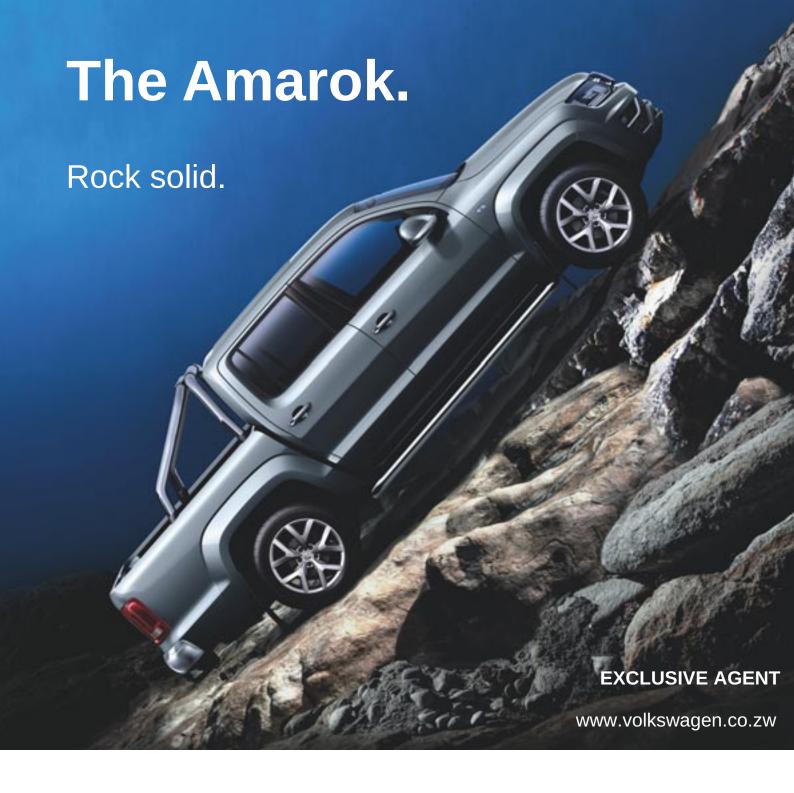
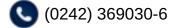
A Provider of Intelligence to the Zimbabwe Mining Community

# #9.9 ISSUE 06 2019

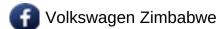




58a Golden Stairs Road Mt Pleasant Harare











# Work All Day, Everyday.



#### Tackle any challenge with JCB.

Designing the world's most advanced machines is in our DNA.

That instinct to engineer the powerful and reliable equipment means better productivity and confidence on the job for you. Discover the revolutionary thinking built into every JCB model with excellent controllability ensuring smooth operations while multi-functioning. The perfect equipment for the mining and construction industries.



**JCB LINK** 



# THE SUCCESS BEHIND BIG BRANDS THAT CARRY BIG LOADS



MADE TO FEEL GOOD.





#### TRENTYRE BRANCHES COUNTRYWIDE

Harare (Willowvale) 177 Erith Road Tel: (0242) 660536-8 Bulawayo 15 Plumtree Road Tel: (09) 71832/4 **Gweru** 1848 Coventry Road Tel: (054) 227507/227516 **Mutare** 2 Simon Mazorodze Street Tel: (020) 6437/68384

# Mining

A Provider of Intelligence to the Zimbabwe Mining Community

#### **Editorial Director**

Rudairo Mapuranga rudairo@miningzimbabwe.com

Communications

Thelma Sungiso thelma@miningzimbabwe.com

#### Writers/ Journalists

Mirirai Ngoya mirirai@miningzimbabwe.com

#### SALES AND MARKETING

Kelvin Sungiso kelvin@miningzimbabwe.com

Kenneth Mutasa Sales Consultant kenneth@miningzimbabwe.com

Michael Ncube, Sales Consultant michael.n@miningzimbabwe.com

#### **PUBLISHER**

Timelison Media

#### ABOUT PUBLICATION

Mining Zimbabwe is the premier source of Zimbabwe Mining news. Our core focus is the mining industry, trends, new technologies being developed and used to improve this crucial sector, as well as new opportunities and investments arising from it. Mining Zimbabwe sole purpose is growing and empowering the mining industry and highlighting all its challenges as well as putting forth expert solutions.









20 Clarendon Cresent, Belvedere, Harare Tel: +263 8644 276 585 | Whatsapp +263 772 701 730

#### **Johannesburg**

Tel: +27 11 875 2131
Advertising: keith@sungiemedia.com
Web: www.miningzimbabwe.com

# CONTENT

Mining Zimbabwe Magazine | JUNE Issue 2019



#### *INSIDE MINING ZIMBABWE*

06 Word From The Editor

#### MINING MATTERS

- 08 The effects of Zimbabwe's Shutdown mines
- 12 Alternative power sources to escape ZESA gruelling power
- 14 Associated Tyres moving the earth
- 16 55/45% the elephant in the room
- 18 Alternative methods to use other than Mercury in Gold mining
- 22 Interview: ZMF Spokesman DOSMAN MANGISI

www.miningzimbabwe.com <>JUNE 2019 **/05** 

- 24 Prospect to sell exploration business to New Energy Metals
- 25 Curechem Your One Stop Shop for All Your Mining Chemicals
- 26 Minerals must foster community growth
- 28 "USE IT OR LOSE IT" Experts speak out

#### MINERAL FOCUS

 $32^{\,}$  All Minerals and location found in Zimbabwe



### The future of the Mining Industry in Zimbabwe is so bright



D. R Mapuranga

Welcome to yet another edition from your favourite Mining News Provider. With positivity in the air, we hope to satisfy you with all the discourse and trending news in the mining industry of Zimbabwe.

Our JULY Edition will be distributed at Mine Entra 2019 and this special issue will feature mining suppliers and service providers, making it possible for the Zimbabwe Mining Industry to run flawlessly. This issue will also feature a special Mining directory. Unlike Newspapers, magazines stay in circulation for years this will be a great opportunity to be featured in, by far Zimbabwe's most in-demand Mining Magazine.

The future of the Mining Industry in Zimbabwe funding, and inspirational dedication, the mining sector is poised to be the economy resuscitator of the once giant economy in

is so bright, with right policies, adequate Africa.

Zimbabwe is on a path towards development and revitalization of the socio-economic as well as political spheres in order to create a strong, vibrant and powerful formidable force in Africa. The mining industry has all it takes to get Zimbabwe towards an amazing investment destination.

Experts believe that the mining sector in Zimbabwe will not be transformed by the government but will rather be transformed by mining players through their tireless work with the government ensuring fair mining policies and protection of investment.

Miners continue to promise withdrawal of gold delivery to Fidelity Printers and Refiners due to the 55 per cent forex retention the government is offering them which they say is not viable considering inflationary challenges the country is facing. Miners have slammed Reserve Bank of Zimbabwe policies as a reminiscence of the former governor's policies, the current RBZ administration is labelled to have "learned nothing and forgotten nothing". The 45/55% policy is an Elephant the government needs to address and quick.

At this point in time, Mining Zimbabwe would like to thank everyone for the support and appreciation they give to Zimbabwe's number one provider of Mining News. We thank everyone responsible for the growth and running of Mining Zimbabwe up to date, Advertisers, Mining companies (small scale and large scale) production staff and importantly the magazine's audiences. Please do make it your habit to visit our website

www.miningzimbabwe.com, our social media pages i.e Facebook, LinkedIn, YouTube and Twitter platforms, you can also request to be added to our WhatsApp and Telegram group chats.

You can also visit us at our new offices at Clarendon Cresent, Belvedere in Harare. Please continue writing to us, your contributions and comments are greatly appreciated.

With regards

D. R Mapuranga

# **EDITOR'S** NOTE











#### Valve Sales, Reconditioning & Rubber Lining

www.invalve.co.za

If it's not INVAL®, it's not Invincible

TEL: +27 (0) 11 822 1777 | FAX: +27 (0) 11 822 3666 | EMAIL: enquiries@invalve.co.za

# EMPOWER YOUR OPERATION

Benchmark for quality and innovation around the world. Based on more than a century of experience, Scania makes your business excel and prepares you for any type of challenge.

