

# Mine closure, the resource curse and Marikana flu: responses to mine downscaling in Matlosana and Matjhabeng

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Historically, gold-mining has played an important role in the development of South Africa. Even though South Africa does still experience substantial new mining developments, mine downscaling in especially the gold-mining industry has been a prominent feature of South Africa's economy over the past two decades. Like mining growth, mine downscaling and its impacts on local and regional economies cannot be ignored. Two prominent regions that have been affected by mine downscaling are Matjhabeng (Free State Goldfields region) and the City of Matlosana (the Klerksdorp area). We compare the nature and the scale of mine downscaling and also the policy responses that have resulted from downscaling in these two locations. We have found that local responses generally underplay the notion of downscaling/closure in their strategic plans. Furthermore, these areas tend not to be aware of the importance of these areas to their rural hinterlands. National responses tend to ignore the economic problems associated with mine downscaling and suggest rather an increase in human settlement development. The result is an apparent mismatch between what is really required at the local level and the support actually being received from the national sphere.

## Introduction

The trajectory of South Africa's economic development is closely related to the minerals energy complex (Fine & Rustonjee, 1996), yet, by the early 1990s, the gold-mining industry was experiencing substantial decline (Binns & Nel, 2001). Crankshaw (2002) notes that this decline in South Africa can be ascribed to ever-depleting gold reserves, the need to mine deeper (which increased mining costs), a changing labour regime and the drop in the gold price in the late 1980s. Similar to mining growth, mine downscaling and its impacts on local and regional economies cannot be ignored. In fact, the World Bank (2002) suggests that the way in which mine downscaling is managed should be part of the cost-benefit assessment associated with mining development. A growing body of literature is emerging on mine downscaling in South Africa (Binns & Nel, 2002; Nel & Binns, 2002; Nel, et al., 2003; Marais, et al., 2005; Winde & Stoch, 2010; Marais, 2013a; Marais, 2013b; Marais & Cloete, 2013). The policy implications of mine downscaling are however seldom contextualised. For nearly two decades the Free State Goldfields (Marais, 2013b) and the City of Matlosana (Van Rooyen & Lenka, 2016) received very little assistance from provincial or local government. One of the first national government responses in respect of mining towns came in the aftermath of the Marikana tragedy<sup>1</sup>, when government launched a national strategy for the revitalisation of distressed mining areas (Tshanagana, 2015). The appropriateness of the said strategy for areas experiencing mine closure has however still to be determined.

Against this background, the paper aims to evaluate local attempts to deal with mine downscaling in mining regions centred on Matjhabeng and the City of Matlosana and simultaneously to investigate provincial and national responses to the two areas (see Figure 1). We essentially advance four arguments. First, the national strategy on the revitalisation of mining areas appears to be inappropriate for areas of mine downscaling in that all mining areas are grouped together under the blanket phrase "economic revitalisation". Second, despite the emerging role of regional services in both areas this dimension of the economy is commonly ignored as a strategy for mine downscaling. Third, the absence of conceptualising and planning a post-mining economy continues to constrain both areas. Local role players find it extremely difficult either to respond to mine downscaling or to articulate a planning approach that is not associated with growth. Because the latter lacks clear articulation, planning remains closely associated with growth. Fourth, though there were a number of similarities in the development of the two areas, the consequences of downscaling in the two areas have been somewhat different.

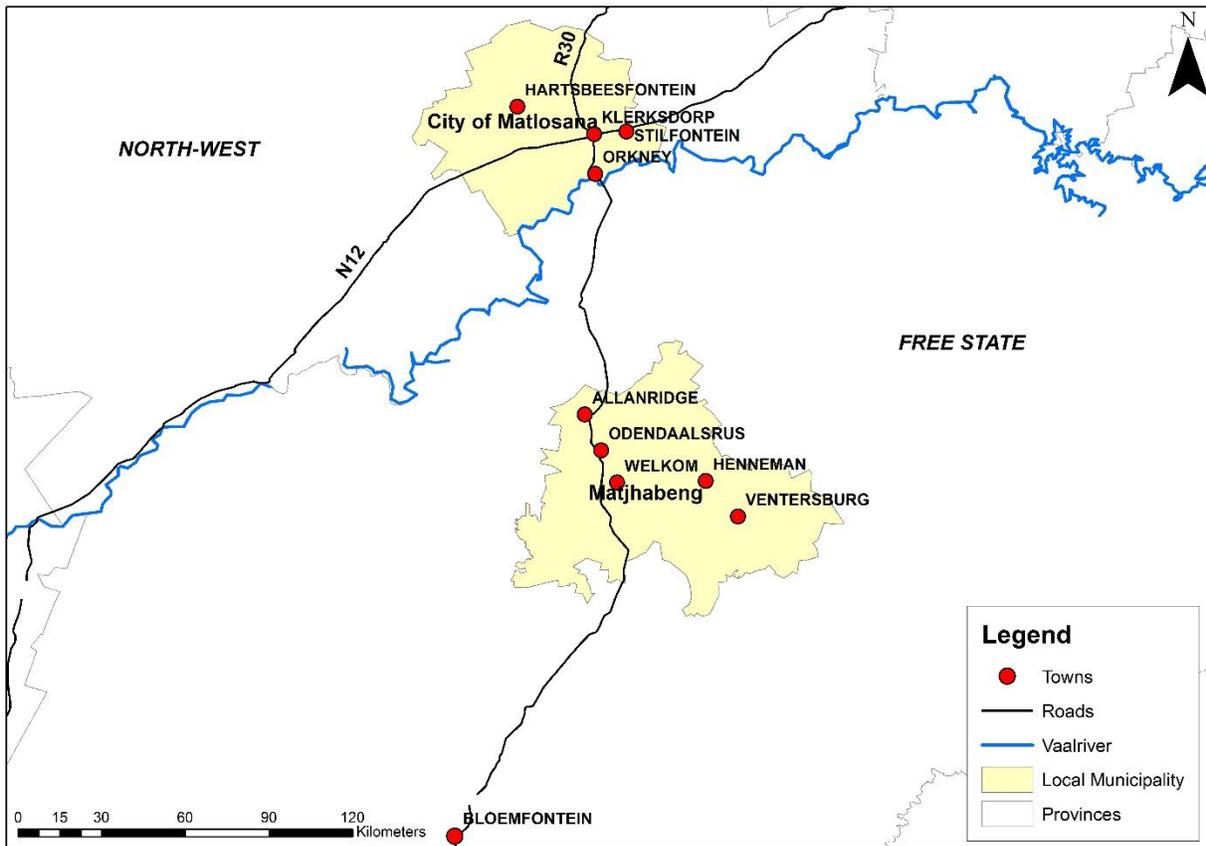
The paper unfolds in three sections. We start by reflecting on the existing literature. The paper brings together three sets of literature, namely that on the resource curse, the literature on mine downscaling and the work available on secondary cities (as our two case studies involve two secondary or intermediate cities in the South African context<sup>2</sup>). Next, we consider the aims and objectives of government's strategy as regards the revitalisation of mining areas. Following the discussion of this strategy for the revitalisation of distressed mining areas, we reflect on responses to mine downscaling and closure at the local level. Finally, we suggest a number of policy lessons. As for the methods employed, we assessed the relevant literature and the policy dynamics associated with mining towns in South Africa. We then followed a case study design.

