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Collapse of the Free State Goldfields, South Africa

Lessons from industrial transitions

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IMAGE (ABOVE): View of the headgear, Harmony Gold Mine, Welkom, Free State, South Africa © GRAEME WILLIAMS / FLICKR

Key insights:

- **Gold mining decline in the Free State Goldfields had a wide range of economic, social and environmental consequences. It affected women in particular, who faced limited access to capital and land, as well as increased gender-based violence.**
- **As gold production declined, the local government initially prioritised measures to revive the mining industry, such as tax incentives and other job-creation support, rather than efforts to diversify economic activity.**
- **The decentralization of public services, as well as the region's central geographical location and its infrastructure legacy, helped preserve some economic activity at the regional level.**
- **Establishing a local multi-stakeholder organization helped identify local infrastructure, skills and needs, as well as mobilized resources, for economic diversification and job creation.**
- **Many former gold-mining shafts have not been fully rehabilitated, despite such rehabilitation being essential not only for environmental and safety reasons, but also for enabling new economic activities and generating short and mid-term employment.**

This case study examines the collapse of gold mining in **Free State, South Africa.** It is part of a series that looks at four historical cases involving the decline of major industrial or mining activities. In each, we describe the reasons for the decline and explore how various actors addressed (or did not address) the social, economic and environmental consequences.

The aim of the series is to share lessons that might guide ongoing and future transitions, particularly those related to the decarbonization of regional economies. Countries and regions that today are heavily dependent on carbon-intensive industries and/or fossil fuel extraction face the prospect of disruptive social and economic changes as the global decarbonization agenda gathers momentum. Sharing knowledge from past experiences might help these communities appreciate the dynamics of transition, and ultimately prepare for and manage these transitions as smoothly as possible, to ensure fair outcomes while reducing any resistance that might slow down necessary change.

Other briefs in this series look at the cases of the closure of the Kodak plant in Rochester, New York, the decades-long decline of the United Kingdom's steel industry, and the closure of a major steelworks plant in Newcastle, Australia. Some overall insights from the cases can be found in a synthesis brief.

Background

Large-scale gold extraction in South Africa started in the Free State Goldfields (FSG) (now in the Matjhabeng Local Municipality, Free State province) after World War II. In the early days of the gold era, provincial authorities attempted to diversify the region's economy, notably through the building of large irrigation infrastructure that would support further agriculture development. However, after the onset of a boom in gold production in the 1970s and early 1980s, diversification and plans for post-mining life fell off the agendas of both provincial and local governments (Marais & Nel, 2016). Forty years of gold-mining operations led Welkom, the main town created around the FSG mining operations, to become the second largest urban area in the Free State (Marais, 2013a). At the same time, it also became the South African city whose economy was most dependent on a single economic sector (Centre for Development Enterprise, 2005).

The gold boom came to an end in 1989, when the gold price dropped suddenly from about US$900 per ounce to about US$300. This led to the closure of many mines that became uneconomic because of, among other things, ageing infrastructure and the exhaustion of easily accessible deposits (Binns & Nel, 2001). The price drop also coincided with the end of the apartheid era and intensifying economic globalization, which catalysed national labour reforms (including higher wages) and increased global competition (Marais & Cloete, 2016). These factors, along with rising electricity costs and increased mechanization of mining operations, all contributed to a large downturn in gold production (Cranckshaw, 2002).

Impacts of decline in gold production

The downturn in gold mining was devastating to FSG. Gold mining represented almost three-quarters of the region's economic output in 1990 (Marais & Cloete, 2016), and the rapid decline in mining output during the 1990s and 2000s had profound environmental and socioeconomic impacts across the province. In Matjhabeng, mine employment fell from 180,000 in the mid-1980s to less than 30,000 by 2013 (Marais, 2013b). The population also declined sharply from 180,000 in 1990 to 36,000 in 2010, as many workers emigrated (Marais & Cloete, 2016). Unemployment and poverty rates rose rapidly in the region, compounded by the absence of effective medium- and long-term unemployment benefits and the limited opportunities for employment outside mining; globalization had also strongly affected South African agriculture, the other major employer of low-skilled labour (Marais & Cloete, 2016).

The broader impacts on the region's economy were catastrophic. The decline of mining triggered the closure of businesses that had provided services to the mines (e.g. engineering companies) or to mine workers and their families (e.g. local transportation operations) (Marais, 2013a; Seidman, 1993). Smaller manufacturing firms closed, and remaining firms were concentrated in the province's larger urban areas (Nel et al., 2006). With the dismantling of housing compounds that mining companies had owned and created for workers, informal settlements expanded (Marais, 2013b). In the 1980s, mining companies tried to reduce their operating costs by selling their housing assets to individuals. As mining declined, average housing prices plummeted, saddling middle- and low-income households with debt and unsellable assets. This, in turn, increased the risk of non-payment of taxes on properties, creating an additional revenue problem for municipalities (Marais & Cloete, 2016). Investor confidence in the region evaporated.