Genuine Scania parts and services available from our workshops in Harare and Bulawayo

Our job is to help you run a reliable and efficient operation. Today and tomorrow.





Email: info@scanlink.co.zw 30001 Dagenham Rd, Willowvale Tel: 621551-3 Cell: +263 772 278134



# THE EFFECTS OF ZIMBABWE'S SHUTDOWN MINES

Closure of mines like Mhangura, Gaths Mine, Shabane Mine, Kamativi Tin mine, just to mention a few, which were once sources of livelihood and a pillar for many families and the economy at large has caused a variety of problems to the once prosperous mining communities.

gainst the background of a successful operating mining industry which at its pick was sustaining the whole of Zimbabwe cementing its position as one of the most economically gifted nations in Africa, Zimbabwe's shutdown mines have become a major stumbling block for the nation to embrace its vision towards economic revival.

According to a popular discourse that has been trending in the mining industry in Zimbabwe, the perception to improve the economy for the citizens lies in the mining industry particularly to the majority of Zimbabweans who live near areas with mineral deposits. As such closed mines in Zimbabwe, have made life difficult for

people who live in such areas.

The closure of mines like Mhangura, Gaths Mine, Shabane Mine, Kamativi Tin mine, just to mention a few, which were once sources of livelihood and a pillar for many families and the economy at large has caused a variety of problems to the once prosperous mining communities.

For example, Shabane and Gaths Mines had shares in Firstel, FBC Bank, Costco, Tube and Pipe industries, Turnal and Fiber Cement, PG AND Maskew industries and a cotton ginnery in Gokwe. The fall of these giant mines saw the closure and downfall of the mentioned once big and popular firms. This has a negative effect on the economy of Zimbabwe up to date.



#### The fall of sporting activities

Many Mines in Zimbabwe sponsored sports through The Chamber of Mines. With the closure of the mines, the majority of the teams and clubs were disbanded, thus a loss of yet another source of livelihood. For example, Gaths Mine had one of the biggest sporting stadia in Zimbabwe for both athletics, Netball, soccer, volleyball, cycling among others, however, the stadium is now a sorry state with the community now using it as a paddock for their cattle. With the closure of these mines in Zimbabwe, sports in actual fact was seriously affected, however, the coming of platinum mines like Zimplats have seen football reemerging.

#### **Childhood destitution**



Children in most towns with closed mines where mineral deposits are still found have dropped out of school, opting to search for mineral deposits selling them at low prices as a way to fend for their families. This causes a significant reduction in the literacy level of multitudes of affected children.

The Great Dyke mineral belt has turned school children into artisanal gold miners trying to create jobs for themselves as a way to move on with life.

Recently a Guruve primary schoolgirl 11, died after being trapped in a disused mine shaft while mining gold.

"More awareness campaigns need to be undertaken by stakeholders in the area on disaster risk management, child labour and child protection as well as guidance and counselling. These need to be undertaken at all possible fora, the death of one pupil is one too many." Guruve district school's inspector Pinias Dambuza said expressing shock.

#### Increased rate of prostitution

Due to economic hardships in Zimbabwe, children as young as 12 are engaged in prostitution particularly in mine areas were major mines were closed and now small scale and artisanal mining activities are taking place.

There is a high increase rate of prostitution in areas where mines have shut down. This lack of income results in women and young ladies resorting to selling their bodies just to let ends meet.

This shows that the shutdown mines are leading to the deterioration of societal values as people are searching for any means possible to take make ends meet.

Prostitution has increased in areas like Mazoe where there is rampant gold panning. More so, it is sad that girls from the age of 13-22 are the most active in the world's oldest profession. Some engage in harlotry because their fellow colleagues are doing so.

#### Land degradation and water pollution

Shutdown mines are to a greater extent, putting people's lives at great risk. For example, people and animals in the Mashava area (Gaths Mine) are at risk of falling into open pits that were just left after extraction of minerals.

The open pits overlook the area were small scale mines operate, thereby distracting the beauty of a community in particular and the nation as a whole.

One mining specialist from the Community Water Alliance, Hardlife Mudzingwa indicated to Mining Zimbabwe that closed mines are creating more opportunities for the small-scale miner, but some problems arise due to their unmonitored activities which are leading to contamination of water for the community.

He said "Small scale miners who use mercury, sulphuric acid and cyanide are leading to the contamination of water"

#### MINING MATTERS

"This is leading to water borne diseases, as such the EMA must look towards those areas and educate the miners in as far as a good purification process to the miner"

"Many animals who live in water are affected, hence die"

#### Minerals just laying idle

A lot of minerals are not fully utilised as a way to build up the country's economy due to the long-shut mines.

Mhangura mine shut down but still has a lot of copper which can contribute to the economy and help local and Zimbabwean majority with job opportunities.

Shabani mine also is sitting on loads of asbestos which can aid in reviving Zimbabwe's economy in this era where the nation is moving towards embracing devolution.

Thus, the closing of mines has put a lot of families at risk since miners lost their jobs, as well as the nation losing foreign currency.

#### **Mining Towns standards deteriorating**

Towns with closed mines have declined in terms of peoples living standards because of a number of reasons:

Shops have closed and some have even collapsed/ community towns operating at low standards.

Looking at the areas like Gath's mine, business owners of community shops have closed and left the area. People are now travelling to a distant shopping centre to access goods and this has been proved to be more expensive to community people.

#### **Resettlement problems**

The issue of resettling the once so-called miners has become a problem in areas with closed mines. Miners feel that it's not easy to just pack and go major reason being that the mines still owe them.

This can be seen through Mashava, Gaths mine have closed but the workers are still there claiming that they cannot leave until they have been paid.

According to the workers, the situation is now so bad as they cannot afford to raise money for school fees and even basic goods. One former miner said "we have pleaded with the government that the company is failing to pay us our pensions and salaries, but nothing has come into fruition"

Shutdown mines have troubled their former employees looking at the Kusena diamond mine which was owned by ZMDC. The mine closed while some workers were on leave.

Speaking to one representative of the mine, Gilbert Kusena he said "we have been troubled by this former mine as they are refusing to pay us since 2011 up to now"

"We are in a bad state as some of our houses were destroyed by cyclone Idai and other members from are still missing"

The government must take into consideration that closed mines have haunted and continue to haunt the majority of former workers lives. As much as Zimbabwe is facing an unprecedented time economically in many years, former workers hope one-day promises of reopening will be fulfilled.





## **Your Premium Drilling Supplies Provider**





#### **CONTACT US**

9 Falmouth Rd, Harare, Zimbabwe

**Cell:** 0771 567 532 | 0777 884 954

Tel: +263 242 745 388 | www.bsds.co.zw



# Your Logistics, Our Business!

Through the synergies between **BAK LOGISTICS**, **PREMIER FORKLIFT and KEY LOGISTICS** we are able to provide a complete logistics package. We believe we are the **ONLY** company in Zimbabwe when it comes to providing end to end logistics solutions.

#### **WHY US**

- ISO 9001.2008 Certified
- DB Schenker Partner
- Toyota Industrial Equipment partner
- Ideal Location
- Road and Rail access
- Cost Efficient
- Warehouse Management system

#### **OUR SERVICES**

- DISTRIBUTION SERVICES
- WAREHOUSING
- TRANSPORT SERVICES
- RAIL INLAND PORT
- CUSTOMS CLEARING
- FREIGHT FORWARDING
- HANDLING SERVICES
- CONTAINER PARK / DEPOT
- GENERAL CARGO







Subsidiaries of the TSL GROUP

HARARE 106 Dartford Road, Willowvale, Harare, Zimbabwe Tel: +263-242-620070/8 4 **MUTARE**Park Road, Mutare
Tel: +263 -20- 65689 | +263 779 310 945

BULAWAYO Sheffield Road, Belmont, Bulawayo Tel: +263-29-60367 10

# Alternative power sources to escape ZESA gruelling **POWER CUTS**



he mining sector in Zimbabwe has been backed to be the economic resuscitator of Zimbabwe, however, with the continued power cuts and other economic problems facing the country, the industry's predicted growth might be thrown into an abyss of no hope.