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<sup>1</sup> 34 Mine workers died in a clash with police in the Platinum Belt near Rustenburg.

<sup>2</sup> No formal definition of secondary cities exists in South Africa. National Treasury has however made available a list of 21 secondary cities. Both Matjhabeng and Matlosana appear on this list.

**Figure 1: Location of Matjhabeng and City of Matlosana**



The case studies involved an assessment of media reflections and of local planning documents on the two areas. In the case of Matjhabeng, a long-standing research interaction has existed with the region – one stretching back to the early 2000s. The most recent interviews were conducted during April 2014, which included approximately 15 interviews with a range of individuals in the region. Though the case study on Matlosana followed the same process, it was conducted in early 2013.

### **The resource curse, mine downscaling and secondary cities: a review of the literature**

Our intention is to bring together three sets of literature, namely literature on the resource curse thesis, mine downscaling and the available literature on secondary cities. In broad terms, both the ‘resource curse’ and the ‘Dutch disease’ refer to the negative effects of mining on a country’s economy. At the country level, proponents of the resource curse thesis suggest that mining increases the levels of corruption, leads to weaker institutions (Ross, 2001), contributes to lower economic growth (Smith, 2015), results in underinvestment in human capital, lack of investment, and an increased likelihood of civil war (Miller, 2015). The Dutch disease more specifically suggests that mining development tends to inhibit economic diversification and exports other than for commodity exports because of the fact that mining exports increase exchange rates (Gylfason, 2001; Smith, 2015). Yet, the resource curse thesis is contested terrain. The role of mining in the development of many states (South Africa being one) should not be

underestimated. In this regard, while the relationship between mining, urbanisation and development has received some attention (Grill, 1984; Jike, 2004), the value of gold mining in Ghana and elsewhere in Africa has also been noted (Bloch & Owusu, 2012; Bryceson & MacKinnon, 2012). In more recent studies, Miller (2015) found that mining contributes to political trust, while Smith (2015) noted that by comparing a large number of countries, it was found that a positive relationship exists between mining and GDP growth per capita in especially non-Organisation of Economic Co-operations and Development (OECD) countries.

Although we acknowledge the value of countrywide studies on the resource curse, our interest in the relationship between mining and the economy lies at the local level. However, Obeng-Odoom (2014, p. 22) notes that "... urban level analysis in resource curse studies is underdeveloped" and that the wider urban and regional implications are often neglected in favour of a focus on the mining industry at the country level. Furthermore, the local impacts of mine closure are seldom related to the "resource curse" theme in existing literature. A 'Scopus' search for the terms *resource curse* and *mine closure* in the titles, the abstracts and the key words of papers revealed only one source that had used these terms in the same paper. We find it surprising that researchers have failed to see the link between the resource curse and mine downscaling. We find it puzzling that no link has been established between the resource curse literature and the literature on mine downscaling, especially as numerous papers are available on these two terms when one searches for them separately. We contend that the long-term negative consequences of mine closure should be part of the resource curse thesis.

Obeng-Odoom (2014) argues that the negative impacts of mining growth (the doom side of boom) at the local level have received some research attention and are commonly referred to as the 'social disruption thesis' (a phrase also used in many other contexts). The majority of work in this regard comes from as far back as the 1970s and 1980s (Wilkinson, et al., 1982), but contributions to this body of literature have continued well into the 2000s (Amundson, 2004; Lawrie, et al., 2012). More specifically, resource booms are associated with the breakdown of social systems, increased alcohol abuse (Bowes-Lyon, et al., 2009), conflict between the local people and new migrants, cultural conflicts and pressures on the settlements system to accommodate large numbers of new migrants (Wood, 1986; Smith, 2015). Mining can also contribute to the exclusion of people not dependent on mining (Steel, 2013). In many cases, local governments face the implications of mining development, but they have little control over the extraction processes in that mining is usually a national government function (Kabamba, 2012; Obeng-Odoom, 2014). Research has however also pointed out that mining plays a positive role in respect of job creation and infrastructure development in mining areas (McGuire, 2003).

