Contents lists available at ScienceDirect

Land Use Policy

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

'Designated areas' and the regulation of artisanal and small-scale mining

Tony Corbett^a, Ciaran O'Faircheallaigh^{a,*}, Anthony Regan^b

^a Griffith University. Australia

^b Australian National University, Australia

ARTICLE INFO

Keywords: Artisanal and small scale mining Regulation of ASM Designated areas for ASM Land allocation policy Bougainville, Papua New Guinea

ABSTRACT

Artisanal and small-scale mining (ASM) is an important and growing economic activity throughout the Global South. ASM can provide livelihoods where few alternative economic opportunities exist, but it can also cause significant social and environmental problems, creating a need for effective regulation. State authorities have, however, struggled to control an activity that is dynamic, has few barriers to entry, and often occurs in remote areas far from national capitals. One potential regulatory tool involves allocating land to establish 'designated areas' for ASM in order to contain operations within discrete zones, facilitating government control, managing relations between ASM and Large Scale Mining (LSM), and mitigating its negative effects. This article explains the rationale for use of designated areas, identifies key policy issues and choices involved in creating them, and provides examples of legislation providing for their establishment. It documents the fact that such provisions are in reality rarely implemented and that, where they are, they generally fail to meet demand for ASM land and are not effectively managed. It identifies a number of proximate causes for these failures, including competition for land, overlapping and ambiguous jurisdiction between different levels of government, resource constraints facing regulators and political ambivalence towards ASM at the national level. It argues that these causes can only be addressed by realigning the governance of land so as to give local and customary authorities a much greater role in land allocation and management, and if national governments overcome their ambivalence towards ASM and accept it as a vital source of economic activity that requires effective regulation.

1. Introduction

Artisanal and small-scale mining (ASM) is widespread and expanding in much of the Global South. It is estimated that 20-30 million people are mining in over 80 countries, with a further 75-125 million people indirectly dependent on ASM for their livelihoods (Buxton 2013; Verbrugge 2014). Artisanal and small-scale mining of gold, the dominant mineral extracted, represents an estimated 10-15 per cent of annual global gold production. ASM has considerable potential to generate economic and social benefits. The scale of the workforce involved and the low barriers to entry means that it can add enormously to income earning opportunities, and in many cases do so where alternative sources of livelihood are scarce. Employment is created not only in mining, but also in numerous service roles, and income generated by mining tends to be spent in the local economy (O'Faircheallaigh and Corbett, 2016: 1).

While individual ASM operations are often on a small scale, large numbers of operations tends to create major environmental and social impacts. Land degradation and contamination of waterways are common, and mercury toxicity derived from ASM gold processing has been extensively documented (Diringer et al., 2015; Tarras-Wahlberg et al., 2000; UNEP, 2013). Social impacts associated with ASM include exploitation of child labour, neglect of traditional livelihoods such as agriculture, and the influx of outsiders which can lead to health impacts from poor sanitation, increased substance abuse, and growth in sex work (Buxton, 2013).

This situation clearly calls for a robust and consistent regulatory response by governments of states and regions with large ASM sectors. designed to maximise the potential benefits of ASM and address environmental and social problems. Many governments have attempted to use control of access to land as a key component of their regulatory response, and in doing so have adopted two broad approaches. The first focuses on the grant of mining licences over specific areas of land to individual miners or cooperatives. This approach has been the subject of substantial research as part of what is now an extensive literature on attempts to formalise ASM, and much of this work highlights its limited efficacy, for example because miners cannot meet the costs of licencing (Siegel and Veiga, 2009), or avoid engaging with government because of the historically illegal status of ASM (Asner et al., 2013; Webster 2012). In addition government officials with very limited resources

* Corresponding author. E-mail addresses: t.corbett@griffith.edu.au (T. Corbett), ciaran.ofaircheallaigh@griffith.edu.au (C. O'Faircheallaigh), Anthony.regan@anu.edu.au (A. Regan).

http://dx.doi.org/10.1016/j.landusepol.2017.08.004

Received 14 February 2017; Received in revised form 2 August 2017; Accepted 3 August 2017 Available online 20 August 2017

0264-8377/ © 2017 Elsevier Ltd. All rights reserved.





CrossMark

cannot enforce compliance (Carstens and Hilson, 2009: 311), particularly in situations where miners are highly mobile and operate in remote areas (Fisher, 2007: 753; Jonsson and Bryceson, 2014: 28). Another problem is that licencing systems are often designed by outside 'experts' who may have little understanding of the realities facing miners on the ground, or of the implementation and enforcement challenges confronting governments with limited resources (Adler Miserendino et al., 2013; Banchirigah, 2008; Centre for Development Studies, 2004: 19; UNEP, 2012a; Verbrugge, 2014).

The second approach involves *territorial* or *spatial* regulation and management of ASM by containing mining operations within designated areas at known locations. Designated areas are provided for in the statutes of many nations with extensive ASM, including Ghana, the Philippines, Tanzania, the Democratic Republic of the Congo, Ecuador and Mongolia. Legislation usually prescribes the selection of designated areas based upon their 'technical' suitability as determined by (proposed or existing) geological surveys conducted by the state, and/or on the basis that the land is unsuitable for large-scale mining. Legislation may also preclude land from being designated for ASM based upon its existing or potential use as, for example, protected conservation area, tourism and recreation area, watershed, agricultural, ancestral or traditional land, or large-scale mining concession.