The current economic crisis in Zimbabwe is partly blamed for the unstable electricity supply which miners say is affecting operations. Zimbabwe Electricity Supply Authority (ZESA) is reportedly facing serious operational challenges particularly power generation which has caused unstable power supply nationwide.

State utility Zimbabwe Electricity Transmission and Distribution Company (ZETDC) last month started indefinite

rolling power cuts lasting up to 10 hours per day, blaming low water levels at the Kariba dam that supplies the biggest hydro plant and creaking infrastructure at Hwange power station.

Caledonia chief Executive Steve Curtis recently raised a red flag on the unstable

power supply as one of the reasons the company declined in its 2019 first-quarter gold production statistics as compared to the previous comparable first quarter of 2018.

This is, therefore, a clear indication that the Mining sector and other sectors in Zimbabwe need to find an alternative source to deal with an unstable power supply so as to keep the sectors moving.

#### Import electricity

Mining companies and other mining associations can import their own electricity from neighboring countries in order to curb low production, therefore, keeping their operation running undisturbed.



month, An Implats spokesman said Zimplats had secured power from Mozambique and a deal to use Zimbabwe's transmission network to

deliver it.

SWE ELECTA

4 DISTRIBU

Thus, if mining firms start to import electricity for their own operations it would reduce the burden on ZESA. therefore, power cuts would be reduced.



#### Using diesel and petrol

Zimbabwe's biggest gold producers, small-scale gold miners, who produced a record 996,373 ounces last year, and other mining companies would find it difficult to import electricity and therefore will be hit hardest by these power cuts because they are largely depended on electricity, diesel and petrol for production.

Zimbabwe's biggest chrome miner, African Chrome Fields, reportedly said that it was using diesel to power its operations and would not be affected by the cuts.

The use of petrol and diesel to power operations is not viable at the moment due to fuel problems the company is facing for quite some time now, however, fuel importation in Zimbabwe has been liberalized meaning mining firms are able to import their own fuel.

#### Solar power

Although building solar projects that will sustain mining power appetite, is the way to go in dealing with unstable power supply for the moving of the mining

sector can be found in solar power.

Among all the benefits of solar panels, the most important thing is that solar energy is a truly renewable energy source. It can be harnessed in all areas of the country and is available every day. Thus solar energy is a sustainable power supply to empower the mining sector.

Karo Resources, which has established a huge camp at its platinum mining claims in Mhondoro-Ngezi has reportedly said that it would build a 300 MW solar plant to curb power shortages. Also, Venice Mine Complex has an impressive solar farm which it has been using to power its operations for some time.

#### **Small Modular Nuclear reactors**

Advanced Small Modular Reactors (SMRs) are a key part in providing stable power and developing safe, clean, and affordable nuclear power options.

Advanced SMRs range in size up to 300 megawatts electrical (MWe), Zimbabwe spend over 5 million USD per month on power imports, which is translated to 60 million a year, 600 million in 10 years, Zimbabwe could have had many SMRs

dotted around the country by now and become a net exporter of energy.

Therefore, mining firms should be geared and invest in small modular nuclear reactors for uninterrupted power supply.

#### **Build independent power stations**

Mining companies and associations could merge to construct independent power stations in Zimbabwe to guarantee the security of power supply and ensure self-sufficiency on electricity by facilitating investment.

If mining firms invest in building independent power stations the country will save millions of dollars it has been losing on electricity imports, rather Zimbabwe will have enough to export.

A good example is RioZim which signed an exclusivity agreement with a Chinese state-owned firm Power China for the construction of a 2000-megawatt (MW) thermal power station in Sengwa, Gokwe North.



ssociated Tyres (Pvt) Ltd is a homegrown, Zimbabwe owned tyre distribution and service company that has been meeting the needs of the Zimbabwe market for nearly twenty years.

Their team includes arguably the most experienced personnel in the country, and their highly trained staff members are on hand to offer the mining sector the best advice and range of quality products.

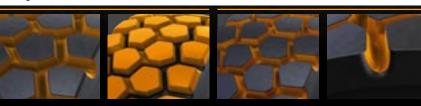
Their professional approach to delivering the goods, be it the actual tyres, the aftersales support, or the add on lines like made-to-order rims, truck and OTR repairs, survival tyre sealant or performance enhancement products like Tyrfil (foam filling), has been a crucial factor in their success.

Associated Tyres (Pvt) Ltd is all about the heavy duty workloads, offering value in its products and after sales service to the

agricultural, mining and transport sectors. Known for their tyre expertise, they offer an outstanding range of quality truck tyre brands like Pirelli, Formula, Kumho and budget brands Aplus and Double Coin. General, Continental (Mining Tyres), selected Michelin (OTR) and well known BOTO (OTR) fill the mining needs. Their farming clients choose from a great selection of European manufactured agricultural brands in Trelleborg, Mitas and Cultor. Our industrial tyres on offer are Camso, Trelleborg and Mitas. In addition, we offer rims, industrial rim conversions, an OTR tyre repair centre in Harare and Bulawayo and On Site Tyre Management.

relationships or through major brand offices based in South Africa. They ensure the mines are visited in conjunction with the principal brand representatives to ensure the best possible after sales attention. Stock of selected tyres are held locally or drawn down from bonded warehouses to ensure competitive prices in RTGS or NOSTRO. They have branches in Harare, Bulawayo, Mutare and a dedicated salesman in the Midlands to meet your needs.

They have a fully accredited Rema Tip Top repair centre, based in Harare and another repair centre in Bulawayo. The technicians are Rema trained and



The brands they offer are all ably supported through direct factory supply

certified, and rigorously follow procedures so ensuring they repair customer tyres to the highest possible standard. They offer

# Technical strength gives associated tyres the edge



They offer on-site service, where their teams move onto mining sites to manage and control tyre performance, and supply business owners with reports that assist in better tyre cost management.

Their Tyrfil factory, based in Harare, offers miners the choice of foam filling their tyres, particularly for underground mine applications, which not only improves safety from premature tyre failure but extends tyre life and reduces costs to the mine. As is their custom, their technicians are well trained to ensure a quality product is delivered on time every time.

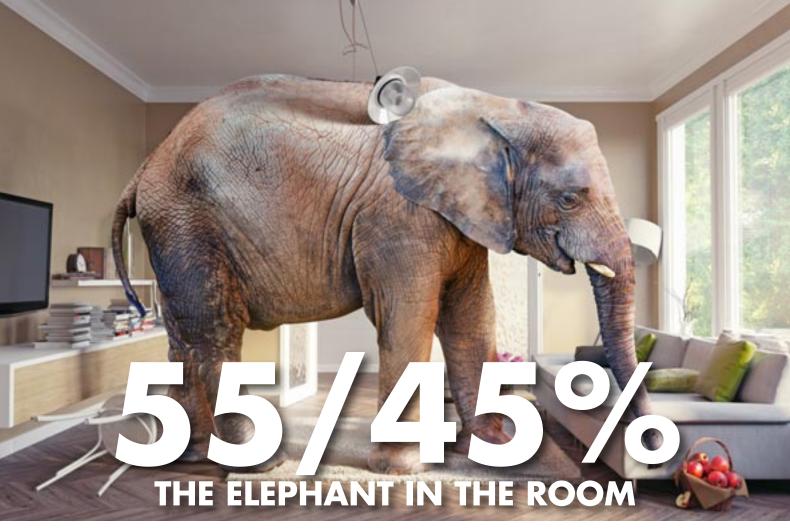
They offer the supply of agricultural rims for tractor rim replacement and conversion, as well cost effective replacement of OE rims and rim components for mining equipment,

through international brand RIMEX. The technical staff is 'Their teams move trained to correctly measure a rim to ensure correct manage and control tyre performance' delivery of your rim orders.

> Call them today and experience the professional and friendly service.



+263 71 221 0162



Despite beating a 19-year record in gold deliveries, reports have it that, over 30 tonnes of the gold was smuggled out of the country last year due to unfavorable pricing following the spreading disparity between the RTGS dollar and the USD.

By Dickson Rudairo Mapuranga

Gold delivery to Fidelity Printers and Refinery the country's sole gold buyer and exporter is hitting a major decline as predicted when the Reserve Bank of Zimbabwe governor John Mangudya announced the New Monetary policy reducing gold forex retention from 70 per cent to 55 yet miners were advocating for an increase up to 90 per cent foreign currency retention.