A second set of literature considers the problems associated with mine closure (the doom side of the doom). Lawrence (2005) articulates this succinctly: "The excitement and fanfare that surrounds the opening of a new mine is never present when it finally closes." Furthermore, the literature on mine downscaling or closure is seldom linked to concerns associated with the resource curse. In comparison with the environmental and technical issues, the socioeconomic issues of mine closure have decidedly been under-researched. The early work dealing with the socioeconomic consequences of mine closure originated from the global north (Bradbury & St-Martin, 1983; Neil, et al., 1992). More recently, this literature has started to include case studies from, and is of relevance to the developing world (Acquah & Boateng, 2000; Jackson, 2002;

World Bank, 2002; Haney & Shkaratan, 2003; McGuire, 2003). The World Bank (2002) argues that how some of the largest mines in the developing world are being closed down will determine the overall cost-benefit associated with mining. Singh (2011, p. 259) maintains that mine closure is “destined to be the big mining issue of this millennium”. The most common local demographic implications of mine closure/downscaling reported in the international literature are ageing and depopulation (Petrov, 2010), substantial increases in artisanal and (in many cases) illegal mining (Hilson, 2010) and an overall loss of production and capital in these areas (Bradbury & St-Martin, 1983). Declining living standards among mine workers (Haney & Shkaratan, 2003) and community instability are commonly reported (Jackson, 2002). Negative health implications for mine workers and the communities that are left behind have also been noted (Holton, et al., 2002).

In addition to some of the social implications of mine closure outlined above, it is necessary that we also reflect on the economic impacts. In terms of economic development, a diverse economy was seemingly better geared towards mitigating mining decline in China (Andrews-Speed, et al., 2005). In the Arctic region, however, Petrov (2010) found that mine closure had specific negative implications for high-tech companies in that skilled people had left the region. In general, mining communities were inappropriately trained for work outside the mining environment (Bowes-Lyon, et al., 2009). Furthermore, mitigation programmes designed to assist with economic development have generally been absent in areas of mine downscaling (Andrews-Speed, et al., 2005). Where mine closure regulations have indeed been put in place, regulations were essentially orientated towards the environmental rehabilitation of the mining area itself. Increasingly, conclusions in mine downscaling research suggest that planning for mine downscaling and closure should start as early as possible (Stacey, et al., 2010) but at least during the main phase of profitable operations (Upton, et al., 2004). Stated differently: mine closure should be part of the mine planning cycle (Veiga, et al., 2001). The creation of appropriate skills and of business partnership programmes outside mining are also commonly suggested as ways of addressing the inevitable reality of mine downscaling (Bowes-Lyon, et al., 2009). Collaborative planning and partnerships have become synonymous with the rhetoric on mining communities (Warhurst & Naronha, 2000). Yet, Hamann (2004) notes that partnerships in areas of weak local government are commonly dominated by mining companies and that many mining companies have shifted their collaborative planning responsibilities onto corporate social responsibility. The result is a focus on short-term endeavours that ignore longer-term planning responsibilities.

In the final part of this section, we consider some issues from the literature on secondary cities. The main reason for the inclusion of this literature relates to the fact that, globally, many secondary cities are closely associated with mining (Wood, 1986). In addition, our two case studies are examples of two secondary cities in the South African context. Obviously, we do not have enough space to elaborate on the wealth of research in respect of secondary cities and we shall therefore provide only a brief overview of the available work. The international research pertaining to secondary cities can be divided into two phases, namely Phase 1 (the 1970s and 1980s) and Phase 2 (since the 1990s) that includes more contemporary work. The more contemporary work emphasises the vulnerabilities and opportunities associated with globalisation (Bolay & Rabinovich, 2004). Institutional shortcomings and a tendency to develop inward-looking Local Economic Development (LED) strategies also receive attention within this literature (Rodrigues-Pose & Fitjar, 2013). The initial research conducted in the 1970s and 1980s

emphasised the importance not only of secondary cities in terms of managing urbanisation but also of the developmental role of secondary cities that are linked to the rural hinterland (Rondinelli, 1983; Hardoy & Satterthwaite, 1986). More specifically, this work emphasises the importance of rural-urban linkages (something that has gained increasing momentum over the past two decades). In this connection, Bolay and Rabinovich (2004, p. 408) remark: “Owing to their social and territorial specificities, intermediate cities are a *privileged environment for regional planning* linking urban growth and regional equilibrium in a positive dynamic between the urban and the rural. They supply goods and public and private services, and often function as administrative centres, representing the provincial and national authorities.” Ironically, as we shall later show, this regional service role tends to be ignored in LED planning and these cities commonly seek to compete with the main metropolitan areas.

### **From the resource curse to Marikana flu: government responses to mining areas and mine closure**

In this section, we move from the resource curse and the Dutch disease to the Marikana flu – our way of describing the South African government’s response in respect of revitalising the so-called distressed mining areas. The Marikana tragedy occurred in August 2012 when the South African Police Services killed 34 mineworkers. Many analysts advanced the poor socioeconomic and living conditions of mine workers as an underlying cause of the unrest in the Platinum Belt (Cronje, 2014). A living-out allowance (a way of getting rid of the compound system historically associated with mining in South Africa) has not necessarily resulted in better living conditions for mine workers – a point already made in the mid-2000s (Marais & Venter, 2006). Furthermore, living-out allowances contributed to informal-settlement development and shifted the burden of infrastructural provision on to local government. Although mine workers in the platinum industry had, by mid-2014, managed to negotiate relatively large salary increases, there is not much proof that the poor living conditions of mine workers have changed or are set to change in the near future. Three policy responses dealing with mine closure in the above context are investigated in more detail: (1) the South African government’s strategy on revitalising distressed mining areas; (2) the Mining Charter; and (3) guidelines for the development of social and labour plans.

The Mining Charter is largely based on the premise that the substantial economic inequalities associated with colonialism and apartheid must be addressed. Therefore, the increased participation of historically disadvantaged South Africans is central to the document. The vision of the Mining Charter consequently is “to facilitate sustainable transformation, growth and development of the mining sector” (Department of Mineral Resources, 2010, p. ii). The Mining Charter sets three objectives in respect of supporting this aim. Only one of the three objectives concentrates on the living conditions of mine workers and mine communities and is phrased in the following words: “to promote employment and advance the social and economic welfare of mine communities and major labour sending areas” (Department of Mineral Resources, 2010, p. 1). Two of the important elements of the charter are “mine community development” and “housing and living conditions”. The more detailed proposals associated with these two elements suggest that mines should be involved in practical development and that these plans should be integrated with the Integrated Development Plans of municipalities. In terms of living conditions, the emphasis is on upgrading hostel units, reducing the densities within existing hostels and

creating homeownership for mine workers. The notion of mine downscaling and the long-term implications of mine closure are not once referred to in the Mining Charter.