Establishment of designated areas for ASM has received little attention in comparison to attempts to establish licencing systems. This paper focuses on the establishment and management of designated areas and on how their potential as a regulatory tool may be realised. The next section discusses the rationale for use of designated areas in regulating ASM. The following section briefly addresses some important policy issues and choices which arise in creating designated areas. We then examine relevant legislative provisions in some major ASM countries and document the general failure to implement legislation and actually establish designated areas. We seek to explain this failure, and the problems that have arisen in effectively managing the few designated areas that have been established. Relevant factors include intense competition for land, particularly from large-scale mining; ambiguous, complex, and competing jurisdictional arrangements between different levels of government; and failure by national governments to recognise the importance of institutionalising a role for local and customary authorities in regulating ASM. (In this last regard legislation recently introduced in Bougainville, Papua New Guinea, constitutes an exception. It places local level authorities at the heart of designated area creation and management, and in our view constitutes a concrete example of a more effective institutional framework). Other obstacles include capacity constraints affecting state authorities; the highly dynamic nature of ASM; and an underlying political ambivalence towards ASM on the part of national governments. In concluding, we argue that this last factor is critical. The other obstacles to effective utilisation of designated areas are unlikely to be overcome unless governments stop seeing ASM as a semi-criminal hindrance to orderly mineral development, and start to see it as a legitimate economic activity that, if properly regulated, can create important economic and social benefits.

2. The rationale for designated ASM areas

Legislation and relevant government policy documents rarely offer any coherent policy rationale for establishing designated ASM areas, but reasons for creating them can be gleaned from government sources and relevant academic literature. Designated areas can make it easier and less expensive for regulators to track and control the movements of miners by concentrating them in discrete areas as opposed to having them dispersed across what are often remote and inaccessible regions. This in turn can facilitate implementation of regulatory initiatives such as bans or restrictions on the use of mercury, and can provide scope for collecting government revenue. It can also facilitate implementation and consolidation of environmental management initiatives such as environmental impact assessments and construction of tailings dams (Business World Online, 2013; Llaguno et al., 2015; Lacorte, 2014; Verbrugge and Besmanos, 2016: 138).

Concentration of miners in designated areas can facilitate the formation of miners' collectives, which in turn can provide more effective avenues for engagement with regulators, including transmission of information on safe mining practices (see for instance Business World Online, 2013; Government of the Philippines, 2012, s.11; Hinton et al., 2003). Designated areas are also viewed as a way of managing the relationship between ASM and large-scale mining (LSM), in particular as a mechanism through which surplus or unused parts of LSM concessions or leases may be reallocated for ASM (Aubynn, 2009; Bomani, 2008; Hilson, 2016b).

There has been little systematic research into whether, or under what conditions, designated ASM areas can help achieve these policy or regulatory goals. Designated areas tend to be advocated in broad terms as having potential as a regulatory tool (Hinton, 2005: 97; Spiegel, 2016: 570). For example (Mutemeri et al., 2016: 637) argue that the dominant approach of African ASM policy, which involves 'scaling down' large-scale mining policy, has failed. They propose a shift in focus 'from individual miners to spaces where activities occur', which would be achieved through statutory provisions for establishing designated areas, and strengthening local governance structures to manage them. In regard to the Democratic Republic of the Congo, De Haan and Geenen (2016): 830 argue the '[i]f artisanal mining needs to be formalised, a very first condition is the creation of more and suitable AEZs [artisanal mining zones]', in conjunction with the creation of 'bottom-up' miners' cooperatives within them.

Other authors note that establishment of designated areas involves significant challenges, but offer little, or only very broad advice as to how these challenges might be overcome. Llaguno et al. (2016) highlight the failure to establish designated areas in the Philippines as provided for in legislation, and suggest that 'external [political] factors' may be the reason for this failure. They do not identify these factors or analyse how they might be addressed. Verbrugge and Besmanos (2016) argue that while the regulation of ASM via a designated area in the Philippines 'harbours clear opportunities... important questions and challenges remain'. These include limited government capacity and political will, dealing with a mobile workforce, distribution of benefits, and jurisdictional ambiguity and conflict over mineral rights. They suggest that improving coordination between different levels of government and 'designing formal institutional frameworks that are adapted to local (institutional) realities' would help address these challenges (Verbrugge and Besmanos, 2016: 139-140). They do not elaborate on the nature of the required frameworks or on what would be needed for their successful implementation.

Hilson et al. (2007) and Hilson and Yakovleva (2007) discuss failed, ad hoc attempts by the Ghanaian Government to reserve or 'block-out' areas for the purpose of relocating artisanal and small-scale miners from a large-scale mining concession. The areas were unsuitable, land tenure was legally ambiguous and thus insecure, and consultation and communication with the people who would have been relocated to them was flawed or non-existent. Patel et al. (2016) also mention '*unofficial* government-designated areas for SSM [small-scale mining]' (emphasis added) as one of several classifications of land in Ghana used for ASM that lack clear and secure tenure.

To provide a basis for a more systematic analysis of the potential for using designated areas as a regulatory tool, the next section considers a series of policy issues and choices raised by their use as a regulatory tool.

3. Policy issues and choices

Our purpose in this section is exploratory and conceptual, and so we seek to fully identify available policy options. While we have drawn on a review of policy and legislative practice in conducting this exercise Download English Version:

https://daneshyari.com/en/article/6460562

Download Persian Version:

https://daneshyari.com/article/6460562

Daneshyari.com