The reduction of foreign currency retention from the previous mark has sparked anger and protests from the small-scale miners over this issue which

in actuality has reduced gold prices significantly thus, making gold submissions to Fidelity unviable.

Deliveries in the first three months of the year declined to 6,5 tonnes from 7,3 tonnes delivered at the same time last year.

Deliveries in the

The year 2018 saw small-scale miners delivering 66 per cent of the 33,3 tonnes that were delivered to Fidelity. But five days after the 2019 Monetary Policy Statement on February 20, according to Zimbabwe Miners Federation president Henrietta
Rushwaya, only 20kg of was delivered, against 60kg-per-day on average.

There is an exploding situation when it comes to the delivery of gold to Fidelity Printers and Refiners, miners have stated that selling gold to Fidelity has become unreasonable and unviable.

## Small-scale miners and experts speak out

One small scale miner identified as Chawanga said "It is unreasonable to sell gold to Fidelity considering the process miners go through which is painful,

> stressful, dangerous and tiresome then you get paid peanuts. The money will also be affected by inflation minutes from the bank, so bond

is a no-no" he said.

first three months of

According to the miners, selling gold to the parallel market has become a better option since the market has proven to be reliable and rewards the miners of their hard-earned money in hard currency. Although the amount paid on the black market is lower, the market has proven to be better than Fidelity.

"It is a well-known fact that the parallel



market has become more viable since the market has proven to be reliable and rewarding the miners of their hard-earned money. Although the amount paid on the Parallel market is lower, the market has proven to be much better than Fidelity.'

"It is a well-known fact that the parallel market pays lesser per gram of gold, what is surprising is that miners are running to those people, the parallel market has become the formal market in Zimbabwe," said one miner.



**On our Mining Zimbabwe Facebook page**, we asked why gold submissions to
Fidelity have fallen and most miners

expressed disappointment with the current payment system.

A follower known as Johannes heartily said " 55 %-45% payment system kills the mining business. How did they arrive at such a payment system? Gold is not just picked from the ground.... You invest money, incur losses.. The moment you start to get some recovery someone says the payment system is what is there? Just to harvest gold like that? It's bad... The culture of bad policies must stop... Pay 100 % to the miners, export the gold at a profit.. Not to exploit miners then export and get profits, pocketing a fortune by blood sucking your citizens.. We look up to those in authority to be fair on miners. Please, review that thievery policy!"

Seasoned geologist Kennedy Mthetwa said "Been there done that got the tshirt in 2000 to 2008 policies which saw gold production decline to unprecedented levels. History repeating itself. RBZ and Fidelity learnt nothing from the 2000 to 2008 era?"

Speaking at a post-2019 Monetary Policy Statement review meeting with small-scale miners in February, Reserve Bank of Zimbabwe deputy director for Financial Markets William Manhimanzi said the central bank was struggling to pay miners in hard cash as it was failing to import notes via South Africa.

"The only bank that remained was FNB, and they gave notice in December 2018 that they would no longer be supplying our own local banks with cash," he said. However, miners slammed the government of hiding behind a finger, they accused the government of stealing exporter's money to take care of their insatiable appetite of the USD thus, robbing exporters of their dues.

"It is clear that the government badly needs foreign currency to take care of its other obligations. However, the above scenario paints a picture of a government which is failing to protect the very providers of forex. This is not sustainable and has to be remedied at all costs. There must be incentives meant to encourage and support small scale gold miners because previous gold deliveries show that this is where most of the gold to keep Zimbabwe going is coming from". Said one miner.

The miners can see the elephant, the miners have pointed it out. The government will have to address the Elephant in the room and soon.

# Alternative methods to Mercury use in Gold mining



Alternative development theory states that development is a bottom-up approach which means that for anything to grow significantly it has to start from the ground up.

With the economy of Zimbabwe towards a path to revitalisation small scale and artisanal mining have contributed significantly to the economy with gold miners contributing more than large producers to the country's gold export.

Small scale gold miners mainly use harmful methods in their mining activities, an open example is the use of mercury.

The United Nations Environment
Programme has estimated that ASGM
contributes a 37 per cent share of the
anthropogenic emission of mercury to the
atmosphere. According to statistics each
year tens of thousands of people are
poisoned by toxic mercury spewed into

the air, land and water by small-scale gold miners in Zimbabwe and other lowincome countries where

has soared as gold prices skyrocketed.

of ercury emissions.

It is estimated that small scale and artisanal miners in Zimbabwe are responsible for over 1 600 tonnes per year of mercury emissions.

Mercury is mixed with gold-containing materials, forming a mercury-gold amalgam which is then heated, vaporising the mercury to obtain the gold. This process according to experts is very dangerous and can lead to significant mercury exposure and health risks.

Mercury is toxic to the nervous system, the brain and spinal cord, particularly to the developing nervous system of a foetus or young child, and inhaling elemental mercury, the vapour is given off when the chemical is heated, can also be dangerous.

The Environmental Management Agency (EMA) has for a long time raised alarm over unsanctioned use of mercury by gold panners in Zimbabwe. EMA has said that the flora and fauna in Zimbabwe were now at risk of extinction due to uncontrolled use of mercury by small scale and artisanal miners.

EMA encourages small scale and artisanal miners and the country at large to embrace mercury alternatives such as gravity concentration coupled with the use of borax which proved to be equally efficient according to the findings of the Global Mercury Project which ran from 2007 to 2012 in Kadoma.

#### **Use Borax to Replace Toxic Mercury**

This method basically requires the same equipment as the amalgamation methods. However, after the rod milling, an ore concentrate holding the heavy minerals is produced by using a launder (gold sluice) and a gold washing pan. The heavy mineral concentrate is mixed with borax powder. By blowtorching the mix, the borax melts and the gold sinks to the bottom. It has recently been demonstrated that under identical conditions, gravity borax method yields more gold than the traditional amalgamation method. Despite this advantage, the use of this method in Zimbabwe is very minimal therefore should be highly encouraged.

#### **Concentration Methods**

Concentration methods thrive on increasing the amount of gold in ore or sediment, by selectively removing lighter materials (gangue). If employed effectively, concentration methods can eliminate or greatly reduce the quantity of mercury in gold recovery. Prior to concentration, the ore must be crushed or milled to liberate gold particles from rock and to increase the surface area. Concentration works best when the particle size of the milled material or sediment is relatively consistent so that most particles are of similar size. The use of screens or sieves can be employed to get a consistent particle size. Once the gold-containing material has the appropriate particle size, one (or several) of the methods described below can be employed to concentrate gold bearing material:

Most concentration methods rely on the high density of gold relative to other minerals in ore or alluvium mixture. These are referred to as gravity methods.

Magnetic or chemical properties can also be exploited to enhance concentration. Due to spatial and temporal differences as well as the uniqueness in mining operations concentration methods must be selected carefully. Factors such as the type of ore or sediment, other minerals present, gold particle size, and the availability of water and electricity should be considered when selecting a particular method.

#### **Gravity Concentration Methods**

#### **Panning**



The panning process uses water to separate heavy gold particles from lighter ones within a medium-sized pan. In this process, ore thought to contain gold is placed in a wide, curved pan along with water. The miner moves the pan in a series of circular motions designed to remove lighter sediments. The high density of gold allows it to settle at the bottom of the pan as lighter material is removed along with water. The process is repeated for some time until gold is exposed at the bottom of the pan for the miner to recover. Panning is effective when gold is relatively coarse and well liberated. All factors being constant, panning can produce high grade concentrates or even liberated gold.

Then miners can employ gold recovery methods such as direct smelting (described below), although many panning operations lead to directly recoverable gold. Panning is a low-cost technology of gravity concentration that requires time and skill to be effective. One of the major drawbacks to panning is that miners must pan small amounts of concentrate. Therefore, panning is often done after other methods of gravity concentration such as sluicing have completed.

