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Formalizing Artisanal and Small-scale Gold Mining

A Case Study of Cote d'Ivoire

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Map of Côte d'Ivoire



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Source: CIA (2004)

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List of acronyms

ASM	Artisanal and Small-scale Mining
DDI	Diamond Development Initiative
EPRM	European Partnership for Responsible Minerals
FN	<i>Force Nouvelle</i>
GDP	Gross domestic product
GNI	Gross National Income
GoECDI	United Nations Group of Experts for the Côte d'Ivoire
ILO	International Labour Organization
LSM	Large-Scale Mining
MIM	Ministry of Industries and Mines
NDP	National Development Plan
NGO	Non-Governmental Organization
OECD	Organisation for Economic Cooperation and Development
PAC	Partnership Africa Canada
PNRO	<i>Programme National de Rationalisation de l'Orpaillage</i>
PRADD	The Property Rights and Artisanal Diamond Development
SODEMI	<i>Société pour le Développement minier de la Côte d'Ivoire</i>
UN	United Nations
USD	United States Dollars

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Chapter 1

Introduction



H1 - Introduction

After a 40-minute drive on the back of a motorbike, passing numerous military and police checkpoints, my guide suddenly stops. “From this moment on we do not take any photos and do not ask any questions anymore. Follow me and do what I say”, he tells me. We are on our way to the illegal gold mine ‘Doka’. Not to be found on any map, the mine is located between cocoa and palm plantations not far from the village of Hire, a rural town in Côte d’Ivoire. While the mine is on the exploration ground of an international mining company, it is, according to local villagers, being controlled by Lieutenant-Colonel Issiaka Ouattara, a former rebel who in January 2017 got promoted to commander-in-chief of the Republican Guard. Walking past the remains of an ash burnt *campement*, we enter the mining pit. Under the eye of a handful of armed forces, more than a thousand miners dig into a 40-meter pit, kept together by self-constructed wooden shafts. As soon as the guards spot ‘*le blanc*’ or white man, we are asked to leave the terrain, because they are afraid that we take photos or shoot video recordings of the activity. Later when I return to the village, others warn me not to return there. “People have been killed there”, explains an employee of the local mining company. When I ask my guide, a former miner, why he worked at Doka, he says: “there is not much other work and this provides good money”.

There is no agreed upon definition of artisanal and small-scale mining (ASM). In policy, it is defined differently from country-to-country, according to a range of criteria. But in general terms, it is thought of as “mining by individuals, groups, families or cooperatives with minimal or no mechanization, often in the informal (illegal) sector of the market” (Hentschel, Hruschka, & Priester, 2003, p. 5). In some countries, a distinction is made between ‘artisanal mining’ or purely manual activity on the one hand, and ‘small-scale mining’ or activity with some mechanization on the other hand. Often, the terms ‘artisanal mining’ and ‘small-scale mining’ are used interchangeably. In the last two decades, the number of people engaged in ASM has increased rapidly worldwide, particularly in sub-Saharan Africa (Hilson & Hilson, 2015). While the often-informal status of the sector makes it particularly hard to gather sufficient and reliable data, it is estimated that it provides direct employment to tens of millions of people in more than 40 countries and provides a livelihood for more than 100 million others who indirectly depend on the sector for their survival (ILO, 1999; Banchirigah, 2006). Moreover, in terms of contribution to worldwide mineral production, it is estimated that significant shares originate from ASM. An estimation of the sector’s production levels in 2007 is provided in Figure 1.1, based on the data of Wagner et al. (2007). In sub-Saharan Africa, it is estimated that over eight million people are employed in the

sector directly, and more than 46 million others rely on it for their livelihood (see Table 1). As is the case in a number of countries in the region, in Côte d'Ivoire, the focus of this thesis, ASM formally holds an illegal status. The government maintains that despite being virtually non-existent in 1999, the beginning of a period of prolonged political instability in the country, the ASM sector today employs at least 500,000 unlicensed operators nationwide. (The Economist, 2016).

Table 1 - Employment estimates for artisanal and small-scale mining, and minerals extracted, in selected developing countries in sub-Saharan Africa

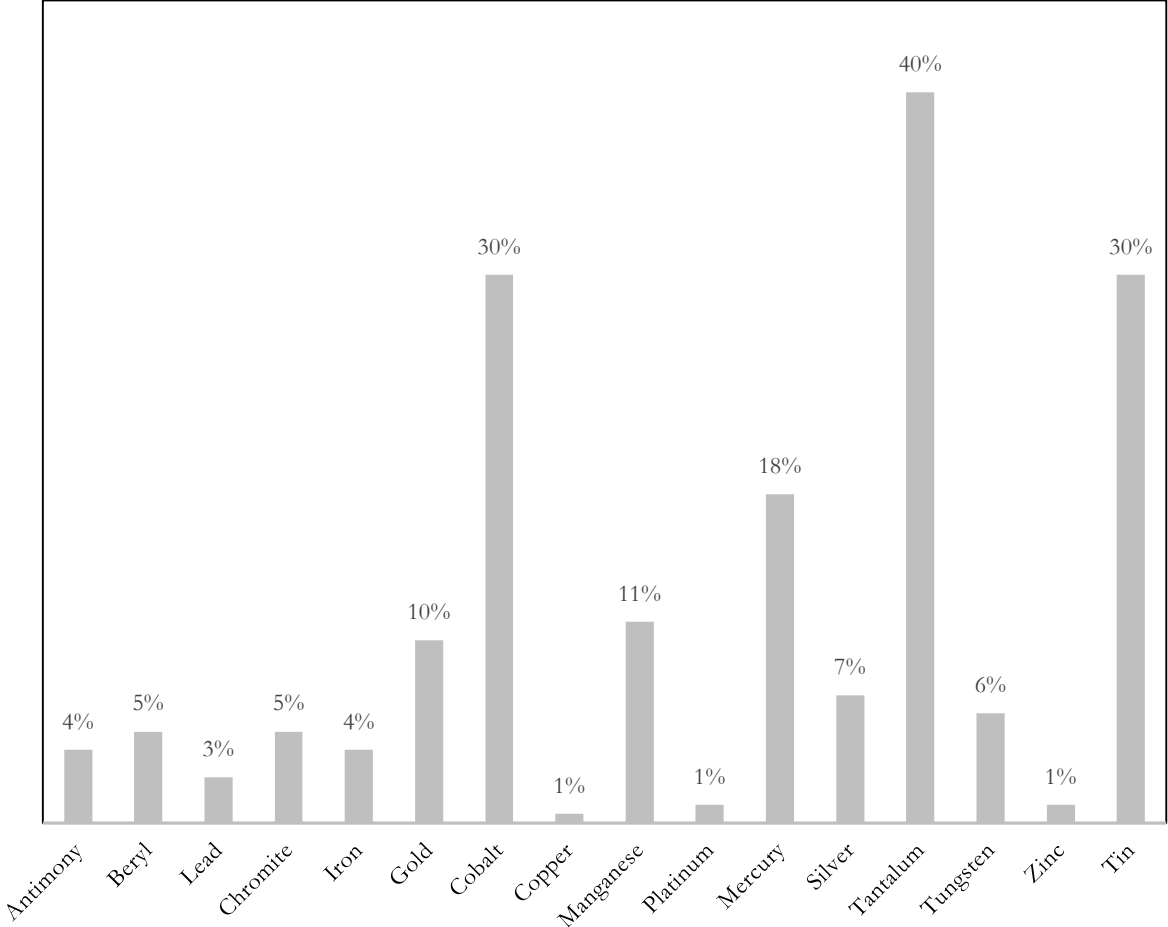
Country	Directly working in artisanal and small-scale mining	Estimated number of dependents	Main minerals mined on a small and artisanal scale
Angola	150.000	900.000	Diamonds
Burkina Faso	200.000	1.000.000	Gold
Central African Republic	400.000	2.400.000	Gold, diamonds
Chad	100.000	600.000	Gold
Côte d'Ivoire	100.000	600.000	Gold, diamonds
Democratic Republic of the Congo	200.000	1.200.000	Diamonds, gold, coltan
Eritrea	400.000	2.400.000	Gold
Ethiopia	500.000	3.000.000	Gold
Ghana	1.100.000	4.400.000	Gold, diamonds, sand
Guinea	300.000	1.500.000	Gold, diamonds
Liberia	100.000	600.000	Gold, diamonds
Madagascar	500.000	2.500.000	Coloured gemstones, gold
Malawi	40.000	240.000	Coloured gemstones, gold
Mali	400.000	2.400.000	Gold
Mozambique	100.000	1.200.000	Coloured gemstones, gold
Niger	450.000	2.700.000	Gold
Nigeria	500.000	2.500.000	Gold
South Africa	20.000	120.000	Gold
Sierra Leone	300.000	1.800.000	Gold, diamonds, coltan
South Sudan	200.000	1.200.000	Gold
Tanzania	1.500.000	9.000.000	Coloured gemstones, gold, diamonds
Uganda	150.000	900.000	Gold
Zimbabwe	500.000	3.000.000	Gold, diamonds, coloured gemstones

From Hilson & Maconachie (2017)

While the ASM sector contributes significantly to production and employment, it is more often associated with its negative social and environmental impacts. Common environmental impacts

include pollution through the use of mercury, which is used to amalgamate gold, deforestation and defacement of land; air pollution; and erosion and other forms of land degradation (Hilson, 2002a; Aryee et al.; 2003; Kitula, 2006). Other scholars have drawn attention to how high levels of child labour in ASM are interlinked with the lack of formal employment opportunities in the region and the need for children to provide financial support to their impoverished families (Hilson, 2010). The impact of mercury pollution on human health has been studied extensively (Tschakert and Singha, 2007); the sector’s association with prostitution and criminal activities examined (Duffy, 2005; Banchirigah, 2006); its links to civil wars explored (Le Billon, 2005); and its potential connection with money laundering and supporting of terrorist activities discussed (Even-Zohar, 2003). These negative impacts have caught the attention of journalists, government officials and, to some extent, international donors, many of whom consequently view the activities of the sector extremely negatively (Hilson & McQuilken, 2014).

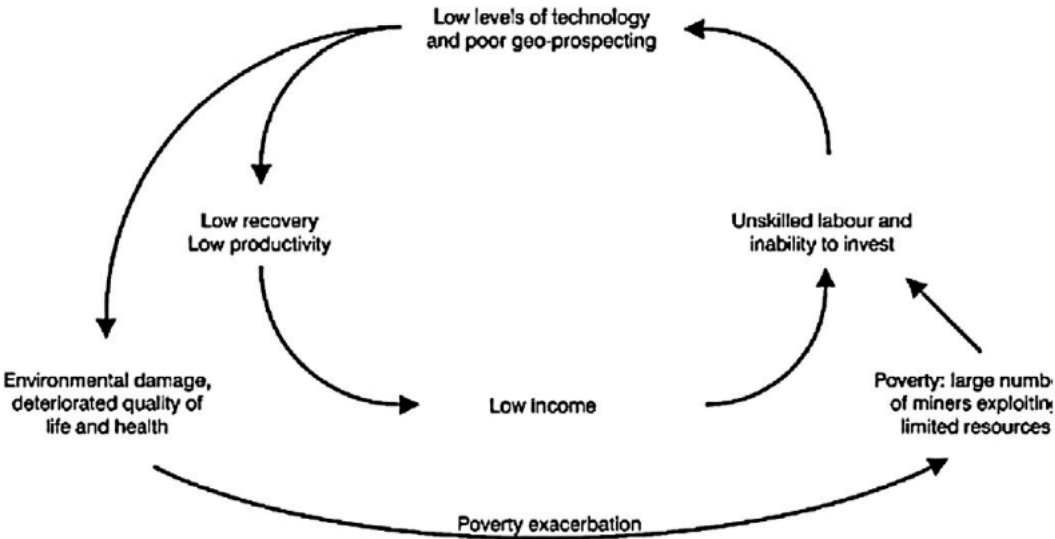
Figure 1.1 - Estimation of the share of ASM in the global production of selected minerals and metals



Source: (Wagner et al., 2007)

But a case can be made that these negative environmental and social impacts are ‘expressions’ of the sector’s informality, specifically, direct consequences of its current development trajectory. In the case of sub-Saharan Africa, because most ASM activity is unlicensed, the sector remains unmonitored and financed through illicit channels. Due to a lack of security of land tenure and their struggles to accumulate income and improve their livelihoods, ASM operators are often more focused on securing their daily needs, rather than prioritizing the management of what the general public, donors and policymakers see as the negative impacts of their activities. Without few possibilities to secure formal finance and appropriate equipment, people immersed in the sector often find themselves trapped in a vicious circle of poverty (see Figure 1.2) (Hilson & McQuilken, 2014). As a result of this extremely one-sided portrayal of the sector, its positive impacts, namely its contribution to employment and production, are often overlooked.

Figure 1.2 - The ASM poverty trap



Source: Hilson and Pardie, 2006

In their efforts to come to grips with the expansion of ASM, many governments in sub-Saharan Africa have been looking for ways to better regulate the sector’s operations. However, this has proved challenging because, as noted, most of the ASM activity occurs outside of the regulatory framework of the state in ‘informal spaces’ (e.g. Geenen, 2012; Spiegel, 2015; Verbrugge, 2015). Formalization is often projected as the ‘magic bullet’ to both decrease the negative impacts and maximize the developmental impact of the sector. Countries such as Ghana (e.g. Hilson & Potter, 2005), Mali (e.g. Hilson & Garforth, 2012), the DRC (Geenen, 2012), Burkina Faso (e.g. Werthmann, 2009), Liberia (Van Bockstael, 2014) and Tanzania (e.g. Fisher, 2008) have in recent decades attempted to gain better control of the sector by implementing comprehensive plans to formalize it. International institutions and organizations such as the World Bank and the United

Nations (UN) have intensified calls for formalizing ASM. According to Hilson and Maconachie (2017) this increased attention is explained by a growing recognition of the sector's economic impact, a greater need by governments to gain control of sprawling activities and the importance of putting regulators in an improved position to tackle the host of environmental and social problems that are associated with the sector. However, in cases such as Ghana (Hilson and Hilson, 2015), Uganda (Siegel and Veiga, 2009), and Niger (Goumandakoye and Hilson, 2016) informality continues to persist in the sector, despite efforts to regularise operations (Siwale and Siwale, 2017), leaving individuals who find themselves trapped in a vicious cycle of poverty. Consequently, the current state of ASM in sub-Saharan Africa is largely informal, environmentally-degrading and characterized by poor working conditions (Hilson and McQuilken, 2014). The question is, of course, why?

