

LEGACY OF THE MINE



Ilan Godfrey

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SNAPSHOT

Ilan Godfrey has won the inaugural OpenPhoto competition for his superb series, *Legacy of the Mine*.

So what drove him to choose this subject?



“ With the discovery of gold in the late 1800s, mines began to spread unrelentingly across much of South Africa – resulting in extreme wealth for a few, exploitation and suffering for the majority and serious environmental degradation.

South Africa is no longer the leading supplier of gold but it still boasts an abundance of mineral resources and is one of the leading producers of gold, diamonds, base metals and coal. The mining industry is still the largest industrial sector in South Africa, employing an estimated half a million people.

While mining has contributed significantly to national economic growth and development, it has also left a legacy which impacts on all aspects of South African society – as well as having played a major role in re-shaping the landscape.

Benefits have never been equitably shared and local communities living near mineral development continue to suffer the most. Man-made mine dumps litter Johannesburg’s skyline, posing a threat to local communities and adding another burden onto a developing economy – to find ways to tackle this environmental threat.

4772 officially listed abandoned mines lie dormant across South Africa – five times higher than operational mines. Unemployed people live in mine hostels adjacent to abandoned mines with few – if any – basic services. Some now have little – or no – relationship to the mines that were once in operation.

Informal settlements also tend to develop on the peripheries of these uninhabitable wastelands. These communities are threatened by air and water pollution, and physical hazards

posed by sites containing open shafts and unstable ground.

Within these areas an illegal industry generally goes unnoticed. Zama Zama – or ‘illegal miners’ – undertake back-breaking work in search of gold – risking death in abandoned mine shafts and on mine dumps.

But it is not just gold. South Africa is the world’s third largest coal exporter. The encroachment of coal mines onto farmlands has become commonplace. Mines unexpectedly open with no public consultation, with farmers believing that people with high political connections must be involved. With limited knowledge about the legal aspects of land reclamation, numerous farmers have already lost their land.

With money to be made and with the recent creation of mining companies under the Black Economic Empowerment programme with close links to government, the political lines are being blurred – and the political arguments heating up. The ANC Youth League aims to nationalize the means of production, distributing the profits among the people. However, the National Union of Mineworkers claims that would threaten the livelihoods of many of the industries workers.

The need for economic growth cannot be ignored but neither can the sustainability of the water, air and soil that future generations depend on. Exploitation, corruption and greed threaten the land. Once a symbol of wealth and a formidable force, the mine today reveals the scars of neglect and decay and poses a serious threat to our society.





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Jeffrey looks out over a stretch of water that flooded a large part of the Tudor Shaft Informal Settlement in Krugersdorp on the West Rand. The informal settlement is built on top of mine tailings and is surrounded by land contaminated by mining activities and radioactive dumps. The inhabitants are exposed to radiation and dust inhalation from the mine tailings. Vegetables grown on the land are contaminated and pose a health risk. Research gathered by a world expert in uranium products, Professor Chris Busby, has revealed that radiation levels on the mine dumps are 15 times higher than normal. After eight years of lobbying, thousands of residents of Tudor Shaft Informal Settlement are being relocated to safe land.





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Sandile Dlamini is 24 years old and lives in the Paynville squatter camp in Springs. He used to work as a miner at Grootvlei mine before it closed in 2010. Sandile showed me the un-operational ventilation shaft, No 8 that has been used by illegal miners as an access point into Grootvlei mine. Sandile says, “Men have fallen to their death trying to climb into this shaft.” Sandile now works as a Zama Zama – an ‘illegal miner’ – but says that the “conditions are unbearable and you can stay underground

for six months to a year and only come up for food when it runs out.” The men that organise the illegal mining operations are known as the ‘Kingpins’, who supply the miners with food and water. Miners have to pay inflated amounts for anything extra. Payment is based on how much gold a miner finds. There is no safety equipment and oxygen is limited. Miners run the risk of dying if the mine shaft collapses. At Shaft No 13, two men died when the mineshaft collapsed, their bodies were never recovered.





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Anna and her husband Martiens Grobler moved onto their farm in Witbank in 1988 and have lived there for 24 years. They share the farm with their son and daughter who both have families of their own. 7 years ago Westcoal Mine began extracting coal on the border of their property. Soon after mining commenced, the Grobler family's health began to deteriorate. Anna's breathing has been badly affected and she relies on medicated breathing apparatus to relieve the tension in her lungs. The family suffer with sinus problems and constantly take antihistamine pills to relieve the symptoms. Anna's grandson often wakes up with a bleeding nose and sleeps with a steam machine in his room to clean the air. Black dust is a constant problem. The value of the property has also drastically reduced. They had plans to build houses on the land. Soon after building commenced these plans were halted due to the foundations becoming saturated with acid mine drainage.





