries have pursued a top-down approach, lacking continuity and adequate funding.<sup>1465</sup> In cases where comprehensive ASM legal frameworks do exist, such as the DRC, they are seldom adhered to and often disregarded by the miners.<sup>1466</sup> These legal frameworks are usually very technical in nature, over-bureaucratic and typically inaccessible for many artisanal miners who more often than not lack formal education and any access to funding.<sup>1467</sup>

It is against this backdrop that governments need to begin thinking out of the box to incentivise artisanal miners to comply with the different legal and ASM initiatives. Perhaps this kind of sector cannot be regulated, or the regulations are inadequate and merely a policy afterthought. Or perhaps the fight against the ‘formalisation dilemma’

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<sup>1460</sup> See discussion at chapter 1, section 2.1.

<sup>1461</sup> See discussion at chapter 6.

<sup>1462</sup> See discussion at chapter 8, section 2.

<sup>1463</sup> Hilson and Hilson (2015) *International Growth Center Working Paper* at 1; Siegel and Veiga (2007) 34(1) *Resources Policy* 51 at 53; Spiegel (2015) 28 *Society and Natural Resources* 543 at 543 and Siwale and Siwale (2017) 4 *The Extractive Industries and Society* 191 at 191.

<sup>1464</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 41.

<sup>1465</sup> AMV at 28.

<sup>1466</sup> Clausen, Barreto and Attaran (2011) 4(1) *Journal of Politics and Law* 15 at 19.

<sup>1467</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 41.

requires looking beyond formalisation. The next chapter, chapter ten, examines the relationship between legacy issues and institutional failure in sub-Saharan African countries and the rise in illegal ASM activities.

# CHAPTER 10: THE CORRELATION BETWEEN STATE FAILURE AND THE RISE IN ARTISANAL AND SMALL-SCALE MINING

## 1. The problem with the formalisation argument

The work of this dissertation acknowledges that despite sub-Saharan African countries' drive to regulate the ASM sector, formalisation efforts have largely failed.<sup>1468</sup> Many of the formal laws and initiatives implemented by governments are not in tune with the realities of the ASM communities.<sup>1469</sup> Most of the legal frameworks include a range of administrative and fiscal barriers, which are impossible for artisanal miners to overcome.<sup>1470</sup> Those areas demarcated for ASM activities are more often than not inadequate both in ore potential and accessibility.<sup>1471</sup> LSM is typically prioritised over ASM, and the government often ignores customary modes.<sup>1472</sup> The problem of wanting to regulate the ASM sector despite the many adversities faced is what this dissertation terms the 'formalisation dilemma'.<sup>1473</sup>

The previous chapter already noted that the so-called 'formalisation dilemma' goes beyond the difficulties faced with regulating artisanal miners.<sup>1474</sup> It would be unrealistic to assume that once artisanal miners are granted tenure security, formalisation benefits will be realised.<sup>1475</sup> The state needs to have a strong capacity with proper human and financial resources and effective civil services to regulate the sector successfully.<sup>1476</sup> Governments and their mining ministries need to be strong and

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<sup>1468</sup> See discussion at chapter 9, section 3.

<sup>1469</sup> See discussion at chapter 9, section 3.

<sup>1470</sup> See discussion at chapter 9, section 3.

<sup>1471</sup> See discussion at chapter 9, section 3.

<sup>1472</sup> See discussion at chapter 9, section 3.

<sup>1473</sup> See discussion at chapter 9, section 1.

<sup>1474</sup> See discussion at chapter 9.

<sup>1475</sup> See discussion at chapter 9, section 3 and Siwale and Siwale (2017) 4 *The Extractive Industries and Society* 191 at 199.

<sup>1476</sup> *Ibid.*

transparent. Governments must have command over sufficient material and human resources to manage the mineral resource sector successfully.<sup>1477</sup>

State incapacity and corruption have been recognised as primary hindrances to political and economic development.<sup>1478</sup> Many African States are showing signs of failure or are approaching total state collapse.<sup>1479</sup> Weak states cannot effectively project power, resulting in the state becoming susceptible to violent conflicts.<sup>1480</sup> The example of the DRC presents a case in point.<sup>1481</sup> The case study of the DRC depicts a country where millions of unemployed Congolese citizens have used the ASM sector as a refuge to provide some source of income.<sup>1482</sup> Despite the various legal frameworks and government initiatives to help regulate the ASM sector, the case study shows clearly that the sector remains largely unregulated.<sup>1483</sup> One has to question why sub-Saharan African countries, such as the DRC, struggle to regulate their ASM activities fully.

There is a plethora of literature documenting the weaknesses in the governance of many sub-Saharan African States.<sup>1484</sup> Over time, scholars have tried to suggest ways in which countries like the DRC can move forward and formalise their ASM sector, despite the many difficulties faced. However, engaging with the so-called 'formalisation dilemma' requires looking beyond formalisation efforts.<sup>1485</sup> There is a need to delve deeper and examine the nature of the government and its mining sector in countries like the DRC and why illegality, especially within the ASM sector, remains so prevalent.

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<sup>1477</sup> See discussion at chapter 9, section 3 and M Kirwin and W Cho 'Weak States and political Violence in sub-Saharan Africa' (2009) *Afrobarometer, Working Paper No. 111* at 3.

<sup>1478</sup> Kirwin and Cho (2009) *Afrobarometer, Working Paper No. 111* at 3 and Rotberg *When States Fall: Causes and Consequences* (2004) at 1.

<sup>1479</sup> T Howard 'Failed States and the Spread of Terrorism in Sub-Saharan Africa' (2010) 33 *Studies in Conflict and Terrorism* 960 at 961 and J Roberts and C Rosenberg 'Why Africa's Weak States Persists' (1982) 35 *World Politics* 1 at 11.

<sup>1480</sup> Di John (2008) *Crisis States Working Papers Series No.2* at 4 and Kirwin and Cho (2009) *Afrobarometer, Working Paper No. 111* at 3.

<sup>1481</sup> See discussion at chapter 6, section 4.

<sup>1482</sup> See discussion at chapter 7, section 1.

<sup>1483</sup> See discussion at chapter 7, section 1.

<sup>1484</sup> Roberts and Rosenberg (1982) 35 *World Politics* 1 at 12; Howard (2010) 33 *Studies in Conflict and Terrorism* 960 at 960; Kirwin and Cho (2009) *Afrobarometer, Working Paper No. 111* at 1; Rotberg *When States Fall: Causes and Consequences* (2004) at 1 and Di John (2008) *Crisis States Working Papers Series No.2* at 2.

<sup>1485</sup> See discussion at chapter 9.

This dissertation argues that sub-Saharan African countries have been set up to fail its citizens, and that this reality has encouraged the rise in ASM activities. One cannot begin to find solutions for the formalisation dilemma without addressing the root causes of the problem. How can one expect a well-regulated mining sector in a state that lacks a strong government that cannot safeguard its citizens and maintain order within its territory?

It would be futile to address the problem of formalisation without first recognising the correlation between state failure and the rise in unregulated ASM activities. The author of this dissertation argues that the problems associated with failing states would first need to be addressed before any nation can begin thinking about formalising informal sectors such as the ASM sector.

## 2. Understanding state failure

The present-day DRC is regarded as a paradigmatic case of 'state failure', and unfortunately, the DRC is not alone.<sup>1486</sup> Many of the countries in the Global South are plagued by attributes linked to systemic state failure.<sup>1487</sup> State failure is particularly an apparent pandemic in the region of sub-Saharan Africa.<sup>1488</sup> The Fragile States Index (FSI), formerly the Failed States Index, has been published since 2005 by the Fund for Peace.<sup>1489</sup> The FSI ranks 178 countries annually based on various factors that impact their levels of fragility.<sup>1490</sup> The index uses 12 factors to determine how to rate each country, which include: (i) security threats to a state; (ii) factionalised elites; (iii) group grievance (iv) economic decline; (v) uneven development; (vi) human flight and brain drain; (vii) state legitimacy; (viii) public services; (ix) demographic pressures; (x) refugee flows; and (xi) external interventions.<sup>1491</sup>

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<sup>1486</sup> W Reno 'Congo: From state collapse to 'absolutism' to state failure' (2006) 27 *Third World Quarterly* 43 at 43 and Siwale and Siwale (2017) 4 *The Extractive Industries and Society* 191 at 192.

<sup>1487</sup> Howard (2010) 33 *Studies in Conflict and Terrorism* 960 at 962; Reno (2006) 27 *Third World Quarterly* 43 at 43 and Rotberg *When States Fall: Causes and Consequences* (2004) at 1.

<sup>1488</sup> Reno (2006) 27 *Third World Quarterly* 43 at 43 and Di John (2008) *Crisis States Working Papers Series No.2* at 3.

<sup>1489</sup> The Fund for Peace 'Measuring Fragility- Risk and Vulnerability in 178 Countries' available at <https://fragilestatesindex.org/>, accessed on 3 March 2021.

<sup>1490</sup> *Ibid.*

<sup>1491</sup> The Fund for Peace *Fragile States Index Annual Report 2020* (2020) at 41-49.

Figure seven below depicts a heat map representing the FSI for 2020. It is evident from the heat map that almost all of the countries in sub-Saharan Africa are on the 2020 FSI as countries that are at critical levels of warning or alert.<sup>1492</sup> Several of these countries, the DRC among them, are on 'high alert', meaning they have gone beyond a fragile state towards state failure.<sup>1493</sup> In 2020, the DRC ranked as the fifth country in the world at risk of failure and moved up to fourth place in 2021, ranking 174 out of 178.<sup>1494</sup>

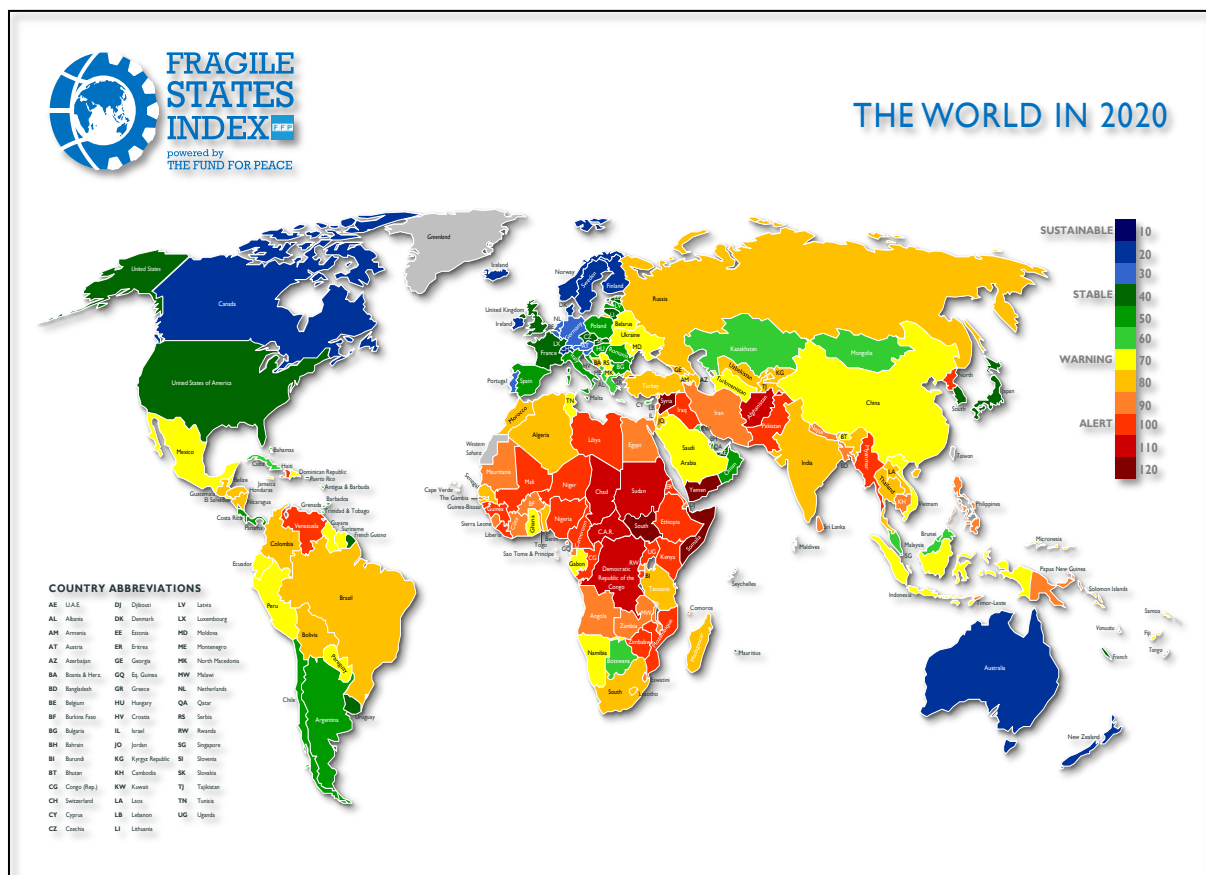


Figure 7: fragile states index heat map 2020.<sup>1495</sup>

<sup>1492</sup> The Fund for Peace *Fragile States Index Annual Report 2020 (2020)* at 2-7.

<sup>1493</sup> *Ibid* at 1-2.

<sup>1494</sup> *Ibid* at 7.

<sup>1495</sup> This figure has been taken from an open source, which permits use of the figure for student research. See: The Fund for Peace 'Fragile States index Heat Map' available at <https://fragilestatesindex.org/analytics/fsi-heat-map/>, accessed on 3 March 2021.

States weaken and ultimately fail when they are no longer able to provide their citizens with basic functions.<sup>1496</sup> Once a state begins to weaken, the economy starts to decline; physical infrastructure breaks down; there is a rapid increase in crime and violence; and healthcare and education become non-existence.<sup>1497</sup> These conditions set up an environment that encourages opposition and armed conflict, producing a refugee crisis and a mass shift in population. It further enables a failing economy, as seen by long-term food and fuel shortages, causing a spike in the death toll within that country.<sup>1498</sup>

State failure threatens personal survival, ultimately driving that individual to 'obtain tangible political and economic resources through other means', usually found in the informal sector.<sup>1499</sup> There appears to be a direct correlation between failed states and the rise in ASM across sub-Saharan Africa.<sup>1500</sup> The research conducted in this dissertation suggests that state failure, created by the government's inability to provide a sense of security to its citizens and ensure proper economic development, has ultimately helped facilitate the rise in informal activities.<sup>1501</sup> In countries with abundant mineral resources coupled with state corruption, these informal activities predominantly occur in the ASM sector.<sup>1502</sup> The example of the DRC, discussed below, is a case in point.

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<sup>1496</sup> Di John (2008) *Crisis States Working Papers Series No.2* at 4 and Rotberg *When States Fall: Causes and Consequences* (2004) at 1.

<sup>1497</sup> D Carment 'Assessing State Failure: Implications for Theory and Policy' (2003) 24 *Third World Quarterly* 407 at 409 and W Zartman *Collapsed States: The Disintegration and Restoration of Legitimate Authority* (1995) at 5.

<sup>1498</sup> Carment (2003) 24 *Third World Quarterly* 407 at 409 and J Milliken and K Krause 'State Failure, State Collapse, and State Reconstruction: Concepts, Lessons, and Strategies' (2020) 33 *Development and Change* 753 at 762.

<sup>1499</sup> Roberts and Rosenberg (1982) 35 *World Politics* 1 at 12 and Howard (2010) 33 *Studies in Conflict and Terrorism* 960 at 962.

<sup>1500</sup> Howard (2010) 33 *Studies in Conflict and Terrorism* 960 at 962 and Milliken and Krause (2020) 33 *Development and Change* 753 at 762.

<sup>1501</sup> Zartman *Collapsed States: The Disintegration and Restoration of Legitimate Authority* (1995) at 5 and M Mann 'The Autonomous Power of the State: Its Origins, Mechanisms and Results' in J Hall (ed) *States in History* (1986) at 113.

<sup>1502</sup> Howard (2010) 33 *Studies in Conflict and Terrorism* 960 at 961.