Following the footsteps of their neighbouring countries in a bid to attract foreign investment to develop the large-scale mining industry, the government of Côte d'Ivoire adopted a new Mining Code in 2014, which aims to “modernize the mining sector and improve transparency” (Shearman, 2014). With fluctuating cocoa prices, hitting a four-year low in February 2017 (CNBC, 2017), the country has in recent years sought to be less dependant on the agricultural sector and is therefore diversifying its economy. Because a third of West Africa's Birimian Greenstone Belt, a mineral-rich geological formation that stretches from Ghana to Senegal, is located within the country, it is thought that there might be more gold in Côte d'Ivoire than in neighbouring Ghana, which is, after South Africa, the continent's leading producer of the precious metal (The Guardian, 2014). This untapped and underexploited potential, the Birimian Greenstone Belt, has attracted numerous mining companies interested in exploiting its manganese, iron ore, nickel, bauxite and, of course, gold. A significant component of the new Mining Code is the “*Programme National de Rationalisation de l'Orpaillage* (PNRO)”, which is specifically aimed at “cleaning up, better organizing and regulating” the country's artisanal gold mining sector over the period 2013-2016.

In a region where informal ASM has been growing rapidly in recent years, but governments efforts have struggled to regulate activities effectively, it is important to question why these efforts have been unsuccessful and what has been learned from previous experiences, in order to adopt a more effective ASM policy framework and to be able to let people escape the ASM poverty trap. As will be explained in this thesis, many of the mining sector reforms implemented in sub-Saharan Africa were made at the expense of an effective ASM policy framework, forcing the sector to remain and even grow in the informal economy (Hilson & McQuilken, 2014). Since Côte d'Ivoire is a country

that only recently implemented major mining sector reforms, its government finds itself in an enviable position to reflect on, and learn from, the experiences of other countries in the region. The aim of this thesis, therefore, is to broaden understanding of the ASM formalisation experience in Côte d'Ivoire, with special emphasis on the experiences surrounding the PNRO, the country's most recent ASM policy framework. It specifically integrates the following research question:

RQ: What approach has been taken to formalise ASM in Côte d'Ivoire, and why has this approach been (in)effective?

Qualitative data, drawn from interviews with miners, policymakers, donors and international organizations, were compiled over a period of three months of fieldwork in Côte d'Ivoire. These qualitative data offer insights into the experiences around the formalization of ASM in Côte d'Ivoire, in the process providing a foundation for a largely-unexplored country case in sub-Saharan Africa. These findings could help donors and policymakers to adopt a more effective ASM policy framework, and contribute to a better understanding of why ASM often persists in informal 'spaces' in sub-Saharan Africa. Most efforts to formalise ASM in sub-Saharan Africa have proved ineffective. Is the Côte d'Ivoire experience any different?

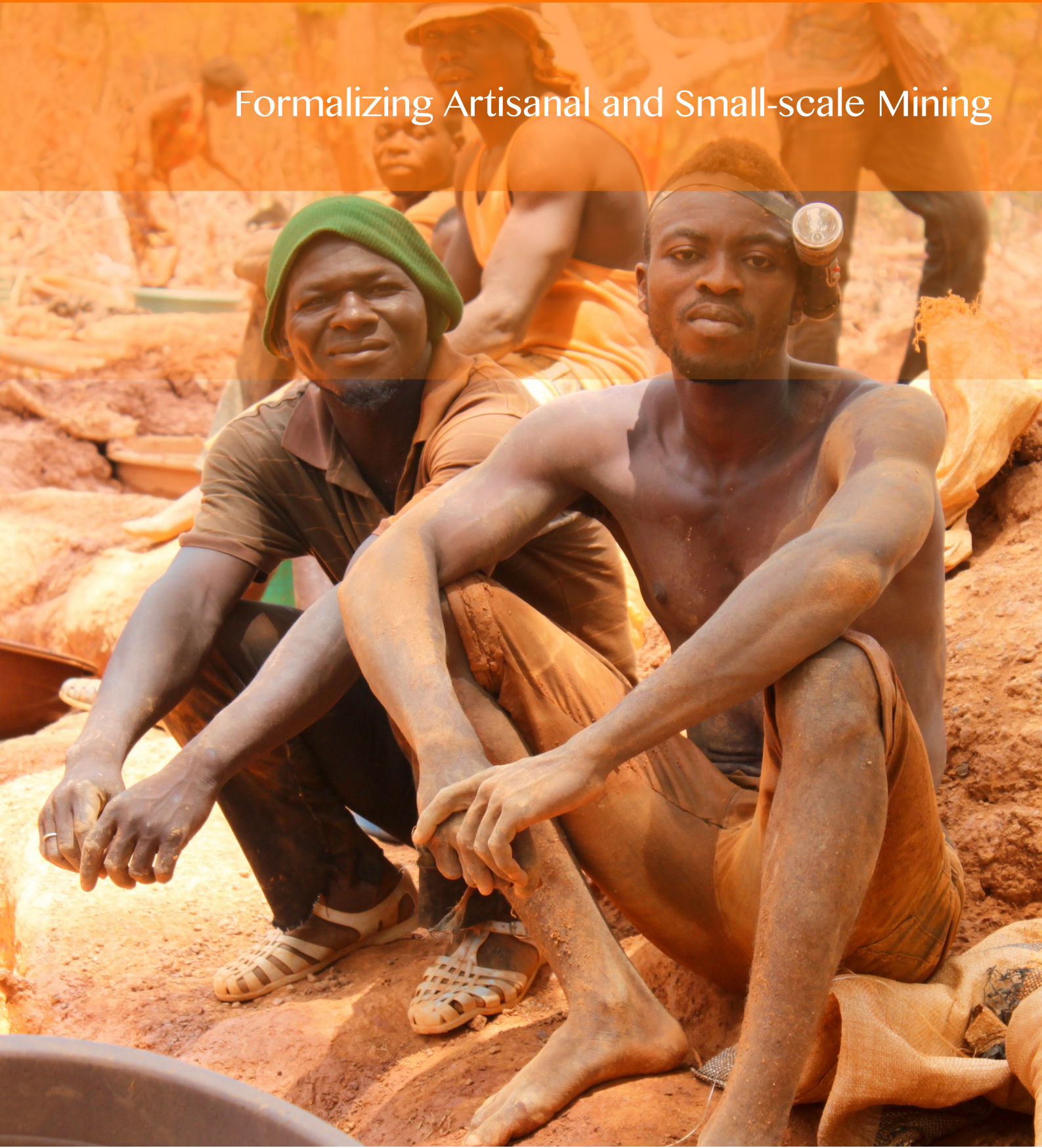
This thesis is structured as follows. In the next chapter a review of the literature is provided. It focuses on the theoretical underpinnings of informality and formalisation literature in general. This helps to contextualise how formalisation is understood and what it is expected to do. The second part of the chapter will critically examine formalisation in the context of ASM in sub-Saharan Africa, focussing mainly on the ideas which underpin the *Legalist* school. Building on the ideas of Hilson et al. (2017) shaped by those of Hernando De Soto, a Peruvian economist and most influential thinker within the *Legalist* school, a theoretical framework is constructed. In Chapter 3 the research design and methodology are presented. Chapters 4 and 5 introduce the empirical part of the study and are structured on the basis of the theoretical framework. Chapter 6, the final chapter, presents the conclusions, critical reflections on the work and prescribes recommendations for further research.



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Chapter 2

Formalizing Artisanal and Small-scale Mining



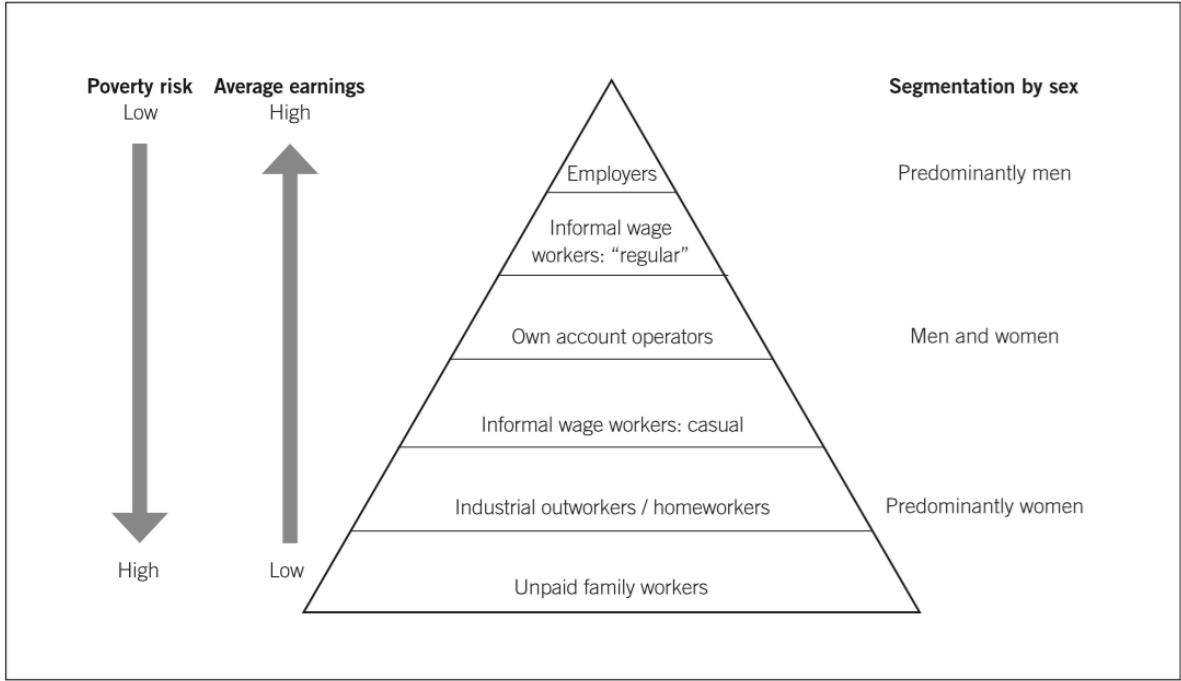
H2 – Formalizing Artisanal and Small-scale Mining

This chapter provides an overview of the literature relevant to the formalisation of ASM in sub-Saharan Africa. The chapter will deal with the concepts of the informal economy, the formal regulatory framework and formalization. The first part of the chapter presents the different theoretical underpinnings of informality, focussing specifically on the ideas of Hernando De Soto. These ideas are relevant because they provide insights on how the informal economy is linked to the formal regulatory framework. The chapter continues with explaining how formalisation is understood in different contexts. Following Siwale and Siwale (2017), a distinction between the narrow understanding and broad understanding of formalisation is made. Finally, formalization in the specific context of ASM in sub-Saharan Africa will be discussed. This final part of the chapter will explain how the ASM policy framework came about and how this is connected to the informal status of ASM in the region, further developing the theoretical framework of Hilson et al. (2017).

2.1 The informal economy

It is estimated that about two-thirds of the world's labour force is found in the so-called informal economy (World Bank, 2009), defined by the International Labour Organization (ILO) 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 job” (Chen, 2005). The main characteristics of employment in the informal economy include low wages, levels of education and rates of literacy, high rates of poverty and long working hours. Businesses in the informal economy are often small-scale, production of goods and services is labour-intensive and skills required for the business activities are usually gained outside formal education (Verick, 2008). While it has long been assumed that the informal economy consisted of individuals who chose to avoid registration and thereby taxation, it is now generally agreed in the literature that most informal workers operate outside the legal framework with costs rather than benefits, lacking secure work, workers' benefits, social protection and representation or voice (Chen, 2005). Another important characteristic of the sector is that it does not consist of a homogeneous group of people. Often a distinction is made between informal employers, informal employees, people who operate on their own account, casual wage workers and industrial outworkers or homeworkers (see Figure 2.1). The ILO estimates the size of the sector to be 41% of the Gross National Income (GNI) of countries in sub-Saharan Africa, ranging from 30% in South Africa to 60% in Nigeria, Tanzania and Zimbabwe.

