

GREEN BUSINESS

G A Z E T T E

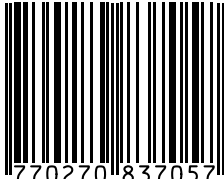
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SAVING THE WORLD FROM CATASTROPHE

by Going Green



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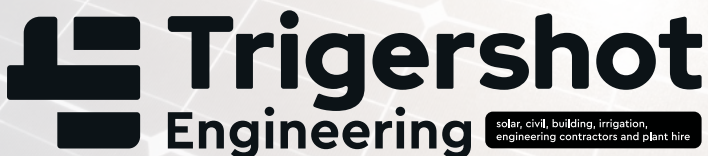
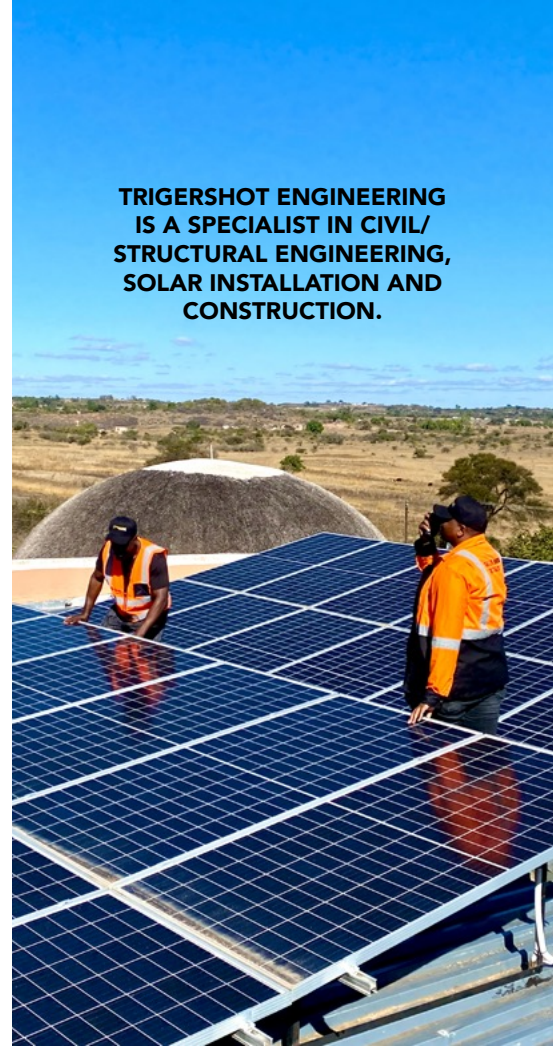
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WELCOME

...to the 13th Issue of the Green Business Gazette.



GREETINGS once again to our avid readers – both old and new. Yet another scorching edition of the Green Business Gazette. I welcome you to Issue 13 of the leading voice in sustainability practice. In this issue we recap the World Bicycle Day commemorations which were recently undertaken. In addition, we look at the Launch of the Green Card by FIFA as part of building awareness on environmental protection and sustainability in football. The Green Card has been launched just in time before the FIFA World Cup™ to be held in Qatar in November and December.

In Issue 13 we take a closer look at Trigershot Engineering, which is presenting rays of hope in the renewable energy installation sector.

Issue 13 also explores how predictive modelling can be used to help the country in the fight against climate change. It is key to note that with predictive modelling we can be able to identify potential disasters such as cyclones, floods and other extreme weather events. Rather than being at the mercy of nature, it is high time we begin to determine our own destiny.

The current issue begins to pose questions on whether we can rely on climate finance or not. It is better said than done. A number of countries pledged to offer climate finance in order to fight climate change.

In particular, in 2015 when the Paris Agreement was signed, a total pledge of \$US 100 billion per year was made to developing countries. However, the situation on the ground is showing that there is a far cry of climate finance than what was projected. The financial poor is near to dry. More genuine, transparent and realistic finance instruments are necessary if we are to fight climate scourge.

We also provide new ideas of greening the hotel sector in Zimbabwe and beyond. Due to their ability to attract tourists and also due to their resource intensity, hotels can no longer ignore sustainability in their operations.

The issue continues to urge sustainable lifestyles, green living and environmentally friendly ways of doing business. The magazine continues to grow with your readership and support. The Editorial Team would like to thank you for giving the publication a chance to grace your reading collections.

The message remains clear, that if we are to save the world from environmental catastrophe, we need to go green NOW!!!