### 2.1.1 Conceptualising state failure

Since the beginning of the 1990s, policymakers and scholars have been interested in the notion of 'state failure'.<sup>1503</sup> To this day, there remains no general agreement on what precisely constitutes a failed state.<sup>1504</sup> One of the primary reasons why 'state failure' has not been properly defined is that the concept of the 'state' is messy and unclear.<sup>1505</sup> One needs to understand the state before one can measure 'stateness', or lack thereof.<sup>1506</sup> Therefore, before understanding the concept of 'state failure', it is imperative to understand what a 'state' is.<sup>1507</sup>

In international law, a 'state' will exist when outside states recognise a political entity as 'the highest political authority in a given territory and is treated as an 'equal' among the international 'community' of states.'<sup>1508</sup> Rather than diplomatic recognition, statehood requires recognition of its existence by other states.<sup>1509</sup> According to international customary law, statehood will only exist when a political entity has: (i) a recognised government; (ii) a defined territory; (iii) a permanent population; and (iv) the capacity to interact and form relationships with other states.<sup>1510</sup> Ratner and Helman were among the first scholars to analyse the concept of 'state failure'.<sup>1511</sup> Both scholars recognised that certain states were unable to sustain themselves as members of the international community.<sup>1512</sup> The concern was that these 'failed states' would endanger their citizens and threaten neighbouring states with political instability, warfare, and increased refugee flow.<sup>1513</sup>

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<sup>1503</sup> M Francois and I Sud 'Promoting Stability and Development in Fragile and Failed States' (2006) 24 *Development Policy Review* 141 at 142 and Zartman *Collapsed States: The Disintegration and Restoration of Legitimate Authority* (1995) at 5.

<sup>1504</sup> Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 28.

<sup>1505</sup> Mann *States in History* (1986) at 112.

<sup>1506</sup> Mann *States in History* (1986) at 112; J Roberts and Rosenberg (1982) 35 *World Politics* 1 at 12 and Zartman *Collapsed States: The Disintegration and Restoration of Legitimate Authority* (1995) at 6.

<sup>1507</sup> Howard (2010) 33 *Studies in Conflict and Terrorism* 960 at 961.

<sup>1508</sup> Di John (2008) *Crisis States Working Papers Series No.2* at 4.

<sup>1509</sup> Francois and Sud (2006) 24 *Development Policy Review* 141 at 142.

<sup>1510</sup> Di John (2008) *Crisis States Working Papers Series No.2* at 4.

<sup>1511</sup> Carment (2003) 24 *Third World Quarterly* 407 at 5.

<sup>1512</sup> Roberts and Rosenberg (1982) 35 *World Politics* 1 at 12.

<sup>1513</sup> Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 4.

Numerous definitions of 'state failure' exist in literature.<sup>1514</sup> Scholars such as Zartman and Ignatieff have identified when state failure occurs.<sup>1515</sup> According to Zartman, state failure occurs when 'the basic functions of the state are no longer performed... it refers to a situation where the structure, authority (legitimate power), law, and political order have fallen apart.'<sup>1516</sup> Zartman further notes that state failure involves the breakdown of both the societal infrastructure and the governmental superstructure.<sup>1517</sup> The 'imbrication of the two components' (i.e., society and state) gives state failure conceptual significance. As the state begins to implode, it depletes society's core functions.<sup>1518</sup> On the other hand, Ignatieff argues that state failure occurs when the government no longer has a 'monopoly of the means of violence'.<sup>1519</sup>

Rotberg,<sup>1520</sup> one of the leading scholars on state failure, defines it as a situation whereby a nation-state fails its citizens as the state is 'consumed by internal violence' and is unable to deliver 'positive political goods'.<sup>1521</sup> Political goods include, *inter alia*, security, the rule of law, political freedom, education, healthcare and physical infrastructure.<sup>1522</sup> Rotberg further notes that the government of that nation-state loses its legitimacy in the eyes of a growing plurality of its citizens.<sup>1523</sup>

The characteristics associated with state failure include: (i) increase of violence in a state;<sup>1524</sup> (ii) few, if any, functioning state institutions that can 'confer identity and assure security to the population';<sup>1525</sup> (iii) loss of legitimacy, both in the national and international sphere;<sup>1526</sup> and (iv) the inability to control borders or territory.<sup>1527</sup> The

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<sup>1514</sup> Di John (2008) *Crisis States Working Papers Series No.2* at 5.

<sup>1515</sup> Francois and Sud (2006) 24 *Development Policy Review* 141 at 142.

<sup>1516</sup> Zartman *Collapsed States: The Disintegration and Restoration of Legitimate Authority* (1995) at 5-8.

<sup>1517</sup> *Ibid.*

<sup>1518</sup> *Ibid.*

<sup>1519</sup> M Ignatieff 'Intervention and State Failure' (2002) 40 *Dissent* 115 at 118.

<sup>1520</sup> Di John (2008) *Crisis States Working Papers Series No.2* at 5.

<sup>1521</sup> Rotberg *When States Fall: Causes and Consequences* (2004) at 1.

<sup>1522</sup> *Ibid* at 3.

<sup>1523</sup> *Ibid* at 1.

<sup>1524</sup> Di John (2008) *Crisis States Working Papers Series No.2* at 6.

<sup>1525</sup> J Gros 'Towards a taxonomy of Failed States in the New World Order: decaying Somalia, Liberia, Rwanda and Haiti' (1996) 17 *The World Quarterly* 455 at 465 and Francois and Sud (2006) 24 *Development Policy Review* 141 at 142.

<sup>1526</sup> Carment (2003) 24 *Third World Quarterly* 407 at 409 and Francois and Sud (2006) 24 *Development Policy Review* 141 at 142.

<sup>1527</sup> Di John (2008) *Crisis States Working Papers Series No.2* at 6.

extent to which a state has failed depends on the degree to which a given state exhibits these characteristics.<sup>1528</sup>

A failed or collapsed state is used to describe those states which embody the characteristics associated with state failure. Usually, civil or social authority has completely disintegrated for such nations, and the external government ceases to function, exposing the population to internal and external threats.<sup>1529</sup> This occurs in extreme cases, such as Somalia, Congo, Liberia and Sierra Leone.<sup>1530</sup> Countries in sub-Saharan Africa vary in the extent to which they have failed or are fragile and risk failing.<sup>1531</sup> Unfortunately, at this less extreme end of the spectrum, state failure is hardly distinguishable from the status of most poor countries in sub-Saharan Africa, which fall victim to institutional weaknesses.<sup>1532</sup>

Words associated with state failure include: failed, failing, weak, fragile and collapsed.<sup>1533</sup> In practice, these terms explain a continuum, with 'fragile states' appearing on the one end of the spectrum and 'failed states' or 'collapsed states' appearing on the other.<sup>1534</sup> The term 'fragile states' has been used to denote states prone to failure in the future.<sup>1535</sup> The term 'failing states' has been used to identify a situation of deterioration, whereby a 'fragile state' moves towards total collapse.<sup>1536</sup> According to Milliken and Krause, 'state failure' and 'state collapse' are two distinct concepts. 'State failure' is more of a 'functional' event, which comes about when a state fails to fulfil its primary responsibilities.<sup>1537</sup> On the other hand, 'state collapse' is far more unique, involving an 'institutional' event that arises when state institutions completely disintegrate, leaving a void of authority and political disorder.<sup>1538</sup>

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<sup>1528</sup> Milliken and Krause (2020) 33 *Development and Change* 753 at 762.

<sup>1529</sup> Gros (1996) 17 *The World Quarterly* 455 at 465.

<sup>1530</sup> Carment (2003) 24 *Third World Quarterly* 407 at 409.

<sup>1531</sup> D Brinkerhoff 'Rebuilding Governance in Failed States and Post-Conflict Societies: core Concepts and Cross-Cutting Themes' (2005) 25 *Public Administration and Development* 3 at 4.

<sup>1532</sup> Gros (1996) 17 *The World Quarterly* 455 at 465 and Brinkerhoff (2005) 25 *Public Administration and Development* 3 at 4.

<sup>1533</sup> Francois and Sud (2006) 24 *Development Policy Review* 141 at 142.

<sup>1534</sup> Gros (1996) 17 *The World Quarterly* 455 at 465.

<sup>1535</sup> Francois and Sud (2006) 24 *Development Policy Review* 141 at 144.

<sup>1536</sup> Carment (2003) 24 *Third World Quarterly* 407 at 409.

<sup>1537</sup> Milliken and Krause (2020) 33 *Development and Change* 753 at 762.

<sup>1538</sup> R Ehrenreich 'Failed States, or the State as Failure' (2005) 72 *The University of Chicago Law Review* 1159 at 1162 and Milliken and Krause (2020) 33 *Development and Change* 753 at 762.

For this dissertation, 'state failure' is determined by the prevalence of three essential characteristics in a particular state:<sup>1539</sup> First, the nation has weak state institutions as they cannot: (i) respond to the citizen's needs;<sup>1540</sup> (ii) provide basic public services to its population;<sup>1541</sup> (iii) support economic development within the country;<sup>1542</sup> or (iv) guarantee citizens' welfare.<sup>1543</sup> Second, there is a breakdown of law and order within the country, leading to two possible scenarios:<sup>1544</sup> State institutions either lose territorial control and the ability to protect their citizens fully, along with its 'monopoly over the legitimate use of force';<sup>1545</sup> or they are used as a vehicle to intimidate and oppress citizens.<sup>1546</sup> Third, at the international level, the state is seen as an illegitimate entity that lacks credibility.<sup>1547</sup> Without credibility, states are usually not recognised by the international community and therefore do not participate in agreements or treaties that regulate international trade, human rights, or the environment.<sup>1548</sup>

### 2.1.2 State failure in sub-Saharan Africa

The failure of a developing state to make its mark as being an effective and stable entity is usually attributed to the problems associated with the country's administration and its leadership.<sup>1549</sup> State failure is often seen as a result of the internal conditions of a particular country, such as corrupt civil services, tribal rivalries and diverting state revenue to the private sector.<sup>1550</sup> It is true that the actions of the leaders and their administration direct the state and pave the way for that country's development.<sup>1551</sup>

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<sup>1539</sup> Brinkerhoff (2005) 25 *Public Administration and Development* 3 at 4.

<sup>1540</sup> Ehrenreich (2005) 25 *Public Administration and Development* 3 at 1162 and S Woodward *The Ideology of Failed States* (2017) at 12.

<sup>1541</sup> Woodward *The Ideology of Failed States* (2017) at 12-13.

<sup>1542</sup> Brinkerhoff (2005) 25 *Public Administration and Development* 3 at 4.

<sup>1543</sup> R Rotberg *State Failure and State Weakness in a Time of Terror* (2003) at 29.

<sup>1544</sup> J Milliken and Milliken and Krause (2020) 33 *Development and Change* 753 at 762.

<sup>1545</sup> Woodward *The Ideology of Failed States* (2017) at 12-13.

<sup>1546</sup> Brinkerhoff (2005) 25 *Public Administration and Development* 3 at 4.

<sup>1547</sup> A Trautman *From Zaire to the DRC: A Case Study of State Failure* LLM Thesis University of South Florida (2013) at 14 and Zartman *Collapsed States: The Disintegration and Restoration of Legitimate Authority* (1995) at 10.

<sup>1548</sup> Ehrenreich (2005) 25 *Public Administration and Development* 3 at 1162 and Woodward *The Ideology of Failed States* (2017) at 14.

<sup>1549</sup> Trautman *From Zaire to the DRC: A Case Study of State Failure* LLM Thesis University of South Florida (2013) at 15 and Rotberg *When States Fall: Causes and Consequences* (2004) at 3.

<sup>1550</sup> K Cox 'Failed States in Question and the Case of Sub-Saharan Africa' (2017) 32 *L'espace politique* 1 at 3.

<sup>1551</sup> Brinkerhoff (2005) 25 *Public Administration and Development* 3 at 5.

However, state failure is not a recent pandemic and cannot solely be blamed on the current political systems in place.<sup>1552</sup>

To understand state failure, one needs to go beyond the present situation and place the country in a greater geo-historical context.<sup>1553</sup> The answer as to why a state has failed lies in conditions of a more global nature. Specifically, in sub-Saharan Africa, state failure should be attributed to the consequences of colonialism and the inevitable difficulties faced by post-colonial states due to international meddling and the recession of the global economy after the beginning of the 1970s.<sup>1554</sup>

### 2.1.3 Colonial legacies

In most parts of sub-Saharan Africa, the legacy of indirect colonial rule is an undeniable, key historical fact.<sup>1555</sup> Colonialism failed to facilitate an environment under which politics could take hold and thrive.<sup>1556</sup> The effects of colonial rule and the speed at which decolonisation happened facilitated a ‘failing’ environment for many nation-states in sub-Saharan Africa.<sup>1557</sup> The colonial inheritance created a type of government characterised by fragile authoritarianism.<sup>1558</sup> Often unstable cabinets were appointed that resulted in a weak bureaucracy that had little capacity to redistribute resources in a way that helped improve the country and its people.<sup>1559</sup> The colonial legacy had long-term ramifications for the sustainability and viability of many of these nation-states.<sup>1560</sup>

Many of the sub-Saharan African colonies proved to be economically and geopolitically unsustainable as states after colonialism fell.<sup>1561</sup> Some of the states were

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<sup>1552</sup> Ibid at 6.

<sup>1553</sup> Carment (2003) 24 *Third World Quarterly* 407 at 410 and Cox (2017) 32 *L'espace politique* 1 at 2.

<sup>1554</sup> Cox (2017) 32 *L'espace politique* 1 at 2.

<sup>1555</sup> See discussion at chapter 6, section 4.1 and M Lockwood *The State They're In: An Agenda for International Action on Poverty in Africa* (2005) at 70.

<sup>1556</sup> Brinkerhoff (2005) 25 *Public Administration and Development* 3 at 6.

<sup>1557</sup> Ibid.

<sup>1558</sup> Di John (2008) *Crisis States Working Papers Series No.2* at 24.

<sup>1559</sup> Cox (2017) 32 *L'espace politique* 1 at 2.

<sup>1560</sup> Di John (2008) *Crisis States Working Papers Series No.2* at 24.

<sup>1561</sup> Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 73.

far too small for there to be any prospect of independent development.<sup>1562</sup> Whilst other states were vast, making it impossible for any new government to control and govern the entire territory successfully.<sup>1563</sup> Some states were artificially demarcated, divided up so that the boundaries separated villages from their fields and towns from their hinterlands.<sup>1564</sup> Even after gaining independence, governments mirrored the states of the colonies without changing the name or the territorial boundaries.<sup>1565</sup> Most newly independent states adopted an independent constitution, which was more often than not modelled on the constitution of the colonial power.<sup>1566</sup> These constitutions were designed to cater for developed first world countries and were largely inappropriate for developing third world states.<sup>1567</sup>

Colonial rulers drew most of the borders arbitrarily. It was extremely difficult to achieve the concept of statehood in Africa.<sup>1568</sup> Post-colonial Africa lacks a history of state development, making it tough for the existing nations to create strong states.<sup>1569</sup> Simply put, episodes of state failure are experienced in most post-colonial African nations because these nations lack a blueprint.<sup>1570</sup> It is challenging for any state lacking a history of prior state development to create a strong state today, as the economic and political institutions required to promote state-building were never properly cultivated in the past.<sup>1571</sup> Post-colonial states were not underpinned by a common identity nor a sense of nation-building, resulting in many local Africans feeling a sense of detachment.<sup>1572</sup> Without a sense of identity and an attachment towards the state, it was undermined as an institution from the outset.<sup>1573</sup>

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<sup>1562</sup> Cox (2017) 32 *L'espace politique* 1 at 2.

<sup>1563</sup> Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 73.

<sup>1564</sup> Cox (2017) 32 *L'espace politique* 1 at 2 and Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 73.

<sup>1565</sup> Bates *When Things Fall Apart: State Failure in Late-Century Africa* (2008) at 47.

<sup>1566</sup> Howard (2010) 33 *Studies in Conflict and Terrorism* 960 at 963-964.

<sup>1567</sup> *Ibid.*

<sup>1568</sup> Brinkerhoff (2005) 25 *Public Administration and Development* 3 at 4.

<sup>1569</sup> Howard (2010) 33 *Studies in Conflict and Terrorism* 960 at 963-964.

<sup>1570</sup> Brinkerhoff (2005) 25 *Public Administration and Development* 3 at 4.

<sup>1571</sup> Howard (2010) 33 *Studies in Conflict and Terrorism* 960 at 964.