Figure 2.1: Model of Informal Employment: Hierarchy of Earnings & Poverty Risk by Employment Status and Sex



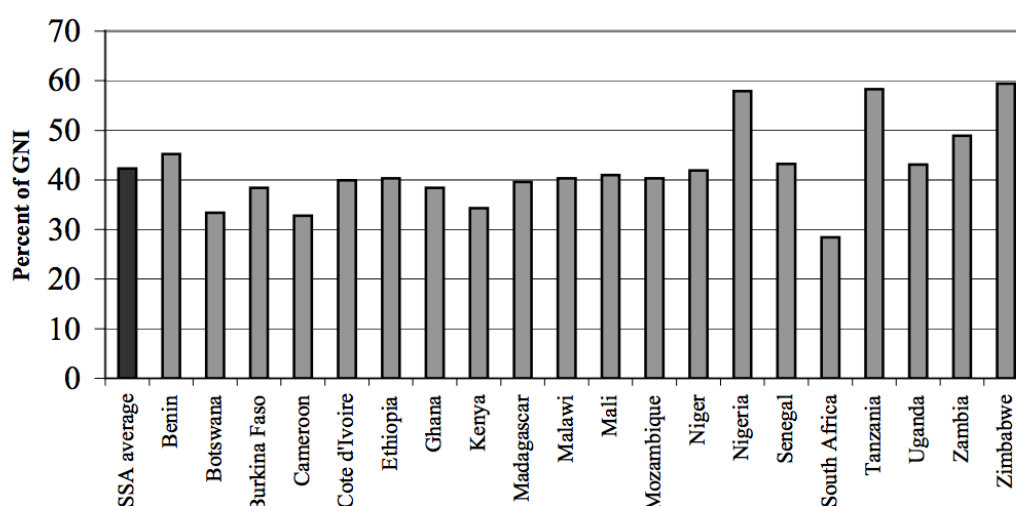
Source: Chen (2012)

Approximately 40% of Côte d’Ivoire’s GNI originates from the informal economy (see Figure 2.2) (Verick, 2008; Schneider, 2002). It is estimated that 93% of all new jobs created in sub-Saharan Africa during the 1990s were in the informal economy (Chen, 2001). This means that the informal economy not only contributes significantly to the size of national economies in sub-Saharan Africa but also provides work for a very large and heterogeneous group of often marginalized people.

One of the central issues in the debate about the informal economy is how and whether it is linked with the formal economy. As Chen (2005, p. 6) points out, it is important in this debate to make a distinction between the formal economy, defined as “comprising regulated economic units and protected workers”, and the formal regulatory framework, defined as “comprising government policies, laws, and regulations”. In the debate on the informal economy, three dominant schools of thought can be identified: the *Dualist*, *Structuralist* and *Legalist*, each of which offers its own unique explanation for how the informal, formal economy and formal regulatory framework are connected.

The *Dualist* school makes a distinction between the formal and informal economy, of which the latter is comprised of marginal activities that provides a safety net for the poor. The sector is distinct

Figure 2.2 – Size of the informal sector in sub-Saharan Africa (ratio of GNI in 2003)



Source: World Bank Doing Business database. This indicator measures output in the informal economy as a share of gross national product (%GNP, 1999/2000). Sourced from the study by Schneider (2002)

from and not related to the formal sector. The *Dualists* argue that informal operators are excluded from the formal economy as a result of the imbalances between growth rates of the population and modern industrial employment, and a mismatch between people's skills and modern economic opportunities (Chen, 2012, p. 4-5). They have little to say, however, about the relation to government regulations, instead focusing more on government provision of necessary support services (Chen, 2005).

The *Structuralists* contest that the informal and formal economies are intrinsically linked, because informal enterprises and wages are subordinate to capitalist development. As a result of attempts to reduce labour costs and increase competitiveness, the reaction of formal firms to state regulation of the economy, global competition and the process of industrialization, drives people to work in informality (Chen, 2012, p. 5). In their view, it is the structure of the capitalist world economy, that explains the existence of the informal economy.

Finally, the *Legalists* primarily focus on the relationship between people in the informal economy and the formal regulatory framework. They believe that government deregulation will lead to increased economic freedom and entrepreneurship among working people, especially in developing countries (from Chen 2005; de Soto, 1989). Because this thesis is focussed mainly on how the formal regulatory framework – the PNRO – is related to the informal economy, in this case, ASM in Côte d'Ivoire, this literature review proceeds by further discussing in more detail the theoretical underpinnings of the *Legalist* school of thought. This is important, because, as Hilson and

Maconachie (2017) explain, recent academic analysis has shed minimal light on why the ASM sector in sub-Saharan Africa is confined predominantly to an informal sector existence. Using the ideas of the *Legalist* school opens the door to broadening understanding of how the ASM formal regulatory framework contributes to the current status of the sector in sub-Saharan Africa.

2.1.1 The ideas of Hernando de Soto

De Soto (2000) declared that “The Legalist school sees the informal sector as comprised of “plucky” micro-entrepreneurs who choose to operate informally in order to avoid the costs, time and effort of formal registration and who need property rights to convert their assets into legally recognized assets”. Recognized as one of the most influential thinker on the subject of informality (Gilbert, 2002), De Soto argued that without property law, capital is impossible to create. This is a dilemma facing a large part of the population of people in developing countries, who do not have legal property rights because they are often active in *extra-legal* parts of the economy (De Soto, 2000, p. 15). By not extending rights to the *extra-legal* parts of the economy, De Soto argued, governments are denying the economic freedom to what amounts to the majority of the world’s population. Not only does failure to do so exclude the poor from participation in the world economy, but it seems to be an inexplicable move for a government, which stands to miss out on collecting enormous amounts of tax revenues (De Soto, 2000, p. 35).

De Soto makes a distinction between possession and property, namely, a differentiation between physical and mental. One can be physically in possession of something, while property is an entitlement, created by law, which stays in force regardless of whether the owner is in physical possession or not. With possession enforcement depends on the possessor, while property is being maintained by law enforcement. Following this, it is the legal system that enables possession to become property or assets, and assets to become *capital*, which, according to De Soto, is the ability to represent assets in abstract value. While the poor do have assets – according to De Soto, it is a person’s physical property – they remain financially and commercially invisible, because they are not represented nor recorded in legal property rights. When people are not able to represent their assets, De Soto speaks of *dead capital*. A consequence of this is that people in the developing world are *undercapitalised*.

A land title is one of the examples De Soto introduces as an asset that is often *undercapitalised* in development countries. The key to making use of *dead capital* is to generate surplus from these physical assets. Therefore, the key argument of De Soto’s logic is that to make use of the full

potential of an economy, *dead capital* needs to be transformed into *living capital*, making use of a coherent property rights system. “Money does not earn money. You need a property right before you can make money. Money presupposes property” (Siegel and Veiga, 2009 from De Soto, 2000, p. 64). The *Legalists*, therefore, promote one form of regulation, namely the formalization of property rights for the informal workforce to help them convert their informally-held assets into real assets (from Chen, 2005; De Soto, 2000). This is a crucial step toward alleviating millions of operators in the informal economy from hardship by enabling them to transfer their possessions into assets and let them participate in the formal economy. However, while the logic of De Soto seems very simple, it is not always clear what is understood by formalization.

2.2 Formalization

While the term appears to be very prominent in policy circles, Spiegel (2015) points out that the process and meaning of the concept is somewhat disputed and could mean different things in different contexts. Within academic circles, a distinction is often made between a narrow understanding and a broad understanding of formalization (Siwale & Siwale, 2017). The narrow understanding of formalisation is most closely aligned with the ideas of Hernando de Soto and is understood as an expansion of the legislative framework to include the *extra-legal* economy. This means that people operating in the informal economy need to obtain a license, register their accounts and pay taxes. It assumes that even unaided formalisation can lead to economic growth and poverty reduction, because an expansion of the legal framework enables people to transfer their possession into assets (Benjamin, 2006). Because formalisation is treated as a product, rather than a process, implementation of the policy framework is often *ad hoc*.

While De Soto’s understanding of formalisation has appeared to be extremely prominent in policy circles, with many governments around the world following his advice in their efforts to formalise the *extra-legal* economy, his argument has also been widely criticized by scholars for being overly simplistic (Gilbert, 2002). Scholars such as Heemskerk (2005) and Siegel and Veiga (2009) have criticized this understanding, explaining that one should adopt a broader understanding of formalisation, one that more refers to the process itself, rather than seeing formalisation as a product. Simply expanding the legislative framework in order to capture more state revenue is unlikely to address the livelihood demands and welfare issues of those active in the sector. Ribot and Peluso (2003) argue that it is important to make a distinction between “the *right* to benefits from things and the *ability* to derive benefits from things” (p.153). While within the *Legalist* school

the *right* and the *ability* are equated, the authors explain that a legal right does not necessarily translate into the ability to access this right. In other words, formalization should encompass both the costs as the benefits of entering the formal economy. For someone that operates in the informal economy, therefore, formalization should not only mean for obtaining a licence, registering accounts and paying taxes, but also a process which positions individuals to enjoy a host of benefits, such as legal ownership, tax breaks, membership in trade associations and social protection.

Moreover, as has been explained, one of the key characteristics of the informal economy is its heterogeneity. This means that formalization has different meanings and implications for different operators in the informal economy. Consequently, in order to address the needs of an informal operator in the design of a policy framework, there must be a detailed understanding of who this operator is. It is therefore essential for policymakers to recognize these different dimensions and become aware that formalisation is not a one-step process but rather an ongoing process. In order for formalization to be effective, the approach needs to be comprehensive but context specific in design and practice (Chen, 2012). This is the most important distinction between the narrow understanding of formalisation and the broader understandings of the concept and helps to explain why formalisation efforts of policymakers and donors can be very challenging.

2.3 Formalization of ASM in sub-Saharan Africa

In order to gain more control of sprawling activities and tackle the host of environmental and social impacts of the sector, governments in sub-Saharan Africa see formalisation as one of the key steps to a more effective regulation of the ASM sector (Hilson and Maconachie, 2017). The question is, however, under what conditions is the process likely to be effective? The next section starts by explaining how the ASM formal regulatory framework came about in sub-Saharan Africa; and, how a limited understanding of the sector specific dimensions of the sector in the region may explain why formalizing its operations has been so unsuccessful. But how, exactly, is the formal regulatory framework for ASM connected to the often informal status of the sector in the region?

Building on the ideas of De Soto, Hilson et al. (2017) present a theoretical framework that identifies the role of bureaucracy and costs and political drive as key factors for the successful formalization of the informal economy. While the framework can be used to explain why a formal regulatory framework is likely to be ineffective, the ideas of De Soto fail to explain the question whether a government is actually able to implement the adopted agenda. Therefore, the role of the capacity

of the government is added to the theoretical framework to explain why a formal regulatory is likely to be ineffective. Combined, these factors provide a theoretical framework to answer the main research question of this thesis.

2.3.1 The ASM formal regulatory framework in sub-Saharan Africa

For decades, ASM has been overlooked in economic policies and programs on both the international, regional and local level (Hilson and McQuilken, 2014). In sub-Saharan Africa, as a result, policy has been created that does not address the needs of those operating in the sector. The idea championed in policy circles has long been that the ASM sector is comprised of enterprising businessmen. This idea began to take shape after publication of the World Bank's seminal report *A Strategy for African Mining*, 1992, which states that "there is no good reason to create differential access to mineral rights for different classes of mining investor" and that "A state mining enterprise should compete on the same terms as a privately-owned company, foreign on the same terms as national, large companies under the same broad rules as small ones" (World Bank, 1992, p. 22). This means that ASM operators must compete on the same level and apply to the same policy frameworks as large-scale mining companies. Following the report's prescriptions, the majority of the 36 countries in sub-Saharan Africa adopted policy frameworks and legislation to formalise ASM during the 1990s, building on these ungrounded claims of the sector's dynamics, thereby laying the foundation for an ASM economy that was deemed to remain informal (Fisher, 2007). Additionally, with developing countries opening up their markets for foreign investors and large-scale mining companies, in many countries in sub-Saharan Africa mining legislation has been created that includes tax holidays and protracted titles for large-scale mining companies. Consequently, ASM has been put in a disadvantage (Hilson & Potter, 2005). As a result of the marginalization of ASM in mining sector reform, policy frameworks have been created that rather stifle the process of formalization and do the opposite of bringing people in the legal domain: they force people to mine illegally, often on the exploration and exploitation grounds of large mining companies (Banchirigah, 2006, Hilson & Potter, 2005). For example, in South Africa the expansion of ASM is strongly linked to how the sector is being treated within the policy framework, namely being regulated under the same legislation as large scale mining (Mutemeri and Petersen, 2002). In countries such as Guinea, Mali, Ghana and Tanzania ASM miners have been marginalized by the generous regulations – which are deemed necessary to attract large-scale mining companies – in terms of the length of leases and the conditions for their renewal (Campbell, 2003, Banchirigah, 2006). This 'large scale mining bias' has resulted in the availability of very little land for ASM miners

to operate, because most land is made available by national governments to large-scale mining companies (Hilson, 2017). Even in the cases where land is made available for ASM miners to operate, the concessions grounds are often geologically unviable. For example, in Tanzania it is estimated that 70% of the land is allocated to large-scale mining companies (Oxfam, 2005).

It was during the during the *International Roundtable on Informal Mining*, organized by the World Bank in 1995, that for the first time was recognized by a wide variety of experts, namely ASM holding a status of being largely poverty-driven. This means that many individuals active in the sector are working in ASM in sub-Saharan Africa as a result of their struggle to find any income generating activity in other sectors (Barry, 1996). Numerous scholars have supported this understanding in a wide variety of case-studies in sub-Saharan Africa, like Tanzania (Fisher, 2007), Sierra Leone (Maconachie and Binns, 2007; Maconachie, 2012), Liberia (Van Bockstael, 2014), the DR Congo (Geenen, 2013, 2014) and Ghana (Hilson and Garforth, 2013). While from 1995 onwards, the poverty-dimensions began to be present in donor rhetoric, the discussions failed on the longer turn to generate meaningful action and open up a space for ASM in the formal regulatory policy frameworks. Consequently, ASM projects and policies that do recognize the livelihood dimensions of the sector, have been launched outside of national and regional policy frameworks in sub-Saharan Africa (Hilson & McQuilken, 2014). Hilson and Hilson (2015) explain that in in the context of ASM there seems to exist a “...disconnection between who policymakers and donors believe they are formalizing and regulating on the one hand, and the individuals – generally asset-less, cash-strapped and desperate for some security of tenure – who seek permits on the other hand” (p. 14-15). Given that many ASM operators are active in the sector because it is their only way to survive, they lack the means and financial capacity to join the formal economy. With mining legislation that prioritizes large-scale mining, ASM is deemed to stay and grow in the informal economy. By formulating ASM policy on the believe that the sector is comprised of enterprising businessmen, policymakers have designed and implemented policy frameworks that are ineffective and are stifling, rather than facilitating the formalization of ASM (Hilson & Hilson, 2015). The policy context of how the ASM formal regulatory framework came about helps to contextualize why the ASM sector is often marginalized in the formal regulatory framework in sub-Saharan Africa and underlines the importance of acknowledging the sector specific dimensions in the design and implementation of the policy framework in order to be effective. This is linked to the next two factors identified as playing a crucial role in the design and implementation of an effective ASM formalization strategy: the role of bureaucracy and costs and political drive.

