Mapungubwe was the capital city of a flourishing African kingdom a thousand years ago and was one of twenty-four sites around the world added to UNESCO’s World Heritage List in 2004. It is a natural treasure holding the history of 50,000 years of human development and contains priceless archaeological and paleontological treasures, with those thus far discovered likely representing the tip of the iceberg of the historical and cultural knowledge contained in this delicate landscape. While Mapungubwe may be best known for the golden rhino and other gold objects recovered from the site of Mapungubwe Hill, the entire area encompassed by the Mapungubwe Cultural Landscape World Heritage Site, contains a remarkably diverse collection of archaeological sites reflecting the complex history of South – and southern Africa. These include not only Farming Community or “Iron Age” sites but also numerous rock art sites, Early, Middle and Later Stone Age sites, sites relating to the influx of pastoralists into the area and the later arrival of the trekkers. This represents an archaeological record stretching from 500,000 years ago to the nineteenth century. It was for all these reasons that the area’s declaration as a World Heritage Site declared it as a “Cultural Landscape”. This marks it as an area that contains a network of sites that can inform us about the long history of human interaction in this part of southern Africa, both with one another and with the environment.

This kind of information is important to us, first, because like the people at Mapungubwe we too are facing various environmental and social crises and second, diverse populations in this area interacted, cooperated and fought with one another, long before South Africa was colonised. This adds to our understanding of South Africa’s history and can shape the way that we interact with one another today.

There are also a number of protected and endangered species occurring in the area. Significant developments have been made in promoting conservation in the area, including a major conservation project, involving South Africa, Botswana and Zimbabwe, which is at a very advanced stage. The socio-economic potential for these developments is unlimited.
In what way is Mapungubwe under threat?

The proposed Vele mine is located 5.6 kms to the east of the Mapungubwe Cultural Landscape (MCL) World Heritage Site and bordering directly on the World Heritage Site buffer zone. As indicated in the Vele Mine’s Environmental Management Programme (EMP), 50% of the mine’s west pit will overlap the Viewshed protection area around the Mapungubwe National Park.

As such, it is very likely that the mine will impact on the World Heritage site in a number of ways including threatening protected species, causing dust and noise that disturbs the feel and look of the area, possible pollution of water resources and damage to and/or total destruction of culturally sacrosanct rock art.

What exactly is at risk of destruction & why?

One of the most concerning aspects at risk of destruction is the permanent loss of a “green”, nature-based tourism destination, which will over time – if the mine is permitted to operate - be transformed to a “brown” industrial development area. The resultant impact of this could be the loss of a potential 2 million hectare transfrontier conservation area existing between Botswana, South Africa and Zimbabwe, which could otherwise deliver a similar wildlife product to the world renowned Kruger National Park but, with the added element of the cultural global significance of Mapungubwe, a historically highly civilized African existence hundreds of years before the first Europeans arrived.

A fully functioning Greater Mapungubwe Transfrontier Conservation Area (TFCA) has been a desired state attribute since the inception of the park and will result in an expansion of biodiversity and species conservation and extension of the cultural landscape will improve its authenticity and integrity and therefore its attractiveness to tourists.

In addition, the mining and related operations will impact significantly on plant and animal life, avifauna, invertebrate species and herpetofauna. The Vele Mine’s Environment Management Plan is poor on dealing with threatened species and does not even contain a reference to the local invertebrate species.

The South African National Spatial Biodiversity Assessment identifies this region of the Limpopo River as being one of only 22% of river segments that remain non-threatened, but just downstream, the river section forms part of 53% of South Africa’s Critically Endangered river segments. This mine therefore threatens the current sections that remain healthy as well as to make the conservation status of the downstream section significantly worse. South Africa already faces a tremendous challenge with regards to the significant impact of mining on the quality and quantity of its water sources and this mine fails to address this issue anywhere near sufficiently. The Limpopo River is already overburdened and water extraction from this system should in fact be reduced, not increased, if the needs of water users along its course and into Mozambique are to be considered. This mine not only threatens to increase water usage but to contaminate remaining water in the system. These impacts have implications for South Africa’s international obligations in that the mining and related operations will potentially be conducted on the banks of the Limpopo River, a shared watercourse with Zimbabwe, Botswana and Mozambique. It should also be noted than an independent review of the Vele Colliery Project concluded that the
impact of mining on water resources in the area, including the potential pollution of the primary aquifer as a result of acid rock drainage, have not been adequately identified or quantified. In the absence of such quantification it is not possible to determine whether or not adequate provision for the mitigation and/or management of polluted water has been made and a precautionary approach is recommended.