Social and Labour Plans, to be developed by mining companies, became a requirement of the Mineral and Petroleum Resources Development Act, 2002, (Act No 28 of 2002) (Department of Minerals and Energy, 2006). To some extent, social and labour plans have become the social licences of mining companies. Guidelines developed to support social and labour plans suggest that “[T]he Social and Labour Plan requires applicants for mining and production rights to develop and implement comprehensive human resources development programmes including employment equity plans, local economic development programmes and processes to save jobs and manage downscaling and/or closure” (Department of Minerals and Energy, 2006, p. 4). The “regeneration of mining economies” and the “provision of adequate living conditions and housing” are essential terms in the guidelines. Although some reference is made to downscaling and closure, the overall intent of the guidelines suggests at the perceived existence of a growing mining industry.

In 2012, following the conflict at Marikana, the South African Government introduced a strategy on the revitalisation of distressed mining areas. It is accompanied by five objectives, namely (1) ensuring the rule of law, peace and stability; (2) strengthening labour relations; (3) improving the living and working conditions of mine workers; (4) providing short-to-medium-term measures to support growth and stability; and (5) identifying long-term measures to support growth and stability (Tshanagana, 2015). The emphasis on stability and living conditions should be noted. No mention is made either of mine downscaling or of managing decline. In fact, the inherent assumption is that the economies of these areas will be turned around.

Matjhabeng and Matlosana are two of fifteen local municipalities identified to benefit from this strategy (a more detailed discussion of the programmes associated with these two municipalities will follow below). In addition to government funds, mining companies have also pledged substantial amounts towards this strategy (a more detailed overview of this is also provided later in the paper). Our contention here is that the government strategy on distressed mining areas is flawed in three respects: (1) All mining areas/sectors are viewed as similar; (2) there is an overemphasis on settlement/housing issues; and (3) the strategy is largely silent on creating post-mining economies or suggesting how the post-mining economy could be conceptualised. The assumptions associated with poor living conditions in Marikana are clear – we therefore argue that the strategy suffers from Marikana flu. Many mining areas in decline simply do not need more settlement infrastructure. Rather, they require innovative ways of reducing their dependence on infrastructure that they would find difficult to maintain in the long run.

### **Mine development and downscaling: reflections from Matjabeng and Matlosana**

Having provided a broad overview of the literature and of current policy considerations in South Africa, we devote the rest of the paper to the two local case studies. The first subsection compares the historical development of mining growth and decline in Matjabeng and Matlosana. This historical overview is followed by a discussion of local responses. Next, we identify the obvious issues that these local responses ignore. Then we turn to the local implications of the strategy on the revitalisation of mining areas. Finally, we comment on the importance of matching local and national responses.

### Historical background

When gold was discovered in the Free State during the Second World War, Odendaalsrus was the only existing town in the area. Starting in 1945, Welkom, Virginia and Allanridge were developed as new towns in order to accommodate the mining population. In the case of Matlosana, Klerksdorp was established in 1872 and mainly performed the role of a regional services centre – more or less halfway between the gold-mining activities in the Witwatersrand and the diamond-mining activities in Kimberley. Although limited small-scale gold-mining emerged in the Matlosana area in the latter part of the 19th century, it was not until the early 1930s that sufficiently large deposits were discovered to justify large-scale commercial development. Orkney and Stilfontein were established as mining towns during the Second World War, but Klerksdorp remained the economic hub of the greater region. Large-scale commercial mining activities only got underway towards the end of the Second World War. The main difference is that while the Free State Goldfields developed largely as a new town development, in Matlosana gold mining developed around an existing regional services centre (admittedly Orkney and Stilfontein also developed as new towns).

Of the 44 shafts in the Free State Goldfields, 22 shafts were developed before 1972. A comparison of the 1962 figures essentially suggests the same mining development trajectory: Matjhabeng had 10 mining companies with 17 shafts and Matlosana had 10 mining companies with 18 shafts. At that point Matlosana employed approximately 50 000 people in the mining industry against the approximately 45 000 then employed in Matjhabeng. The fact that the USA left the gold standard in 1972 resulted in a spike in the price of gold. Within eight years the gold price increased from approximately 50USD per fine ounce to nearly 330USD per fine ounce, so that a further 22 shafts were developed in the Free State Goldfields between 1972 and 1993. The rapid increase in the gold price also resulted in increased mining life for mines that were already at risk of becoming marginal by the end of the 1960s. We suspect that the same patterns prevailed in Matlosana. By 2013, seven mines (two uranium and five gold) were still operating in the City of Matlosana. It should also be noted that, at the apex of mining development in 1988, approximately 180 000 mine workers were employed in the Matjhabeng area. We also suspect that the number was substantially lower in the Matlosana area – approximately 120 000.

### Comparing trends in the decline of the mining sector

Both areas were hard hit by the initial downscaling attempts in the early 1990s. Yet, we do not have data to showcase the initial decline experienced between 1989 and 1996. The closure of the Stilfontein Mine at Matlosana in 1992 resulted in the loss of 24 000 jobs (Urban Foundation, 1994) while the first major blow to Matjhabeng came with the closure of the Harmony mine by Rand Mines in 1991, which resulted in 10 000 jobs being lost (Ryan, 1991). Table 1 represents data for 1996, 2001 and 2011. Four similarities in respect of mine downscaling are evident since 1996 (see Table 1). First, the economic size and structure of the two areas were much similar in 1996. Matjhabeng's GDP stood at R14.9b and that in Matlosana was slightly lower at R14.6b. Second, as regards economic structure, exposure to mining in both areas was well over 50% in 1996 with Matlosana enjoying slightly more exposure (63% of GVA originating from mining). The figure in Matjhabeng was 55%. Second, the degree of annual economic decline between 1996 and 2001 was much similar: -4% per annum in Matjhabeng and -4.5% per annum in Matlosana. Third, by 2001, the dependency on mining was likewise much similar with 29% of employment in Matjhabeng and 31% in Matlosana originating from mining. Fourth, the share of

employment in services and trade in 2011 was substantially higher than in 1996. On the one hand, this is the result of mining's decline. A more detailed investigation suggests that employment in trade has been stable despite mining decline. Although many factors could have been responsible for this trend, in our opinion it suggests that these two areas have benefitted substantially from their regional function.