2.3.2 Bureaucracy and Costs

According to De Soto, governments can create informality through bureaucracy and costs. Individuals will continue to operate in informality if government procedures remain difficult and costly, because the incentives for individuals do not weigh the costs nor the effort to join the legal economy (Chen et al., 2004). De Soto's argument was based on findings from his own research in Peru where it took up to 289 days to open a business in Lima, required spending US\$ 1231 – 31 times the monthly minimum wage, and took upwards of six years and eleven months and required 207 administrative steps in 52 government offices to obtain the legal authorization to build a house on state-owned land (De Soto, 2002, p.18). Given that most operators in the ASM sector in sub-Saharan Africa are poverty driven, it is unlikely that they are able to fulfil cumbersome bureaucratic procedures, travel long distances or pay high prices to obtain a licence. The marginalization of ASM in national policy frameworks which prioritize large-scale extraction in a country contributes to this dynamic. Bureaucracy and costs in this sense prevent people to join the formal economy. Numerous examples can be found in the literature that confirm this for ASM in sub-Saharan Africa, like in Ghana, where miners are not able to pay the fees for a licence and environmental permit and are obliged to travel to the capital to register (Hilson & Potter, 2005) or Zimbabwe, where consultancy costs of US\$4000 and a registration fee of US\$100 for an environmental impact assessment, impede miners to join the formal economy (Spiegel, 2015). In summary, “ineffective policies and bureaucratic inefficiency, a lot of paper-work, long waiting periods for obtaining licenses, long distances to travel, high costs for obtaining official document, including payment of bribes, limited availability of land on which artisanal miners can legally work, concern about ensuing high investment costs in a formal exploitation project [and] limited education of the miners, which renders bureaucratic and technical procedures not accessible to them (Geenen, 2012)” contribute to the persistence of ASM in the informal economy in countries in sub-Saharan Africa.

2.3.3 Political drive

A second important factor that contributes to the informal status of ASM in sub-Saharan Africa is the political drive of policy makers to establish an effective ASM policy framework. Following De Soto, Siegel and Veiga (2009) explain that successful formalisation by a government is deemed to fail if a government lacks the will to implement the policy framework. For a government formalisation does of course cost money and effort to include the *extra-legal* economy in its existing legal framework and for a miner it means obedience to the law. However, De Soto explains that in

the end it is futile for a government to try to eradicate the *extra-legal* economy, given that such efforts are costly and create conflict that will most likely lead to the persistence of those being persecuted. Consequently, the only way for a government to prevent conflict and the persistence of the *extra-legal* economy, is by looking for a way to expand its property rights system to include this part of the economy (Siegel and Veiga, 2009). So without the full commitment of a government, successful formalisation is very unlikely, even when mining titling is prioritized (Hilson et al., 2017). De Soto used the example of the supposed terrorist threat to the Peruvian government during the 1980s as a way to illustrate the importance of political will in the formalization process.

In his negotiations with the Peruvian Government, De Soto explained to the President of Peru that “if [the president] wanted Peruvians to avoid the temptations of the terrorists, he would have to show the people that working within the law was in their interest...due to bad law, the poor were facing huge entry and operational costs and were missing some of the crucial institutions needed to create prosperity (De Soto, 2002, p. xxii)”. Finally, this resulted in a systematic revision of the formalization process, which was based on an acknowledgement of the *extra-legal* economies dimensions and the installation of an ombudsman to connect with the population (Hilson et al., 2017). Whilst in the case of ASM in sub-Saharan Africa, there is not a comparable case in terms of policy overhaul, there are different indications that support the idea that a shift in thinking towards ASM is gathering some momentum. Hilson et al. (2017) identify three reasons why there is currently an increased political drive. Firstly, the recognition that ASM is an integral part of the rural economy, forces policy makers to design a more comprehensive policy framework that does not treat each sector in policy individually. Secondly, more and more policy makers start to recognize the value of a well organized ASM sector, having the potential to alleviate millions of people from hardship and engage with volatile groups (Hilson and Osei, 20014). Thirdly and finally, based on formalization efforts like in Ghana or Tanzania, there is an increased recognition that the marginalization of ASM in the policy framework, as a result of large scale mining prioritization, does not lead to successful formalization. The question remains, whether this increased political drive is enough to create a real policy overhaul, as a result of the persistent idea of ASM being comprised of businessmen (Hilson et al., 2017).

While De Soto underlines the importance of political drive of a government, his explanation is merely focussed on the economic and livelihood dimensions of ASM expansion. However, his ideas do not tell us anything about why policy makers would lack the political drive to formalize

the ASM sector. What if a government does not want to eradicate the *extra-legal* economy, nor want to formalize the sector? Or what if the existing power structures simply benefit from maintaining the status quo? Having a closer look at authors like Chabal and Daloz (1999) and Reno (2009) does provide interesting insights in how government officials can maximize their power and income by making use of the informal character of African polities. Often, high-ranking politicians and businessmen manage to exercise their political authority through the private control of environmental resources in sub-Saharan Africa, having therefore little incentive to formalize a sector they are directly or indirectly benefitting from (Reno, 1995, 1998).

With ‘the political instrumentalization of disorder’, Chabal and Daloz (1999) refer to a “process by which political actors in Africa seek to maximize their returns on the state of confusion, uncertainty and sometimes even chaos, which characterizes most African polities.” (p.xviii). While De Soto deems an absence of political will by a government as economically irrational because of the missed tax revenues, Chabal and Daloz (1999) explain that one could see this as rational, once we understand the ways in which individuals seek to instrumentalize resources which they command within this general political economy of disorder. In this sense, lacking the political drive to formalize can be deemed rational for those who benefit from disorder. Rather than seeing informality as a lack of state capacity, it should be seen as a condition which offers opportunities for those who know how to play that system. Classic examples from the ‘conflict minerals’ literature support this understanding, like the case of eastern DRC (e.g. Eichstaedt, 2011; Vlassenroot and Raeymakers, 2004) and Sierra Leone (e.g. Hazen, 2013; Le Billon, 2008; Smillie et al., 2000).

2.3.4 Capacity

Finally, a factor that according to the political economy and development economics literature does appear to influence the effectiveness of any formal regulatory framework, but is not taken into account by De Soto’s argument is the question whether a government is actually able to enforce the adopted legislation. Interestingly enough, while the role of state capacity for economic development has been widely discussed in the literature (Johnson and Koyama, 2017), this is rarely considered to be a relevant factor determining the level of informality of ASM operations (Van Bockstael, 2014). Therefore, questioning the ability of a state to collect taxes, enforce law and order and provide public goods needs to be taken into account as an important factor that determines the success of any formalization attempt. Because even in the case when the sector specific dynamics of ASM are acknowledged in the policy framework, when there is a high political drive

to formalize and when bureaucracy and costs are limited, successful formalization is unlikely if a government simply lacks the ability to implement such agenda.

2.4 Conclusion

While the informal economy comprises two-third of the world's labour force, a lot of misunderstanding of the sectors different dimensions and characteristics exists. Three dominant schools of thought can be identified that explain how the informal economy, the formal regulatory framework and the informal economy are connected. Because this thesis is mainly focussed on the connection between the formal regulatory framework and the informal economy, the ideas of Hernando De Soto, a *legalist*, are most suitable to help to understand the process of formalizing ASM in Côte d'Ivoire. According to his logic, an expansion of the legal regulatory framework is necessary, to convert the informally-held assets of the poor into real assets. In other words, it is necessary to formalize the *extra-legal* economy. While this understanding of formalization appears to be very prominent in policy circles in sub-Saharan Africa, others explain that this understanding is too narrow in its assumption that formalization is a product and not a process. Therefore, a formalization process that fits narrow understanding of the concept is deemed to fail. In order for formalization to be effective, the design of the policy framework has to be based on an acknowledgement of ASM's specific dimensions and characteristics. Multiple cases in sub-Saharan Africa show that governments in the region often adopt a too narrow understanding of formalization. Because it was long understood that the ASM was comprised of enterprising businessmen, a policy framework was designed that equalled the ASM sector to the large scale mining sector. Together with a large scale mining bias in the policy framework, this has led to a marginalization of the ASM sector in sub-Saharan Africa. De Soto's ideas help to explain that both bureaucracy and costs and a lack of political drive rather contribute to the persistence of ASM in the informal sector, than that they help individuals to escape the ASM poverty trap in sub-Saharan Africa. However, his argument lacks the ability to explain the role of a government's capacity to implement such legislation. Using these insights provides the necessary scope to research the formalization process of ASM in Côte d'Ivoire. The research design, together with the methodology, will be presented in the next chapter.



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Chapter 3

Research Design and Methodology



Chapter 3 – Research Design and methodology

3.1 Introduction

In order to answer the main research question, “What approach has been taken to formalise ASM in Côte d’Ivoire, and why is this approach (in)effective?”, the thesis follows different analytical steps. The specific purpose of the analysis is twofold: firstly, to improve understanding of the formalisation process of ASM in Côte d’Ivoire and secondly, to improve understanding of how a formal regulatory framework is connected to the informal economy. In order to address these objectives, a theoretical framework has been constructed using insights from the development economics, political economy and legal literature in the previous chapter. The main analysis will follow the ideas of Hernando De Soto to explain how the formal regulatory framework for ASM in Côte d’Ivoire – the PNRO – is connected to the informal economy – the artisanal and small-scale gold mining sector in the country. This approach will be used to explain why the current formalization approach in the country is ineffective. Core in this analysis are the concepts: the formal regulatory framework, the (in)formal ASM sector in sub-Saharan Africa, formalization, bureaucracy and costs, political drive and capacity. A qualitative case-study of the formal regulatory ASM framework in the Côte d’Ivoire is selected as the most appropriate research method. Desk research, three months of field research and an internship in Côte d’Ivoire have provided the necessary tools to obtain the data.

3.2 Research design

Given that very little information is available about the case of ASM in Côte d’Ivoire in the literature the first part of the analysis is focussed on getting an overview of the significance of ASM in the country. The analysis will focus on the size and the positive and negative social and environmental impacts of the sector. The analysis will be based on public information available in the country, policy reports and local experiences from ASM communities. This should provide a general understanding of the significance of the sector and the importance of the need for an effective formal regulatory ASM framework.

Once the significance of the ASM sector is understood, the formal regulatory framework for ASM will be introduced. The analysis will focus on what approach has been taken to formalize ASM in the country and explain why this approach is ineffective. The analysis is build on the direct results of the PNRO and a multi-stakeholder experience around the design and implementation of the PNRO. The experiences of the different stakeholders in the field are used to provide an

encompassing image of what kind of formalization strategy has been adopted. While the experiences of the government might provide insights in the direct results of the program, experiences by the private sector and the ASM communities might provide more critical insights in how the formal regulatory framework was implemented and whether the program actually addresses the problems it was designed for. Once this is understood, it can be explained why the formalization process is ineffective. The concepts of the narrow understanding of formalization and the role of bureaucracy and costs will be used as a tool to explain why the government's approach is ineffective. A narrow understanding of formalization is characterized by a formalization process that is *ad-hoc* implemented, primarily focussed on the expansion of the formal regulatory framework and does not address the livelihood demands of those participating in the informal economy. A formalization process that fits the narrow understanding of formalization is likely to be ineffective. Secondly, as De Soto explains, difficult bureaucratic procedures and high costs prevent ASM operators from obtaining an authorisation. This provides a second explanations of why the formal regulatory framework is ineffective.

While this part of the analysis enables to explain what approach has been taken to formalise ASM in Côte d'Ivoire, it does not explain why government of Côte d'Ivoire has been unable to implement an effective ASM formalization strategy. This is an important question, because one would expect the country to have learned from experiences in the region, that have a long history of mining sector reform. As has been explained in the literature review, De Soto identifies the role of political drive as a crucial factor for the success of any formalization process. Two factors are identified that could explain an absence of political drive. Firstly, the role of political figures privately benefitting from the informal status of ASM could explain why they would not want to formalize the sector. Secondly, the prioritization of large-scale mining in the country could explain why there is little focus on the ASM sector and provides a second explanation of why there is little political drive to formalize the sector. The analysis is based on the experiences of different stakeholders in the field and reports by international experts. Finally, while the lack of political drive can explain why a formal regulatory framework was adopted that was ineffective, a second factor must be taken into account that is not explained by the argument of De Soto. Because even in the case of a high political drive, it could also be the case that the government was simply not able to implement the formalization agenda. Therefore, the role of capacity is used as a second factor to explain why an ineffective formal regulatory framework was adopted. The argument is build on the direct results of the PNRO and the experiences of different stakeholders in the field.

These different analytical steps provide an encompassing overview of what approach has been taken in Côte d'Ivoire to formalize the artisanal and small-scale gold mining sector and enable to explain why the current approach of the government of Côte d'Ivoire is ineffective.

3.3 Methodology

The main analysis of this thesis is built on the direct results of the PNRO and a multi-stakeholder experiences of the formalization process of artisanal and small-scale gold mining in Côte d'Ivoire. Because experiences are highly subjective concepts within the context specific reality of the case of Côte d'Ivoire, a qualitative case-study of the formal regulatory ASM framework in the country has been selected as the most appropriate research method. Following the constructivist tradition of qualitative research, “*to display [the] multiple constructed realities through the shared investigation of meanings and explanations* (Ritchie et al., 2013, p.12)” a wide variety of perspectives of multiple stakeholders in the field has been gathered through semi-structured interviews. The interviews were aimed at surveying the opinions of the identified stakeholders on the effectiveness of the formal regulatory framework for the artisanal and small-scale gold mining sector. This includes perspectives from both international, regional, national and local stakeholders in the field, ranging from international donors to informal gold miners. Given the often marginalized position of ASM communities in sub-Saharan Africa, specific emphasis was put on including their experiences in the analysis. This enables to reflect on the complex process of formalization within the specific context of ASM in Côte d'Ivoire. Data have been obtained through desk research and three months' field research in Côte d'Ivoire.