The crisis proved to be particularly devastating for women. As it deepened, many men sought employment opportunities elsewhere, meaning a high share of the people left behind were women. Divorce rates increased sharply (Baden et al., 1998). Women were left with the double burden of entering into paid work and carrying on with household work. With men far more likely to find jobs in the formal sector, women resorted to seeking income in the informal economy, generally characterized by insecure, irregular jobs with low pay. Violence against women rose, especially sexual violence (Sesele et al., 2020). In this aspect, the mining sector's decline intensified pre-existing gender violence and structural inequalities that had not been addressed as the apartheid system was dismantled (during apartheid, state-sponsored violence against black communities had included violence against women) (Baden et al., 1998).

In response to mining decline, local political authorities prioritized measures that focused on supporting the mining industry, such as tax incentives and other job-creation support, rather than efforts to diversify economic activity. One of the consequences of this is that local development policy did not adequately address gender-related vulnerabilities in the community (Sesele, 2019), and this situation has not improved over time. Despite the fact that successive local governments discussed a commitment to gender equality, implementation through development programmes (such as support for small, medium and microenterprises) has been ineffective (Sesele et al., 2020). In practice, men still have control over decisions that influence whether development projects can go ahead or not and who benefits from them. Women seeking land or capital to launch entrepreneurial ideas continue to face considerable obstacles. In some situations, women are expected to offer sex as an alternative currency to persuade male "gatekeepers" to provide access to jobs and other business opportunities. As a result, women face higher risks of HIV infection (HIV rates are very high in some areas) and other sexual diseases, and unwanted pregnancy (Sesele, 2019).

Other consequences of the decline of mining touch virtually all aspects of life. A non-exhaustive list includes "illegal mining, environmental hazards,… rising unemployment and poverty levels, business closure and expansion of township settlements in some of the former mining areas, negative impacts on local governments, below-average housing market and redlining of some areas by banks, decreasing links between mining houses and training institutions in the region, and continual changes in mine ownership which has made negotiations between role-players difficult" (Marais, 2013a).

Many former gold-mining shafts have not been fully rehabilitated, enabling the spread of unregulated artisanal and small-scale mining, a dangerous practice that leads to both environmental and physical hazards (Mhlongo & Amponsah-Dacosta, 2016). The law requires mining companies to make financial provisions for environmental rehabilitation of their mining operations (Presidency of South Africa, 2002). However, the framework governing mining rehabilitation has been described as lacking transparency and accountability (CER, 2018), and there has been a lack of rehabilitation activity or clear incentives to rehabilitate (van Zyl et al., 2012). Beyond the environmental and safety concerns, inaction on clean-up represents an opportunity cost that further hinders transition prospects; for example, stakeholders have identified rehabilitation as a sector that could generate lower-skilled jobs (Strambo, Burton, et al., 2019).

Responses

Local and regional responses

In the wake of the gold mining sector's collapse, local authorities and the community focused most attention on ways to support the return of gold production. Even after 30 years of decline, many in these communities still find it difficult to think about economic alternatives to gold mining, or to acknowledge the prospect that remaining gold operations will likely close in the next decade (Denoon-Stevens, 2017). This blinkered response to the crisis has come at the expense of a more effective approach to transition planning (Marais, 2013a).

Overall, the responses to mining decline took place in the context of the establishment of the new post-apartheid state, which sought to promote development and address inequality (Marais & Cloete, 2016). This ultimately affected the type of the strategies implemented and their level of success. Initial responses came largely from local town councils, mining companies and the mining trade unions. The development arm of one of the main mining trade unions, the Mineworkers Development Agency, offered retraining programmes to redundant mineworkers and also provided support to new small businesses (Binns & Nel, 2001). The local government in Welkom, helped by a local development agency, tried to support downstream economic activities from gold mining, such as jewellery making, as well as foster economic diversification by promoting agriculture, tourism and logistic services (Marais & Nel, 2016). It also implemented a tendering and procurement policy that gave priority to inputs from local businesses and service providers (Binns & Nel, 2001).