<sup>1572</sup> Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 74.

<sup>1573</sup> *Ibid.*

Furthermore, because independence occurred so quickly in most sub-Saharan African countries, a political environment was generated based on political patronage.<sup>1574</sup> Political alliances had to be constructed quickly with minimal recourse and without proper party organisation outside of urban areas.<sup>1575</sup> This set the stage for nationalist leaders having to rely on existing political structures.<sup>1576</sup> In a short time, these leaders would have to use patronage to bind prominent individuals, usually chiefs, to their parties and local voters to candidates.<sup>1577</sup>

For many of these newly independent sub-Saharan African countries, 'independence represented the capture of the state by local political elites who used power to accumulate wealth.'<sup>1578</sup> After gaining independence, most states became authoritarian.<sup>1579</sup> Leaders began to distribute benefits and resources more narrowly, retaining the majority of the benefits to those they favoured.<sup>1580</sup> The Post-colonial period saw a rise in state corruption, political privilege and economic inequality.<sup>1581</sup>

In addition, post-colonial governments inherited a multitude of challenges from the colonial legacy. Economies within these states were designed in such a way to extract immediate value instead of creating long term growth and mass employment.<sup>1582</sup> Many sub-Saharan African governments adopted policies that not only undermined economic incentives but also distorted market prices.<sup>1583</sup> This crippled both development and growth in most states.<sup>1584</sup> Moreover, the world was experiencing an

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<sup>1574</sup> Political patronage refers to the practice of elected officials at the national or local government level using their appointments to dispense state resources to individuals as a reward for political and electoral support, see: Di John (2008) *Crisis States Working Papers Series No.2* at 23.

<sup>1575</sup> Trautman *From Zaire to the DRC: A Case Study of State Failure* LLM Thesis University of South Florida (2013) at 14-15 and Woodward *The Ideology of Failed States* (2017) at 14.

<sup>1576</sup> Ibid and Bates *When Things Fall Apart: State Failure in Late-Century Africa* (2008).

<sup>1577</sup> Di John (2008) *Crisis States Working Papers Series No.2* at 24.

<sup>1578</sup> Bates *When Things Fall Apart: State Failure in Late-Century Africa* (2008) at 37.

<sup>1579</sup> Di John (2008) *Crisis States Working Papers Series No.2* at 5.

<sup>1580</sup> Brinkerhoff (2005) 25 *Public Administration and Development* 3 at 7 and Bates *When Things Fall Apart: State Failure in Late-Century Africa* (2008) at 47.

<sup>1581</sup> See discussion at chapter 6, section 4.2 and Bates *When Things Fall Apart: State Failure in Late-Century Africa* (2008) at 51.

<sup>1582</sup> Milliken and Krause (2020) 33 *Development and Change* 753 at 762.

<sup>1583</sup> Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 74.

<sup>1584</sup> Bates *When Things Fall Apart: State Failure in Late-Century Africa* (2008) at 114.

economic decline in the early 1970s, less than ten years after most African states' independence. This exacerbated the situation.<sup>1585</sup>

Following in the footsteps of the colonial rulers, political stability for most of these states was maintained by balancing coercion and co-option.<sup>1586</sup> Many of these territories, which became nation-states, had weak social bases, deeply rooted in colonial times.<sup>1587</sup> Newly elected governments compensated for this by using violence and creating a state based on neo-patrimonialism.<sup>1588</sup> Governments used both force and state resources to secure the loyalty of patron-clients and gain legitimacy from the governed population.<sup>1589</sup> Anti-democratic decisions were made that were difficult to sustain.<sup>1590</sup> Neo-patrimonialism also encouraged escalating levels of corruption and bad governance, preceding insurgencies within these nation-states, a key feature of state failure.<sup>1591</sup> The legacy left by colonialism ultimately enabled an environment that led many sub-Saharan African countries towards state failure and ultimate collapse.<sup>1592</sup>

#### 2.1.4 External influence

Whilst foreign interference cannot be blamed for all the political problems in sub-Saharan Africa, one cannot discount the overwhelming influence of foreign actors in the region's history and political economy.<sup>1593</sup> To understand state failure in the context of sub-Saharan Africa, one needs to examine the impact that external influences have had on newly independent states.<sup>1594</sup> 'Instead of previous colonial methods of direct military control or indirect political control', newly independent states

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<sup>1585</sup> Trautman *From Zaire to the DRC: A Case Study of State Failure* LLM Thesis University of South Florida (2013) at 14-15.

<sup>1586</sup> Milliken and Krause (2020) 33 *Development and Change* 753 at 763.

<sup>1587</sup> Rotberg *When States Fall: Causes and Consequences* (2004) at 27.

<sup>1588</sup> *Ibid* at 28.

<sup>1589</sup> Milliken and Krause (2020) 33 *Development and Change* 753 at 764.

<sup>1590</sup> Rotberg *When States Fall: Causes and Consequences* (2004) at 27.

<sup>1591</sup> Milliken and Krause (2020) 33 *Development and Change* 753 at t 765.

<sup>1592</sup> Rotberg *When States Fall: Causes and Consequences* (2004) at 27.

<sup>1593</sup> See discussion at chapter 6, section 4.3; K Kalu 'The Cold War and Africa's Political Culture' (2020) 20(1) *Vestnik RUDN. International Relations* 11 at 17 and Di John (2008) *Crisis States Working Papers Series No.2* at 24.

<sup>1594</sup> Gros (1996) 17 *The World Quarterly* 455 at 465

continued to be indirectly controlled by foreign powers through neo-colonialism.<sup>1595</sup> Neo-colonialism involves the practice of political, economic and cultural pressure to control and influence the decisions of independent states that were former colonies.<sup>1596</sup> It creates an environment of dependency by using conditional aid to influence a country that relies on financial support for its survival.<sup>1597</sup>

One of the primary events that had a debilitating impact on sub-Saharan Africa's development was the Cold War. The Cold War, which began in 1945, involved intense conflict for ideological supremacy between the two major ideological actors, the Soviet Union (USSR) and the United States (US).<sup>1598</sup> With the imminent end to formal colonial rule, both the US and the USSR realised the potential to inculcate their respective ideologies on newly independent African nations.<sup>1599</sup> The two major actors were determined to gain the upper hand and ensure that the opposing force could not spread its ideology throughout Africa.<sup>1600</sup> The ideological warfare resulted in the two countries taking more than a passive interest in Africa by ensuring that various forms of aid and grants flowed through various African countries.<sup>1601</sup> The Cold War actors also created foreign policies related to financial and military support and greatly impacted the continent's emerging political culture.<sup>1602</sup>

Whilst support from the two major actors and international financial institutions was vital in sustaining many of the African States, it ultimately led to undermining these states by facilitating their militarisation.<sup>1603</sup> The activities of the Cold War generated an environment that encouraged social and political instability through a violent political culture.<sup>1604</sup> The USSR and the US began supplying arms to newly independent African

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<sup>1595</sup> Callaghy *Africa in World Politics: The African State System in Flux* (2000) at 45.

<sup>1596</sup> Carment (2003) 24 *Third World Quarterly* 407 at 411.

<sup>1597</sup> Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 78.

<sup>1598</sup> Milliken and Krause (2020) 33 *Development and Change* 753 at 762.

<sup>1599</sup> Kalu (2020) 20(1) *Vestnik RUDN. International Relations* 11 at 19 and Rotberg *When States Fall: Causes and Consequences* (2004) at 27.

<sup>1600</sup> Di John (2008) *Crisis States Working Papers Series No.2* at 24 and Kalu (2020) 20(1) *Vestnik RUDN. International Relations* 11 at 18 and Gros (1996) 17 *The World Quarterly* 455 at 465.

<sup>1601</sup> See discussion at chapter 6, section 4.3; Kalu (2020) 20(1) *Vestnik RUDN. International Relations* 11 at 16 and Milliken and Krause (2020) 33 *Development and Change* 753 at 763.

<sup>1602</sup> Kalu (2020) 20(1) *Vestnik RUDN. International Relations* 11 at 14 and A Pierre *The Global Politics of Arms Sales* (1982) at 3.

<sup>1603</sup> Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 78-79.

<sup>1604</sup> Di John (2008) *Crisis States Working Papers Series No.2* at 24 and Kalu (2020) 20(1) *Vestnik RUDN. International Relations* 11 at 17.

countries, which heightened conflict, banditry and civil war.<sup>1605</sup> By the end of the 1970s, most of the global arms' trade was directed towards sub-Saharan Africa.<sup>1606</sup> In exchange for pragmatic allegiance, the USSR supplied weaponry, which often landed in the wrong hands and was used against the state rather than for themselves.<sup>1607</sup> The easy availability of externally supplied armaments also encouraged governments to respond to the opposition through force instead of political compromise.<sup>1608</sup> Scholars, such as Gros, have identified a strong nexus between militarisation and state failure.<sup>1609</sup> The more militarised a state is, the greater chance it has of failing.<sup>1610</sup>

Focused on overpowering one another, the US and USSR paid little attention to the important issues that African societies faced during decolonisation.<sup>1611</sup> Foreign policies towards African nations should have been used to rebuild the African continent from the ruins of colonial rule and ensure inclusive political and economic spaces.<sup>1612</sup> The Cold War should have been a time to help develop African States by strengthening their political and economic foundations that colonial policies had fragmented.<sup>1613</sup> The influence of the USSR and the US and the impact of the Cold War meant that the newly independent African nations were unable to organically develop on their own terms right after colonialism ended. Instead, African countries became a site for proxy wars, which caused permanent damage to an already weak economic and political system.<sup>1614</sup>

The changes brought about through the Cold War ultimately helped to further facilitate decolonisation throughout Africa.<sup>1615</sup> However, the continent of Africa became

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<sup>1605</sup> Bates *When Things Fall Apart: State Failure in Late-Century Africa* (2008) at 115 and Callaghy *Africa in World Politics: The African State System in Flux* (2000) at 45.

<sup>1606</sup> Pierre *The Global Politics of Arms Sales* (1982) at 3.

<sup>1607</sup> Gros (1996) 17 *The World Quarterly* 455 at 465 and Bates *When Things Fall Apart: State Failure in Late-Century Africa* (2008) at 115.

<sup>1608</sup> Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 80.

<sup>1609</sup> Gros (1996) 17 *The World Quarterly* 455 at 465.

<sup>1610</sup> *Ibid.*

<sup>1611</sup> Kalu (2020) 20(1) *Vestnik RUDN. International Relations* 11 at 17 and Bates *When Things Fall Apart: State Failure in Late-Century Africa* (2008) at 114.

<sup>1612</sup> *Ibid.* at 18 and Pierre *The Global Politics of Arms Sales* (1982) at 4.

<sup>1613</sup> Callaghy *Africa in World Politics: The African State System in Flux* (2000) at 45 and Kalu (2020) 20(1) *Vestnik RUDN. International Relations* 11 at 17.

<sup>1614</sup> Kalu (2020) 20(1) *Vestnik RUDN. International Relations* 11 at 18 and Milliken and Krause (2020) 33 *Development and Change* 753 at 763.

<sup>1615</sup> *Ibid.* at 16 and Trautman *From Zaire to the DRC: A Case Study of State Failure* LLM Thesis University of South Florida (2013) at 15.

entangled in 'balance-of-power politics' and was rapidly transformed into a centre for a proxy war.<sup>1616</sup> The Cold War environment had detrimental consequences for African State creation in the long run.<sup>1617</sup> Even after the Cold War, many African States were forced to rely on foreign aid, creating an environment of dependency and susceptibility.

With the 1970s oil price shocks, the price drop in primary commodities in the early 1980s and the mismanagement of the agricultural sector, trade in Africa rapidly declined.<sup>1618</sup> The export growth was far slower in sub-Saharan Africa than in other developing countries, leaving the African economies susceptible to commodity prices.<sup>1619</sup> Many of the sub-Saharan African economies relied heavily on exporting a few key commodities, such as coffee and cocoa, for foreign exchange.<sup>1620</sup> Only a few countries produced primary commodities that were used on the domestic market or for export. As Nyerere notes, 'Africans produce what they do not consume and consume what they do not produce.'<sup>1621</sup>

African economies could hardly survive, and between 1970 and 1990, 'the continent's share of developing country agricultural primary product and food exports declined from 17 per cent to 8 per cent.'<sup>1622</sup> By the 1990s, Africa was contributing only two per cent of the overall share of world trade.<sup>1623</sup> The Western World's high inflation rates during the 1970s and 1980s exacerbated the situation, which saw the price of imported manufactured goods increase exponentially.<sup>1624</sup> With a combination of (i) inefficient public services; (ii) lack of physical security; (iii) deteriorating infrastructure; (iv) widespread corruption; and (v) endless economic uncertainties as a result of excessive state regulations, over-valued exchange rates and weak financial institutions increased the risks and costs of doing business in Africa and ultimately discouraged investors.<sup>1625</sup>

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<sup>1616</sup> Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 46.

<sup>1617</sup> Bates *When Things Fall Apart: State Failure in Late-Century Africa* (2008) at 78-79.

<sup>1618</sup> Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 83.

<sup>1619</sup> Callaghy *Africa in World Politics: The African State System in Flux* (2000) at 45.

<sup>1620</sup> Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 83.

<sup>1621</sup> Callaghy *Africa in World Politics: The African State System in Flux* (2000) at 45-47.

<sup>1622</sup> *Ibid* at 45.

<sup>1623</sup> N Van de Walle 'Africa and the World Economy: Continued Marginalisation or Re-engagement?' in J Harbeson and D Rothchild (eds) *Africa in World Politics: The African State System in Flux* (2000) at 265.

<sup>1624</sup> Bates *When Things Fall Apart: State Failure in Late-Century Africa* (2008) at 117 and Scott at 83.

<sup>1625</sup> Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 83.

Sub-Saharan Africa's dependence on foreign aid continued because of its decline in commercial investment and exclusion from the international economy.<sup>1626</sup> International financial institutions financially backed up many sub-Saharan African States.<sup>1627</sup> Commercial borrowing and foreign aid became the norm.<sup>1628</sup> However, such financial support came at a cost.<sup>1629</sup> Although financial support started modestly during the 1960s, by the 1970s and early 1980s, African States were borrowing at an alarming rate.<sup>1630</sup> This was in response to the mounting debt burden, which was exacerbated by the 1970s economic crisis.<sup>1631</sup> Multilateral lending and microloan agencies began to have a virtual monopoly over African economies.<sup>1632</sup> By the end of the decade, overall levels of foreign aid increased to such an extent that it averaged around 10 to 15 per cent of GDP, a historically unprecedented amount.<sup>1633</sup>

Furthermore, as discussed in chapter four, the financial aid received by African States became linked to reform programs that were externally imposed and aimed at rolling back the various states.<sup>1634</sup> The World Bank and IMF introduced Structural Adjustment programs (SAPs) to help reduce the African States' dependency on financial support and reintegrate their economies into the world economy.<sup>1635</sup> In practice, African States had to cede control over the economy in exchange for foreign aid and debt rescheduling.<sup>1636</sup>

Almost every single sub-Saharan African State was subject to SAPs, which meant that they had to lower their tariff structures, remove subsidies, devalue their currency, and

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<sup>1626</sup> Van de Walle *Africa in World Politics: The African State System in Flux* (2000) at 265.

<sup>1627</sup> Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 78-79.

<sup>1628</sup> Callaghy *Africa in World Politics: The African State System in Flux* (2000) at 48 and Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 84.

<sup>1629</sup> Scott at 78-79.

<sup>1630</sup> Milliken and Krause (2020) 33 *Development and Change* 753 at 765.

<sup>1631</sup> Van de Walle *Africa in World Politics: The African State System in Flux* (2000) at 265.

<sup>1632</sup> Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 84.

<sup>1633</sup> Van de Walle *Africa in World Politics: The African State System in Flux* (2000) at 266.

<sup>1634</sup> See discussion at chapter 4, section 2 and Rotberg *When States Fall: Causes and Consequences* (2004) at 29.

<sup>1635</sup> See discussion at chapter 4, section 2 and Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 84.