Desk research was done before and during the field research in Côte d'Ivoire through the collection of secondary data like newspaper publications, radio broadcasts, articles by think tank organizations, Facebook posts and policy reports. These sources provided the necessary data around the direct results of the PNRO. Field research in Côte d'Ivoire mainly consisted of semi-structured interviews with individuals and focus groups. After a stakeholder mapping, interviews have been conducted with government authorities (national and local), national regulating agencies for the mining industry, civil society organizations, donor organizations and intergovernmental agencies. Interviews conducted with these stakeholders were mainly semi-structured. Within the ASM communities, semi-structured interviews have been conducted with miners, diggers, financiers, land owners, farmers, local authorities and journalists. These interviews provided the data needed to present a multi-stakeholder experience on the effectiveness of the design and

implementation of the PNRO.

Different methodological challenges were faced. The different characteristics of ASM make research in this field particularly challenging. Firstly, the fluctuating production levels, seasonality and informality of the sector present severe challenges to get an accurate overview of the size and revenue streams of the sector. Secondly, because of the often illegal status of the activity in a country, both the accessibility to ASM sites as well as the reluctance of stakeholders to discuss the topic, presents a severe challenge to obtain data. As a result of its informal character, ASM activity is often found in remote and inaccessible areas of a country, where state control is limited and where armed forces, like soldiers, police officers or (former-)rebels maintain a foothold in the control of natural resources (Verbrugge and Adam, 2016). Therefore, when visiting mining sites and collecting data security issues can present serious challenges (Heemskerk, 2005). Any research in the field of ASM, should take these challenges in considerations and adapt its research strategy to these challenges.

To overcome these challenges, a three months' internship at 'Social Justice'¹, a local NGO, has been used as a methodological tool to gain access to the data. By representing a local NGO, rather than presenting myself as a foreign researcher, an increased level of trust enabled to meet government officials and visit ASM mining sites in a relatively short period. While this increased access, one has to be aware of how this might have limited the position as being independent as a researcher. Data have been gathered in Côte d'Ivoire over a period of three months from January 2017 to April 2017. The specific time of the year was taken in consideration when researching ASM because of the inaccessibility of mining sites during the rainy season (April-October). Finally, while language barriers were expected, these were not often experienced as a result of the level of French speaking miners. In the single case where miners only spoke a local or foreign languages, local guides helped as translators.

The first phase of the research was primarily concerned with interning at 'Social justice'. This enabled to do a stakeholder mapping and get the right contacts to arrange access to ASM mining sites. The second phase was headlined by involvement in the ASM West Africa Workshop,² 1-3 March 2017 in Abidjan. The international conference was organized to "increase awareness of a sector that is still largely unknown, discuss shared challenges and identify best practices, so that

¹ <http://www.socialjustice-ci.net/>

² <https://www.asmwestafrica.org/>

ASM management and development policies can be strengthened and improved” (ASM West Africa Report, 2017). Being a part of the organization and attending the series of presentation by a multitude of (inter)national ASM stakeholders at the conference, enabled to research the national perspective towards formalization as well as the regional perspectives towards formalization. Finally, being part of the organization, enabled to get more insights in the different agendas of those participating at the conference. The third phase of research consisted of three field trips to different ASM mining sites in the country. Access was arranged through the local contacts and networks of the internship and contact with a mining company. The first fieldtrip was to the region of Bouafle and Angovia, located in the centre of the country, and took place between 7-10 March. The second fieldtrip was to the region of Hire, located between Abidjan and Yamoussoukro, and took place between 19-22 March. The third fieldtrip was scheduled to the region of Ity, near the border with Liberia, between 19-23 March, but was last-minute cancelled, because of security concerns. The three fieldtrip locations are presented in ANNEX I.

3.4 Conclusion

Using the theoretical framework, the necessary analytical steps are identified to gain more understanding in the formalization process of ASM in Côte d’Ivoire. In the next chapter, the significance of the ASM sector in the country will be analysed as well as the effectiveness of the PNRO, using the concepts of the narrow understanding of formalization and bureaucracy and costs. Chapter 5 will explain why an ineffective formal regulatory framework was adopted using the role of political drive and capacity. These two chapters together provide an answer to the main research question of this thesis.



Chapter 4

Formalizing Artisanal and Small-scale Gold Mining in Côte d'Ivoire



H4 – Formalizing Artisanal and Small-scale Gold Mining in Côte d’Ivoire

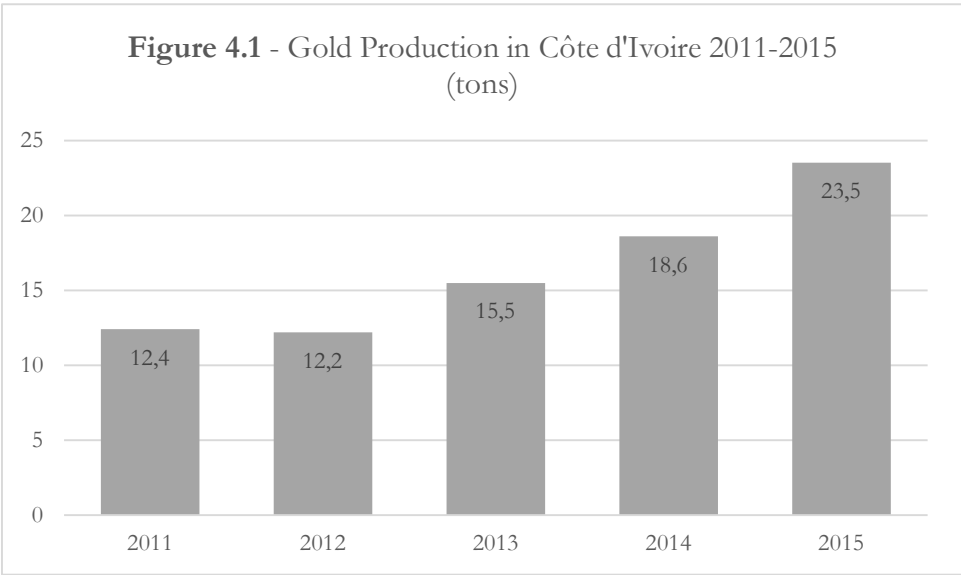
4.1 Introduction

In this chapter, experiences around the formalization of artisanal and small-scale gold mining in Côte d’Ivoire will be shared. The first part of the chapter elaborates on the recent growth of the sector and its impacts on the country. These developments initiated the need for the adoption of a formal regulatory framework for the effective management of the ASM sector by the Ministry of Industries and Mines (MIM) in Côte d’Ivoire: the “*Programme National de Rationalisation de l’Orpillage* (PNRO)”. The chapter continues with outlining what kind of formalization strategy has been adopted by the MIM and whether this has been an effective strategy. The last part of the chapter continues with answering the question, why the formal regulatory framework for ASM in Côte d’Ivoire is ineffective, making use of the concepts of the narrow understanding of formalization and bureaucracy and costs.

4.2 ASM in Côte d’Ivoire

Because very little information is available in the literature about the significance of ASM in Côte d’Ivoire, the first part of this chapter is focussed on outlining the size and positive and negative impacts of the sector. This is important, because this enables to explain why there is a need for an effective formal regulatory ASM framework in the country. In the last 15 years Côte d’Ivoire has been through a turbulent period, to say the least, with the country experiencing a *coup d’etat* in 1999 and two civil wars in respectively 2002 and 2011. After the end of the second civil war the political and security situation in Côte d’Ivoire gradually normalized, resulting in robust average annual GDP growth rates of 8,5% between 2012 and 2015. “[In order] to lay the foundations of strong and inclusive growth allowing Côte d’Ivoire to ascend to emerging country status by 2020”, president Ouattara of Côte d’Ivoire presented the National Development Plan (NDP) in 2011, focussing on four pillars that were most important for the countries development (ADB, 2013). Part of the NDP was the ambition to make more use of the untapped and underexploited mineral resource potential of the country by trying to attract numerous mining companies interested in the manganese, iron ore, nickel, bauxite and, crucially, gold. In a series of investor-friendly policies, the government has attracted several mining companies like the British Randgold Resources and the Australian Endeavour Mining and Newcrest Mining. While the ambition was to triple gold production in the next four to six years (The Economist, 2013), production levels have almost doubled between 2011 and 2015 (see Figure 4.1). Next to large scale mining the country hosts a

dozen semi-industrial companies, although they seem not to be in operation (EPRM, 2016). The main minerals mined on a small and artisanal scale in Côte d'Ivoire are diamonds and gold. The ASM diamond sector in Côte d'Ivoire gained international attention after the successful implementation of The Property Rights and Artisanal Diamond Development (PRADD) program, which played a key role in the lift of the UN embargo on the diamond sector in the country, after ten years of non-compliance (USAID, 2014).



Source: MIM (2016)

While artisanal and small-scale gold mining has a long history in the country³, the MIM in Côte d'Ivoire indicates that the sector has experienced a record growth over the 1999-2011 period as a result of the absence of a mining administration in some parts of the country during the political turmoil and a record gold price, which reached up to 56 USD a gram in 2011 against 8.75 USD a few years earlier (MIM, 2017). ASM communities from the regions of Hire and Angovia confirm to have experienced a similar growth of the activity during that timeframe⁴. Data about the size and revenue streams of the ASM gold sector remain wild estimations, given that a national census has never been conducted in Côte d'Ivoire. Official estimates place the number around 500.000 operators who directly and indirectly depend on the sector, many of whom come from neighbouring countries like Guinea, Mali, Burkina Faso and Ghana (PAC, 2017). According to the *United Nations Group of Experts for the Côte d'Ivoire* (GoECDI) (2015), production levels for some ASM mining sites are comparable with large scale mining operations in the country. The production

³ Interviews with local authorities Angovia (09/03/2017) and Hire (22/03/2017) and ASM expert Côte d'Ivoire (09/02/17)

⁴ Interviews with ASM communities in Hire (21/03/2017) and Angovia (09/03/2017)

of Gamina, a former ASM gold mine near Daloa (see Map of Côte d'Ivoire), would account for 13.8 percent of the country's official annual production of 18,6 tons in 2014. This would translate into a lost revenue around three million USD in lost royalties and other lost revenue in terms of export and windfall taxes (GoECDI, 2015). A total estimation of lost revenues by the government would account for US\$958 million over the period 2005-2015 according to the MIM (AA, 2016). According to the MIM, the activity can be found in 24 out of the 31 regions in the country, with the highest intensity ranging from the south-west of the country to the north (see Figure 4.2, MIM, 2017).

Figure 4.2: Level of activity of artisanal and small-scale gold mining in Côte d'Ivoire



- Intensive artisanal gold mining in agricultural areas (coffee, cocoa, cashews, cotton)
- Medium intensity artisanal gold mining operations
- Relatively low levels of artisanal gold mining operations

Source MIM (2017)

Next to lost revenues by the national government, the GoECDI makes note of land tenure tensions with autochthone communities, widespread use of mercury, cyanide and other chemicals in gold amalgamation processes, (child) prostitution, land degradation, deforestation, landslides, which have caused several deadly accidents, child labour and the financing of former rebels (GoECDI, 2015,2016). Numerous mining companies have indicated to have conflicts with artisanal gold miners illegally mining on their exploration and exploitation ground, causing serious security risks for both the artisanal miners and large scale mining operations as well as a loss of production.⁵ A recent report by Partnership Africa Canada (PAC) has mapped the illicit trade of gold between Côte d'Ivoire, Mali and Burkina Faso, explaining that the extremely porous borders between the countries allow for a high degree of labour mobility and smuggling, posing a significant loss to public revenue, undermining government oversight and, if left unchecked, having the potential to destabilize the region (PAC, 2017).

When asked about the impacts of the activity on the local communities, ASM operators and villagers in the regions of Angovia and Hire indicated that the activity has contributed a lot to the economic development of these rural towns. The increased ASM activity in their region has created both direct job opportunities, like for example mining, digging and washing, but has also indirectly contributed to jobs like the production of construction materials and electricity networks⁶. Also improved transport possibilities and the construction of more houses are indicated as positive impacts. One villager in Hire explains that “while I am not a miner, I profit from the presence of motor taxi’s in the village, that are mainly used by the [artisanal] miners”⁷. Both the population and local commerce have strongly increased. A local journalist in Hire estimates the population to have grown from 35.000 to 60.000 inhabitants between 2007 and 2015. However, the sudden boom of the activity has also increased the prices of housing and commercial products and the level of criminality. This sudden increase of the activity has created tensions between the often foreign ASM operators and the local population, because not everybody is able to profit from the activity in the same degree. Another villager indicates that the often ‘fast money’ is especially attractive to the local youth, resulting in increased school drop-out and tensions in local marriages.⁸

⁵ Interviews with mining company employees (21/02/2017; 15/03/2017) and consultant (21/02/17)

⁶ Interviews with ASM communities in Angovia and Hire (09/03/2017; 22/03/2017)

⁷ Interview with villager in Hire (21/03/2017)

⁸ Interviews with local authorities Angovia (09/03/2017) and Hire (22/03/2017), teacher and youth worker Angovia (08/03/2017), journalists and youth worker Hire (20/03/2017)

In summary, artisanal and small-scale gold mining can be found in almost all regions of Côte d'Ivoire. The activity has experienced a strong growth over the 1999-2011 period as a result of the political instability in the country and a high international gold price. Because the sector contributes significantly to gold production, it is expected that the government has lost large amounts of revenue, due to the informal status of the sector and regional smuggling. The sector contributes both to negative social and environmental impacts, like child labour and mercury pollution, as well as positive impacts like job creation, the stimulation of local commerce and gold production.