The cornerstone of the municipality's response to the decline was the Free State Goldfields Development Centre (FSGDC), which it established in 1992 – together with neighbouring towns and the private sector – to attract new investment, support new economic activities, and find new ways of generating jobs (Marais, 2013a). The non-profit FSGDC included representatives of seven municipalities, the mining companies, organized business, parastatal organizations, black business organizations, and the regional services council. While many town counsellors were on the FSGDC Board, the organization remained fairly independent from the municipal authorities in its work. Its mandate initially limited its activities to marketing the region's potential for setting up new secondary industries (van der Walt & Louw, 1992). The FSGDC looked for big catalyst projects to replace gold mining; it promoted the gold jewellery industry, agro-processing, and heritage tourism, as well as supported the construction of a motor-racing track, together with the Free State provincial government (Marais, 2013a). At the same time, it aimed to support entrepreneurs from the informal economy to formalize their businesses, through incentives such as free access to industrial sites, loan and rental subsidies, free administrative services, and discounted tariffs for water, electricity and waste disposal (Binns & Nel, 2001). By 1996, the Centre had supported more than 80 small companies, and created or retained over 1,000 jobs (Marais, 2013a).

The FSGDC's mandate expanded in 1998, at which point it adopted a strategy focused on supporting a key project per sector and making the most of potential interactions between these projects. Examples include the diversification of agriculture products, the intensification of agro-processing, the establishment of a job training centre and a gold jewellery hub, tourism development (especially for mining heritage), and logistics improvement to the Matjhabeng area to make it into a distribution hub (Marais, 2013a). The FSGDC succeeded in attracting interest among some new investors. For example, Spanish investors announced that they would invest in a new cargo airport (Venter, 2002).

However, local politics worked against the FSGDC's efforts. As South Africa's transition from apartheid came to a head in 1994, the Centre found it increasingly difficult to distance itself from the internal political rivalries within the new ruling party, the African National Congress, and associated factional politics. The leaders of the municipal and the provincial government did not belong to the same political factions; therefore, higher levels of government did not support the region's efforts to manage gold mining's decline (Twala, 2012).

The FSGDC was dissolved in 2004 following changes in municipal legislation, and two other entities for supporting local development were established. One was the Matjhabeng Marketing and Investment Company (MMIC), a municipal entity that was registered as a private company and whose Board of Directors consisted only of non-mining, private-sector representatives. The other entity was the Department of Economic Development and Spatial Planning, which was formed at the local municipality level, and absorbed the former FSGDC. However, conflicts with the Municipal Council and a lack of funding led the MMIC to close one year later. Conflicts also arose within the public sector regarding questions over the appropriate governance level of the local development agency. These conflicts led to the discontinuation of earlier projects (including the cargo airport) and, ultimately, to the loss of some of the earlier gains. In the mid-2000s, yet another new development agency was established at the district level (one level up from the municipality). However, this agency had no local business representation. Moreover, as a result of the rivalry between the two development entities, the new entity quickly became dysfunctional (Marais, 2013a).

While the FSGDC was rather successful during its initial years, the longer-term results are mixed. Many small firms ultimately failed. Jobs created represented only a fraction of the numbers that had been lost (Binns & Nel, 2001). Big projects did not materialize, as a result of political conflicts, the sudden withdrawal of public funding, mismanagement, constant change in mining ownership, and distrust among key actors (Marais, 2013a).

Irrespective of this rather bleak picture, the FSG community and the economy also demonstrate a capacity for resilience. Two key factors helped preserve some economic activity at the regional level. The first one is the decentralization of public services, which provided new employment opportunities in the area. Thanks to its central geographical location and the infrastructure legacy of the gold boom, the area has also played an increasing role in providing services to the broader region, notably in trading, education, health and some manufacturing industry. However, the latest local economic development strategies (from 2012) focus mainly on the trading dimension of the region and overlook other key regional functions that have been essential to the area's resilience, such as provision of health and education services (Marais et al., 2017).

National response and the emergence of Social and Labour Plans

When the crisis began in the FSG from 1989 onwards, the national government did not provide any obvious support to the region. Even by 1998, the national government's Mining and Minerals White Paper neither discussed what the gold mining decline meant for Free State – the main gold production area of South Africa – nor how to address the issues this implied (Department of Minerals and Energy, 1998).

In 2002, the South African government introduced new legislation, the 2002 Mineral and Petroleum Resources Development Act. This was intended as a tool to promote better development in the post-apartheid era, to address historical inequalities in mining rights, and to address the long-term environmental impacts of mining (Presidency of South Africa, 2002). The Act introduced a requirement for mining companies to elaborate Social and Labour Plans (SLPs) as a prerequisite for obtaining mining rights (Marais et al., 2018). SLPs are supposed to help tackle the socioeconomic problems associated with mining and mine closures, and to support integrated planning between municipalities and mines by aligning their respective local development plans, programmes and investments. (Department of Mineral Resources, 2004). According to the Act, SLPs should explain how mining activities in a given area will affect employment, living conditions, infrastructure, nutrition levels, housing issues, poverty levels, and the development of small, medium and microenterprises (SMMEs), as well as detail impacts on community development more widely (Cawood, 2004; Marais, 2013a).