<sup>1636</sup> See discussion at chapter 4, section 2 and Bates *When Things Fall Apart: State Failure in Late-Century Africa* (2008) at 118 and Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 85.

privatize the parastatal sector.<sup>1637</sup> Giving up control over the economy resulted in the curtailing of the state's recourse to patronage, which limited the state's flexibility in dealing with political crises.<sup>1638</sup> Without the ability to provide patronage, governments had fewer methods of buying off restive groups. Still, they remained susceptible to violent confrontation from those who had experienced deliberate discrimination over the years.<sup>1639</sup> Under SAPs, the political climate of many of these countries became far riskier for governments, and it debilitated the main apparatus of the state on which leaders had long relied to stay in power.<sup>1640</sup>

Many scholars have argued that SAPs unwittingly undermined the very interest within the state that they had initially set out to promote, making that state even more susceptible to failure.<sup>1641</sup> SAPs were not entirely able to bring about the envisaged economic reforms which they were conditional upon.<sup>1642</sup> Much of the foreign aid was either misappropriated or misdirected.<sup>1643</sup> SAPs heightened reliance on external actors with regards to macroeconomics decision-making, ultimately side-lining state institutions.<sup>1644</sup>

SAPs not only increased dependency on foreign aid but also exacerbated the debt burden.<sup>1645</sup> By the early 1990s, aid constituted approximately 75 per cent of the African government's revenues.<sup>1646</sup> The total amount of debt in Africa in 1992 totaled 150 billion US dollars, a considerable increase compared to 14.8 billion US dollars in 1974.<sup>1647</sup> The 1992 debt equated to more than 100 per cent of Africa's total GNP, much of which resulted from SAPs' borrowings, which could not be rescheduled.<sup>1648</sup>

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<sup>1637</sup> See discussion at chapter 4, section 2 and Milliken and Krause (2020) 33 *Development and Change* 753 at 765.

<sup>1638</sup> Bates *When Things Fall Apart: State Failure in Late-Century Africa* (2008) at 118.

<sup>1639</sup> Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 85.

<sup>1640</sup> See discussion at chapter 4, section 2 and J Herbst 'The Structural Adjustment of Politics in Africa (1990) 18 *World Development* 949 at 951.

<sup>1641</sup> Van de Walle *Africa in World Politics: The African State System in Flux* (2000) at 275.

<sup>1642</sup> Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 87.

<sup>1643</sup> Trautman *From Zaire to the DRC: A Case Study of State Failure* LLM Thesis University of South Florida (2013) at 29.

<sup>1644</sup> Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 87.

<sup>1645</sup> Herbst (1990) 18 *World Development* 949 at 951.

<sup>1646</sup> Van de Walle *Africa in World Politics: The African State System in Flux* (2000) at 276.

<sup>1647</sup> Milliken and Krause (2020) 33 *Development and Change* 753 at 765 and Callaghy *Africa in World Politics: The African State System in Flux* (2000) at 48.

<sup>1648</sup> *Ibid.*

African States landed up spending more on debt service than on health and education combined.<sup>1649</sup>

Political independence in Sub-Saharan Africa should have provided the perfect opportunity for the world to support the region in helping to dismantle the legacies of colonialism and any exploitative institutions.<sup>1650</sup> The world should have helped newly independent states carve their own path to progress and modernity.<sup>1651</sup> Instead, external actors facilitated state failure by hampering stability and ensuring sustained economic and political development for newly independent states.<sup>1652</sup> With the challenges of corrupt governments, poverty and unemployment, and the enormous cost of building new nation-states, Africa remained with little option but to continue relying on foreign actors for aid and loads.<sup>1653</sup> One only has to look at the case study of the DRC to understand this.<sup>1654</sup>

Throughout the years, international aid actors, such as the World Bank, have tried to address issues relating to state failure in sub-Saharan Africa.<sup>1655</sup> For example, the World Bank has provided substantial support for capacity building through its lending and non-lending programs.<sup>1656</sup> However most of these aid actors have not been able to meet the specific challenges faced by these fragile states, nor have they been able to translate their commitments to country-level changes.<sup>1657</sup> There is a need for these international actors, such as the African Union, to reform and adapt their state building practices and policies in line with the realities on the ground and with the intention of incentivising change.<sup>1658</sup>

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<sup>1649</sup> Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 87.

<sup>1650</sup> Rotberg *When States Fall: Causes and Consequences* (2004) at 30.

<sup>1651</sup> Reno (2006) 27 *Third World Quarterly* 43 at 45.

<sup>1652</sup> Kalu (2020) 20(1) *Vestnik RUDN. International Relations* 11 at 17 and Bates *When Things Fall Apart: State Failure in Late-Century Africa* (2008) at 119.

<sup>1653</sup> *Ibid* at 18 and Milliken and Krause (2020) 33 *Development and Change* 753 at 767.

<sup>1654</sup> See discussion at chapter part 3 of the thesis.

<sup>1655</sup> World Bank 'Capacity Building in Africa: An OED Evaluation of World Bank Support' available at <https://elibrary.worldbank.org/doi/abs/10.1596/0-8213-6241-0>, accessed on 21 January 2022.

<sup>1656</sup> *Ibid*.

<sup>1657</sup> Barrera A 'The Congo Trap: MONUSCO Islands of Stability in the Sea of Instability' (2015) 4(1) *Stability: International Journal of Security & Development* 1 at 13.

<sup>1658</sup> *Ibid* at 15.

### 2.1.5 The DRC – A Failing State

Numerous scholars have perceived the DRC as a prime example of a state that has fallen into a downwards spiral of corruption, backdoor policies that benefit only a small handful of people, loss of state legitimacy, and mismanagement.<sup>1659</sup> As is evident from the case study of the DRC, the country lacks economic development in both the domestic and international state economies. It has failed to profit from resource revenues.<sup>1660</sup> It does not appear to have enough capacity or willingness to ensure that its citizens receive basic public goods.<sup>1661</sup> The DRC has also failed to protect its citizens from civil war and external influences.<sup>1662</sup> Most of the state infrastructure and institutions have deteriorated beyond repair since independence, and the country has seen a rise in inequality and poverty in recent years.<sup>1663</sup> The combination of these factors has all contributed to state failure, which has led to a rise in informal activities, particularly artisanal mining.<sup>1664</sup>

The DRC had a turbulent transition from Belgian colonial rule to independence, and the nation continues to face endless difficulties.<sup>1665</sup> One can only really understand the country's current political and socio-economic climate by examining the history of the DRC and the influence that colonialism, international players and corruption has had on it.<sup>1666</sup> State failure in the DRC should be looked at through a historical lens, as the country's institutional failure and state weakness is greatly attributed to the various legacy events that have taken place throughout its history.<sup>1667</sup>

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<sup>1659</sup> See discussion at chapter 6 and Trautman *From Zaire to the DRC: A Case Study of State Failure* LLM Thesis University of South Florida (2013) at 10 and Milliken and Krause (2020) 33 *Development and Change* 753 at 768.

<sup>1660</sup> See discussion at part 3 of the thesis and R Jackson 'Regime Security' in A Collins (ed.) *Contemporary Security Studies* (2007) at 149.

<sup>1661</sup> See discussion at part 3 of the thesis.

<sup>1662</sup> See discussion at chapter 6, section 4; Trautman *From Zaire to the DRC: A Case Study of State Failure* LLM Thesis University of South Florida (2013) at 9 and Rotberg *When States Fall: Causes and Consequences* (2004) at 30.

<sup>1663</sup> See discussion at chapter 6, section 3; Trautman *From Zaire to the DRC: A Case Study of State Failure* LLM Thesis University of South Florida (2013) at 9 and L Ndikumana and K Boyce 'Congo's Odious Debt: External Borrowing and Capital Flight in Zaire' (1998) 29 *Development and Change* 195 at 207.

<sup>1664</sup> Jackson *Contemporary Security Studies* (2007) at 149.

<sup>1665</sup> See discussion at chapter 6, section 4; Trautman *From Zaire to the DRC: A Case Study of State Failure* LLM Thesis University of South Florida (2013) at 8 and Nzongola-Ntalaja *The Congo: From Leopold to Kabila: A People's History* (2002) at 28.

<sup>1666</sup> See discussion at chapter 6, section 4.

<sup>1667</sup> See discussion at chapter 6, section 4.

Chapter six of this dissertation discussed the history of the DRC in great depth.<sup>1668</sup> As noted in that chapter, one of the primary events which drastically shaped the DRC was colonisation, first through the rule of King Leopold II and then through the Belgian Parliament.<sup>1669</sup> Colonial rulers imposed bureaucratic structures to govern the colony, which failed to transform society and the economy as a whole.<sup>1670</sup> Colonisation set the stage for a regime that promoted private interests and saw rulers and their external allies monopolise the country's enormous wealth rather than serving the people's basic needs.<sup>1671</sup> a regime that DRC rulers continue to use today.<sup>1672</sup>

Throughout DRC's colonial rule, state regulations were in the hands of the Belgian administration and its army.<sup>1673</sup> The European minority, accounting for less than one per cent of the total population, could monopolise formal rule throughout the DRC.<sup>1674</sup> The colonial leaders ruled through violence and forced labour.<sup>1675</sup> They also used traditional authorities as pawns to help spread their coercive rule.<sup>1676</sup> Selected chiefs and tribes would help the Belgian administration by mobilising forced labour and tributes.<sup>1677</sup> The Congolese themselves were forbidden from owning land, and 'private property rights were exclusively restricted to white landowners.'<sup>1678</sup> These same rules applied to the rights of other types of assets, such as mining concessions.<sup>1679</sup>

During Belgian colonial rule, the Congolese society was comprised of mostly disconnected communities that lived in separate types of subsistence economies.<sup>1680</sup>

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<sup>1668</sup> See discussion at chapter 6.

<sup>1669</sup> See discussion at chapter 6, section 4.1.

<sup>1670</sup> See discussion at chapter 6, section 4.1 and Ndikumana and Boyce (1998) 29 *Development and Change* 195 at 207.

<sup>1671</sup> See discussion at chapter 6, section 4.1 and Nzongola-Ntalaja *The Congo: From Leopold to Kabila: A People's History* (2002) at 28.

<sup>1672</sup> Ibid.

<sup>1673</sup> See discussion at chapter 6, section 4.1 and R Anstey *King Leopold's Legacy: The Congo under Belgian Rule 1908-1960* (1966) at 241.

<sup>1674</sup> Reno (2006) 27 *Third World Quarterly* 43 at 46.

<sup>1675</sup> See discussion at chapter 6, section 4.1 and T Theodore *Reinventing Order in the Congo: How People Respond to State Failure in Kinshasa* (2004) at 9.

<sup>1676</sup> See discussion at chapter 6, section 4.1 and Nzongola-Ntalaja *The Congo: From Leopold to Kabila: A People's History* (2002) at 28.

<sup>1677</sup> See discussion at chapter 6, section 4.1 and Reno (2006) 27 *Third World Quarterly* 43 at 46.

<sup>1678</sup> Ndikumana and Boyce (1998) 29 *Development and Change* 195 at 208.

<sup>1679</sup> Anstey *King Leopold's Legacy: The Congo under Belgian Rule 1908-1960* (1966) at 241.

<sup>1680</sup> Reno (2006) 27 *Third World Quarterly* 43 at 47.

Boundaries drawn up during the Belgian colonial rule, to demarcate the DRC were arbitrary and did not account for geographic, historical or ethnic differences.<sup>1681</sup> In 1908, DRC's first constitution-like document, known as the 'Charte Coloniale', was drawn up for the colony.<sup>1682</sup> In terms of the 'Charte Coloniale', political activity was restricted and the Congolese people were prohibited from gathering, save for religious or cultural reasons.<sup>1683</sup> The local Congolese people could only travel if colonial permission was granted.<sup>1684</sup> The impact of the 'Charte Coloniale' resulted in a total lack of integration and political coherence.<sup>1685</sup>

Furthermore, the exploitation of the country's abundant resources paved the way for years of conflict and civil war and ongoing entrenched poverty.<sup>1686</sup> Large amounts of the Belgium wealth accumulated through mineral extraction benefitted only a small minority of people and was mainly invested outside the DRC.<sup>1687</sup> Colonial rule in the DRC ultimately cultivated a broken and insecure population, economically dependent, and politically destitute, lacking the ability to self-rule.<sup>1688</sup> This period paved the way for the country's economic downturn and entrenched poverty.<sup>1689</sup> Colonialism also set the stage for the long and complicated history of international presence in the DRC.<sup>1690</sup>

After independence, the DRC struggled to govern itself properly.<sup>1691</sup> The model of government infrastructure and the idea of politics pre-independence had been centred on the Belgian colonial system of government.<sup>1692</sup> Before 1960, political parties had

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<sup>1681</sup> G Vanthemsche 'The Historiography of Belgian Colonialism in the Congo' in C Lévai (ed.) *Europe and the World in European Historiography* (2006) at 90.

<sup>1682</sup> A Exenberger and S Hartmann 'The dark side of globalization. The vicious cycle of exploitation from world market integration: Lesson from the Congo' (2007) 31 *Working Papers in Economics and Statistics* at 9 and Vanthemsche *Europe and the World in European Historiography* (2006) at 91.

<sup>1683</sup> Ndikumana and Boyce (1998) 29 *Development and Change* 195 at 208.

<sup>1684</sup> Anstey *King Leopold's Legacy: The Congo under Belgian Rule 1908-1960* (1966) at 241.

<sup>1685</sup> Nzongola-Ntalaja *The Congo: From Leopold to Kabila: A People's History* (2002) at 29 and Exenberger and Hartmann (2007) 31 *Working Papers in Economics and Statistics* at 9.

<sup>1686</sup> See discussion at chapter 6, section 4.1.

<sup>1687</sup> See discussion at chapter 6, section 4.1.

<sup>1688</sup> See discussion at chapter 6, section 4.1.

<sup>1689</sup> See discussion at chapter 6, section 4.1.

<sup>1690</sup> See discussion at chapter 6, section 4.1.

<sup>1691</sup> See discussion at chapter 6, section 4.2; Reno (2006) 27 *Third World Quarterly* 43 at 45; Trautman *From Zaire to the DRC: A Case Study of State Failure* LLM Thesis University of South Florida (2013) at 32 and Anstey *King Leopold's Legacy: The Congo under Belgian Rule 1908-1960* (1966) at 241.

<sup>1692</sup> See discussion at chapter 6, section 4.2 and Ndikumana and Boyce (1998) 29 *Development and Change* 195 at 209.

only existed in name and fragmented quickly after independence.<sup>1693</sup> Post-independence, Native Congolese were required to take up governing positions, even though many had little to no experience in handling government positions, let alone a first-world European governing system.<sup>1694</sup> Furthermore, by the time of independence, most people in the DRC had very little formal education.<sup>1695</sup> The first Congolese university graduate only received his degree in 1956, and at the time of independence in 1960, there were a mere total of 16 graduates in the entire country.<sup>1696</sup> There was a clear need to create an infrastructure with a strong intellectual base to replace the old colonial institutions.<sup>1697</sup>

Although the DRC gained independence on 30 June 1960, very little changed for the average Congolese citizen.<sup>1698</sup> The transition from colonial rule to independence was relatively fast, and the first five years were extremely chaotic.<sup>1699</sup> Only six months after independence, the first Congolese prime minister, Lumumba, was murdered.<sup>1700</sup> The fragmented state was victim to two secessionist attempts and saw several different so-called 'governments' claiming the country simultaneously.<sup>1701</sup> There was no central government authority, disintegrated military forces, an ineffective police force, and governments were overthrown as soon as they tried to establish themselves.<sup>1702</sup> At certain stages, there would be up to four competing governments attempting to claim authority over the country.<sup>1703</sup> The country was further used as a pawn for the

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<sup>1693</sup> Vanthemsche *Europe and the World in European Historiography* (2006) at 91 and Trautman *From Zaire to the DRC: A Case Study of State Failure* LLM Thesis University of South Florida (2013) at 32.

<sup>1694</sup> Anstey *King Leopold's Legacy: The Congo under Belgian Rule 1908-1960* (1966) at 241.

<sup>1695</sup> Trautman *From Zaire to the DRC: A Case Study of State Failure* LLM Thesis University of South Florida (2013) at 31 and Theodore *Reinventing Order in the Congo: How People Respond to State Failure in Kinshasa* (2004) at 9.

<sup>1696</sup> Reno (2006) 27 *Third World Quarterly* 43 at 45.