4.3 The formal regulatory framework: The PNRO

The formal regulatory framework that applies for artisanal and small-scale gold mining in Côte d'Ivoire is the Mining Code of 2014. According to the law n°2014-138 of the Mining Code of 2014, “*all mineral substances [...] in the ground and underground [...] are the property of the State of Côte d'Ivoire*” (article 2) (Code Minier, 2014). This means that all natural resources in the ground and underground in Côte d'Ivoire are property of the State. Next to the distinction between surface and subsurface rights, the Mining Code explains that “*any individual or entity [...] may undertake any activity regulated under [the Mining Code] on the Ivoirian territory provided they have previously obtained a mineral right or authorisation (article 4)*” (Code Minier, 2014). This means that any ASM operator in Côte d'Ivoire that is active without having obtained an authorisation of the State is according to the Mining Code of 2014 an illegal operator. ASM activities may solely be undertaken by nationals of Côte d'Ivoire and in zones reserved by the government for the specific purpose of ASM activity (articles 52 and 64) (Code Minier, 2014). An overview of the ASM legal framework in Côte d'Ivoire is provided in Table 4.1.

In a response to “the expansion of the illegal activity, with negative consequences for both the population and the environment” the government presented in 2013 the “Plan National de Rationalisation de l'Orpaillage (PNRO) in order to “clean up, organize and regulate the sector, so that it is in the short term a formal legal activity” (MIM, 2013). The program was conceived of and designed by the MIM (EPRM, 2016). The government's objective was to gradually bring informal ASM operators to the formal domain through training, organizing the sector in groups and to learn ASM operators about new farming techniques, that preserve flora and fauna.

Table 4.1: ASM legal framework Côte d’Ivoire

	Artisanal mining authorisation
Issuance	By ministerial order, to individuals of Ivorian nationality or Ivoirian majority cooperatives (article 65)
Rights	<ul style="list-style-type: none"> • Exclusive mining rights, except in case of discover of a deposit requiring semi-industrial or industrial methods and processes to min, in which the holder is indemnified (article 66 and 71) • No chemicals or explosives (article 68) • No workings on agricultural lands without settlement (article 70)
Terms	<ul style="list-style-type: none"> • 2 years, renewable (article 67) • 25 hectares maximum (article 69) • Non-transferable (article 72)

Source: Code Minier (2014)

The program was launched in October 2013 and consisted of five main phases (ASM West Africa Report, 2017):

- 1) A preparatory phase during which Government officials were trained and local population were informed about the illicit character of the mining activities occurring on their lands;
- 2) An information-gathering phase during which GPS coordinates and ancillary data were collected concerning illegal sites and operations, in order to assess the scale of the issue;
- 3) A third phase in which illicit mining sites were forcibly closed by security forces;
- 4) A phase focusing on the improvement of mining techniques, to be orchestrated by the State-owned mining company SODEMI
- 5) A final phase when environmental impacts are to be mitigated by rehabilitating former illegal ASM sites and by educating local communities.

At the time of writing, only the three first phases of the program have been implemented. According to MIM 429 illicit gold mines have been identified and forcefully closed down, 68 local technical committees have been installed, hundreds of miners have been arrested and substantive amounts of weapons, ammunition, mining equipment, chemicals and narcotics have been seized. Despite these efforts, 185 illegal gold-mining sites were counted, including 142 former recolonized sites and 47 new sites (MIM, 2017). Miners either continue their activity at night or return to the

mining sites as soon as the government's security forces have left their region⁹. According to the ASM communities in the region of Hire and Angovia, the PNRO is not an effective policy. "The government arrives with a lot of force, closes down mining sites and stays for two weeks. The moment they leave, miners simply return. The problem is that there is no follow-up."¹⁰ According to multiple interviews with different large-scale mining companies in Côte d'Ivoire, the main problem they face is that the conflicts between ASM and LSM continue after the implementation of the PNRO. During the PNRO the government has helped them to forcefully remove miners of their terrain and close down mining sites, but this has not solved the problem. One employee explained:

...Our main concern is not a loss of production due to ASM activity, but a concern about security. We have a big problem when an accident happens with an illegal miner working on our terrain, primarily in terms of reputation. We can ask the government to remove miners from our terrain, but on the long run this does not change the situation. The current policy does not address these problems, while it is the governments responsibility¹¹.

These results present an image of a policy framework, that was designed first and foremost as an immediate response to the emerging problems that arose as a result of the ASM sectors strong growth over the 1999-2011 period. To address the negative environmental and social impacts, the MIM designed a policy framework that was particularly focussed on the identification of illegal gold mining sites and subsequently the forceful ejection of these sites. While the program has successfully identified hundreds of illegal artisanal small scale mining sites, the MIM has not been able to implement all phases of the program. ASM activity continues in the country, with the ASM miners simply returning to mining sites or working at night. In a response to the "persistence of the illicit activity and in order to prevent disastrous consequences for the environment and population" the MIM has among other things formulated the ambition to "implement more large-scale security operations" (MIM, 2017b). The question is, will this bring any change to the current state of the sector? Most likely, ASM activity continues and ASM operators, that already face extremely difficult working conditions, become even more marginalized. This raises the question, why has the current formalization approach been so ineffective?

⁹ Reports GoECDI (2015, 2016), interviews with mining company employee (22/03/2017) and ASM communities in Angovia and Hire (09/03/2017; 22/03/2017)

¹⁰ Interview with youth worker Angovia (08/03/2017)

¹¹ Interview with Grace

4.4 A narrow understanding of formalisation

First and foremost, the formalisation approach adopted by the MIM seems to align with what in the literature review has been described as a narrow understanding of formalization, reflecting the ideas of the *Legalist* school of thought in the policy framework. As will be explained, the design and implementation of the formal regulatory framework was characterized by an *ad-hoc* implementation, was primarily focussed on the legal framework and was not a comprehensive approach that was context specific in design and practice.

4.4.1 *Ad-hoc implementation*

Firstly, experiences from ASM communities indicate that the implementation of PNRO was *ad-hoc*. According to a villager in Angovia, they were simply being informed that in a period of three months all mining sites would be closed down. A miner in the same region explained that:

...the government should really have taken more time for the local population to adapt to the new situation. There has been no transition period during which the government tried to help us to apply for an authorisation or become legally active.¹²

A consequence of *ad-hoc* implementation is that ASM operators, that already face hard working conditions, lose their jobs until the moment an authorisation has been granted to them. For people who work in the sector, because it is their only means of survival, this leaves them no other choice than to continue to operating informally.

4.4.2 *Primarily focussed on the legal framework*

Secondly, the formalization approach by the government of Côte d'Ivoire is very narrow its focus on the legal framework. This is illustrated by the mere focus of the PNRO on coming to grips with “the expansion of the illegal activity”. While the identification and closing down of illegal gold mining sites is part of a successful formalization strategy, this certainly does not encompass the total picture of what formalization in the context of ASM entails. One miner in the region of Hire explained that:

¹² Interview with ASM operators in Hire (22/03/2017)

...the current policy is not effective, because it does not enable people to become legally active. The government should explain to the people, what steps we specifically need to take to work in legality.¹³

According to a local NGO in Abidjan, the understanding of the Mining Code remains also very limited in the country, especially in remote areas. For example, for the exploitation of minerals, people in remote areas of the country are not always familiar with the fact that the extraction of natural resources is an illegal activity without the permission of the State, while this might be a very clear distinction for a large scale mining company. This illustrates that formalization is more than just a product. While the formal regulatory framework of the government has been primarily focussed on dealing with the negative expressions of the ASM sector and has changed the miners *right* to benefit from things, miners have *not* been *able* to benefit from those rights. Currently, ASM operators only experience the costs of entering the informal economy. In the design and implementation of the formal regulatory framework, very little attention has been paid to let informal ASM operators benefit from entering the formal economy, like legal ownership, social protection or getting organized. During the ASM West Africa Workshop a government official, rightly pointed out that formalisation is more than a legal framework:

...Before legalisation occurs, people need to be organised and formalise their mining operations. In this regard, formalisation is about setting up the necessary organisational structures, in order to support legalisation of mining (ASM West Africa Report, 2017).

Given that the PNRO is still in the third stage of the implementation, the government has failed to meet these preconditions. Therefore, to successfully enforce the formalization policies, the government needs to start organizing ASM operators, like miners, diggers, financiers, buyers and exporters, along the value chain.

4.4.3 Formalization does not address livelihood needs

Thirdly, the current approach does not address the livelihood demands of those active in the sector, nor is the approach comprehensive and context specific in design and practice. When asked what the government could have done better, ASM communities in the region of Hire and Angovia explain that the government should have done a better job in consulting the local communities on what problems really arise. Both in Hire and Angovia, the ASM communities indicate that they

¹³ ¹³ Interview with ASM operators in Angovia (09/03/2017)

have the feeling that the government does not understand how the ASM activity contributes to economic development, local problems and development issues.¹⁴ For example, an ASM operator that has been granted an authorisation is only allowed to work in zones reserved by the government for the specific purpose of ASM activity. However, according to the reports by the European Partnership for Responsible Minerals (EPRM, 2016) and the GoECDI (2015, 2016), the government has not yet clearly defined, unoccupied and geologically viable parcels for miners. This means that miners have no other choice than to return to the mining sites that have been closed down by the government. Rather than helping ASM operators to become part of the formal economy, the current approach makes life for informal ASM communities even more difficult. This clearly does not contribute to a successful formalization of the artisanal and small-scale gold mining sector in the country.

4.5 Bureaucracy and Costs

According to De Soto, individuals will continue to operate informally if government procedures remain difficult and costly, because the incentives for individuals do not weigh the costs nor the efforts to join the legal economy. As formulated in the Mining Code of 2014, ASM operators in Côte d'Ivoire are only allowed to work legally if they are in the position of an authorisation that has to be granted by the MIM. While according to the MIM currently 40 authorisations for ASM have been delivered, no information about where these miners operate could be confirmed by the researcher. A list of these authorisations could upon request by the MIM not be provided¹⁵, nor were any ASM operators with authorisations identified during the fieldtrips. Most recent public data from the MIM's website, states that only ASM authorisations have been provided to ASM diamond miners (MIM, 2016b) and 14 licences have been issued to export, but not to mine gold (EPRM, 2016). Based on this information, it can be concluded that no or very limited authorisations have been handed out over the PNRO-timeframe and no or very limited legal artisanal and small-scale gold mining takes place in Côte d'Ivoire. Numerous miners explain that they have filed a demand for an authorisation, but none of them have heard back from the MIM. Some of these cases have been waiting for months. "There are many miners that would like to work in legality, but they simply do not have the means"¹⁶. This information is supported by the report from the EPRM (2016) stating that "application for an ASM permit is reportedly arduous, costly, and there are reports of applications submitted six or more months ago, and with no

¹⁴ Interviews with ASM communities in Angovia and Hire (09/03/2017; 22/03/2017)

¹⁵ Interview with General Director of the MIM (24/03/2017)

¹⁶ Interview with youth worker Angovia (09/03/17)

response from the MIM". Because the government is currently in the process of starting to hand out authorisations, it is too early to state that the current process to obtain an authorisation is too bureaucratic and costly. Moreover, the researcher has been unable to find any detailed information on which steps a miner needs to take to obtain licence. However, the fact that over a period of more than three years the government has handed out no (or a very limited amount of) authorisations and the absence of any easily available information about how an ASM operators could obtain a licence, do support the idea that the process is cumbersome. As a government official explained during the ASM West Africa Workshop: "The perception alone of a complex regulatory framework and high cost of compliance, can prevent operators from working legally" (ASM West Africa Report, 2017). These findings support the understanding that currently the incentives for miners to join the legal economy, do not weigh the costs. This leaves ASM operators with no choice than to continue operating informally.

4.6 Conclusion

In a response to the strong growth and negative social and environmental impacts of the artisanal and small-scale gold mining sector in Côte d'Ivoire, the government formulated a formal regulatory framework to "clean up, organize and regulate the sector, so that it is in the short term a formal legal activity". While it was the MIM's ambition to gradually bring ASM operators in the formal domain, not much has changed since the adoption of the PNRO: no (or very limited) authorisations have been handed out, no geologically viable ASM corridors have been identified and the negative impacts of the ASM sector, including LSM-ASM conflicts, have not decreased. To refer to the governments ambition, the sector has been 'cleaned up', but not 'organized and regulated'. The ineffectiveness of the formal regulatory framework can be explained by two factors. Firstly, the MIM has taken a formalization approach that is too narrow in its focus. The *ad-hoc* implementation, the primary focus on the legal side of formalisation and the adoption of a policy framework that does not address the livelihood demands of ASM operators, has resulted in a situation where the benefits for ASM operators to enter to formal domain, do not weigh the costs. Secondly, the bureaucracy and costs to obtain an authorisation prevent miners from entering the formal domain. This has lead to a situation where currently no legal artisanal and small-scale gold mining takes places in Côte d'Ivoire.

During the ASM West Africa Workshop in Abidjan, an NGO official rightly pointed out:

“We tend to forget that ASM is largely a poverty-driven activity, for people in remote areas who only have the resource available close by. We therefore need to look at the sector’s issues from a development perspective that takes into account poverty alleviation. In this regard, it is clear that forcibly removing illicit miners is not an effective strategy. It is essential, that mining regulation not only forbid unregulated mining, but also ensure that legal mining delivers enough benefits for miners and local communities to justify this choice” (ASM West Africa Report, 2017).