#### **Sluicing**



Sluices use water to wash ore or alluvium down a series of angled platforms. As water washes sediment down a sluice, gold particles tend to sink and are captured by material covering the bottom of the sluice, often carpets. Sluices are usually inclined at 5 to 15-degree angle. As moving water travels down a sluice, it generates greater force and keeps gold particles from sinking easily. For this reason, most gold is captured at the beginning of the sluice. Carpets or other capturing devices on the bottom of sluices can be removed and washed in a bucket to remove the captured gold.



#### MINING MATTERS

The design of a sluice can lead to higher gold recovery if the force of the water travelling through the sluice is greatly decreased. Also, a series of rifles can contribute to the management of flow to improve gold recovery. The use of a zigzag sluice can also achieve the same by creating a drop between the first and second platform that disrupts the velocity of the water as it moves down the sluice. Another way of improving the zig-zag sluice is to have a combination of two sluice surfaces. The first is tilted at a steeper angle than the second, decreasing the velocity of the water as it hits the second sluice, increasing gold recovery.

Water supply is a prerequisite to have a functioning sluice operation. This can be done with piping, drums, buckets, or natural flowing water bodies. A constant flow will be better than a bucket-driven flow. Sluices are good at concentrating large amounts of ore and sediment in a relatively short time but often do not yield concentrates with high amounts of gold. The resulting concentrate must usually undergo further methods of concentration, such as panning.

#### **Shaking Tables**



Shaking tables are elevated tables tilted to one side with raised ridges running horizontally down their length. Crushed ore or sediment feed and water are released at one end of the table. The water washes the crushed ore down the table. As the material is washed down the table, specialised grooves trap gold and direct it to collection points on the side of

the table as lighter minerals are washed away. Concurrently, the table is continually shaken by a motor to agitate the material and aid in the separation of gold. Shaking tables are effective and can concentrate large amounts of ore

at a time, considering high grade concentrates and liberated gold, but they are also relatively expensive and require some experience to operate.

#### **Spiral Concentrators**



The term spiral concentrator refers to specialised pans tilted on an angle with spiralled grooves. The spiral grooves in the pan lead toward the centre where a hole is connected to a container to catch material. The pan is rotted continually using a pan as concentrate is fed into the pan by an operator. In most designs, a pipe extending horizontally across the pan sprays water along the surface of the pan as the concentrator spins. The water washes lighter particles down the spiral concentrator into a bucket while denser particles, including gold, are carried by the spiral grooves toward the hole in the centre of the concentrator. The process is repeated several times until the operator is left with a high-grade concentrate, and often liberated gold.

**Vortex Concentrators** 

QUICK FACT

The mine has a capacity to treat 450 tonnes of ore per day.

Vortex concentrators make use of a rotating flow of water to separate lighter materials from a concentrate and remove them via a raised drain

hole. A vortex concentrator is a 'circular tub' with water input on the side of the tub and a raised drain in the centre. The said circular tub is filled with water until it reaches the level of the drain hole. The concentrate is then added in a thin layer around the bottom of the bowl. Following this, water is then pumped into the side input, creating a rotating vortex of water that drains in the centre. The created vortex pulls lighter material up from the bottom of the bowl and out through the drain hole. Gold because of its high density remains at the bottom of the tub for collection. The methods require expertise in that there is a need to monitor the amount of water flow going into the tub. If it is too great the velocity of the water will carry gold particles out of the bowl and this will lead to losses of gold.

#### Centrifuges



By definition, a centrifuge is a vessel that rotates about a central point. Its wide application has been related to the separation of materials in a mixture by density. In a bid to apply the principle to

to gold processing, the concentrate is fed into the centrifuge through an inlet pipe at the top of the centrifuge in a slurry of around 60-75% water and 40-35% solids. The fed material collects in a vessel in the centre of the machine where high-speed rotation creates a force that moves the material up the sides of the vessel's walls. As the materials are pushed up the sides of the bowl's wall, denser material like gold is caught in ridges while lighter material is ejected from the centrifuge.

#### Other Concentration Methods

#### Magnets

The use of magnets can be employed to remove magnetic minerals such as magnetite from the concentrate. Magnets can be used after and/or in conjunction with other methods of concentration. One technique for extracting magnetic minerals is to place handheld magnets on the bottom of a pan containing dried concentrate to separate metallic from non-metallic material. It is critical to take due care to avoid losing gold particles during the separation. The use of a piece of paper so that the minerals attracted to the surface of the paper can be easily removed.

#### **Flotation**

The flotation process is usually used by large scale miners but can also be adopted in small scale operations. The process is best for processing complex ore types, especially ores that are difficult to process using gravity methods. When doing flotation, a mixture of slurry and frothing agents are added into a flotation machine. A tube releases air into the tank of the machine and an agitator creates air bubbles at the bottom of the tank.

Minerals that are hydrophilic, such as



gold, attach to the bubbles' surface and are brought up to the top of the tank. Other minerals fall to the bottom of the tank and are discarded as tailings. Bubbles containing gold and other hydrophilic minerals accumulate at the top of the water level as froth. This froth is then scraped off to create a concentrate of gold and other hydrophilic minerals. Flotation creates high quality concentrates and is good at capturing fine gold.

#### **Gold Recovery**

#### **Direct Smelting**

The methods briefly explained above can yield a concentrate with a large proportion of gold comparative to other materials. Nevertheless, there is a need to separate the gold from the other remaining minerals before it can be sold. Methods like direct smelting can then be employed to recover gold. When using direct smelting, the high-grade concentrate is heated until the gold melts. The liquid is then cooled to form solid gold Dore, a semi-pure gold alloy, that can reach upwards of 95% purity.

#### **Chemical Leaching**

Chemical leaching makes use of the chemical properties of gold to leach it from the ore, concentrate, or tailings. Leaching is commonly used in large scale mining operations but has been increasingly adopted in small scale mining because of its high gold recovery rate and low cost. For best results when using chemical leaching there is need to use a combination of preconcentration and mill leaching, as they lead to the least amount of waste, the short processing time for miners, and high gold recoveries. Some of the chemicals used for leaching are toxic e.g. cyanide compounds. When chemical leaching is employed, it is important for miners to handle the chemicals in a sound manner and to ensure that they use appropriate personal protective clothing to avoid health and environmental concerns.

#### When using direct smelting, the high-grade concentrate is heated until the gold melts.

Cyanide is highly toxic and great precautions must be taken when handling it. However, in contrast to mercury, cyanide does not persist in the environment. Cyanide leaching should not be done on tailings where mercury is present because cyanide will from a soluble mercury cyanide complex, mobilising mercury to great distances.



# Interview: ZMF Spokesman **DOSMAN MANGISI**

Inside Mining Zimbabwe with Rudairo Dickson (RD) this month met the spokesperson of Zimbabwe's biggest and loudest small scale miners association, Zimbabwe Miners Federation (ZMF) Dosman Mangisi (DM) to discuss on his career in the mining industry and what he believes needs to be done to see the mining industry moving for the next years.

RD, Good day Dosman, welcome to Inside Mining Zimbabwe. Can you please share your background and experience in the mining sector?

**DM;** I'm the Public Relations Manager of Zimbabwe Miners Federation, a government umbrella body for INSPIRATION all artisanal, small and I was moved with passion after I saw medium scale miners in a lot of technical Zimbabwe. I now have six issues not being addressed years in the same practice emerging from a media and communication background. I was moved with passion after I saw a lot of technical issues not being addressed I then enrolled at Zimbabwe School of Mines to do Minerals Resource Evaluation, the program that equips one to be fully well versed with all technical aspects in the mining industry, from Geology, Survey, Mining and Mineral processing. Importantly, it touches more on Mining projects due diligence, evaluation and valuation. The program equipped me to make informed strides in the mining sector.

**RD** The name Dosman Mangisi has been so vocal when it comes to the promotion and development of small scale mining

for the past years. What pushed you to be so vocal when it comes to representing miner's wishes?

**DM:** The former Deputy Minister Hon Fred Moyo, was my major pillar of inspiration for inducting me into the mining industry. Mining economic opportunities, up and downstream to the country became more influential to push me. I had to make sure that these opportunities are seen and felt by both the government and the miners themselves across all communities in the country and world over to have an appreciation of the Zimbabwe mining sector. The strength of the sector is vested in numbers and their productions which must be made known to

> business, public, private sectors and investors at large across the world.