<sup>1697</sup> Trautman *From Zaire to the DRC: A Case Study of State Failure* LLM Thesis University of South Florida (2013) at 32 and Exenberger and Hartmann (2007) 31 *Working Papers in Economics and Statistics* at 9.

<sup>1698</sup> See discussion at chapter 6, section 4.2 and 4.3.

<sup>1699</sup> See discussion at chapter 6, section 4.2 and 4.3 and Anstey *King Leopold's Legacy: The Congo under Belgian Rule 1908-1960* (1966) at 242.

<sup>1700</sup> See discussion at chapter 6, section 4.2 and 4.3 and Ndikumana and Boyce (1998) 29 *Development and Change* 195 at 207 and Theodore *Reinventing Order in the Congo: How People Respond to State Failure in Kinshasa* (2004) at 9.

<sup>1701</sup> Trautman *From Zaire to the DRC: A Case Study of State Failure* LLM Thesis University of South Florida (2013) at 35.

<sup>1702</sup> Exenberger and Hartmann (2007) 31 *Working Papers in Economics and Statistics* at 9.

<sup>1703</sup> Vanthemsche *Europe and the World in European Historiography* (2006) at 91.

superpower rivalry between the Soviet Union and the US during the Cold War.<sup>1704</sup> The chaotic fragmentation of the country's political scene in the early 1960s went hand in hand with its economic disintegration.<sup>1705</sup>

Some stability prevailed after a 1965 coup when Colonel Mobutu Sese Seko seized power and formed a united government.<sup>1706</sup> Mobutu was adamant to build a strong nation-state and create a capitalist economy.<sup>1707</sup> To some extent, he was quite successful at the beginning of his reign, as he was able to expand the educational system and gain control over the country's economic ground structure.<sup>1708</sup> Mobutu also devised a plan to nationalise major industries and mines in the country.<sup>1709</sup> He was able to control inflation, which increased agricultural and mineral production, and resulted in the country's average growth rate of eight per cent per annum.<sup>1710</sup> Overall, there were nine relatively successful years of state-building, which enjoyed support from the international community.<sup>1711</sup>

Mobutu was also able to secure military and financial support from the US, seeking anti-communist allies in central Africa.<sup>1712</sup> Together with the previous Belgium colonial system, foreign aid and the establishment of elites who aided him in his rule, the country had the appearance of a state that was functioning and developing.<sup>1713</sup> However, the country's transformation was only really felt in the elite and urban economic centres.<sup>1714</sup> Mobutu's state-building had minimal impact on the rural areas, where around 75 per cent of the Congolese population lived at the time.<sup>1715</sup> Mobutu

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<sup>1704</sup> See discussion at chapter 6, section 4.3 and Anstey *King Leopold's Legacy: The Congo under Belgian Rule 1908-1960* (1966) at 242.

<sup>1705</sup> See discussion at chapter 6, section 4.3 and Reno (2006) 27 *Third World Quarterly* 43 at 45.

<sup>1706</sup> See discussion at chapter 6, section 4.2 and Ndikumana and Boyce (1998) 29 *Development and Change* 195 at 208.

<sup>1707</sup> See discussion at chapter 6, section 4.2 and Anstey *King Leopold's Legacy: The Congo under Belgian Rule 1908-1960* (1966) at 260.

<sup>1708</sup> Theodore *Reinventing Order in the Congo: How People Respond to State Failure in Kinshasa* (2004) at 11.

<sup>1709</sup> See discussion at chapter 6, section 4.2.

<sup>1710</sup> Anstey *King Leopold's Legacy: The Congo under Belgian Rule 1908-1960* (1966) at 261.

<sup>1711</sup> Theodore *Reinventing Order in the Congo: How People Respond to State Failure in Kinshasa* (2004) at 12.

<sup>1712</sup> See discussion at chapter 6, section 4.3 and Anstey *King Leopold's Legacy: The Congo under Belgian Rule 1908-1960* (1966) at 262.

<sup>1713</sup> Trautman *From Zaire to the DRC: A Case Study of State Failure* LLM Thesis University of South Florida (2013) at 34 and Theodore *Reinventing Order in the Congo: How People Respond to State Failure in Kinshasa* (2004) at 9.

<sup>1714</sup> Ndikumana and Boyce (1998) 29 *Development and Change* 195 at 208.

<sup>1715</sup> Exenberger and Hartmann (2007) 31 *Working Papers in Economics and Statistics* at 9.

governed the Congo by utilising the already established colonial state structure, which was inappropriate and unaligned with a young independent African country.<sup>1716</sup> He did little to restructure state institutions, hoping that he could gain financially from domestic and international resources.<sup>1717</sup>

1974 marked the beginning of the DRC's deterioration. The country was hit by multiple crises,<sup>1718</sup> which resulted in a downward spiral that quickly impacted various sub-sectors.<sup>1719</sup> During this time, the DRC's state's bureaucratic capacity significantly shrunk and led to numerous informal institutions.<sup>1720</sup> Mobutu responded to the crises by transforming his regime.<sup>1721</sup> What had started as a project of state-building gradually became a regime based on neo-patrimonialism that saw Mobutu trying to uphold his authority by any means possible.<sup>1722</sup>

Mobutu started to establish himself and his proclaimed state structure that directly reflected authoritarian leadership by dominating every facet of the state and directly controlling all media, sports, and religious events.<sup>1723</sup> He created a patrimonial patronage system by institutionalising a system of 'kleptocracy',<sup>1724</sup> in which he misused corrupt officials and amassed personal wealth for himself and his administration.<sup>1725</sup> Mobutu's endemic state corruption left many of the national dependents vulnerable and needy.<sup>1726</sup> Instead of the abundance of mineral wealth

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<sup>1716</sup> See discussion at chapter 6, section 4.2; Vanthemsche *Europe and the World in European Historiography* (2006) at 91 and Theodore *Reinventing Order in the Congo: How People Respond to State Failure in Kinshasa* (2004) at 10.

<sup>1717</sup> See discussion at chapter 6, section 4.2 and Anstey *King Leopold's Legacy: The Congo under Belgian Rule 1908-1960* (1966) at 260.

<sup>1718</sup> It is beyond the scope of this thesis to go into detail about all the events which took place from 1974 onwards in the DRC. However, one of the main events was 1974 economic crisis which saw the decline of copper prices together with the first oil price shocks.

<sup>1719</sup> Theodore *Reinventing Order in the Congo: How People Respond to State Failure in Kinshasa* (2004) at 11.

<sup>1720</sup> *Ibid* at 12.

<sup>1721</sup> Reno (2006) 27 *Third World Quarterly* 43 at 46.

<sup>1722</sup> See discussion at chapter 6, section 4.2 and Theodore *Reinventing Order in the Congo: How People Respond to State Failure in Kinshasa* (2004) at 12.

<sup>1723</sup> Trautman *From Zaire to the DRC: A Case Study of State Failure* LLM Thesis University of South Florida (2013) at 34 and Callaghy *Africa in World Politics: The African State System in Flux* (2000) at 176-177.

<sup>1724</sup> *Kleptocracy* is a type of government that has corrupt leaders (known as kleptocrats) who use their political power to appropriate the nation's wealth, usually by embezzling or misappropriating the funds of the government at the expense of the wider population.

<sup>1725</sup> See discussion at chapter 6, section 4.5 and Exenberger and Hartmann (2007) 31 *Working Papers in Economics and Statistics* at 9.

<sup>1726</sup> Reno (2006) 27 *Third World Quarterly* 43 at 46.

being used to uplift the Congolese people, help build infrastructures, improve welfare, or provide some sort of human security, it only benefitted Mobutu and his henchmen.<sup>1727</sup>

By the 1980s, the State was drowning in large debts; many of the soldiers had begun to desert the State's military; corruption ensued; the State began to lose authority over its territory, and the country's industrial mining infrastructures was gradually dismantled.<sup>1728</sup> Of relevance is that Mobutu created laws that authorised informal mining exploitation to encourage Congolese citizens to 'fend for themselves' during economic difficulty by directly exploiting and trading in minerals.<sup>1729</sup> These promulgated laws set the stage for the rapid surge of informal artisanal mining. As the country became economically unstable, it slowly slipped into a state failure.<sup>1730</sup>

The DRC, much like other sub-Saharan African countries, has a long history of foreign interference, which has contributed to ongoing instability, conflict and socio-economic instability.<sup>1731</sup> Both the USSR, Western government and other groups have been complicit in encouraging African corruption through resources.<sup>1732</sup> By the end of the Cold War in 1991, the DRC's state infrastructure and institutions were hardly functioning or non-existent.<sup>1733</sup> The State was no longer politically useful to the West, resulting in the cession of any form of financial assistance from the USA.<sup>1734</sup> The years of abuse and corruption under Mobutu's rule had stripped the DRC of its ability to be

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<sup>1726</sup> See discussion at chapter 6, section 4.5 and Exenberger and Hartmann (2007) 31 *Working Papers in Economics and Statistics* at 9.

<sup>1727</sup> See discussion at chapter 6, section 4.2 and Rotberg *State Failure and State Weakness in a Time of Terror* (2003) at 12-13.

<sup>1728</sup> Reno (2006) 27 *Third World Quarterly* 43 at 46.

<sup>1728</sup> See discussion at chapter 6, section 4 and Ndikumana and Boyce (1998) 29 *Development and Change* 195 at 208.

<sup>1729</sup> See discussion at chapter 6, section 4.2.

<sup>1730</sup> Trautman *From Zaire to the DRC: A Case Study of State Failure* LLM Thesis University of South Florida (2013) at 36 and Vanthemsche *Europe and the World in European Historiography* (2006) at 92.

<sup>1731</sup> See discussion at chapter 6, section 4.3.

See discussion at chapter 6, section 4.3 and Anstey *King Leopold's Legacy: The Congo under Belgian Rule 1908-1960* (1966) at 260.

<sup>1733</sup> See discussion at chapter 6, section 4.3; Theodore *Reinventing Order in the Congo: How People Respond to State Failure in Kinshasa* (2004) at 11; Trautman *From Zaire to the DRC: A Case Study of State Failure* LLM Thesis University of South Florida (2013) at 38 and Rotberg *State Failure and State Weakness in a Time of Terror* (2003) at 29.

<sup>1734</sup> See discussion at chapter 6, section 4.3 and Reno (2006) 27 *Third World Quarterly* 43 at 45.

self-sufficient, and without Western aid, the State became entrapped in a cycle of decay.<sup>1735</sup>

The DRC was not only subjected to colonial rule and used as a pawn during the Cold War but was also subject to two local civil wars.<sup>1736</sup> Both of the wars were centred on the country's minerals and can be attributed to a fragile corrupt state with international meddling and conflicted ruling.<sup>1737</sup> The two Congo wars, which have already been discussed at length in chapter six, had enormous implications.<sup>1738</sup> By the end of the wars, the GDP of the DRC had declined by almost 20 per cent, and it had destroyed what was left of the formal economy.<sup>1739</sup> The control of mineral resources became a major issue, which in turn caused regional conflict, a legacy that is still present today.<sup>1740</sup>

By 2002, the DRC was regarded as a failed state in every aspect; the country had become a staging ground for conflict.<sup>1741</sup> There was severe economic decline and inadequate infrastructure.<sup>1742</sup> The country's borders were transparent.<sup>1743</sup> There was a general sense of disregard for the laws of the country.<sup>1744</sup> The State also lacked public services.<sup>1745</sup> It is not difficult to see why the DRC is viewed as a state of failure, and as Trautman explains, the country is a great example of what 'state failure would look like in the international system.'<sup>1746</sup>

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<sup>1735</sup> See discussion at chapter 6, section 4.3 and 4.5; Trautman *From Zaire to the DRC: A Case Study of State Failure* LLM Thesis University of South Florida (2013) at 38 and Vanthemsche *Europe and the World in European Historiography* (2006) at 93.

<sup>1736</sup> See discussion at chapter 6, section 4.4.

<sup>1737</sup> See discussion at chapter 6, section 4.4.

<sup>1738</sup> See discussion at chapter 6, section 4.4.

<sup>1739</sup> Rotberg *State Failure and State Weakness in a Time of Terror* (2003) at 13 and Anstey *King Leopold's Legacy: The Congo under Belgian Rule 1908-1960* (1966) at 243.

<sup>1740</sup> Reno (2006) 27 *Third World Quarterly* 43 at 48.

<sup>1741</sup> Rotberg *State Failure and State Weakness in a Time of Terror* (2003) at 29.

<sup>1742</sup> Theodore *Reinventing Order in the Congo: How People Respond to State Failure in Kinshasa* (2004) at 243.

<sup>1743</sup> Exenberger and Hartmann (2007) 31 *Working Papers in Economics and Statistics* at 10.

<sup>1744</sup> Ndikumana and Boyce (1998) 29 *Development and Change* 195 at 210 and Vanthemsche *Europe and the World in European Historiography* (2006) at 93.

<sup>1745</sup> Anstey *King Leopold's Legacy: The Congo under Belgian Rule 1908-1960* (1966) at 262 and Trautman *From Zaire to the DRC: A Case Study of State Failure* LLM Thesis University of South Florida (2013) at 42.

<sup>1746</sup> Trautman *From Zaire to the DRC: A Case Study of State Failure* LLM Thesis University of South Florida (2013) at 42 and Vanthemsche *Europe and the World in European Historiography* (2006) at 93.

The atrocities of colonial exploitation,<sup>1747</sup> unstable and corrupt governmental regimes,<sup>1748</sup> global interference,<sup>1749</sup> and consistent rebel conflicts supported by misconduct within the mining sector have assisted in setting up the DRC for state failure.<sup>1750</sup> The case study of the DRC depicts a country where millions of unemployed Congolese citizens have used the ASM sector as a refuge.<sup>1751</sup> However, DRC's experience is not an isolated incident. Many sub-Saharan African States are beginning to weaken and fail, with some states even experiencing signs of total collapse.<sup>1752</sup> When these countries fall victim to weak infrastructural institutions and their states begin to fall deeper and deeper into disarray, it is the citizens and their basic needs that are left the most affected. Many of these citizens have no choice but to survive without the State and therefore turn to activities within the informal sector.

### 3. The way forward

Primary barriers associated with the ASM sector need to be addressed, and existing regulations reviewed further to encourage successful formalisation of ASM.<sup>1753</sup> Many of the policymakers lose focus on the real fundamental characteristics of ASM.<sup>1754</sup> ASM legal frameworks need to be both conducive and comprehensive and should be carefully thought out, taking into account the diversity of ASM operations.<sup>1755</sup> ASM regulations should also be supportive and accessible to all artisanal miners instead of merely punitive in nature.<sup>1756</sup> ILO Officials and other bodies have noted that the ASM sector has too many constraining regulations, often over bureaucratic and rarely enforced.<sup>1757</sup> Artisanal miners must be provided with the support required to meet the regulatory criteria.<sup>1758</sup>

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<sup>1747</sup> See discussion at chapter 6, section 4.1.

<sup>1748</sup> See discussion at chapter 6, section 4.5.

<sup>1749</sup> See discussion at chapter 6, section 4.3.

<sup>1750</sup> See discussion at chapter 6, section 4.4.

<sup>1751</sup> See discussion at chapter 6, section 2.

<sup>1752</sup> Bates *When Things Fall Apart: State Failure in Late-Century Africa* (2008) at 118 and Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 85.

<sup>1753</sup> See discussion at chapter 9, section 3.

<sup>1754</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 51.

<sup>1755</sup> *Ibid.*

<sup>1756</sup> See discussion at chapter 9, section 3.

<sup>1757</sup> Hilson and Hilson (2015) *International Growth Center Working Paper* at 10.

<sup>1758</sup> Siwale and Siwale (2017) 4 *The Extractive Industries and Society* 191 at 191.

However, the problem with regulating any formal sector is that many governments believe that the answer lies in well-drafted legal legislation without looking at the root of the problem. The reality is that before any sector can be brought into the formal domain, significant groundwork needs to be laid. Suppose countries in the same position as the DRC want to move forward and successfully formalise their informal sectors. In that case, it is essential that they address any weaknesses at the institutional level. To ensure that these countries are properly integrated into the international realm, there needs to be a well-regulated formal economy. Without a regulated domestic economy, a secondary, illegal economic market is guaranteed to spring up to serve the needs of the people.

