FISEVIER

Contents lists available at ScienceDirect

The Extractive Industries and Society

journal homepage: www.elsevier.com/locate/exis



Original article

Artisanal and small-scale mining in Nigeria: Experiences from Niger, Nasarawa and Plateau states



Ikenna Theodore Oramah*, Jeremy P. Richards, Robert Summers, Theresa Garvin, Tara McGee

Department of Earth & Atmospheric Sciences, University of Alberta, Edmonton, AB, T6G 2E3, Canada

ARTICLE INFO

Article history: Received 24 March 2014 Received in revised form 27 August 2015 Available online 11 September 2015

Keywords: Artisanal and small-scale mining Community-inclusive ASM ASM drivers ASM concerns Nigeria

ABSTRACT

There is broad consensus that donors and policymakers have struggled to formalize artisanal and small-scale mining (ASM) – low-tech mineral processing and extraction – because of a poor understanding of the sector's dynamics. As a result, ASM is largely – and at times, unfairly – associated with illegality, smuggling, and a loss of royalty fees and title fees. Experiences from four communities in north-central Nigeria reveal that, despite these views, ASM has evolved into a viable activity that can potentially support rural developmental objectives such as employment, reduction of poverty and hunger, as well as profits for government. Our findings suggest that there is a higher potential for success in the sector in Nigeria and Sub-Saharan Africa more generally if ASM is practiced in a community-inclusive way.

© 2015 Elsevier Ltd. All rights reserved.

1. Introduction

This article contributes to the body of literature on artisanal and small-scale mining (ASM) – low-tech mineral processing and extraction – in sub-Saharan Africa by offering critical reflections on experiences from four communities in north-central Nigeria. Lessons from Nigeria could provide important insights on how to address the sector's many problems. Here, we profile four communities that feature unique ASM practices, in the process identifying the methods that have the best potential to support Nigeria's rural community developmental objectives, such as employment, and reduction of poverty and hunger. We investigate the drivers that have pushed rural dwellers in north-central Nigeria to abandon farming for ASM, and the perceived viability of, and concerns relating to, the sector in this region.

2. Profile of artisanal and small-scale mining (ASM) in Nigeria

Historical and archeological records show that solid mineral extraction has occurred in Nigeria for over 2400 years (Jemkur et al., 2006). Ancient Nigerian communities, such as the Nok, Kano, Benin, Ife, and Oyo, are reported to have exploited minerals, including iron, clay, and gold for metal sculpting since about 400 BC (MMSD, 2008). British colonialism in the early 19th century fueled an upsurge in both small-scale and large-scale mining

operations. From this point, industrial and fuel minerals began to be exported in large quantities. During this time, Nigeria would become the largest columbite exporter (accounting for about 95% of the world's total supply) and the sixth-largest tin producer in the world (Michelou, 2006; MMSD, 2008). However, a combination of the county's oil and gas discovery (in 1956), a decline in global metal prices, the depletion of alluvial reserves, the Nigerian civil war (1966–1970), implementation of the Indigenization Act, and ineffective state control triggered the collapse of the country's mining sector. Today, large-scale mining is mainly limited to iron ore and coal mining, but these mines are not operating at full capacity and generate relatively little revenue. This has created opportunities for ASM (Lawal, 2002; Okeniyi, 2013).

In fact, the poor performance of the large-scale mining sector in Nigeria has left most of the industry in the hands of ASM operators, who conduct over 95% of mining (Lawal, 2002; MMSD, 2008 MMSD, 2008). Although there are no official statistics for the actual number of people engaged in ASM in Nigeria, the sector is estimated to directly employ over 500,000 people and indirectly provide a livelihood² to over 1.2 million people (Hayes, 2008; Okeniyi, 2013). What makes estimation of the number of ASM sites/operations in Nigeria so difficult is that most are unlicensed

^{*} Corresponding author. Tel.: +1 7807084199.