Tawanda Collins Muzamwese
EDITOR-IN-CHIEF

GREEN BUSINESS GAZETTE

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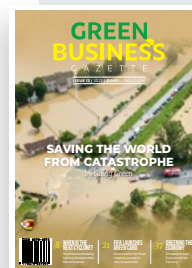
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ON THE COVER



A Call to Action to Saving The World by Going Green.

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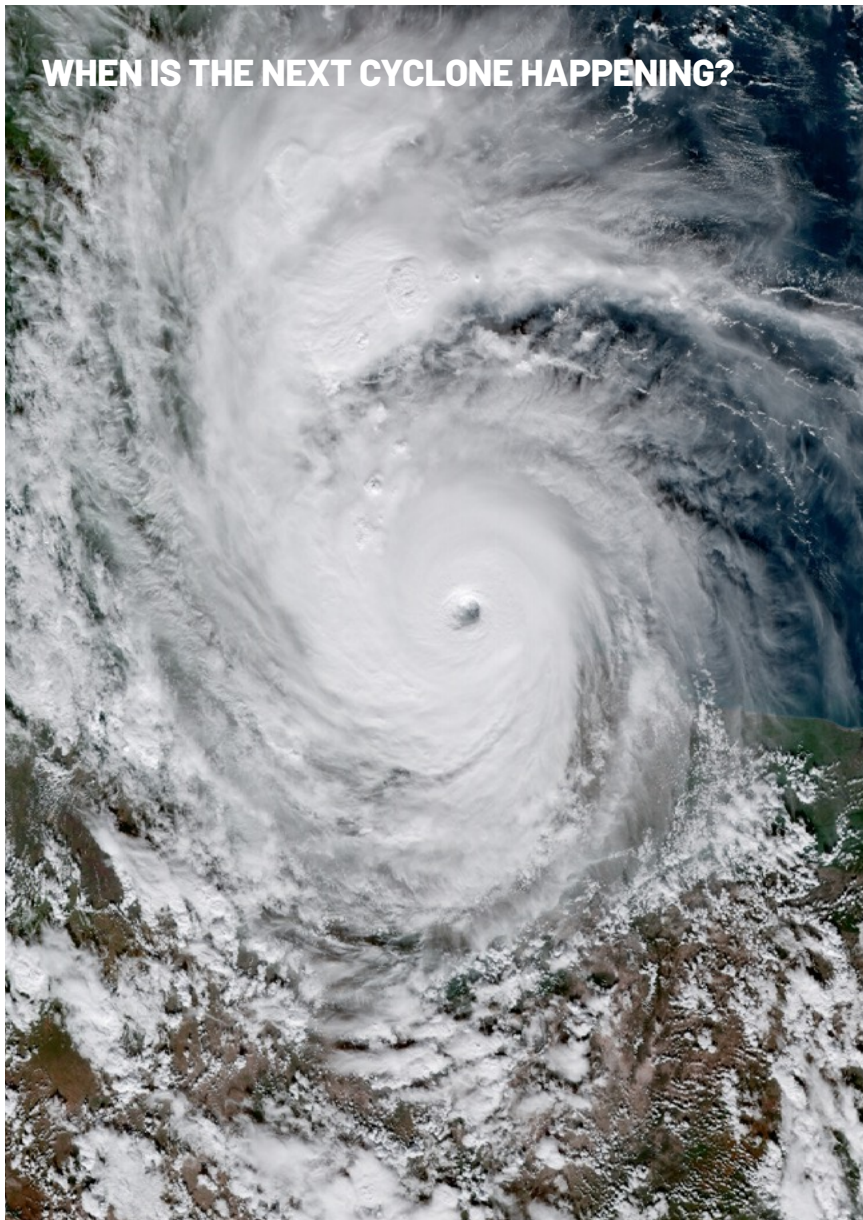
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We remind ourselves that we only have one planet and we must take good care of it in order to avoid being in dire straits.



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Hosted by the Traffic and Transportation Office of the City of Harare