Therefore, these countries will need to reconstruct their basic infrastructural institutions to ensure that the citizens' basic needs can be met. Corruption has plagued many of these countries since their independence.<sup>1759</sup> To curtail corruption, legal systems must be implemented and enforced to control and manage governments and their administrations. The economy also needs to be stabilised to assist both domestic and international growth. Furthermore, there must be a strong state capacity with proper control over the country's resources and people. Consequently, in the next chapter of this dissertation, the author recommends various ways in which governments in sub-Saharan Africa can implement different methods that will help bolster their capacity.

#### 4. Conclusion

Colonialism created a sense of dislocation, making it very difficult for African States to follow their own development path and natural growth. European imperialists artificially bifurcated African societies, disregarding the local histories and culture.<sup>1760</sup> Furthermore, the economic and political institutions that were put in place failed to ensure broad-based economic development.<sup>1761</sup> Instead of state development being based on legitimacy, it was based on domination and authoritarian political culture that used violence, corruption and patronage to maintain control. The legacy left by

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<sup>1759</sup> Bates *When Things Fall Apart: State Failure in Late-Century Africa* (2008) at 118 and Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 85.

<sup>1760</sup> Di John (2008) *Crisis States Working Papers Series No.2* at 25.

<sup>1761</sup> Kalu (2020) 20(1) *Vestnik RUDN. International Relations* 11 at 15 and Carment (2003) 24 *Third World Quarterly* 407 at 411.

colonialism ultimately enabled an environment fraught with dysfunctions and a lack of self-identity, pushing many states in the direction of state failure and ultimate collapse.<sup>1762</sup>

Since independence from colonialism, most states in Africa have been recipients of a potent combination of aid and arms,<sup>1763</sup> both of which have been supplied by external actors who have varying and often contradictory motives as well as ambiguous opinions on development and how African States fit within it.<sup>1764</sup> Consequently, Africa's underdevelopment has been exacerbated, unwittingly, by external actors, precipitating an escalating trend of militarisation.<sup>1765</sup> Whilst foreign aid and support has been vital in uplifting the African state system, it has simultaneously undermined states, with the help of the states' neo-patrimonial leaders and institutional weaknesses.<sup>1766</sup> It has also resulted in a lack of self-sufficiency, a key ingredient required for any state to ensure its success.<sup>1767</sup>

The history of the Congolese State involves years of conflict and civil wars.<sup>1768</sup> Like many sub-Saharan African countries, colonial exploitation, external influences and corrupt and ruinous leadership have set the stage for years of atrocities, dictatorships, instability, corruption and consistent conflicts.<sup>1769</sup> So much of this continues today. The DRC remains one of the richest mineral endowed countries on earth, where most of its population live in abject poverty.<sup>1770</sup> The DRC government is dependent on external funding, lacks good territorial control and has largely failed to muster the support and legitimacy of both the Congolese population and the international community.<sup>1771</sup> The

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<sup>1762</sup> Rotberg *When States Fall: Causes and Consequences* (2004) at 27.

<sup>1763</sup> See discussion at chapter 4, section 2.

<sup>1763</sup> See discussion at chapter 4, section 2 and Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 90.

<sup>1764</sup> See discussion at chapter 4, section 2 and Rotberg *When States Fall: Causes and Consequences* (2004) at 29.

<sup>1765</sup> Callaghy *Africa in World Politics: The African State System in Flux* (2000) at 177.

<sup>1766</sup> Scott *State Failure in Sub-Saharan Africa: The Crisis of Post-Colonial Order* (2017) at 90.

<sup>1767</sup> Trautman *From Zaire to the DRC: A Case Study of State Failure* LLM Thesis University of South Florida (2013) at 12.

<sup>1768</sup> See discussion at chapter 6, section 4.

<sup>1769</sup> See discussion at chapter 6, section 4.

<sup>1770</sup> See discussion at chapter 6, section 4.2.

<sup>1771</sup> See discussion at chapter 6, section 4.

combination of these factors has severely impacted the DRC, and at present, the country is considered a failed state on every level.

Much of the ASM formalisation efforts in sub-Saharan African countries have generally not worked. The common denominator appears to be that most of these countries are beginning to show signs of state failure or are nearing total state collapse. Many of these states have endured endless conflict and civil war. Most are unable to integrate fully into the global economy as a whole. Their government lacks the capacity to respond to its citizen's needs and deliver basic public services. Some of these states are not even viewed as legitimate entities by the international community.

There appears to be a direct correlation between institutional failure and the rise in ASM activities. One cannot solve the problems stemming from illegal ASM activities without addressing the underlying issues of state weakness and institutional failure. One of the biggest issues with a weak state is the lack of state capacity. There must be a well-capacitated state with proper control over the country's resources and people. Consequently, the last chapter of this dissertation recommends various ways governments in sub-Saharan Africa can bolster their capacity and in turn take steps towards regulating and formalising their ASM sector.

# CHAPTER 11: QUEST FOR SOLUTIONS

## 1. Introduction

Formalising the ASM sector in sub-Saharan African countries is a significant step towards safeguarding the livelihoods of small-scale miners and their communities.<sup>1772</sup> However, ensuring that unregulated, informal mining activities are brought into the legal domain remains an ongoing challenge.<sup>1773</sup> As a wealth of literature demonstrates, the topic of ASM-formalisation is not a new one.<sup>1774</sup> Numerous scholars and global institutions have attempted to tackle the delicate issue of ASM-formalisation.<sup>1775</sup> Already three decades ago, the World Bank identified the problems associated with the ASM sector in less developed economies and published a landmark report, called ‘Small-Scale Mining: A Review of the Issues’.<sup>1776</sup>

ASM-formalisation continues to gain traction on sub-Saharan Africa’s development agenda.<sup>1777</sup> Many of the governments across sub-Saharan Africa have tried to integrate their ASM sectors into the formal domain, whilst simultaneously supporting LSM and encouraging international investment.<sup>1778</sup> Governments continue to face the difficult task of having to regulate the ASM sector whilst ensuring that artisanal miners remain motivated to operate within the formal economy.<sup>1779</sup>

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<sup>1772</sup> See discussion at chapter 4, section 3 and 4.

<sup>1773</sup> See discussion at chapter 9.

<sup>1774</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 49; Phillips (2017) in Conference on Enterprise Formalisation in Africa, Accra, Ghana, January 10-11, 2007; Siegel and Veiga (2007) 34(1) *Resources Policy* 51 at 51; Singo and Seguin (2018) *IMPACT* at 22; Siwale and Siwale (2017) 4 *The Extractive Industries and Society* 191 at 191; Verbrugge (2015) 46(5) *Development and Change* 1023 at 1023; Geenen 37 *Resource Policy* 322 at 322; Hilson and Maconachie (2017) 49 *Area* 443 at 443; Hilson and Hilson (2015) *International Growth Center Working Paper* at 1; Hilson, Goumandakoye and Diallo 80 *Land Use Policy* 259 at 259 and Marshall and Veiga (2017) 4(2) *The Extractive Industries and Society* 300 at 300.

<sup>1775</sup> Hilson and McQuilken (2014) 1 *The Extractive Industries and Society* 104 at 105.

<sup>1776</sup> Noetstaller (1987) *World Bank Technical Paper Number 75, Industry and Finance Series* 23 at 16.

<sup>1777</sup> See discussion at chapter 1, section 1 and chapter 4, section 3.

<sup>1778</sup> See discussion at chapter 7.

<sup>1779</sup> See discussion at chapter 7.

## 2. Insights

The final chapter concludes the dissertation with summative insights. This last section sums up the debate on the dynamics and impact of ASM in sub-Saharan Africa by summarising the findings of this dissertation, particularly the findings of the DRC case study. Lastly, this section recommends solutions to help countries move forward and ensure successful ASM-formalisation.

### 2.1 Debilitating Dichotomies

Dichotomising the informal and formal sectors undermines an understanding of the linkages between ASM and LSM. In the last three decades, the ASM sector has expanded as a global economic activity.<sup>1780</sup> As discussed throughout this dissertation, artisanal operations play a vital role in many developing countries, contributing to both the mining industry and providing millions of people with a livelihood.<sup>1781</sup> There is a strong correlation between ASM activities and poverty.<sup>1782</sup> In many parts of sub-Saharan Africa, ASM is as important in contributing to the country's economy as those activities relating to LSM.<sup>1783</sup> The contributions of ASM to the formal economy can be significant.

'ASM's potential to be an 'employment engine' in national development processes has long been recognised by African governments, donor institutions and researchers.'<sup>1784</sup> It is hardly a coincidence that ASM activities have flourished in the most impoverished of countries.<sup>1785</sup> The ASM sector is especially prevalent in sub-Saharan Africa as the region is not only mineral-rich, but these countries are also victim to mass poverty and unemployment.<sup>1786</sup>

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<sup>1780</sup> See discussion at chapter 1, section 1 and chapter 4, section 3.

<sup>1781</sup> See discussion at chapter 1, section 1 and chapter 4, section 1.

<sup>1782</sup> See discussion at chapter 4, section 5.

<sup>1783</sup> See discussion at chapter 4, section 3.

<sup>1784</sup> See discussion at chapter 4, section 3.

<sup>1785</sup> See discussion at chapter 4, section 1.

<sup>1786</sup> See discussion at chapter 4, section 1.

The negative environmental and social consequences emanating from the ASM sector continue to undermine the sector's credibility as a forerunner to locally and nationally based socio-economic development.<sup>1787</sup> Many governments have voiced their concerns about the sustainability, or unsustainability, of the ASM sector.<sup>1788</sup> As evidenced by the analysis of this dissertation, the ASM sector is infamous for, *inter alia*, its impact on the environment,<sup>1789</sup> its low standard of occupational health and safety,<sup>1790</sup> its misuses of child labour and association with unrest and conflict funding.<sup>1791</sup> Most governments are under the impression that if they can bring the ASM sector into the formal domain, the negative ASM-implications will be mitigated.<sup>1792</sup>

## 2.2 Pressures of and Encounters with Formalisation

In response to the negative socio-economic and environmental impacts flowing the ASM sector, many governments in sub-Saharan African have already established different pieces of legislation attempting to regulate the sector.<sup>1793</sup> However, in practice many of the ASM activities remain poorly licensed and mostly unregulated in sub-Saharan Africa.<sup>1794</sup>

Legal provisions pertaining to artisanal mining in the DRC are known to be poorly implemented and provide little tenure security.<sup>1795</sup> The 'maladjustment of the law to local realities' appears to flow mainly from the country's existing socio-economic conditions.<sup>1796</sup> The poor implementation of its laws suggests that the State has ostensibly limited control over its territory as well as restricted capacities to enforce its own law. Many Congolese miners find it difficult to work within the legal framework and artisanal mining activities remain at an all-time high.<sup>1797</sup>

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<sup>1787</sup> See discussion at chapter 5, section 2.

<sup>1788</sup> See discussion at chapter 5, section 2.

<sup>1789</sup> See discussion at chapter 5, section 2.1.

<sup>1790</sup> See discussion at chapter 5, section 2.1.

<sup>1791</sup> See discussion at chapter 5, section 2.3.

<sup>1792</sup> See discussion at part 3 of this thesis above.

<sup>1793</sup> See discussion at chapter 9, section 1.

<sup>1794</sup> See discussion at chapter 9, section 1.

<sup>1795</sup> See discussion at chapter 8, section 5.

<sup>1796</sup> See discussion at chapter 8, section 5

<sup>1797</sup> See discussion at chapter 8, section 5

Whilst on the face of it, these regulations and initiatives appear to be the solution to the issue of formalisation, it appears from the case study that the DRC's ASM sectors' negative socio-economic and environmental implications continue to escalate.<sup>1798</sup> It is questionable whether the lack of regulation has further perpetuated the artisanal sector's negative impact on both the environment and society, allowing the sector to develop informally. The reality is that countless artisanal miners are driven to ignore the aforesaid formalisation mechanisms and instead continue to operate illegally.<sup>1799</sup> It would, therefore, be appropriate to conclude that whilst the DRC has remained determined to mitigate illegality in their ASM sector, the outcome has not been overly effective.

Using the DRC as a case in point substantiates the difficulties that can be experienced by a country attempting to formalise its ASM sector.<sup>1800</sup> It is apparent that whilst the DRC has made encouraging preliminary steps towards formalisation, the outcome has yielded mixed results.<sup>1801</sup> The DRC depicts a country where millions of unemployed Congolese citizens have used the ASM sector as a refuge to provide some source of income.<sup>1802</sup> Despite various efforts by the DRC to regulate artisanal mining operations, informality within the sector appears to persist unabated.<sup>1803</sup>

The problem of unsuccessfully regulating the ASM sector is not isolated to the DRC.<sup>1804</sup> Illegal ASM activities continue unabated in many countries across sub-Saharan Africa.<sup>1805</sup> Nevertheless, governments in the region remain adamant about formalising their ASM sectors so that they can control and better monitor their economies.<sup>1806</sup> Most Sub-Saharan African countries want to enhance local development through regional integration.<sup>1807</sup> The governments of these African countries believe that by aligning themselves with one another, they could collectively

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<sup>1798</sup> See discussion at chapter 8, section 2.

<sup>1799</sup> See discussion at chapter 8, section 3.

<sup>1800</sup> See discussion at part 3.

<sup>1801</sup> See discussion at chapter 8.

<sup>1802</sup> See discussion at chapter 6.

<sup>1803</sup> See discussion at chapter 8.

<sup>1804</sup> See discussion at chapter 9, section 1.

<sup>1805</sup> See discussion at chapter 9, section 1.

<sup>1806</sup> See discussion at chapter 9, section 2.1.

<sup>1807</sup> See discussion at chapter 9, section 2.2.

transform the ASM sector into the formal domain, creating a positive impact on their economies.<sup>1808</sup>

The reality is that many of the sub-Saharan African countries continue to see an increase in illegal ASM activities.<sup>1809</sup> Whilst many of these states have tried to address illegality in the ASM sector and have put ASM-formalisation at the forefront of their agendas, governments remain trapped in the what this dissertation terms the 'formalisation dilemma'.<sup>1810</sup> Most of the ASM legal frameworks are overly technical and bureaucratic in nature and are typically inaccessible for many artisanal miners who more often than not lack formal education and any access to funding.<sup>1811</sup>

It is against this backdrop that the author of this dissertation acknowledges that governments need to look beyond ASM-formalisation and address the underlying issues.<sup>1812</sup> The existing ASM regulatory frameworks of numerous sub-Saharan African countries need to be reviewed to make them more supportive and accessible. Governments with large ASM sectors need to respond with consistent and robust policies that are aligned with the realities of the country and artisanal miners. These policies must balance the need to address the various social and economic impacts associated with ASM while maximising the potential benefits flowing from the ASM sector.

Perhaps the fight against the 'formalisation dilemma' requires looking beyond formalisation. Most of the sub-Saharan African countries are experiencing signs of failure or are in a phase of total state collapse.<sup>1813</sup> Lack of state capacity and corruption is viewed as one of the main hindrances to political and economic development.<sup>1814</sup> There appears to be a direct correlation between institutional failure in sub-Saharan Africa and the rise in ASM activities.

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<sup>1808</sup> See discussion at chapter 9, section 2.2.

<sup>1809</sup> See discussion at chapter 4.

<sup>1810</sup> See discussion at chapter 9.

<sup>1811</sup> See discussion at chapter 9, section 4.

<sup>1812</sup> See discussion at chapter 10, section 1.

<sup>1813</sup> See discussion at chapter 10, section 2.2.

<sup>1814</sup> Kirwin and Cho (2009) *Afrobarometer, Working Paper No. 111* at 3 and Rotberg *When States Fall: Causes and Consequences* (2004) at 1.

The author of this dissertation argues that it is futile for governments to address the issue of ASM-formalisation and free themselves from the restraints of the so-called 'formalisation dilemma', without first addressing their own state weaknesses and institutional failures.<sup>1815</sup> It is imperative that a state has strong capacity with proper human and financial resources and effective civil services to regulate the ASM sector successfully.<sup>1816</sup> Governments also need to think out of the box to incentivise artisanal miners to comply with the different ASM legal frameworks and initiatives.<sup>1817</sup>

The lessons learnt from the DRC experience should be used to help other countries and their ASM sectors, such as South Africa – a country that has yet to regulate its ASM sector.<sup>1818</sup> This dissertation concludes by considering these underlying issues and recommending solutions to help overcome the hurdles presented by the 'formalisation dilemma'.