**Table 1: A comparison of socioeconomic attributes in Matjhabeng and Matlosana**

| Attributes   | Matjhabeng |            |            | Matlosana |            |            |
|--|------------|------------|------------|-----------|------------|------------|
|  | 1996       | 2001       | 2011       | 1996      | 2001       | 2011       |
| Population   | 472 281    | 408170     | 406461     | 335 114   | 359 203    | 398 676    |
| Population growth rate since previous period                 |            | -2.8       | -0.4       |           | 1.4        | 1.0        |
| HDI  | 0.50       | 0.49       | 0.56       | 0.56      | 0.55       | 0.63       |
| Gini co-efficient  | 0.49       | 0.57       | 0.55       | 0.55      | 0.61       | 0.62       |
| Unemployment rate  |            |            |            | 12.9      | 25.6       | 19.6       |
| % employment <sup>3</sup> in agriculture                     | 5.3        | 8.4        | 3.7        | 4.6       | 6.9        | 6.1        |
| % employment in mining                                       | 55.6       | 31.0       | 29.4       | 63.4      | 48.3       | 31.2       |
| % employment in manufacturing                                | 4.4        | 7.8        | 6.1        | 3.4       | 3.1        | 3.8        |
| % of employment in utilities                                 | 0.4        | 0.3        | 0.5        | 0.6       | 0.9        | 0.8        |
| % of employment in construction                              | 3.9        | 3.3        | 5.5        | 2         | 2.2        | 3.4        |
| % of employment in transport                                 | 1.8        | 2.4        | 3.4        | 3.3       | 3.4        | 4.0        |
| % of employment in trade                                     | 9.3        | 18.1       | 17.4       | 8         | 10.4       | 14.6       |
| % of employment in finance                                   | 7.8        | 9.6        | 10.4       | 3.6       | 5          | 8.1        |
| % of employment in services                                  | 11.5       | 19.2       | 23.6       | 11.1      | 19.8       | 28.0       |
| Total mining employment                                      | 97 914     | 36 505     | 27 494     | 73 945    | 41 488     | 24 704     |
| % GVA contribution by agriculture                            | 0.7        | 0.8        | 0.9        | 0.8       | 0.7        | 1.0        |
| % GVA contribution by mining                                 | 52.4       | 40.5       | 34.4       | 58.8      | 52.3       | 29.4       |
| % contribution by manufacturing                              | 3.3        | 3.6        | 2.0        | 2.3       | 2.4        | 3.4        |
| % contribution by utilities                                  | 0.8        | 0.7        | 0.6        | 1.0       | 0.6        | 0.4        |
| % contribution by construction                               | 1.3        | 1.4        | 1.5        | 1.6       | 1.2        | 2.0        |
| % contribution by trade                                      | 9.6        | 11.0       | 11.3       | 7.9       | 7.7        | 11.0       |
| % contribution by transport                                  | 5.6        | 7.3        | 7.7        | 6.2       | 7.4        | 13.2       |
| % contribution by finance                                    | 11.7       | 15.0       | 16.3       | 9.4       | 10.5       | 17.7       |
| % contribution by services                                   | 14.6       | 19.7       | 25.4       | 12.6      | 17.2       | 21.8       |
| GDP (2005 constant figures in millions)                      | 14 956 207 | 12 078 134 | 12 989 289 | 14 624 14 | 11 623 881 | 12 397 796 |
| Annual GDP decline since the previous period (all sectors)   |            | -4.1       | 1.4        |           | -4.5       | 0.07       |
| GVA of the mining sector (2005 constant figures in millions) | 7 277 985  | 4 504 980  | 4 260 445  | 8 552 846 | 6 074 988  | 3 644 952  |

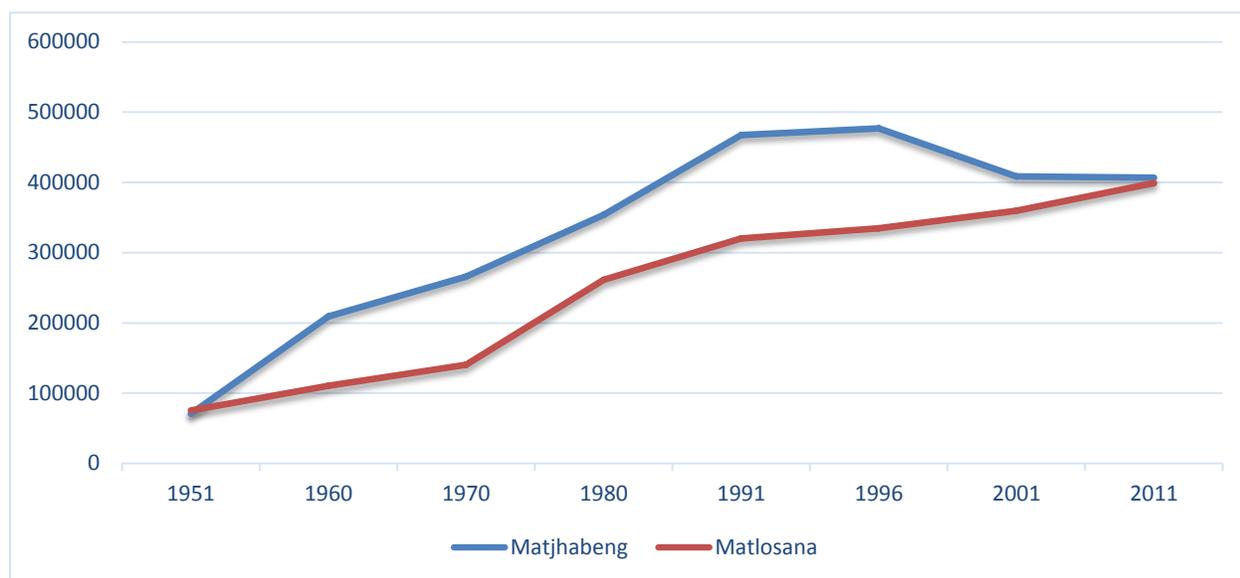
<sup>3</sup> Employment within households was excluded for this exercise.