¹ The Indigenization Act was a law enacted to empower Nigerians to take over control of the economy from foreigners.

² In this article, livelihoods are any activities undertaken to generate income for

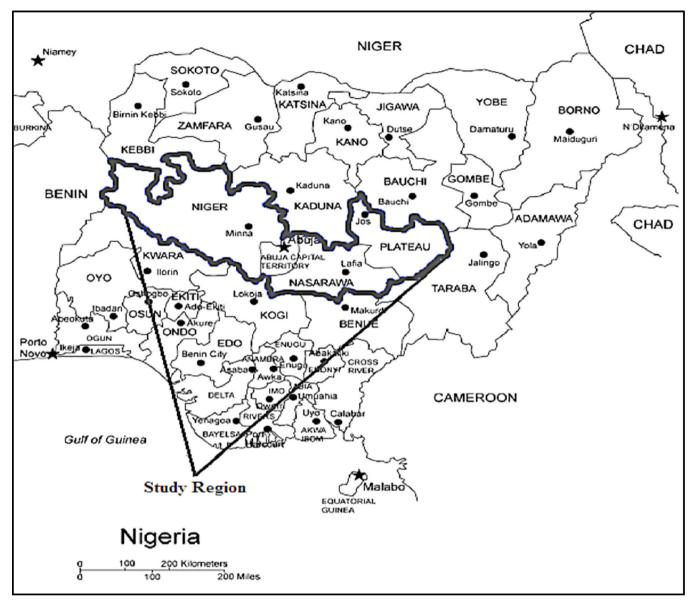


Fig. 1. Map of Nigeria showing the study area. Map modified from World of MapsTM ([®]Bruce Jones Design 2010, with permission).

and occur irregularly, and are shaped by seasonality, the migration of artisans in search of alternative livelihoods, changes in the market prices of minerals, and the exhaustion of deposits (MMSD, 2008). In Nigeria, ASM practices are not standardized because of pronounced variations in technical knowledge and skills, cultural and geographic affiliations; the types of minerals mined; social and environmental factors; the level of formalization; and access to markets (MMSD, 2008). Overall, however, ASM in Nigeria is largely characterized by low productivity, a lack of capital, poor technology, hazardous working conditions, land degradation and pollution (Africa Research Bulletin, 2011).

As in other countries in sub-Saharan Africa, such as Ghana, Mali and Tanzania, the legal ASM sector in Nigeria is recognized and encouraged by the government. According to Nigeria's Minerals and Mining Act of 2007, ASM operators can hold a small-scale mining lease and operate under such a lease if they are Nigerian citizens with no criminal record, or if they are Nigerian mining cooperatives or quarry associations. Through the Mining Cadastral Office (MCO), the Ministry of Mines and Steel Development (MMSD) awards small-scale mining leases to individuals to work a

designated area. The Act also states that "the area covered by [a] small-scale mining [ASM] lease shall not be less than 5 acres and shall not exceed 3 square kilometers" (Nigerian Minerals and Mining Act, 2007; p. 34). Mining leases in Nigeria are usually valid for 25 years and renewable for a maximum of 20 years. The holder of a small-scale mining lease pays an annual surface rent that is subject to the approval of the Minister³ in charge of the MMSD. The 2007 Act also notes that artisans without valid mining titles will be treated as illegal miners, but those lacking the capacity to acquire a lease will be formalized into mining cooperatives or quarry associations by the MMSD (Uka, 2011). Although reports indicate that about 845 ASM cooperatives have so far been registered (Ugwu, 2013), the broader issue is that most of these artisanal miners do not possess the ability to navigate the bureaucracies that must be tackled in order to acquire a small-scale mining lease.

 $^{^{\}rm 3}$ A politician appointed by the federal government to make and implement policy decisions.

Download English Version:

https://daneshyari.com/en/article/1047547

Download Persian Version:

https://daneshyari.com/article/1047547

<u>Daneshyari.com</u>