### 2.3 Recommendations

If governments of countries that exhibit signs of state weakness and failure want to address ASM-formalisation, they will need to enhance their own state capacity. The author of this dissertation argues that to enhance state capacity, and hence ensure successful formalisation of ASM, governments need to induce compliance. Governments, therefore, need to create laws and regulations that incentivise artisanal miners to comply with ASM-regulations, a concept which is recognised in the AMV.<sup>1819</sup>

Importantly, the legal regulations pertaining to the ASM sector need to be appropriate and relevant to the poor sector of the population to ensure proper enforcement. These laws need to appear 'attractive' to the very people it is trying to regulate. Governments will need to ensure that the ASM actors are aptly involved throughout the formalisation process to guarantee that any changes made are in line with the realities on the ground. Ensuring compliance also means that artisanal miners feel empowered and

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<sup>1815</sup> See discussion at chapter 10, section 3.

<sup>1816</sup> See discussion at chapter 10, section 4.

<sup>1817</sup> See discussion at chapter 9, section 4.

<sup>1818</sup> See discussion at chapter 2, section 3.

<sup>1819</sup> AMV at 28.

believe that the state regards them in the same light as LSM. To achieve this, governments need to think about providing artisanal miners with formal property rights whilst simultaneously considering the customary practices that may still exist in that region.

This dissertation explains at length the relationship between the ASM sector and poverty, with many artisanal miners coming from some the poorest communities.<sup>1820</sup> The author of this dissertation argues that if governments want to ensure that adherence to ASM-regulations, they also need to increase artisanal miners' access to credit and finance. In addition, governments need to decentralise the ASM system by allowing for all interested ASM stakeholders to engage in dialogue and ensuring that ASM regulatory policymakers are easily accessible. This will ensure that the people involved in the ASM sector are provided with a platform to engage more easily with government and can participate in any decision-making processes that may directly impact them.

### 2.3.1 Inducing Compliance

A pervasive problem with ASM-regulation is finding a delicate balance between ensuring that artisanal mining is well-regulated and not overburdening the already constrained ASM sector in sub-Saharan Africa. Artisanal miners should be well supported, and local realities of the ASM sector are accounted for, ensuring that artisanal miners are not pushed to the backburner once large-scale interests materialise. Sub-Saharan African countries wanting to regulate their ASM sectors need to look at other countries in the region that have already tried to regulate their ASM sector, such as the DRC, and learn from their accomplishments as well as their mistakes.

The inherent challenge with ASM-regulation in sub-Saharan Africa is that comprehensive legal frameworks regulating the ASM sector are often too arduous and therefore not obeyed or simply overlooked.<sup>1821</sup> The case study of DRC reveals that

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<sup>1820</sup> See discussion at chapter 1, section 1 and chapter 4, section 1.

<sup>1821</sup> See discussion at chapter 9, section 3.

lack of incentive and capital on the part of artisanal miners is one of the main reasons why there is little or no compliance with the relevant ASM laws and regulations.<sup>1822</sup> The cost to register and formalise ASM activities far outweighs the benefits.<sup>1823</sup> It is therefore argued that for any country wanting to monitor and control their ASM sector successfully, the laws regulating the sector need to be less constraining, more appropriate and tailored to the needs of thousands of artisanal miners spread across the region.

According to Posner, the primary economic function of the law is to induce compliance.<sup>1824</sup> In situations where the law fails to induce compliance, governments must respond by creating 'procedurally efficient rights', that ensure the costs of using the legal system are reduced.<sup>1825</sup> Any rational miner that is interested in maximizing his own profits would respond to incentives.<sup>1826</sup> Therefore, the decision by an artisanal miner to participate in the formal economy must essentially be a rational one that can only be realised through an advantageous regulatory legal framework.

In addition, it is imperative to consider the specific circumstances of each region's natural resources. In most countries, the government acts as the owner of the natural resource, with the ability to exclude others from its use.<sup>1827</sup> In the mining context, governments from developing countries are, therefore, able to regulate LSM activities. LSM companies often focus their operations on high-grade underground deposits or large and rich open pit deposits.<sup>1828</sup> Both types of deposits require significant capital to enable miners to explore and exploit the minerals in question.<sup>1829</sup> No mining company would invest such a large amount of money without a level of certainty that the company is able to operate freely in the exploitation phase without government intervention. Such a situation, therefore, gives the government ample leverage to regulate the LSM sector.

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<sup>1822</sup> See discussion at chapter 8 section 3.4.

<sup>1823</sup> See discussion at chapter 8 section 3.4.

<sup>1824</sup> R Posner *Economic Analysis of Law* 6 ed (2006) at chapter 2.

<sup>1825</sup> O'Faircheallaigh and Corbett (2016) 3 *The Extractive Industries and Society* 961 at 967.

<sup>1826</sup> Clausen, Barreto and Attaran (2011) 4(1) *Journal of Politics and Law* 15 at 19.

<sup>1827</sup> Geenen 37 *Resource Policy* 322 at 326 and Clausen, Barreto and Attaran (2011) 4(1) *Journal of Politics and Law* 15 at 19.

<sup>1828</sup> Hilson and Hilson (2015) *International Growth Center Working Paper* at 13.

<sup>1829</sup> *Ibid*

On the other hand, artisanal miners often focus their ASM operations on shallow surface deposits, old mine workings, riverbeds as well as shallow alluvial mineral.<sup>1830</sup> Since these deposits are typically mined in a rudimentary and labour intensive manner, they are far more likely to be exploited by artisanal workers.<sup>1831</sup> Without needing to invest a large sum of money, artisanal miners can operate without cooperating with the government, thereby conducting their mining activities below the radar.<sup>1832</sup> An exception to this is the illegal ‘Zama Zamas’ in South Africa, who typically target old defunct mine shafts.<sup>1833</sup>

Unable to regulate artisanal miners, governments must acknowledge that they do not have much leverage to induce compliance by, ‘command and control’ regulation. Instead, by using Posner’s ‘procedurally efficient law’, artisanal miners would be incentivised to comply with the relevant laws and the costs of entering the legal framework would be reduced. One only needs to look at the current ASM-regulatory framework in the DRC to understand this situation.<sup>1834</sup> These regulations involve unrealistic licensing fees, time-consuming bureaucratic licensing procedures and elaborate environmental risk-assessment requirements.<sup>1835</sup> Such repressive regulations further hinder formalisation efforts by creating deterring obstacles, which encourage artisanal miners to operate outside of the existing legal framework. Governments need to engage with artisanal miners to create attractive and conducive regulations.

### 2.3.2 Developing a Procedurally Efficient Legal Framework

To induce artisanal miners to comply with the laws and regulations, it is necessary to create a formal legal framework that promotes ASM and is specific to the needs of the ASM sector. Difficult administrative processes and bureaucratic permitting needs to be reconsidered. The legal frameworks need to accommodate the diverse character

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<sup>1830</sup> O’Faircheallaigh and Corbett (2016) 3 *The Extractive Industries and Society* 961 at 967.

<sup>1831</sup> Geenen 37 *Resource Policy* 322 at 326.

<sup>1832</sup> Clausen, Barreto and Attaran (2011) 4(1) *Journal of Politics and Law* 15 at 19-20.

<sup>1833</sup> Ledwaba and Nhlengetwa 7 *Journal of Sustainable Development Law and Policy* 26 at 38.

<sup>1834</sup> See discussion at chapter 7, section 2.

<sup>1835</sup> See discussion at chapter 7, section 2.

of ASM in countries where either ASM activities are legal, albeit unregulated or deemed outright illegal. Those countries, such as the DRC, where ASM is already regulated, need to reform their existing legislation, and ensure that the ASM sector is put at the heart of national development.

It is essential that when developing or reforming the legal framework, governments are cognisant of the local realities of artisanal miners, by implementing a more inclusive and integrated approach. Policymakers need always to be conscious of the fact that most ASM sectors consist of highly impoverished and unemployed people who are desperate to make a living.<sup>1836</sup> It is nonsensical to implement legislation that over-burdens the sector with high legal costs and unattainable legal requirements, such as requiring the miners to purchase an artisanal miner's card annually.

There is a need to develop coherent, comprehensive policy frameworks for the ASM sector in the region. Such policy frameworks need to be able to maximise the potential of the ASM sector by ensuring that broad-based social and economic opportunities are provided for, whilst simultaneously effectively managing the sectors environmental and social costs. Artisanal miners require regulatory mechanisms that are easily obtainable, cheap, consistent and predictable. Such regulations must ensure that the miners' livelihoods are secured and that they can invest in appropriate mining methods, which are safer and less environmentally destructive. The regulations should also ensure that artisanal miners are supported in their operations and that they can work in a safe environment.

Furthermore, fundamental considerations must be considered when developing ASM legislation. These considerations should include: (i) customary modes of operating; (ii) gender equality; (iii) community participation; (iv) access to land; (v) labour protocols; (vi) requirements for community development; (vii) clear criteria for the duration, (viii) renewal and transfer of licences; (x) clarity on the level of mechanisation and processing option allowed; and (xi) environmental, health and safety standards. Excessive regulatory measures, such as stringent taxes, are disproportionate to the low levels of education, financial and technical abilities of the majority artisanal miners.

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<sup>1836</sup> See discussion at chapter 4, section 5.

A process of management from bottom-up should be considered, which may include a platform for constructive regular dialogues between ASM stakeholders and government policymakers.

Governments attempting to regulate ASM should be focused on enabling the ASM sector by removing the negative barriers associated with formalisation. Governance frameworks need to have a more integrated and comprehensive approach which will additionally assist the country's national development and economy. The mining legislation should benefit all related stakeholders and not create unnecessary uncertainty. Formalisation should not be seen as a policy goal, but rather as a means to aid the quest to improve people's livelihoods in sub-Saharan Africa and for a stronger, more independent informal mining sector.

### 2.3.3 Property Rights for Artisanal Miners

Maconachie and Hilson argue that the basic condition for formalisation is 'property'.<sup>1837</sup> The notion of ASM and property rights is not a new one.<sup>1838</sup> Many researchers have articulated the connection between legal tenure and economic development.<sup>1839</sup> Those operating in the ASM sector should have the advantage of being given 'full legal and transferable mining titles to their claims.'<sup>1840</sup> Legal tenure would allow the state to enforce property and administrative laws; account for the miners by ensuring credit and administering technical and financial support and enhancing environmental assessments to ensure greater environmental protection.<sup>1841</sup> The World Bank promotes this position by arguing that without giving artisanal miners full legal and transferable mining titles, no real solution is possible.<sup>1842</sup>

If the ASM sector is drawn into the formal economy and ASM operators are offered security of tenure, ASM activities could become more sustainable. Such a move might

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<sup>1837</sup> Maconachie and Hilson (2011) 35 *Natural Resource Forum* 293 at 294.

<sup>1838</sup> C Huggins 'Artisanal and small-scale mining: critical approaches to property rights and governance' (2016) 1(2) *Third World Thematics: A TWQ Journal* 151 at 153.

<sup>1839</sup> *Ibid.*

<sup>1840</sup> Matthysen and Montejano Conflict Minerals' initiative in DR Congo: Perceptions of local mining communities' (2013) at 8.

<sup>1841</sup> Buxton (2013) *IIED Sustainable Markets Paper* at 1.

<sup>1842</sup> Banchirigah (2006) 31 *Resources Policy* 165 at 168.

ensure that benefits flow to those miners at the end of the production line, which may in turn allow those impoverished but resource-rich communities to become more prosperous. If these miners were given alienable mining rights, the tradable capital could be used to help them access micro-loans. The design of exclusive property rights, conveyable and transferable, is therefore crucial for the pursuit of a profitable and sustainable ASM industry.

It is not to say that informal mining sites do not have efficient systems. Without strong property rights, however, artisanal miners lack security of tenure required to secure land and ensure investments in mining enterprises.<sup>1843</sup> Not only could property rights improve the situation of artisanal miners considerably, but it could further improve the economic development of developing societies. Legal tenure will enable governments to collect appropriate taxes and royalties from miners as well as have better control over smuggling, illegal mineral revenue generated from armed groups as well as other criminal activities.

According to the economic theory of property rights, property rights ensures that resources are most efficiently allocated to people, which in turn incentivises people to invest and develop a resource.<sup>1844</sup> Unlimited access to a resource will result in people using the property in an unsustainable manner, which will cause exploitation and ineffective overuse.<sup>1845</sup> Therefore, according to the economic theory, 'the stronger the property rights are, the more efficiently the resource will be used.'<sup>1846</sup>

It is essential that legal frameworks include provisions that accommodate for artisanal miners acquiring property rights, whilst still ensuring that regional customary law is accounted for. The government should formalise the customary rights of artisanal miners and ensure that they are given legal titles to their claims. The security of tenure that is required to trigger investment must be attained through mining licences or permits. Currently, most sub-Saharan African countries' artisanal mining licences or cards are only valid for one or two years.<sup>1847</sup> This needs to be amended for longer

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<sup>1843</sup> Clausen, Barreto and Attaran (2011) 4(1) *Journal of Politics and Law* 15 at 20.

<sup>1844</sup> Huggins (2016) 1(2) *Third World Thematics: A TWQ Journal* 151 at 153.

<sup>1845</sup> Maconachie and Hilson (2011) 35 *Natural Resource Forum* 293 at 294.

<sup>1846</sup> Clausen, Barreto and Attaran (2011) 4(1) *Journal of Politics and Law* 15 at 17.

<sup>1847</sup> Hentschel, Hruschka and Priester (2003) *IIED Report* at 42.

periods of validity, as well as over larger areas to ensure that these licences or cards are considered as 'secured rights'. Furthermore, overlapping property rights need to be addressed, as do those artisanal mining areas which may have been allocated to more than one party. Legal frameworks also need to consider enabling LSM regulation to have the right to dispose of those parts of their licences to ASM, which are uneconomical or unsuitable for mining industrially.

Most countries require their artisanal miners to work in a demarcated area as selected either by the government or the LSM sector.<sup>1848</sup> These areas are more often than not located in regions of limited accessibility and low prospectivity.<sup>1849</sup> In the DRC the demarcated areas reserved for artisanal miners are known as an officially recognised ZEAs.<sup>1850</sup> By ensuring that artisanal miners can access delineated areas with sound, technical and geological prospectivity, the miners would be in a better position to secure finance and assistance from various funders. Legal frameworks must therefore ensure that artisanal miners can access these types of areas as any rational investor would not want to invest in a licence with limited tenure or one with low prospectivity. Governments must also consider the customary rights and practices of artisanal miners when developing a procedurally efficient legal framework and granting property rights to artisanal miners.

#### 2.3.4 Customary Modes

There is a complex interface between the bundle of surface resources rights and those below the ground.<sup>1851</sup> In most countries of the world, the state owns and licenses the minerals, irrespective of who owns the surface rights.<sup>1852</sup> Consequently, a separation exists between sub-surface rights and surface rights.<sup>1853</sup> However, this formal distinction is seldom reflected or adhered to in customary practices.<sup>1854</sup> In the DRC, mining rights prevail over surface rights.<sup>1855</sup>

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<sup>1848</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 53.

<sup>1849</sup> Geenen and Radley (2014) 62 *Futures* 58 at 59.

<sup>1850</sup> See discussion at chapter 7, section 2.1.2.

<sup>1851</sup> Huggins (2016) 1(2) *Third World Thematics: A TWQ Journal* 151 at 155.

<sup>1852</sup> E Woertz 'Mining Strategies in the Middle East and north Africa' (2014) 35 *Third World Quarterly* 939 at 945.

<sup>1853</sup> Huggins (2016) 1(2) *Third World Thematics: A TWQ Journal* 151 at 153.

<sup>1854</sup> *Ibid.*

<sup>1855</sup> See discussion at chapter 7, section 2.1 and Mining Code Law no. 7 of 2002 at Article 3.