It is also important to consider the impacts of the associated infrastructure, such as the roads and dams that go along with mines, hauling millions of tonnes of coal to and from the mining site poses enormous risks to the sensitive environment on top of the actual mining operation itself.

What do you say to the argument that once the mine is operational it will result in 30 000 direct and indirect jobs?

Figures such as these are rolled out by mines all the time and seldom come to fruition. The facts are, as quoted from the Vele Mine’s Environment Management Plan, that the mine will employ 826 permanent employees resulting in an impact on the direct livelihood of approximately 1 495 people. How this translates into 30 000 direct and indirect jobs is speculative.

In addition, after 29 years (being the approximate life span of a coal mine), the employment opportunities will end. In comparison, in the tourism sector at least 700 permanent jobs currently exist in the core of the Transfrontier Conservation Area (TFCA) whilst the conservative estimated direct jobs to be created within the TFCA over the next 15 years amounts to 3 904 direct jobs. The fundamental difference being that these employment opportunities are sustainable and the intact environment will continue to contribute towards the GDP of the country for the benefit of all future generations.

Further to the speculative figures used in support of the mine, the Mapungubwe region does not have enough people to supply the estimated employment number, which suggests that workers may have to be brought in, with social and cultural consequences.

The figures also do not take into account the jobs that will be lost in other thriving industries in the region such as agriculture and ecotourism. Jobs in the these sectors employ a wider diversity of people including women and elderly people, whereas mining usually only targets a limited range of people in terms of demographic factors.

Jobs in mines also often come with serious health and social impacts. In the move towards a Green Economy, dependence on mining for the only form of job creation will leave South Africa in the dark ages. The MCL offers opportunities for many other forms of jobs that are sustainable, more socially equitable and less environmentally damaging. If local people lose out on access to natural resources (such as clean water), the income from their jobs in mines will have to be significant enough to compensate for this and we have yet to see this happen, so the opportunity cost of these jobs’ must also be carefully measured.
What do you say to the argument that any action to stop the building of the intended mine is actually hindering economic growth?

Again, this assumes that the only form of economic growth is mining which, if true would spell a disastrous long term future for SA. Any business that relies on utilising its non-renewable capital base for its sole form of income will soon run into trouble. Whilst SA is currently heavily reliant on the mining sector for job creation and income, and no-one disputes this, it cannot remain the case forever. It is the more diversified economies that have the greatest competitive edge in the global marketplace and the move towards a green economy suggests that this diversification is an identified imperative for South Africa. It is also important to weigh up the opportunity cost of mining in certain areas as the short term gains may not justify the long term costs and losses which may be a bigger burden to the economy. So when mining destroys water catchments, causes the loss of agricultural land, pollutes the air and rivers, destroys valuable biodiversity, effects ecotourism etc, it should be considered against the opportunity costs as well as the other development options that may be suited to the region and will be more equitable and less damaging in the long term.

What should Business SA be aware of in relation to this matter?

This mine, and many others, are being proposed for sensitive and therefore inappropriate areas. Development therefore needs to be contextualised within the broader landscape of SA. A strategic assessment of the most appropriate land uses and wisest use of our limited resources should be undertaken to inform decision making around the RIGHT kind of development. Right now, development agendas are being driven by individual companies with selfish interest. This needs to shift to a more strategic approach to development in which mining has its key place, but not at the risk of all other development opportunities and our own long term sustainability.

To those South Africans who support the building of the mine, what do you have to say to them that is in addition to what has been said already?

People need to interrogate what they are being told. The employment numbers need to be validated and the true beneficiaries of mining operations exposed. The claims about restoration and limited or reversible impacts need to be investigated. The acid mine drainage crisis facing Gauteng right now is evidence of how decisions taken for the sake of ‘development’ were ill informed in terms of the long term consequences and how mitigation measures have been grossly inadequate. We cannot afford to keep making these same errors when faced with new development plans that clearly benefit a few over the short term as opposed to many over the long term. We have to learn from the past! The EWT is not against mining. But sensitive and important areas
How can businesses and ordinary South Africans show their support and assist in this campaign?

By becoming better informed about the real risks posed by many current mining applications that are threatening to destroy large tracts of sensitive ecosystems and cultural landscapes, as well as that which compromises many community's access to resources and a healthy environment.

Investors need to rethink investing in such projects and collectively, we need to increase the pressure on government and various sectors of industry to start moving towards a Green Economy and seizing the enormous opportunities that are open to a developing country like SA, and to demonstrate leadership in this area by filling the niche, which ultimately results in a more prosperous and healthier future for us all.

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