These results and experiences raise another question, because why has the government of Côte d’Ivoire been unable to implement an effective ASM formalization strategy? In a region where many neighbouring countries have a long history of ASM reform agendas, one would expect the country to have learned from these experiences. In the next chapter this question will be answered, focussing on the political drive to formalize and the role of capacity.



Chapter 5

An ineffective formal regulatory ASM framework



Chapter 5 – An ineffective formal regulatory ASM framework

5.1 Introduction

This chapter focuses on the factors that have prevented the Government of Côte d’Ivoire from implementing an effective formal regulatory framework for the artisanal and small-scale gold mining sector. Since the adoption of the PNRO, little has changed in the country. ASM operations continue to contribute to the negative social and environmental impacts, the government loses large amounts of export and tax revenues of the ASM sector and no ASM operators have entered the formal domain. This raises the question, why? Based on experiences around the ASM West Africa Workshop,¹⁷ reports from the GoECDI and EPRM and interviews with numerous stakeholders in the field, an image is presented, that explains the context of why the government wanted to formalize the artisanal and small-scale gold mining sector. Building on the argument of De Soto concerning the role of political drive in the effectiveness of any formalization process, a story is presented that can explain why the current formal regulatory framework is ineffective. Additionally, the role of the capacity of the government to adopt an effective formal regulatory framework is taken into account.

5.2 The political drive to formalize ASM in Côte d’Ivoire

To recapitulate, according to De Soto, without the full commitment of the government successful formalisation is very unlikely. The presence of political drive to formalize the ASM sector is therefore a crucial element in any formalization process. An absence of political drive by the government of Côte d’Ivoire to formalize the sector can explain why the formal regulatory framework is ineffective. So why was the formalization process initiated? Was the purpose of the PNRO to collect the missed tax revenues? Did the government want to create more jobs and exploit more gold through ASM operations? Or was formal regulatory framework focussed on decreasing the negative impacts of the sector? The previous chapter has presented an image of a government that was primarily concerned with decreasing the negative impacts of the sector. However, this information does not tell much about why there would be a lack of political drive in Côte d’Ivoire to formalize the ASM sector. As has been explained in the literature review, politicians privately benefitting from the informal status of the sector and the prioritization of large

¹⁷ A multi-stakeholder that was organized between 1-3 March 2017 in Abidjan “to discuss issues and opportunities relating to ASM in West Africa, learn from experiences elsewhere and share best practices”. The workshop was organized by PRADD, the *Deutsche Gesellschaft für Internationale Zusammenarbeit* (GIZ), the UK Embassy, the OECD and the MIM (Source: <https://www.asmwestafrica.org/>)

scale mining operations by a national government are determining factors of a lack of political drive to formalize the ASM sector in sub-Saharan Africa.

5.2.1 *The Private control of Resources*

As described in the previous chapter, the artisanal and small-scale gold mining sector did experience a strong growth during the political turmoil in the country from 1999-2011. During nine years the country was separated into a northern a southern part, with the north effectively being controlled by the *Force Nouvelle (FN)*, a rebel movement headed by Guillaume Soro, the current President of the National Assembly. During this period the north was divided into multiple sub-zones headed by a commander or *com'zones* which was responsible for the security of that region and the collection of revenues. After the end of the political turmoil, the *com'zones* were removed and integrated into the army (Bavier, 2015). However, numerous reports by the GoECDI (2014-2016) indicate that some former *com'zones* took advantage of their position and still profit from “their warlord-style predatory economic activities, including the control of gold and diamond mines, smuggling cocoa, cotton and cashews, and levying illegal taxes on trade and transport (Bavier, 2015)”. One of these persons is Issiaka Ouattara or Wattao, who in January 2017 was promoted to Commander in Chief of the Republican Guard of Côte d'Ivoire. According to the reports, Wattao, together with three other political figures involved in the current Ivoirian Administration and the past Administration of Burkina Faso, controlled the artisanal gold mine of Gamina. The annual production of the illegal mine, where 15,800 diggers were active, would account for 13.8 percent of the annual official gold production of Côte d'Ivoire. While the mine of Gamina has been closed down, numerous other mines that are currently still active have been linked to his private control (GoECDI, 2016), like the mine 'Doka' in the region of Hire.¹⁸ According to the GoECDI, the incomes generated through the private control of illegal gold mines by Wattao enable him to maintain 500 armed elements, which mostly serve under the military as non-registered and pledge allegiance to him personally. The military strength of these private security forces allows Wattao “to secure undisputed control over illegal gold and diamond operations, [...] thus jeopardizing the implementation of long-due formalization efforts and reforms of the Ivorian artisanal gold-mining sector and also depriving Côte d'Ivoire of a significant source of revenue (GoECDI, 2015)”. “People with power and in power are benefiting from a status quo, which is an artisanal gold-mining supply chain that is 95-100% illicit. You're talking about large quantities of gold being produced, potentially rivalling that of large-scale actors (EPRM, 2016). The fact that currently still former *com'zones* privately profit

¹⁸ Own observations and interviews in Hire

from the control they built up during the political turmoil in Côte d'Ivoire, supports the argument made by Chabal and Daloz (1999). According to 'the instrumentalization of disorder' high ranking politicians in Côte d'Ivoire lack the political drive to formalize the ASM sector, because they exercise their power on the base of the income they earn from the informal ASM production. A successful formalization of the sector would present a direct threat to these revenue streams. The findings of the GoECDI present direct evidence of government officials illegally benefitting from the illicit production and trade of gold in the country. While these findings have been presented to the UN Security Council in 2016, the recent promotion of Wattao early 2017 presents an image of a government that is unable to counter the power of those benefitting from the informal status of the gold sector. This presents a serious challenge of any formalization effort of the ASM sector made in the country.

5.2.2 Large-scale mining prioritization

But if there is a lack of political drive in the country to formalize the sector, why then has the PNRO been formulated? As explained in the previous chapter, the governments primary concern appears to be to decrease the negative impacts of the sector. However, this must be seen in the light of the adoption of the Mining Code of 2014. The new Mining Code was "aimed at enhancing mining investment in Côte d'Ivoire, particularly in the gold sector, and strengthening its contribution to local development (Dorin, 2015)." The new legislation included a removal of the additional profit tax and an extension of exploration permits from three to four years. The Mining Code particularly emphasizes local community development and environmental protection. While this approach has been successful in the attraction of new foreign mining companies, this has also resulted in the occupation of significant parts of land for the exploration and exploitation purposes of these mining companies. Exploitation and exploration permits in 2015 together count for 19,1 percent of the total surface of Côte d'Ivoire in 2015¹⁹, compare to Ghana which has a long mining history, where about 25 percent of the country has been reserved for mining purposes (Hilson, 2017). In 2015, eight mining companies were operating and 163 prospect licences were handed out in Côte d'Ivoire, with permits reaching 400 km² (EITI, 2015), compare to Tanzania where companies are granted areas as large as 150 km² (Hilson, 2017). While in neighbouring countries like Burkina Faso overlap of land title is allowed between LSM and ASM operators, ASM operators in Côte d'Ivoire are according to law n°2014-138 obliged to undertake their activity in the "*ASM corridors*". However, the areas that the government has identified for artisanal and small-scale gold

¹⁹ Own calculations, based on data from EITI (2015)

mining are not geologically viable (EPRM, 2016). Because more and more parcels are being sold to large scale mining companies, very little space is left for ASM miners to operate, putting the sector in a disadvantage to large scale mining companies. This increases the likelihood of ASM-LSM conflicts, because the only choice ASM operators have is to mine on the exploration and exploitation ground of large scale mining companies. The prioritization of the large scale mining sector present another example of why the government would lack the political drive to formalize the ASM sector.

5.2.3 External pressure

Direct evidence of the government lacking the political drive to formalize the ASM sector is illustrated by the experiences around the organization of the ASM West Africa Workshop. In a response to the current state of ASM sector in Côte d'Ivoire, the workshop was organized. While the workshop was publicly presented as a regional focus, different informants explained that the workshop was explicitly organized to put pressure on the government to adopt a more effective formal regulatory ASM policy framework. The conference was used as a tool for non-specialist stakeholders to set the record straight on how ineffective the current approach of the government is regarding the ASM sector and as a platform of common vision for technical experts like the World Bank and the OECD. According to one informant, the MIM was very unwilling to organize the workshop and tried last-minute to change the date of the workshop in order to prevent the workshop from happening. Due to pressure of different mining companies on the MIM, the government was finally pushed to organize the workshop.²⁰ While in public the MIM presented the organization of the conference as a regional effort to improve the governance of the ASM sector, these experiences indicate that in fact the government needed to be pushed to discuss ASM best practices and learn from the multi-stakeholder's expertise in the field. These findings support the idea of an absence of political drive by the government to formalize the sector.

In summary, two factors are identified that can explain the lack of political drive to formalize the ASM sector. The private control of informal ASM mines by high ranking politicians can explain why these actors would not want to formalize the sector and therefore presents a serious challenge in any successful formalization attempt in the country. Also the prioritization of large scale mining in the policy framework explains why there is little political drive to formalize the sector. The absence of political drive is illustrated by the MIM not wanting to organize the ASM West Africa

²⁰ Interview with a consultant (21/02/17)

Workshop. Interestingly enough, it was the private sector that had to convince the government of the importance of such workshop, while the prioritization of large scale mining in the country is one of the factors that can explain why the ASM sector is in its current state.

5.3 Capacity

Finally, a factor that does appear to influence the effectiveness of the formal regulatory framework, but is not taken into account by De Soto's argument is the question whether the government was actually able to enforce the adopted legislation. As Van Bockstael (2014) explains, this is rarely considered to be a relevant factor determining the level of informality of ASM operations. However, different indications support this understanding for Côte d'Ivoire. According to the *Directeur Général* of the MIM, one of the most important challenges during the implementation of the PNRO was the translation of policy from the national to the local level. "One of the most severe challenges we face is the transmission of technical expertise from the national level to the local level. Informing everybody on all levels of implementation remains challenging".²¹ According to one local *Préfet* from Tengrela in the northernmost region of Côte d'Ivoire, there is a need for better coordination, especially in terms of a regional approach. "Illegal miners simply disappear across the border, only to come back shortly afterwards (ASM West Africa Report, 2017)." A local employee of a mining company in Hire explains that as part of the PNRO a technical committee has been installed in the village, but nobody knows why it is there nor what it is doing. He also explains that within the MIM, people at lower ranks do not dare to speak up, afraid of being transferred to remote regions in the country or losing their job.²² This creates a hyper positive image of the implementation process of the PNRO. Consequently, the fear from local civil servants to criticize the effectiveness and implementation of the policy framework prevents the MIM from learning from their mistakes. In a response to the question why the government has not licensed artisanal gold miners and why gold buying houses have not exported a single ounce, the MIM only stated that "the government was presently undertaking the necessary actions, and would require sufficient time to implement these (ASM West Africa Report, 2017)". While the PNRO consisted of five different phases to be implemented over the period 2013-2016, the government has only been able to reach the third phase. These experiences present an image of a Ministry that did not possess the right capacity to implement the adopted formalization strategy. Especially the schism between the national and local level appears to play an important role in where things go wrong.

²¹ Interview *Directeur Général* Coulibaly – MIM (24/03/17)

²² Interview with mining company employee (22/03/2017)

Ineffective communication in both directions prevents the MIM from implementing an effective formalization strategy for ASM. According to one expert, part of the problem is how the MIM is organized. “You cannot expect a geologist at the MIM to have a sensitive eye for the wider socio-economic development issues and extra social costs in the context of ASM. From his point of view, a ban on ASM might make sense, while the broader costs of social rural development are of course much higher”²³. Therefore, it is likely that a reorganisation of the MIM, where the governance of the ASM sector is part of the Ministry that is responsible for rural development, will result in the formulation of a formal regulatory framework that is more effective.

5.4 Conclusion

In a response to the question why the government of Côte d’Ivoire adopted a policy framework that was ineffective in regulating the ASM sector, different factors have been identified. The absence of political drive can be explained by two factors. Firstly, evidence of high ranking politicians currently active in the government and still benefitting from the informal gold production and trade presents a direct challenge towards any formalization attempt. This factor is reinforced by the prioritization of large scale mining in Côte d’Ivoire. The ambition to attract more foreign mining companies by the government, has resulted in the marginalization of ASM in the formal regulatory framework. This leaves very little space for ASM miners, forcing them to operate on the exploration and exploitation ground of large scale mining companies, thereby increasing the likelihood of LSM-ASM conflicts. The current situation in Côte d’Ivoire, is that of a government facing the consequences of a neglected ASM sector in the formal regulatory framework. Given that this situation is untenable, external pressure by both the private sector as well as international stakeholders is rising. The question is however, if the government is able to respond to these demands. Different indications support the idea that next to a lack of political drive a lack of capacity is also an important factor of why the current approach has been so ineffective. However, if this is the case, it is crucial that the government of Côte d’Ivoire opens its doors to learn from external technical expertise.

²³ Interview with ASM expert Côte d’Ivoire (09/02/17)



Chapter 6

Conclusions, discussion and recommendations



Chapter 6 - Conclusions, discussion and recommendations

6.1 Introduction

The purpose of this thesis was to broaden understanding of the ASM formalisation experience in Côte d'Ivoire with special emphasis on how the formal regulatory framework for ASM, the PNRO, is connected to the informal status of the sector in the country. This has been done by answering the main research question “What approach has been taken to formalise ASM in Côte d'Ivoire, and why is this approach (in)effective?”. In order to answer the main research question, a theoretical framework has been constructed, build on the ideas of the *Legalist* school of thought, to explain how the formal regulatory framework for ASM is connected to the informal status of the sector in sub-Saharan Africa. Most important concepts in the analysis were the narrow understanding of formalisation, the role of bureaucracy and costs, political drive and the capacity of the government.