|   |     |      |      |     |      |      |
|---|-----|------|------|-----|------|------|
| Annual GVA decline for mining since the previous period (all sectors) |     | -8.9 | -1.3 |     | -6.6 | -5.0 |
| Percentage of population older than 65                                | 2.7 | 3.6  | 4.6  | 3.2 | 4.3  | 5.2  |

Source: Matjhabeng – Global Insight, 2014; Matlosana, SACN, 2013

The most obvious differences between the two areas relates to population growth and decline. Table 1 provides evidence since 1996 and Figure 2 traces these patterns back to 1951.

**Figure 2: Population growth in Matjhabeng and Matlosana, 1951–2011**



Source: Stats SA, 2013 (estimates based on assumed boundaries prior to 2001)

In the case of Matjhabeng, the economic decline has been accompanied by population decline since 1996. Interestingly enough, our estimates suggest that the 1951 populations for the two areas were more or less similar. Although there was an original steep increase in Matjhabeng, the patterns evened out again between 1960 and 1970. What is important to note is the substantial population growth that occurred between 1970 and 1991. Essentially, this is attributable to substantial mine development related to a significant increase in the price of gold from 50USD per fine ounce in 1970 to 600USD per fine ounce in 1980. The increase meant that mines that had been marginal by 1970 were again highly profitable by 1980. The net result was a substantial increase in the population of Matjhabeng. The same steep increase is also discernible in respect of Matlosana. The main difference between the two areas lies in the differences in growth after economic decline. In Matjhabeng, the population dropped from 472 000 in 1996 to below 410 000 in 2001. This represents a decline of -2.8% per annum over a five-year period. This negative trend continued between 2001 and 2011, with the population declining at -0.4% per annum. Even though there has been a decline in Matjhabeng, Matlosana has experienced continued population growth. In Matlosana, the population grew by 1.4% per annum between 1996 and 2001 and at 1% per annum between 2001 and 2011. The figures for Matlosana largely

correspond with natural population growth in South Africa. Thus, although Matlosana did not experience negative population growth, it also did not experience high population growth either.

A second point, not unrelated to the data in Table 1 but not represented in Table 1, is the growth in households and informal settlements development in mining areas (Thompson, 2003; Marais, 2013a). Despite population numbers having declined in Matjhabeng, there has been an increase in the number of households. Household numbers in Matlosana have also increased substantially more than have population numbers. These figures suggest that, in some cases, mine downscaling contributes to household growth and also to pressure to provide housing. In our opinion, this however is somewhat artificial: most of the people who make up households are former mine workers (either creating new households or bringing their family from labour sending areas) who stay on in the area in the hope of finding employment.

The question obviously is: Why this considerable difference between the two areas? In as long ago as the mid-1990s, the Urban Foundation already argued that mine downscaling had led the Matlosana area to reclaim its role as a regional services centre (Urban Foundation, 1994). Work by Van Rooyen and Lenka (2016) confirms this. There is however probably also a second reason: Matlosana's close proximity to both the Platinum Belt and the West Rand which it services. Interestingly enough, the available data on Matjhabeng suggest that this regional services role is indeed the very reason that is keeping Matjhabeng from falling apart economically, altogether. As the mining economy has decreased over the past 25 years, regional services have played a role in creating a new economic equilibrium by means of growth in small manufacturing sector, trade and services (partially through the decentralisation of government services in the Free State). Local gains include the enhanced provision of regional health, education and retail services and a conscious effort on the part of local manufacturers to market their products regionally and nationally following the contraction of the once important local mining industry market.

#### Local responses

Despite the above evidence of mining decline and closure, local responses in terms of strategic planning seem somewhat hesitant to acknowledge the problem. Not only have neither of the localities articulated what mine downscaling means, but the notion of a post-mining economy has also not featured in the development plans. The notion of mine closure is only mentioned twice in the Integrated Development Plan of Matlosana (City of Matlosana, 2015) and no reference is made to it in the Integrated Development Plan of the Matjhabeng Municipality. One of the two occurrences of the term *mine downscaling/closure* in Matlosana reflects on the implications of mine closure for municipal revenue. Previous work in Matjhabeng has already alluded to the same problem (Marais, 2013a). Historically, the mining houses owned substantial properties for their workers. Downscaling meant that these properties were privatised and this, in turn, that the respective municipalities were increasingly at risk in that the payments for property tax and service now had to come from individuals/households and not from the mining companies and because these individuals were at risk of losing their jobs.

Having discussed the fact that the notion of mine downscaling and closure does not feature in integrated development plans, some comment is called for regarding LED strategies. The current Matlosana LED Strategy was revised in 2012. The strategy seeks to improve the business

environment for selected economic nodes through the introduction of catalytic projects. Further attention is devoted to black economic empowerment by way of the municipality's procurement policies and the promotion of small, medium and microenterprises (SMMEs). The strategy highlights performance areas in terms of economically friendly municipal procedures and regulations, promotes identified economic sectors, mainstreams economic activity into the formal economy and facilitates a cooperative programme. The LED Strategy of the Dr Kenneth Kaunda District Municipality (in which Matlosana is located) seeks to diversify the district's economy by gaining competitiveness in new areas of development. Five thrusts have been identified: (1) agricultural expansion and diversification; (2) industrial development; (3) development in utilities and construction; (4) SMME development and support; and (5) tourism development. The documentation is less clear on how decisions were taken to arrive at these thrusts. During a SWOT analysis of the City of Matlosana in 2013, the Dr Kenneth Kaunda Economic Development Agency further noted that the projects implemented by the municipality were not high-impact projects (KKEDA, 2013). Consequently, ten high-impact projects to the value of R10bn are now in the planning phase. The most pressing project seems to be an SME manufacturing or industrial plant and a meat-processing plant. The economic logic for these projects remains unexplained. There also remains a strong belief that large catalyst projects – such as a freight airport – are viable and should be located in the area.