Since customary rights are often not adequately recognised in the Mining Codes and Regulations, extensive conflict is often generated over these rights.<sup>1856</sup> Many areas in sub-Saharan Africa already have customary tenure systems, which enforce informal arrangements that govern the way the rights of mineral resources are used, accessed and transferred.<sup>1857</sup>

One cannot underestimate the importance of custom, especially because most of the ASM sectors are located in relatively remote areas, where the land is not registered under systems managed by the state.<sup>1858</sup> The challenge lies in trying to marry the customary and statutory tenure systems in such a way that is suitable for both the economic and cultural conditions of a particular country.

To create an 'attractive' legal framework that induces artisanal miners to comply, governments also need to confront the differences that exist between statutory and customary sub-soil rights together with overlapping surface rights. The legal framework must attempt to tackle the challenge of trying to integrate statutory with customary tenure. There must be a dialogue between locals in the region and government to ensure that customary practices are recognised, instead of trying to morph these practices into a foreign system. In some areas, the locals might expect to be paid by the mining companies on the basis that they are the 'traditional landowners'.<sup>1859</sup>

Ghana is a good example of a country that has legally recognised customary land ownership.<sup>1860</sup> The Ghanaian system allows customary land right holders to have a legal claim over 'land rents' and 'a portion of mining royalties.'<sup>1861</sup> Ghana's 2006 Minerals and Mining Act<sup>1862</sup> strongly incentivises mining companies to engage with all

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<sup>1856</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 7.

<sup>1857</sup> M Freudenberger, B Thiam, C Picard, S Jiekak and T DeJong 'Property rights Conundrums in Artisanal and Small-scale Mining: Experiences from USAID Projects in Côte D'ivoire, Guinea, and the Democratic republic Of Congo' Paper prepared for presentation at the 2015 World Bank Conference on Land and Poverty, The World Bank, Washington, DC, March 23–27, 2015.

<sup>1858</sup> Huggins (2016) 1(2) *Third World Thematics: A TWQ Journal* 151 at 155.

<sup>1859</sup> Freudenberger, Thiam, Picard, Jiekak and DeJong.

<sup>1860</sup> Huggins (2016) 1(2) *Third World Thematics: A TWQ Journal* 151 at 156.

<sup>1861</sup> *Ibid.*

<sup>1862</sup> Minerals and Mining Act no. 703 of 2006.

customary landowners and to ensure that fair compensation is paid at market value.<sup>1863</sup> Since Ghana's land laws recognise customary land rights, mining companies are obliged to negotiate with all landowners, regardless of whether their interests are registered or not.<sup>1864</sup> Also, both mining companies and the government are obliged to map all those untitled but verifiable land rights claims.<sup>1865</sup> This rule is based on the principle that the mining company is seen as intruding the local community's territory.<sup>1866</sup> Other countries in sub-Saharan Africa should follow Ghana in this respect by ensuring that ASM-regulations take into account customary land practices and rights and should encourage mining companies and government to engage with the locals.

### 2.3.5 Ensuring Access to Finance

Inducing compliance by improving the process of the formal property rights system or creating a procedurally efficient legal framework on its own will not solve the 'formalisation dilemma'. The majority of artisanal miners are poor and need to rely on financial assistance.<sup>1867</sup> However, the non-legal status of many of the artisanal miners renders them unable to access legal finance.<sup>1868</sup> Money is often borrowed through inequitable sources, resulting in the miners accumulating debt which itself leads to enhancing theft, fraud and other socio-economic problems.<sup>1869</sup> The inability of artisanal miners to access finance is a double-edged sword as a minimal amount of capital is required to secure a mining permit and purchase basic rudimentary equipment.<sup>1870</sup>

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<sup>1863</sup> McQuilken and Hilson *Artisanal and small-scale gold mining in Ghana: Evidence to inform an 'action dialogue'* (2016) at 21 and G Hilson and S Banchirigah 'Are Alternative Livelihood Projects Alleviating Poverty in Mining Communities? Experiences from Ghana' (2009) 45 *Journal of Development Studies* 172 at 183.

<sup>1864</sup> McQuilken and Hilson *Artisanal and small-scale gold mining in Ghana: Evidence to inform an 'action dialogue'* (2016) at 21.

<sup>1865</sup> Huggins (2016) 1(2) *Third World Thematics: A TWQ Journal* 151 at 156.

<sup>1866</sup> Hilson and Banchirigah (2009) 45 *Journal of Development Studies* 172 at 183.

<sup>1867</sup> See discussion at chapter 1, section 1 and chapter 4, section 1.

<sup>1868</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 55.

<sup>1869</sup> *Ibid* at 50.

<sup>1870</sup> J Hinton 'Communities and small-scale mining: An integrated review for development planning' (2006) *Report to the World Bank* 213 at 134.

This dissertation explains at length the nexus that exists between the ASM sector and poverty.<sup>1871</sup> Many of these informal miners are unable to access proper finance given their illegal and low socio-economic status.<sup>1872</sup> Whilst many countries officially support ASM and recognise that it is a viable way to alleviate poverty and contribute to the country's economy, the primary development objective in most of these countries continues to be focused on creating an investment climate for LSM operations.<sup>1873</sup> The ASM sector, on the other hand, remains largely undercapitalised.<sup>1874</sup> For example, most of the current ASM-regulations in sub-Saharan Africa require artisanal miners to acquire mining permits to enable them to register their mining activities and mine legally.<sup>1875</sup> These permits are costly with stringent renewable requirements and are a major deterrent for artisanal miners.<sup>1876</sup> Those artisanal miners that are able to raise capital for the licence or permit, often lack the additional money required to invest in productive and sustainable mining equipment and operations.<sup>1877</sup>

If governments want to overcome the formalisation dilemma, they need to increase access to credit and finance. Governments can do this by introducing microfinance credit, grants, drafting legislation for ASM financing, donor funding and government loan facilities tailored specifically for ASM. In most sub-Saharan African countries, where there is usually not enough capital to financially support formalisation efforts, international development institutions can step in and address the problem of missing capital.<sup>1878</sup> These international agencies could create 'government loan facilities' which ensure that they carry the risk of lending capital to the artisanal miners.<sup>1879</sup>

Government loan facilities have been implemented in various countries across sub-Saharan Africa, such as Mozambique and Namibia.<sup>1880</sup> In Namibia, the government established a *Minerals Development Fund* which provided the ASM sector with US

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<sup>1871</sup> See discussion at chapter 4, section 4.

<sup>1872</sup> See discussion at chapter 4, section 4.

<sup>1873</sup> Siegel and Veiga (2007) 34(1) *Resources Policy* 51 at 55.

<sup>1874</sup> *Ibid.*

<sup>1875</sup> Geenen 37 *Resource Policy* 322 at 326.

<sup>1876</sup> *Ibid.*

<sup>1877</sup> D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 14.

<sup>1878</sup> Siegel and Veiga (2007) 34(1) *Resources Policy* 51 at 55.

<sup>1879</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 57.

<sup>1880</sup> Siegel and Veiga (2007) 34(1) *Resources Policy* 51 at 55.

\$92 million in loans.<sup>1881</sup> With the help of slow payment periods, low-interest rates and minimal bureaucratic overhead, it is estimated that almost 92 per cent of the loans were repaid.<sup>1882</sup> Equipment loans to hire mining gear may be a better alternative to cash to ensure that suitable machinery is used in the mining process.<sup>1883</sup> Tanzania, through World Bank initiatives, has made provision for ASM grants and an equipment leasing scheme.<sup>1884</sup>

The ability to access upfront sustainable finance enables and incentivises artisanal miners to stay within the legal framework. This would have the knock-on effect whereby the miners would be in a position to invest in support services and more efficient equipment, consequently improving the sustainability of their operations.

### 2.3.6 ASM Stakeholder Participation

To ensure a long-term sustainable formalisation strategy, all interested stakeholders must be involved in the formalisation process, and a platform should be created that ensures regular, sustainable dialogue between ASM stakeholders. By giving ASM communities a platform to speak, governments will be better placed to understand the complexities faced in these communities, and together a co-created roadmap can be established.

The mere fact that the ASM sector continues to operate in the informal sector is indicative of the fragile ASM-regulations, which is largely not complied with as both the beneficiaries and the implementors lack understanding.<sup>1885</sup> These ASM-regulations are often not supported or complied with by the very people for whom they are intended.<sup>1886</sup> Lack of compliance is largely the result of the regulations not

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<sup>1881</sup> Ibid and Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 57.

<sup>1882</sup> Huggins (2016) 1(2) *Third World Thematics: A TWQ Journal* 151 at 156 and Siegel and Veiga (2007) 34(1) *Resources Policy* 51 at 55.

<sup>1883</sup> Geenen 37 *Resource Policy* 322 at 326; McQuilken and Hilson *Artisanal and small-scale gold mining in Ghana: Evidence to inform an 'action dialogue'* (2016) at 21 and D'Souza *Artisanal Mining in the DRC: key Issues, Challenges and Opportunities* (2007) at 15.

<sup>1884</sup> Siegel and Veiga (2007) 34(1) *Resources Policy* 51 at 55 and Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 58.

<sup>1885</sup> Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 45.

<sup>1886</sup> Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) at 62.

speaking to the local realities on the ground and are devoid of artisanal miners' expectations.<sup>1887</sup>

Collaboration between government and the ASM sector should not be limited to 'governmental agencies on a national level,' but should rather be extended to include all types of significant stakeholders within the ASM sector. Being familiar with the ASM areas, local communities and well as the events in their jurisdiction, it is recommended that local government bodies help the national government to draft and implement ASM-regulations. Local government is better placed to monitor ASM operations and can quickly attend to any environmental or safety threats that ASM related activities pose to the neighbouring communities. Local governments must be provided with the resources and skills needed to control and monitor the ASM sector within their locality. Local government involvement would ensure that there is ground-level support which caters for the needs of the ASM community.

Community-based development can be a complex process which can lead to a rise in mistrust amongst community members.<sup>1888</sup> For there to be effective participation, a balance of power must exist between the different groups involved.<sup>1889</sup> It is for this reason that ASM stakeholder participation should be encouraged. Stakeholder participation ensures that ASM communities get involved in the development processes and motivates the right type of people to come together to make informative decisions and share information. Participation encourages people to undertake a consultative process aimed at consensus building. Stakeholder participation gives a platform to those community members to voice their opinions on matters that affect them both directly and indirectly. When the government engages with ASM communities and involves them in the decision-making process, the communities become more accepting and supportive of the outcome of the process and ultimately helps build greater trust amongst stakeholders. This ultimately induces trust and additional accountability within the ASM sector.

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<sup>1887</sup> Hoadley and Limpitlaw (2004) A paper presented at the *Mintek Small Scale Mining Conference* at 7.

<sup>1888</sup> D Mitlin and J Thompson 'Participatory Approaches in Urban Areas: Strengthening Civil Society or Reinforcing the Status Quo?' (1995) 7(1) *Environment and Urbanization* 231 at 232.

<sup>1889</sup> *Ibid.*

### 2.3.7 Decentralisation of Mining Administration

Decentralisation has been defined as ‘the transfer of authority and responsibility for public functions from the central government to subordinate or quasi-independent government organisations or the private sector.’<sup>1890</sup> Decentralisation is aimed at transferring authority from the ‘central government and its agencies’ to subordinate governmental authorities who represent, and are accountable to, the local population.<sup>1891</sup> The concept of decentralisation is not a new one and is an important requirement for successful formalisation.<sup>1892</sup> In regions where people are faced with weak states, social injustices and inequality, decentralisation tends to offer people at the local level an opportunity to engage directly with government and partake in decision-making processes.<sup>1893</sup>

Decentralisation ensures that such resources and power are placed at a level of government which is closer to the people, with a platform to participate in decision making.<sup>1894</sup> Participation through decentralisation encourages artisanal miners to get involved and hold state officials accountable.<sup>1895</sup> This will allow state officials to be more transparent, and ASM communities will be able to monitor the performance of local government and potentially corrupt practices. This should ultimately incentivise local officials and politicians to be more responsive.<sup>1896</sup> Overlapping roles and responsibilities of government departments should be reduced by decentralising the process.<sup>1897</sup>

In most sub-Saharan African countries, artisanal miners are required to travel long distances to reach capital cities to register their ASM activities.<sup>1898</sup> This situation is not

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<sup>1890</sup> J Litvack, J Ahmad and R Bird ‘Rethinking Decentralization in Developing Countries’ (1998) *Sector Studies Series* at 7.

<sup>1891</sup> Litvack, Ahmad and Bird (1998) *Sector Studies Series* at 7.

<sup>1892</sup> A Parker ‘Decentralization: The Way Forward for Rural Development?’ (1995) *Working Paper 1475* at 18.

<sup>1893</sup> Litvack, Ahmad and Bird (1998) *Sector Studies Series* at 7.

<sup>1894</sup> S Bergh ‘Democratic decentralisation and local participation: a review of recent research’ (2004) 14 *Development in Practice* 780 at 781.

<sup>1895</sup> Parker (1995) *Working Paper 1475* at 19.

<sup>1896</sup> *Ibid* at 20.

<sup>1897</sup> *Ibid*.

<sup>1898</sup> Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 47.

only costly but also extremely time-consuming for the artisanal miners.<sup>1899</sup> Once political representatives get nearer to artisanal mining communities, such proximity should ensure better mobilisation and more efficient allocation of resources at the local level.<sup>1900</sup> It is recommended that as more people throughout Africa acquire access to cell phones and the internet, online electronic permit platforms should be considered. Online electronic permits could limit corruption and increase transparency.

The ASM registration system is often associated with bureaucracy and complicated paperwork.<sup>1901</sup> The current registration systems in place are a huge deterrent for those artisanal miners who do not have the finances, skills, capacity or capabilities to comply with these regulatory formalities.<sup>1902</sup> Decentralisation can also assist in simplifying complex bureaucratic procedures as state officials are closer to the realities on the ground and are more sensitive to local conditions and needs.<sup>1903</sup> The issue of improving local and provincial administrative structures within sub-Saharan African countries is a recommendation for further research and is beyond the scope of this dissertation.

It is against this backdrop that governments need to start thinking of innovative ways to incentivise artisanal miners to comply with the different laws and ASM initiatives. The ASM sector can no longer be a policy afterthought. This dissertation argues that governments need to work on the incapacities within their states and institutions before they can address the 'formalisation dilemma'.<sup>1904</sup> One cannot try to regulate a sector without working towards a proper functioning government and a professional civil service.

### 3. Conclusion

In conclusion, one must consider the lessons learned from these formalisation endeavours. Governments need to relook at the formalisation initiatives and assess

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<sup>1899</sup> Banchirigah (2006) 31 *Resources Policy* 165 at 169.

<sup>1900</sup> Lungus *Formalisation of Artisanal and Small-scale Mining in sub-Saharan Africa: Challenges and Ways Forwards* LLM Thesis University of Manchester (2007) at 49.

<sup>1901</sup> *Ibid.*

<sup>1902</sup> Bergh (2004) 14 *Development in Practice* 780 at 781.

<sup>1903</sup> *Ibid* at 782.

<sup>1904</sup> See discussion at chapter 9.

whether the correct measures are in place to achieve sustainable results. The informal nature of ASM requires a special and innovative approach to formalisation. It is a unique activity, essential to reducing poverty and unemployment in Africa. A blanket approach to formalising ASM by using a regulatory legal framework, which was initially designed for LSM, does not work. The cultural, social and economic differences in every country need to be uniquely addressed. Perhaps a different approach to ASM, regulated by 'new' regulatory and administrative framework's is required to redress the inadequacies of the legacies left by corruption and colonial regimes with sub-Saharan Africa.

Sustainable development of a country's ASM sector, by successful revised and appropriately implemented formalisation, can positively contribute to the regional and local economies of these countries. This dissertation substantiates that ASM plays a vital role throughout sub-Saharan Africa, but the dilemma of how to formalise this sector successfully needs to be urgently addressed. The lessons learnt from formalisation endeavours and initiatives, as discussed herein, can be used to revise this sector and realise its untapped potential.

“The future of the mining industry requires a balanced industry in which both large- and small-scale are competitive alternatives. It would remain unfortunate for mineral rich countries in Africa to fail to fully take advantage of the accrual of social capital and the potential for broad-based development that can be attained by creating a solid and comprehensive legal, financial, and institutional structure to support the artisanal mining sector.”

S Zhuwarara ‘Securing A Place for Artisanal Mining’ in *Mining Review Africa* (19 May 2020)

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