RD, Mr Mangisi you're in the current executive of Zimbabwe Miners Federation, the biggest and loudest representatives of small scale miners in Zimbabwe. Can you please share what the current ZMF administration has achieved so far as compared to the previous administration?

**DM:** In terms of achievements it has been one step after another. We walk to go forward, which is a success. The previous have their success story which is written in black and white. They pushed a number of reforms in the sector, especially in the gold sector that is the legalisation of gold mining and promoting conducive policies for small scale miners. For example, the Environmental Management Plan for small scale miners, although it is true

# Interview: ZMF Spokesman Dosman Mangisi



that, they left it at draft stage and it has, however, been completed with the current executive.

Identification of hot spots for artisanal miners is part of the previous executive activities. The current one has come on a full force towards mining mechanisation of the artisanal and small scale miners. A number of mechanisations are already lined up and have started rolling up. ZMF has signed an alliance with Metbank, to cater for financial advisers and loans funding, and a number of miners have since opened accounts with the bank in order to benefit. ZMF has an MOU with Pabloz ASM Mechanisation support, which is funding miners in the gold sector with compressors and consumables. Other mechanisations on cards are chrome miners, excavators for the small scale chrome miners. Mechanisation is key to the development of the small scale miners. Achievements are coming in stages.

RD, Being a miner comes with its own challenges, what challenges are you facing as a miner and how do you intend to curb them.

**DM:** The first biggest challenge is mining

technical due diligence really lacks in the small scale mining sector. For one to start mining he needs this exercise from mining experts or a general idea. One needs to identify the deposit, size of the deposit, mining methods which are sustainable, how to develop the mine and have a sustainable

production so that at the end one breaks the ground using suitable mining equipment.



Zimbabwe School of Mines has been on the lead to promote mining skills to the artisanal and small scale miners. I have been on outreach with EMA to train the ASM in Mpoengs, Matebeleland South, also Zimbabwe Environmental Lawyers Association once funded a training on women in mining in Inyathi, Matebeleland

> North, this training was conducted by Zimbabwe School Of Mines. These were part of my initiatives with stakeholders who were keen to support ASM sector with skills. Many of these trainings need to be carried out. I also want to encourage miners to attend these mining training

programs and take them seriously if they want to progress.

RD, Mr. Mangisi you're into mining promotion, mining projects assessment, and evaluation and valuations technical assistance. Where do you see the mining industry in the next three years?

**DM:** For the Zimbabwe mining industry to bloom, a number of issues need to be addressed and implemented. Mining industry funding which covers the whole chain with good interest rates, or government-supported funds. For the small scale miners, it is to ramp up the full mining mechanisation program. Value addition and beneficiation of minerals is key, government must incentivise this

# Interview: ZMF Spokesman Dosman Mangisi



area, so that the metal and steel industry is seen growing, more exports of metal and steel exports are happening, foreign currency start to flow into the country, we need more of operating smelters and refineries of base mineral-like what Unki Mine has done, employment creation takes place, infrastructure development

takes shape. Also to relook into our mining taxation system in the country. We have too many taxes charged in the mining industry directly and indirect up to 15 types of them, and some are duplication. The government must try and do away with some, in order to promote growth.

**RD,** Economic experts have predicted the mining industry to be the economic resuscitator on a probability higher than Agriculture. Does the Mining sector have all it takes to raise the economy of Zimbabwe from this unstable situation?

**DM**: That's not a secret, to say the mining sector holds it all when it comes to the resuscitation of the economy of

Zimbabwe. We have 60 minerals known to be in our country and 40 strategic minerals out of that. More investments must be channelled towards value addition and beneficiation of minerals.

Smelters, and foundries for ferrous and non-ferrous to manufacture metal and steel products for local use and exports. From there we are able to have a good infrastructure. Agriculture also needs mining for its resuscitation.

Mechanisation and infrastructure building hope to be funded by the mining sector. I can lastly say all eyes of all sectors of the economy are on the mining sector, you name it.

### **Prospect to sell exploration business to New Energy Metals**



eading African battery minerals company, Prospect Resources Ltd has announced that it agreed to sell its exploration business in the Democratic Republic of Congo to New Energy Metals Limited.

The sale according to the company's report will be effected by the transfer of Prospect's wholly-owned subsidiary, Prospect Cobalt Pte Ltd ("PCP"), along with its associated subsidiaries and assets.

According to the company's managing director, the sale was effected in order to improve and work on Arcadia's Lithium

project economics and moving the project into development.

Prospect Resources is positioned to be the leading producer of lithium in Africa and the largest producer of low-iron petalite concentrate in the world

"Arcadia will be the primary driver of shareholder value in the near future, and by divesting the Company's explorational activities in the DRC, Prospect can re-allocate capital to improving Arcadia's project economics and moving the Project into development," said Hosack.

The managing director also said that the Arcadia Lithium Project is a top ten global hard rock lithium asset with strong project economics. It is shovel ready and the company is currently sourcing

funding to allow them to commence development.

Lithium

The sale was
effected in order to improve and work on Arcadia's

Demand for the mineral has been progressively rising owing to the growing demand for electronic vehicles, which use lithium-ion batteries.

Prospect Resources Limited is an ASX listed lithium company based in Perth with operations in Zimbabwe.
Prospect's flagship project is the Arcadia Lithium Project located on the outskirts of Harare in Zimbabwe. The Arcadia Lithium Project represents a globally significant hard rock lithium resource and is being rapidly developed by Prospect's experienced team, focusing on near term production of petalite and spodumene concentrates.

# **Curechem - Your One Stop Shop for All Your Mining Chemicals**



t Curechem, we pride ourselves to be "The Chemical People" whose goal is to increase mineral output throughout Zimbabwe by ensuring a constant supply of quality chemicals to the mining industry despite the harsh global economic environment. We have created a niche market for ourselves in the mining Industry, especially the gold mining sector.

The reason we are a one-stop shop of choice for all your mining chemicals is the passion and energy that we, "The Chemical People", heavily invest in providing high quality and effective chemicals to all our valued customers across the country. The quality of sodium cyanide (98%) we offer enables the most efficient means of leaching out gold from various gold ores found in Zimbabwe. This can be supplied either in boxes or drums. When it comes to maintaining the appropriate pH during the leaching process, our lime readily answers to that call. The provision of oxygen to the leaching process is guaranteed by our hydrogen peroxide(HP 50). For gold adsorption, our activated carbon ensures the success of this process. Caustic Soda which is used in the elution process and in some cases to maintain proper pH levels is also readily available at Cure Chem.

In addition to the main chemicals used in the metallurgy of gold, Cure Chem has the following chemicals which can be used mainly in the gold industry such as; Borax, Lead Nitrate, Nitric Acid, Sulphuric acid and Hydrochloric acid.





Lastly but definitely not the least in importance is the copper sulphate we supply. It acts as an activator in the flotation process employed in the processing of Platinum Group Metals (PGMs). We offer uninterrupted supply to our valued customers at any given moment and are in a position to supply bulk chemicals anywhere in the country. We also provide our customers with in-depth knowledge on the technical application of these chemicals.

As the market leader in the supply of all the chemicals and reagents required in the process of gold recovery, we are committed to providing superior quality products to our customers using all the commercially applicable technologies in use the world over, supported by our strong technical expertise.

We as Curechem, strongly believe that supplying chemicals does not end with a sell alone. We take the initiative to follow up with our clients and ensure the safe use and disposal of hazardous substances as a result of chemical use. Curechem partakes in several seminars that target small scale miners, where they are taught on hazardous chemical management. This is in line with the ILO Convention 170 on the Safety in the use of chemicals at work.

Our seminars intel spillage management education and interpretation of MSDSs and First Aid measures for chemical exposure. The safety of all our customers is a priority because without a safe working environment for them when using chemicals, we are not able to experience the great support which they give us. It is upon our continuous supply of highquality chemicals that can be found nowhere else in Zimbabwe in such quality and information coupled to our chemicals, that we provide which makes us your best mining chemicals supplier! Cure Chem-Proudly ISO 9001:2015 Certified.

# Minerals must foster community growth

Minerals act as symbols of prosperity as such they must be used for development at the grassroots level in a way to aid economic and social improvements to mine communities' lifestyle.