However, in practice, these plans focus primarily on workers and not the many other challenges faced by the wider community following production decline (Marais, 2013a).

Although somewhat celebrated in the international community as “best practice” (Rogerson, 2012), there is little evidence that the SLPs have improved collaborative planning in mining areas (CALS, 2016; van Rooyen & Lenka, 2016). Many issues continue to undermine the objectives of the SLPs and impede long-term collaborative planning or the emergence of resilient post-mining economies. These includes weak local government, a misalignment of the planning frameworks of different state agencies, and a focus on short-term horizons, corporate social responsibility agendas and politically attractive projects (CALS, 2018; Marais et al., 2018).

In 2012, after South African police killed 24 miners who were on strike at the Marikana platinum mines, the South African government put forward a strategy for revitalization of distressed mining areas. The strategy focuses on outcomes, such as increasing house ownership (which inadvertently reinforces dependence on the local mining-dependent economy), but does not mention the risks associated with production declining at the mines or approaches to manage these risks (Marais et al., 2017). Critics of the national response argue that instead of this generalised strategy, mining areas each need a tailored strategy that addresses the diverse and unique challenges of their location and mining subsectors.

While the national government did little to directly address the consequences of gold mining decline in the Free State province, it has implemented other development programmes that could have helped navigate some of the impacts on the region. The post-apartheid government established a series of programmes to promote better rural development, upgrade informal settlements, support business cooperatives, and promote SMMEs, all of which could have relevance to a region experiencing social and economic crisis. Unfortunately, these programmes appear to have made little difference in helping the FSG region deal with the impacts of a decline in gold mining. Despite the fact that several national programmes were introduced to support SMME development (Department of Trade and Industry, 2004), the Free State province continues to have a poor record of SMME creation and of labour absorption, especially for women (the representation of male entrepreneurship is higher than the South African average). Key barriers to entrepreneurship include limited access to finance, poor information, lack of training opportunities, poor infrastructure, crime, and lack of access to government support programmes (Rogerson, 2006). In addition, the fact that the Free State’s rural areas consisted largely of commercial farming lands owned by white farmers meant that the province was unable to benefit much from the government’s promotion of rural development, which focused on “traditional lands” (Marais & Cloete, 2016).

Moreover, national and provincial initiatives promoted cooperatives as a way of addressing entrenched economic marginalization and poverty, including in the crafts, agriculture, retail, manufacturing, tourism and housing sectors (Khumalo, 2014). However, these efforts failed to catalyse significant benefits in the Free State, due to limited access to markets and business infrastructure, poor business planning, a lack of training opportunities, and interventions that did not adequately account for local economic conditions (Khumalo, 2014; Wessels & Nel, 2016). While today the national government has a programme to upgrade informal settlements, concerns have surfaced about poor local implementation (Socio-Economic Rights Institute of South Africa, 2018).

The private sector also has played some role in driving local economic diversification efforts particularly after the introduction of SLP requirements in the mid-2000s. However, in practice, political conflict has often hindered the implementation of projects identified in SLPs. Among the companies that are part of the mines’ supply chains (e.g. engineering companies), some managed to diversify their core activities or to find new regional or national markets for their products and services (Marais et al., 2017).

Conclusion

The Free State Goldfields case illustrates the wide range and depth of economic, social and environmental consequences of a rapid decline of mining operations in areas that are highly dependent on this activity. It also highlights how such impacts may affect women in particular, notably because of limited access to capital and land, as well as increased gender-based violence.

In terms of policy responses, the first reflex of local authorities was to prioritize measures aimed at supporting the mining industry, rather than diversifying the economy. The nature of gold mining, with periods of booms and busts, is likely to explain this initial response. However, like for coal mining today, the decline was, this time, structural and definitive. Precious time and resource were thus lost in trying to revive a vanishing industry.

Subsequent policy measures show the value of establishing a local organization to identify the local infrastructure, skills and needs for a successful transition, as well as the opportunities for diversification. It also shows the limitations of responses from the national level. Despite the existence of various policies to support regional development and the revitalization of mining areas, national policies tend to apply a blanket approach across the territory, resulting in measures ill-adapted to local conditions, or containing requirements that limit their availability. With regards to this, various just transition programmes and initiatives emphasize the importance of a place-based approach (Atteridge et al., 2020; European Commission, 2020; Strambo, Aung, et al., 2019).

The Free State Goldfields case highlights the importance of incorporating transition measures that tackle the social and environmental consequences of mining decline. In particular, rehabilitation of former mines is essential not only for environmental and safety reasons, but also for enabling new economic activities and generating short- and mid-term employment. The case also underscores the potential tensions that may arise across governance scales.

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