6.2 Summary of Findings

The research has presented different findings. Firstly, due to a long period of political instability and a high international gold price, the artisanal and small-scale gold mining sector has experienced a strong growth over the 1999-2011 period in Côte d'Ivoire. In a response to the strong growth and the negative social and environmental impacts of the sector the government of Côte d'Ivoire presented the PNRO in 2013 for the effective regulation of the sector. While the program was aimed to end in 2016, the implementation of the process is still ongoing. The direct results of the program and experiences of different stakeholder in the field present an image of a formal regulatory framework that was ineffective: no (or very limited) authorisations have been handed out, no geologically viable ASM corridors have been identified and the negative impacts of the ASM sector, including LSM-ASM conflicts, have not decreased.

Different factors have been identified that can explain why the current formalization strategy of the government of Côte d'Ivoire is ineffective. Firstly, the adopted formalization strategy is too narrow in its focus. The *ad-hoc* implementation makes it more difficult for ASM operators, that already face hard working conditions, to join the formal economy. Also, the one-sided focus on the legal side of formalization, does not enable people to become legally active. ASM operators indicate that they need more assistance in order to join the formal economy, like an explanation of which steps they need to take to become legally active. Finally, a limited understanding of the sector's different dimensions has resulted in a formal regulatory framework that does not address

the livelihood needs of ASM operators. The absence of zones reserved for the purpose of ASM leaves miners no other choice than to continue to operate in the informal sector. These factors are characteristics of a narrow understanding of formalization by the government of Côte d'Ivoire. Secondly, while very limited information is available on the different bureaucratic steps and costs that an ASM operator faces in order to obtain an authorisation, the absence of this data indicates that the process is cumbersome. Also the fact that no or very limited legal artisanal and small-scale gold mining takes place in Côte d'Ivoire supports this understanding. This is a second factor that can explain why the current approach of the government is ineffective. In an answer to the question, why the government of Côte d'Ivoire has been unable to implement an effective ASM formalization strategy, two factors are identified. Firstly, there is a lack of political drive in the country to formalize the sector. This can be explained by direct evidence of high ranking politicians privately benefitting from the informal status of the ASM sector and the prioritization of large scale mining in the country. These factors present a serious challenge in the success of the implementation of any formalization strategy in the country. Finally, different indications support the idea that a limited capacity of the government of Côte d'Ivoire to implement the adopted agenda have prevented the MIM from successfully implementing an effective formal regulatory framework. Especially the schism between the national and local level in presence of the right information and expertise appears to be a problem.

6.3 Conclusion

Answering the main research question of this thesis, a formalization approach in Côte d'Ivoire has been taken that was too narrow in its focussed and primarily concerned with mapping and controlling an illegal activity, rather than that it contributed to an effective formalization of the sector. This narrow focus, together with the bureaucratic procedures and costs to obtain an authorisation, the private control of informal gold mines by high ranking politicians, the prioritization of large scale mining and a lack of capacity by the government, have contributed to the design and implementation of an ineffective formal regulatory framework for the artisanal and small-scale gold mining sector in the country. A consequence of this, is that with the current approach the sector is deemed to stay informal and increases the likelihood of ASM-LSM conflicts. This scenario is unwanted, because it leaves the ones that most need an effective regulatory framework left in informality, it increases problems with insecurity for mining companies and creates a huge losses of tax revenues for the government. The sole actors that profit from an informal ASM sector are the ones that benefit from the illicit trade of gold.

6.4 Discussion

So, what can be learned from these findings? On a theoretical level, a revisiting of the ideas of the *Legalist* school of thought and specifically the ideas of Hernando De Soto has provided different insights. While a formalization strategy that is based on a *Legalist* understanding and fits the narrow understanding, will likely to be ineffective, the ideas of Hernando De Soto prove to be insightful in explaining how a formal regulatory framework is connected to the informal economy. These findings are not only important on a theoretical level, but can also help policy makers to formulate a more effective formalization strategy for ASM in sub-Saharan Africa. This means that the bureaucratic procedures and costs to obtain an authorisation must gain specific attention in the design of an ASM formalization strategy. Also the political drive to formalize the sector must be identified in order to understand how likely a successful formalization will be. In case of a lack of political drive, political pressure by different stakeholders in the field might prove to be effective to create the necessary policy overhaul. A second finding, that reinforces the point made by Van Bockstael (2014), is the importance of the capacity of a government as a determining factor for the successful formalization of the ASM sector in sub-Saharan Africa. This suggests that this factor deserves more attention within the academic debate.

On a practical level, the findings support the idea of the importance of a thorough understanding of the sector specific dimensions of ASM in the design and implementation of an effective formalization strategy. Given that very limited information about the sector is available in the country, much terrain can be won here. Examples are a national census on the size and revenue streams of the sector and a better consultation of ASM communities in the design of the policy framework. In terms of capacity, the government should improve the quality of communication and consultation between the national and local level to improve the effectiveness of the implementation of the policy framework. Rather than starting from the top, the formalization approach should start from the bottom.

So what lays ahead? One of the key messages of the ASM West Africa Workshop was that the “international standards and regulation are fast evolving and the principles of risk management, traceability and due diligence, as codified by the OECD Due Diligence Guidance and upcoming EU Supply Chain Due Diligence Regulation, are quickly becoming the norm globally” (ASM West Africa Report). Consequently, in order to prevent being shut out of international supply chains, countries in West Africa need to meet international due diligence standards. A successful formalisation of the ASM sector in each country in the region is a crucial aspect of meeting these

standards. These developments increase the external pressure on the government of Côte d'Ivoire to adopt an effective formal regulatory ASM framework. The increased external pressure by stakeholders along the supply chain to push the government of Côte d'Ivoire to adopt a more effective ASM formalization strategy, might create the momentum that is according to De Soto deemed necessary for a successful policy overhaul. However, as one informant explained:

...A policy framework that was designed due to external pressure has a higher risk of not being fully reinforced at all levels of the implementation. The implementation is less likely to trickle down into the local levels of the country, because this external pressure is only reaching the top.²⁴

In the end, a successful formalization very much depends on how the national formal regulatory framework is translated to the local level. It is therefore really the understanding of the Government of Côte d'Ivoire towards the need for formalization that should determine the political drive to formalize the ASM sector; external pressure is only a means to achieve this.

²⁴ Interview with GIZ employee (02/02/2017)



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Annexes



ANNEX I – Fieldtrip locations



Base 802224AI (C00674) 6-04

ANNEX II – Interview outline with local government official



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Date : Bouaflé, 10/03/17

Entretien avec le Secrétaire général du département de Bouaflé

Situation actuelle

1. Quelle est l'importance de l'activité de l'orpaillage dans votre région ?
2. Si vous deviez décrire les problèmes les plus importants du secteur dans votre région, quels seraient-ils ?
3. Quel est l'effet positif de l'orpaillage dans votre région ?
4. Depuis combien de temps l'orpaillage est-il actif dans votre région ?
5. Avez-vous connu des changements dans votre région depuis le début de l'activité de l'orpaillage ? (Population, Activité commerciale, Criminalité, Prix, etc.)
6. Dans l'affirmative, que qualifieriez-vous de changement positif et de changement négatif ?
7. Quelles sont les principales raisons pour lesquelles les gens travaillent dans le secteur de l'orpaillage ?

Autorités local vs orpaillage

8. Comment décririez-vous la relation entre la préfecture et l'orpaillage dans votre région ?
9. Décririez-vous cela comme une bonne ou comme une mauvaise relation ? Et pourquoi ?
10. Est-ce une relation différente que dans d'autres parties du pays ?
11. Quels sont les conflits entre les autorités local et l'orpailleurs le plus souvent ?
12. Comment l'activité de l'orpaillage est-elle tolérée dans votre région ?

La politique de rationalisation de l'orpaillage (PNRO)

13. Comment la politique de PNRO a-t-elle eu un impact sur votre région ?
14. Quel est l'état actuel de cette politique dans votre région ?
15. Quels ont été les résultats jusqu'ici de la politique adoptée dans votre région ?
16. La politique a-t-elle contribué à une meilleure réglementation du secteur ?
17. Quel est selon vous les points positifs de l'actuelle réglementation du secteur de l'orpaillage ?
18. Quel est selon vous les points négatif de l'actuelle réglementation du secteur de l'orpaillage ?
19. Quel type de suggestion pourriez-vous faire pour une meilleure réglementation du secteur de l'orpaillage ?
20. Êtes-vous membre du *Comité Technique Local* ?
21. Pouvez-vous m'expliquer les activités *Comité Technique Local* ?
22. Quelle est l'étape la plus difficile dans une meilleure organisation du secteur ?
23. Si vous deviez identifier les défis dans le processus de formalisation de l'orpaillage en Côte d'Ivoire, que pourriez-vous identifier ?

Informations complémentaires

24. Recommanderiez-vous d'autres personnes / contacts avec qui je devrais parler ?
25. Recommanderiez-vous d'autres documents que je devrais lire ?

26. Avez-vous d'autres questions concernant l'étude ou souhaitez-vous faire d'autres commentaires ?

Merci beaucoup pour votre temps

ANNEX III – Research outline field trip Angovia and Hire

Les objectifs

1. Comprendre les incitations des orpailleurs à travailler dans l'exploitation minière artisanale
2. Découvrir ce qui a été le résultat de la politique de rationalisation de l'orpaillage dans la région d'Angovia/Hire
3. Comprendre la relation entre les orpailleurs et les
 - a. Entreprises minières
 - b. Autorités locales
 - c. Communautés locales
4. Obtenir un aperçu de l'impact de l'activité de l'orpaillage sur la région
 - a. Social
 - b. Économique

Les cibles potentielles	L'objectif
Secteur de l'orpaillage <ul style="list-style-type: none"> - L'orpailleur <ul style="list-style-type: none"> o Creuseurs o Concasseurs o Laveurs, etc. - Propriétaires du terrain - Chef des mines - Les financiers des mines - Acheteurs d'or/comptoirs 	L'objectif à atteindre lorsqu'on visite une mine se situe à trois niveaux : <ol style="list-style-type: none"> 1. Pour mieux comprendre les incitations des orpailleurs à travailler dans les mines 2. Pour connaître les problèmes auxquels les orpailleurs sont actuellement confrontés 3. Pour savoir le taux de connaissance des orpailleurs concernant le programme national pour la rationalisation de l'orpaillage (PNRO) Ces informations peuvent contribuer à une meilleure organisation du secteur à l'avenir et à l'adoption d'une meilleure stratégie de sensibilisation des organisations de la société civile de la région.
Autorité locale	L'objectif d'un entretien avec les autorités locales de Hire/Angovia est d'entendre leur point de vue sur l'état actuel du PNRO dans la région. Cette connaissance peut beaucoup attribuer à une meilleure compréhension de la façon dont le secteur de l'orpaillage peut être mieux organisé. Il est également important de déterminer s'il existe des différences d'idées entre les autorités locales au niveau régional et au niveau local sur le PNRO. Il est essentiel d'entendre les perspectives et les expériences des autorités locales pour améliorer les structures de gouvernance actuelle. Une réunion peut donc être très précieuse.
Population locale	Entendre les perspectives de la population locale sur l'orpaillage, peut contribuer à une meilleure compréhension de l'impact de

	l'activité sur la région. Obtenir un aperçu de l'impact de l'activité sur la région peut aider à comprendre la nécessité d'une meilleure réglementation du secteur.
Représentants des entreprises minières	L'objectif d'un entretien avec les entreprises minières est de comprendre leur relation avec les orpailleurs. Il est important de savoir quels problèmes existent actuellement entre les sociétés minières et les orpailleurs et d'écouter les perspectives des sociétés minières sur ce qui pourrait permettre de surmonter ces problèmes. Aussi, sommes-nous attirés par la vision des sociétés minières sur le potentiel d'une future collaboration entre orpailleur et les sociétés minières.

La période de la visite (7-10 jours, par exemple 7 – 15 Mars)

07/03/2017, mardi	Départ pour Angovia
08/03/2017, mercredi	Entretiens avec les autorités locales
09/03/2017, jeudi	Entretiens avec des sociétés minières
10/03/2017, vendredi	Visite de la mine
11/03/2017, samedi	Visite de la mine
12/03/2017, dimanche	Départ pour Hiré
13/03/2017, lundi	Visite de la mine
14/03/2017, mardi	Entretiens avec des sociétés minières/autorités locales
15/03/2017, mercredi	Départ pour Abidjan

ANNEX IV – Letter to the Minister of Industries and Mines

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Dr. Jean-Claude BROU
Ministre de l'Industrie et des Mines
République de Côte d'Ivoire

Abidjan, vendredi le 17 Mars 2017

Objet : Recherche sur l'orpaillage à Cote d'Ivoire

Monsieur le Ministre,

Dans le cadre de mon Master Etudes Africaines à l'Université de Leyde aux Pays-Bas, je fais trois mois de recherches en Côte d'Ivoire. Mes recherches portent sur les défis du processus de formalisation de l'exploitation aurifère artisanale à petite échelle en Côte d'Ivoire et portent une attention particulière sur le PNRO 2014-2016.

Lors de la conférence 'ASM West Africa', qui a été organisée par votre ministère, l'importance de l'interaction entre les sociétés minières et l'artisanat minier a été soulignée comme une étape cruciale dans la formalisation. Par conséquent, je suis très intéressé à entrer en contact avec différentes grandes sociétés minières en Côte d'Ivoire qui ont des activités des artisans miniers sur leurs sites. Je vous écris cette lettre pour demander votre aide pour organiser ce contact et obtenir une autorisation officielle pour une visite. Si possible j'aimerais discuter avec votre ministère la semaine prochaine, parce que mon temps est limité. A ce moment, je pourrais vous donner un aperçu des résultats obtenus à mi-parcours dans ma recherche en Côte d'Ivoire. Je suis joignable en tout moment au numéro 88892670.

En espérant une suite favorable à ma demande, je vous prie d'agréer Monsieur le Ministre l'expression de ma très haute considération.

Titus Sauerwein



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