As already noted, the Matjhabeng Municipality's IDP makes no mention of the terms *mine closure* or *mine decline*. The IDP nevertheless provides a list of mining mitigation and redevelopment projects – seemingly projects to be implemented by the mines in terms of their social and labour plans or through their corporate social responsibility programmes. No indication is given as to what the criteria for these projects are or how these projects fit into a vision for a post-mining economy. Although it is difficult to assess the extent to which these projects will indeed contribute to a post-mining economy, there are at least a few that might just help to decrease Matjhabeng's dependence on mining (such as mine manufacturing and expanding small-scale mining).

Similar to the case in Matlosana, the economic development function at the district level is managed by a development agency at the district level. A number of highly contested local institutional responses to mine downscaling in Matjhabeng have been followed since the early 1990s (Marais, 2013b). In general, political infighting ruined agreed upon local economic strategies (Marais, 2013b). Sustainable development and job creation are central to the overall aim of the development agency. Another important goal is that of developing the potential of the region to ensure that the district becomes an important commercial hub (Lejweleputswa Development Agency, 2015). The notion of the commercial hub is interesting in that it builds on the regional services function. The documents unfortunately fail to provide more detail on the intentions in this respect. Despite having been relaunched in 2012, the agency shifted its focus to project identification and feasibility studies (South African LED Network, 2015). When we interviewed representatives of the agency in April 2014, there was little evidence to suggest that progress had been made up to that point. Rather, the agency was crippled by continued political infighting, the lack of an overarching vision and below-par management.

In the interim, one of the mining companies in Matjhabeng has appointed development consultants to draft a “master plan” for Matjhabeng's post-gold economy. At the time of writing, this plan has not circulated wider than the Harmony mine management and the notion of

collaborative planning with the municipality and the communities has been completely absent from its processes to date. Even though this is a noble idea, management apparently assumes that a turnaround strategy is possible and that it has the institutional capacity to manage this. Furthermore, much talk in the Goldfields refers to the possibility of creating a secondary film studio in the area. Although the main feasibility studies are still in process, the subsidies required to get this off the ground seems substantially more than the Cape Town film industry is currently receiving. In our opinion, it seems highly improbable that Matjhabeng will manage to secure a significant part of the film industry.

Though the introduction of Social and Labour Plans as required by the Mineral and Petroleum Resources Development Act, 2002, (Act No 28 of 2002) holds potential for collaborative planning between mines and local government, there is little evidence of this actually being practised in both municipalities. The reasons for this are complex. The poor quality of IDPs hampers this process while the historical intent of mining companies to provide corporate social investment further stands in the way of collaborative planning. Add to this cauldron the interference of the Department of Mineral Resources that has very little institutional history in social and economic planning and the result is rather unsatisfactory. Frequently, mines and municipalities agree to a common list of projects without having a shared vision as to the nature of a post-mining economy. More often than not, mines get to foot the bill (and in the majority of the cases do so without resistance) for some of the unfunded projects in IDPs and there is evidence of municipalities being unwilling to take over responsibility for and maintenance of projects mining houses have developed. However, an approach of this kind cannot automatically be viewed as collaborative planning. Longer-term economic planning is also jeopardised in this way. The relationship between mines and local government role players in a period of downscaling also happens to be more complex than in a boom period. The main reason for this is that mine downscaling usually leads to changing mine ownership (a reality in both Matlosana and Matjhabeng), which hampers partnership development and overall responsibility levels. Generally, poor local government and instability in this sphere have further contributed to mines often playing a dominant role in projects. This in itself generates conflict. Both of the mining areas have also experienced considerable changes in mine ownership, which makes collaborative planning difficult in that new relationships of trust have frequently had to be established.

Because Social and Labour Plans are not public documents, it is impossible to assess these plans within the framework of collaborative planning. Mining companies however routinely report on their annual activities, which include social and economic investments. We managed to access the reports for AngloGold-Ashanti and Harmony. Although both companies frequently use the term *local economic development* in their report documents, these projects are in many cases social and infrastructural investments. The issue of economies' post-mining activity does not feature. The one project in Matlosana that could fit comfortably under the umbrella of a local economic development project is the co-funding of business parks. The principle idea of collaborative long-term planning remains rather vague.

#### Missing the obvious in local responses

The literature pertaining to secondary cities suggests that consideration should be given to the regional development role of secondary cities. Most commonly, the development strategies of Matlosana and Matjhabeng reflect only on the trading element of this regional role. Both suggest

that it is important to expand their business function by constructing new malls and trading spaces. The importance of trade is also apparent from the fact that trade's share of the economic cake has been on the increase in both municipalities since 1996 and that it has been instrumental in creating jobs. A range of other factors can however be added, for example, the role of local educational facilities. The fact that the most prominent schools in both cities have hostels is an important mechanism that has been instrumental in developing this regional role. The establishment of the Harmony Sports Academy as a niche school is another example. The Further Education and Training (FET) College in Matjhabeng is the best-performing FET in the Free State and one of the best in South Africa. Matjhabeng also hosts a campus of the Central University of Technology. None of the benefits associated with these educational facilities are acknowledged in strategic planning documents.