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A family spend the day fishing on the Vaal River. An estimated 12 million people in four provinces – Gauteng, Free State, North West and Northern Cape – rely on water from the Vaal River system. Reports reveal that by 2014 the water will not be suitable for human consumption – posing a threat to people’s health, the economy and food production. Researchers have stated that the problem is caused by acidic water seeping from waste on abandoned mines as well as the discharge of untreated acidic mine water into the rivers and streams that make up the Vaal River system. Mariette Liefferink, chief executive officer of the Federation for a Sustainable Environment, warns that “toxic water affects the soil and neural development of the foetus, which leads to mental retardation, can cause cancer and cognitive problems.”





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Thokozani Sikhakhae is 20 years old and works as a security guard at ERPM Cason Shaft. The mine was originally established in 1896 and was one of the deepest mines in the world at 3585 meters deep. ERPM is situated on the Witwatersrand Basin near the town of Boksburg, 25km to the east of Johannesburg. It was established as an underground mining operation more than 100 years ago. Underground mining was suspended in October 2008. Following the death of two employees overcome by carbon dioxide at the SWV Shaft on 19 September 2008, underground pumping at ERPM had to be discontinued. This led to the suspension of underground drilling and blasting on 31 October 2008. A process is in place to try to find an economic solution to the problem but with no success so far.





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An early morning on Delagoa colliery in the Witbank area, a man goes in search of coal. The local community of KwaGuqa live near the abandoned mine. David Ndlovu, from KwaGuqa, is one of the many who have fallen victim to the abandoned mines in the area. In 1999, he was walking to work along one of the many footpaths, which criss-cross the mine when a sinkhole collapsed beneath him. As he sank into the ground, he was badly burned up to his waist by the coal, which has been burning underground since the mine was decommissioned in the 1950s.





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Michael Wilhelm Calitz is 26 years old and rents a room in Cinderella Hostel, Boksburg. He works as a street beggar to earn money to support his son, Dillan, who lives with his mother. If he does not provide maintenance for his son he could go to jail. Cinderella hostel was the migrant worker compound for ERPM Cason Shaft. It is one of many hostels around South Africa that were part of the migrant labour system under Apartheid. The hostels housed men from rural communities who left behind their wives and children to travel long distances to work on the mines. Now they provide shelter – but little else – for the poor and destitute.





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Belrose Supermarket and petrol station in Meyerton. With the discovery of gold in the Witwatersrand area in the late 1800s, a further discovery was made called “Black Reef”, which ran along the bank of the Klip River. Johannes Petrus Meyer, a council member for the Klip River District had a vision for a town in this area. In 1891, the town of Meyerton was officially proclaimed. It has a population of 12,000 and sits on the Klip River, a tributary of the Vaal River.





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A meeting between officials from the council and miners to discuss the future of Grootvlei mine, following its closure in 2010. Over 4,000 miners from Lesotho, Swaziland, Mozambique and South Africa were out of work and had not received their full pay. The miners had been offered an opportunity to train in other skills, while the future of the mine was under negotiation. However, the mine had been stripped of most of its assets. Grootvlei Mine was owned by Aurora Empowerment Systems, whose directors included Khulubuse Zuma, a nephew of President Jacob Zuma, and Zondwa Mandela, a grandson of former president Nelson Mandela.





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A huge sinkhole that swallowed up several homes in Likazi informal settlement in Witbank. Thousands of people live in the settlement on top of the abandoned Coronation colliery. Miraculously no one was hurt when the land collapsed. Residents live on the edge of hundreds of sinkholes, some of which are up to 30 meters deep. The sinkholes are not cordoned off and people risk falling into the crevices below.





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Sylvia Mlimi, Angel Mona and Setty Mndawe with the coal they have collected. Everyday they need to go out in search of coal for cooking and keeping their home warm during the winter months. Over recent decades, a number of studies have drawn attention to the higher than normal rates of respiratory disease and stunted growth in children – the result of being exposed to coal smoke from incomplete combustion coal processes.





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Monde, Puleng, Zizipho and Khuselo play on the Riverlea mine dump near their homes. Riverlea is a new housing development on the corner of Main Reef Road and Nasrec Road, Johannesburg. This is where gold was first discovered on the Witwatersrand Main Reef by Harrison and Walker in March 1886. For decades, gold miners have been extracting residual gold from the dumps. Today chemical methods are used to enable companies to 're-mine' the dumps, slowly changing the Johannesburg landscape once again. For every metric tonne of solid waste heaped in the dumps, there is just 0.3 grams of gold.