By Mirirai Ngoya

Community people located in areas with mineral deposits' living standards must be transformed for the better. Mining should be seen as an opportunity to reduce poverty and means to put food on the table to community families without challenges since minerals are located in their areas.

Big mines together with medium miners in Zimbabwe generate a lot of mineral reserves for the nation, thereby increasing foreign currency income for the country which must be traced back to the community level and used for developments.



There is a need for the country to revise its mining models and focus on value addition as a way of stimulating economic growth.

Old Colonial systems believed that Africa is a source of raw materials which would then be shipped and processed in their respective countries, creating employment and stimulating industrial growth at the expense of Africa as such it is in this move that Zimbabwe as a nation must focus on utilising its mineral outcomes to develop the country.

#### Infrastructure development

Government and other stakeholders need



to invest in solid infrastructure and sustainable management systems of operation to Zimbabwean miners. There is a need to embrace a vision of infrastructure development, as done by ZIMPLATS which put efforts in the construction of Kadoma general hospital.

"... I exhort other mining concerns in our country and private sector in general to emulate this sterling work that has been done by Zimplats and engage in Corporate Social investment programmes that meet the needs of the communities around which they operate," said His Excellency President Mnangagwa. More so, Zimplats guided by its values of care and respect as a private sector is engaging into a lot of programs to make sure that they are promoting Sustainable Development Goals (SDG's) within the community. They are **FACT** undertaking the following major works as a way to make sure that the hospi-

• Restoration of the water reticulation system, including the sinking of 2 boreholes and

tal retains its ability to

offer quality health care:

installation of water storage.

- Restoration of all ablution facilities to a functional state.
- Construction of a new laundry block and provision of new washing machines, driers and ironing equipment.
- Kitchen refurbishment and installation of new kitchen equipment.
- Refurbishment of the existing wood-fired incinerator and installation of a new suitably sized coal fire incinerator.
- The roadway all around the hospital was rehabilitated, walkways were paved and new pedestrian walkways were established.
- A new perimeter fence was installed to assist the hospital with access control.
- Facelift of the outpatient's department, mother and child block, paediatrics ward, both the main and small theatres;

maternity ward and old nurses home.

There is need for the country to revise its mining models and focus on value addition as a way of stimulating economic

growth.

The company is also working towards the development of a high-density housing scheme for their

employees in Chegutu, namely. Umvomvo phase 4 located 4km Northwest of Chegutu CBD and a low-density suburb





This will help improving housing standards for the workers which is going to be a

surrounding communities

Zimplats has invested significantly in education in

at large.

Bob mine in Shurugwi plays a pivotal role by working together with the community

through funding the "school building

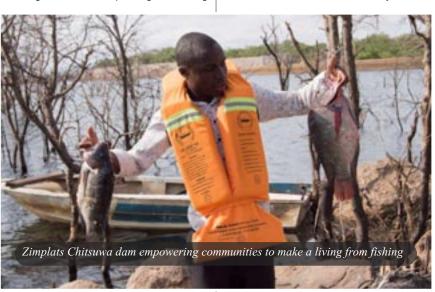
project".

major contribution to the national economy

Blessing one miner reporting to Mining

activities by children since they will be going to school"

In areas like Mashava Mine, the government should also put efforts and consider former miners health, by



Zimbabwe reviewed that "the mine has engaged into funding process because they want to provide a better learning environment to local school children since they will be not travelling long distances." More so, he indicated that "it is also a measure to reduce prostitution rate of young girls and boys, gold panning

improving Gaths mine hospital operation standards.

Areas with rich mineral deposits like Mazoe should also be developed in a way to improve residence living standards like-housing in the area were former miners and small scale miner reside have deteriorated as such they is an urgent need for the



Zimplats supports local enterprise development -These ladies run a brickmaking company

government to intervene and provide better living standards. Speaking to a reliable source in Chiadzwa community he indicated that the area is rich in mineral reserves but not really benefiting the local community to a greater extent. In the area with such a big and well-recognised mine we have no boarding school, no big hospital and more so roads have deteriorated," he said.

As such the government of Zimbabwe must then focus on improving communities were mineral reserves are located. To a lesser extent, "some of the local people are benefiting as they are in the security department and fashion and fabric." but a lot must be done by the government to invest in the community.



# "USE IT OR LOSE IT" EXPERTS SPEAK OUT

The government of Zimbabwe through the ministry of Mines and Mining Development announced that they are considering re-possessing mineral claims from mining firms and individuals that are holding them for speculative purposes amid revelations that some have been sitting on the mining concessions for almost 100 years with no mining production ever taking place.

The president of Zimbabwe, Emmerson Dambudzo Mnangagwa during the inaugural youth indaba held in Harare in March also confirmed the developments saying that his government has realised that most of the minerals discovered or known have been claimed by companies that are not using those claims at all.

According to the President, those firms would just register the claims across the country for either speculation or for future extraction. This has led to a situation where it has become rare to find

free, unpegged or areas where there are no claims in the country.

Thus as a way to create opportunities for the young generation coming into the mining industry, the government is considering to introduce the 'use it or lose it' policy because the young generation is failing to secure claims because they have been secured years ago, by mining conglomerates.

The Zimbabwe Miners Federation
President Henrietta Rushwaya reportedly praised and honoured the government's move on the proposal of the "use it or lose it" policy which she said sets a benchmark towards the promotion of indigenous miners in Zimbabwe by clearing holding of mining concessions for speculative purposes.

The Zimbabwe Miners Federation boss

Government has realised that most of the minerals discovered or known have been claimed by companies that are not using those claims at all.

also said that the introduction of the policy is very necessary to the youth amidst Zimbabwe's high unemployment rate. If the policy is implemented, some mines might be able to employ a handful of youth in the country, and some will have the opportunity to become mine owners.

"We have areas which have been held on for the past years for speculative purposes. If a conglomerate has been holding on to mining claims since 1930 for speculative purposes, let them be given to small scale miners, to our youth artisanal miners who do not have anywhere to carry out mining activities. That way we would have eradicated unemployment, minimise illegal mining activities as well as promote safe mining methods" she said.

Zimbabwe is on a path towards development and revitalisation of the socio-economic as well as political spheres in order to create a strong, vibrant and powerful nation. Mining experts have therefore predicted the mining sector in Zimbabwe to be the resuscitator and optimistic reviver of Zimbabwe's ailing economy. The introduction of the 'use it or lose it' policy is therefore necessary for bringing The policy is activity in the mining sector for very necessary for the revival of the economy of the revival of the sector -7imbabwe.

As part of plans to boost mining export revenues to \$12 billion a year as of 2023 from the current \$3 billion, the policy is ideal in pushing investors into mining than having mines and mining concessions lying idle with no activity taking place.

The policy will also help the country in reaching the current government's vision

to become a middle-income earner by 2030. According to Zimbabwe Small Scale and Artisanal Miners Federation spokesperson, Dosman Mangisi, the policy is very necessary for the revival of the sector and it helps in bringing the government closer to the mining operations.

"It is very necessary because it helps the government know which mines are being put into good use and also to reduce the issue of speculation and and helps the

a risky business!" he said.

Mineral expert and seasoned Geologist, Kennedy Mtetwa blasted the government for repeating the same mistakes over and over again and accused it of being greedy when it comes to national development without taking considerable steps. According to him, Zimbabwe is not even making an effort in funding new exploration. Zimbabwe is satisfied with producing very little and is not worried about tomorrow's explorations.



ministry in coming up with a better binding database," he said.

Commenting on the Mining Zimbabwe Facebook page, Patrick Takaedza encouraged the government to have

closer and background investigabefore they advocate for cer-

tain policies, some of which are not practical to say.

osman Mangis

"Exploration and evaluation of Mineral Resources is a very costly exercise and the process can take decades to conclude. After investing so much and for so long feasibility studies may even indicate that it is not profitable to develop a mine. Whoever is petitioning needs to understand these basic facts, mineral evaluation cannot be rushed. It's

"It's more of greed by people with no clue about what it takes to develop a mine from exploration. If the minister didn't learn from taking farms and giving them to people with no clue about farming then results are there for all to see. Vast farmland is lying derelict. It will be the same with mining claims" he said.