Both cities have a small though insignificant manufacturing sector. In both areas, this sector is important in that it probably services their rural hinterlands. As regards the overall trend of centralisation of manufacturing, some attempts should be made to ensure that these industries continue operating from the respective municipalities. A possible strategy to boost both the local manufacturing industry and the regional role of the trading spaces is to guarantee that an adequate and well-maintained road network exists to ensure effective linkages with the cities.

A final consideration that has received no mention in local strategies is the fact that attention should be given to the role of hosting decentralised government services. Both areas have increased their share of employment in services. Although such employment does not contribute substantially to economic growth, it is nevertheless a way of reducing the economic and employment loss. Historically, decentralised government services in the Free State were directed to Kroonstad (Mokhaka) but, since the dawn of democracy, a number of provincial departments and even the national Department of Mineral Resources have relocated their offices to Matjhabeng.

#### The application of the strategy to revitalise mining towns in Matlosana and Matjhabeng

In the above sections, we alluded to the fact that the two municipalities find it decidedly difficult to articulate responses to the decline in their economies experienced over the past two decades. We made the point that both a national response and an appropriate local response are required. Our focus now shifts to a discussion of how the national response, through the Strategy on the Revitalisation of Distressed Mining Areas has played out in the respective municipalities.

In Matjhabeng, government earmarked a budget of R311m for the 2015/16 financial year. This budget from government is divided as follows: human settlements (84.3%), social development (3.5%), rural development (6.9%), environmental affairs (4.4%) and transport (1%). If one includes the provisions made by the mining companies (we assume this to be part of their Social and Labour Plans) then an amount of well over R550m has been made available for human settlement development. The total for economic development is less than R100 000.

In Matlosana, the overall trend is much similar to that in Matjhabeng, with the lion's share of the funds being allocated to human settlements. The allocation of funds in the North West makes no distinction between funding going to Matlosana and the platinum mining areas. As some of these funds are also meant for the Platinum Belt, some rationale for the higher percentage allocation to

the development of improved settlements could well be appropriate. The main reason is that some form of improved settlement environment is indeed required in the platinum mining areas. Maybe the main concern here is that there is no discernible difference in strategy in respect of Matlosana and Rustenburg.

For a number of reasons this emphasis on addressing the housing and living environments could prove to be counterproductive. First, it assumes that all mining areas are similar and that the nature of living conditions is the main problem. Yet, as we have already indicated, an expansion of settlements in areas of mine downscaling should be a last resort. Second, the emphasis on human settlement development, in many cases associated with the provision of title, could well lead to people being locked into a location characterised by job-loss and weak economic prospects and so limit their ability to migrate. Third, it could lead to the abandonment of infrastructure and housing. In fact, there is already evidence of subsidised houses being left unattended. The Matlosana municipality's IDP notes that “[A]bandoned RDP houses due to closure of mines” is a key challenge (City of Matlosana, 2015, p. 124). Providing more housing and infrastructure would certainly not assist either Matlosana or Matjhabeng in redirecting their economies.

#### Matching local and national responses

In the above discussion, we have emphasised that a sound interaction should exist between local and national responses. More specifically, the argument was made that the nature and scale of downscaling requires a response from national government. When the national government response came, it assumed that the nature of distressed mining areas is much similar in all places. Consequently, there has been an overemphasis on the development of human settlements, and a failure to support or plan for alternative forms of economic development.

In our opinion, the nature and problems associated with mine closure should be articulated at the local level. However, the response from the two municipalities has proved to be rather poor. Consequently, government's response, in its overemphasis on human settlements has failed to contextualise the concerns of mining areas in a time of mine closure. No effort should be spared in seeking to achieve a more appropriate alignment of these aspects.

#### **Conclusion**

The paper was contextualised against the international literature related to the resource curse. More specifically, the paper provides a local case study related to mining, mine downscaling and the resource curse – something that has not received much attention globally. Mine development and mine downscaling share a similar history. Yet, the Matjhabeng population grew more rapidly during the mining growth phases than was the case in Matlosana. When mine decline materialised at the end of the 1980s, Welkom lost substantially more people than did Matlosana. The economic realities of mine downscaling in the two areas are however quite similar.

The responses from government and from the mining houses were assessed. In general, very little attention has been devoted to collaborative planning and planning for a post-mining economy. More prominent in the plans is the notion of improved living conditions. We have labelled these attempts at addressing Marikana flu. The assessment unequivocally established that what had happened at Marikana cannot be separated from the socio-economic living

conditions of mine workers. Yet, it is the blanket approach of viewing all mining areas as similar, which has given rise to our critical reflections in this paper. Surely, a case can be made for areas of mining decline? For one, this would mean that planners' mindset would have to change: instead of planning for growth, they would rather have to plan for decline. Furthermore, areas of mining decline do not need increased settlement infrastructure and innovative plans in respect of closing down some infrastructure may in fact be more appropriate.

Against the background of the evidence provided in this paper, we conclude with a number of general guidelines pertaining to areas of mine downscaling and closure:

- The notion of planning for mining decline should be conceptualised in policy. A substantial number of mining settlements (including our two case studies) will never be revitalised if they are supported by the government strategy on distressed mining areas.
- The current emphasis on providing adequate housing and living conditions in declining mine areas could well result in households being locked in at locations with very little economic viability. Alternatively, it might lead to unused infrastructure and settlements. An overemphasis on housing and the living environment could also increase the longer-term risks associated with the maintenance of civil infrastructure.
- The notion of a post-mining economy is seldom considered in the existing government strategies. It is a term seldom used at the local government level or within mining companies. We argue that the notion of planning for decline should be conceptualised and also made practical for such areas.
- The two case studies suggest that because of their original size they have performed important regional services functions. As a first step, appropriate post-mining strategies should include ways of supporting this function.
- Finally, much more effort should be put into creating an environment within which collaborative planning can excel. This implies collaborative planning between mining municipalities and the provincial and the national spheres of government. It also implies collaborative planning between mining companies and local municipalities and, moreover, that planning is inherently a longer-term activity. Short-term projects might tick the right boxes but are unlikely to provide in the economic needs of an area beyond mining.

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