Zimbabwe is not the first country to propose the "use it or lose it" principle. One of the leading global producers of minerals, South Africa, in May last year warned miners who were placing their assets under care and maintenance that the government would seriously look into the trend with a view to seeking corrective measures.

# All Minerals and location found in Zimbabwe

Agate	Nyamandhlovu, Chikomba, Lupane
Aluminum	Mutare, Nyanga, Mwenezi
Amazonite	Nyamandhlovu, Rushinga
Amethyst	Nyamandhlovu, Hurungwe, Hwange, Makonde, Lupan
Antimony	Kwekwe, Bubi, Mberengwa, Kadoma, Shurugwi
Arsenic	Bubi, Shurugwi, Mutare, Gwanda
Asbestos	Masvingo, Gwanda, Matobo, Mberengwa, Insiza, Makonde, Umzingwane
Aventurine	Masvingo, Beitbridge
Barites	Kwekwe, Mwenezi
Beryl	Hurungwe, Kariba, Goromonzi, Harare, Mudzi, Rushinga, Mutoko, Bindura, Marondera, Gutu, Buhera, Bikita, Chegutu, Hwange, Mberengwa, Gweru
Bismuth	Gwanda, Insiza, Goromonzi, Hwange
Cesium	Mudzi, Bikita, Goromonzi
Calcite	Hwange, Bindura, Chiredzi, Mwenezi
Chromium	Mberengwa, Guruve, Makonde, Gweru, Kwekwe, Shurungwi, Chegutu, Kadoma, Gwanda, Insiza, Masvingo, Chirumanzu
Citrine	Marondera, Harare, Goromonzi
Clay	Harare, Bulawayo, Gwanda, Gweru
Coal	Gokwe, Chiredzi, Beitbridge, Mwenezi, Hwange, Lupane, Binga, Kariba, Hurungwe, Bikita
Cobalt	Kwekwe, Insiza, Shamva, Bubi, Bindura
Copper	Makonde, Kadoma, Mutare, Chirumanzu, Chegutu, Kwekwe, Shurugwi, Beitbridge, Gokwe, Bindura, Chipinge, Bikita, Insiza, Makonde, Harare, Bulawayo, Shamva, Chiredzi, Nkayi, Mudzi, Chegutu, Bindura, Kwekwe, Hurungwe, Bubi, Makonde, Bikita, Gwanda, Masvingo.
Cordierite	Hurungwe, Beitbridge, Chimanimani, Rushinga, Makuti
Corundum	Beitbridge, Chiredzi, Shurugwi, Marondera, Mberengwa, Mazowe, Rushinga, Insiza, Goromonzi, Wedza,
Diamond	Makoni Gweru, Bubi, Beitbridge, Binga, Mwenezi, Mutare, Chivi
Diatomite	Hurungwe
Dolomite	Mutare, Beitbridge, Makonde, Mudzi, Masvingo, Rushinga.
Emerald	Gutu, Masvingo, Insiza, Mberengwa, Hurungwe.
Feldspar	Harare, Bikita, Umzingwane, Goromonzi
Fireclay	Hwange, Chiredzi, Kwekwe, Lupane, Nkayi, Kadoma, Kwekwe
Flint clay	Mwenezi, Beitbridge
Fluorite	Hwange, Guruve, Binga
Garnet	Beitbridge, Hurungwe, Mudzi, Guruve, Rushinga, Marondera
Graphite	Hwange, Hurungwe, Kariba, Makonde
Gypsum	Beitbridge
Gold	Every district in Zimbabwe
Iron	Kwekwe, Mberengwa, Harare, Kwekwe, Buhera, Gweru, Charter, Chiredzi, Masvingo, Mazowe, Kadoma.

# All Minerals and location found in Zimbabwe

Jade	Masvingo
Kaolin	Kwekwe, Mutare, Bubi, Hwange, Kadoma, Mazowe, Harare, Umzingwane, Nkayi, Chegutu
Kainite	Hurungwe, Nyanga, Mudzi, Rushinga
Lead	Mberengwa, Kwekwe, Gokwe, Mutare, Wedza, Hwange
Limestone	Mberengwa, Gwanda, Bindura, Shamva, Mazowe, Kadoma, Umzingwane, Gweru, Chegutu, Chimanimani, Mudzi, Harare, Hurungwe
Lithium	Goromonzi, Mudzi, Buhera, Bikita, Chegutu, Hwange, Harare, Insiza, Rushinga, Mutoko, Mutare, Hwange
Magnetite	Gwanda, Nyanga, Kadoma, Mwenezi, Insiza, Buhera, Mberengwa, Beitbridge, Gweru
Manganese	Kwekwe, Gweru, Makonde, Mberengwa
Mercury	Bubi, Kadoma
Mica	Hurungwe, Rushinga, Kariba, Hwange
Molybdenum	Kwekwe, Insiza, Shurugwi, Makonde, Chipinge, Gweru, Mutare
Mtorolite	Guruve, Mutare
Nickel	Bubi, Makonde, Kwekwe, Insiza, Guruve, Shamva, Shurugwi, Matobo, Chegutu, Bindura, Gweru.
Ochre	Gweru, Kwekwe
Palladium	Kwekwe, Makonde, Shurugwi, Chegutu
Phosphate	Buhera
Platinum	Kwekwe, Makonde, Shurugwi, Chegutu, Centenary
Pyrite	Shurugwi, Gwanda, Mazowe, Kadoma, Bulilimamangwe, Shamva, Hwange.
Salt	Mwenezi
Sapphire	Mudzi
Selenium	Makonde
Silica	Gweru, Kwekwe, Makonde, Chegutu, Gokwe, Harare, Goromonzi
Sillimanite	Hurungwe
Silver	Makoni, Makonde, Kwekwe
Talc	Bubi, Guruve, Insiza, Nyanga, Mutare, Mt Darwin, Mberengwa, Goromonzi, Mutoko, Wedza, Kwekwe,
	Makoni
Tantalum	Hurungwe, Guruve, Kariba, Mudzi, Mutoko, Shamva, Bindura, Harare, Goromonzi, Murehwa, Mt Darwin, Rushinga, Mazowe, Marondera, Gutu, Masvingo, Buhera, Bikita, Mutare, Hwange, Chivhu, Mberengwa, Chimanimani, Makoni, Insiza
Tin	Hurungwe, Mudzi, Shamva, Bindura, Goromonzi, Harare, Rushinga, Mt Darwin, Nyanga, Gutu, Bikita, Hwange, Masvingo, Mutare
Topaz	Hurungwe, Gweru, Mutare
Tungsten	Hurungwe, Kariba, Shamva, Mazowe, Rushinga, Bindura, Guruve, Mt Darwin, Harare, Mudzi, Goromonzi, Bulawayo, Insiza, Matobo, Gwanda, Umzingwane, Bubi, Buhera, Mberengwa, Kadoma, Bikita, Shurugwi, Mutare, Chipinge, Chegutu, Kwekwe, Chiredzi, Wedza, Gweru, Hwange, Masvingo, Makoni
Vanadium	Mt Darwin, Guruve, Bulawayo
Vermiculite	Buhera, Mudzi Zinc Kwekwe, Gokwe, Nyanga



Mining Zimbabwe will Exhibit and Distribute Magazines at Zimbabwe's most reputable Mining, Engineering, Transport, Building and Construction Exhibition, MINE ENTRA.



Linking buyers, sellers, suppliers, importers, exporters of services and goods to the Zimbabwe Mining industry







#### Why Mining Zimbabwe

Advertising with Mining Zimbabwe will expose your products to audiences who may been keen to do business with you and some who haven't heard of your business. This event attracts highly interested customers looking for relevant product solutions.

Our high quality Magazines have a much longer shelf life and they are often browsed through for months after publication keeping your advert in circulation for months even years

Voted in the top 60 influencial mining websites in the world



#### **CONTACT US**

20 Clarendon Cresent, Belvedere, Harare Tel: +263 8644 276 585 | +27 11 875 2131 Whatsapp + 263 772 701 730 Web: www.miningzimbabwe.com

Thank you to our Mine Entra advertisers





