Visit us for more on www.gbg.co.zw



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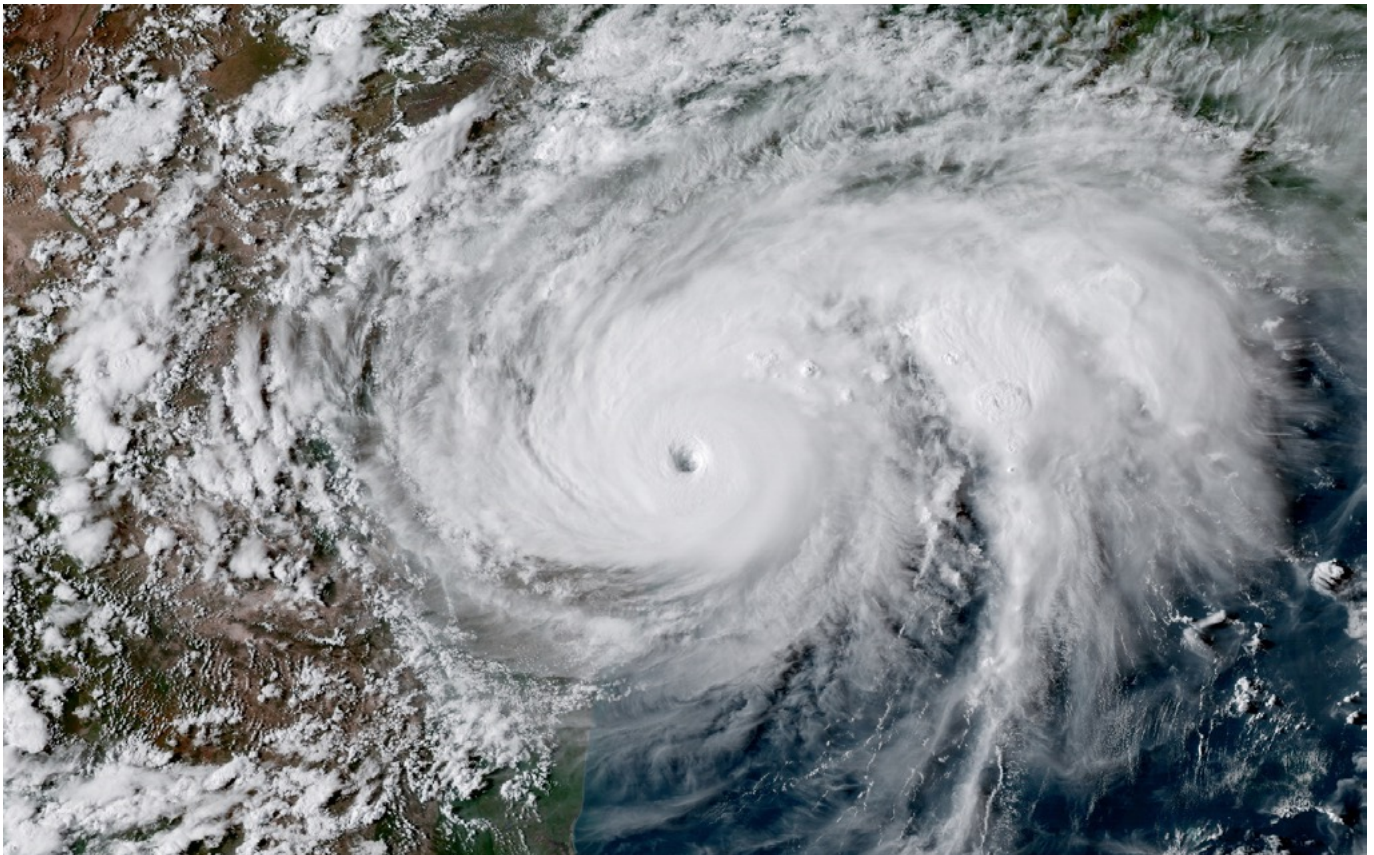
FIFA Launches Green Card in time for Qatar 2022

Sustainability Becoming Mainstream In The World's Most Beautiful Game



WHEN IS THE NEXT CYCLONE HAPPENING? – HOW PREDICTIVE MODELLING CAN HELP ZIMBABWE MANAGE NATURAL DISASTERS

■ Tawanda Muzamwese



When Zimbabwe experienced Cyclone Idai in 2019 and Cyclone Eline in the year 2000, everyone felt the pain, including those who did not stay in the epicentre of the cyclone. As a country, we have come to realise that natural weather events are very uncertain and unpredictable. Therefore, through scientific research and monitoring weather patterns, we can meteorologically determine the weather patterns and model extreme events.

Predictive modelling using algorithms of remote sensing can allow us to see into the future before we get into it. Statistical knowledge and machine learning are beginning to allow unprecedented possibilities in order to help us to see what dangers may befall us in future. This approach can assist us in developing policy, technological and management measures including evacuation of personnel.

A pattern that was common at the turn of the millennium in Zimbabwe showed that every 10 years a major weather event such as a cyclone would happen. The shorter frequency between Cyclone Batsirai (January 2022), Cyclone Ana (January 2022), Cyclone Gombe (March 2022), Cyclone Chalane (December 2020), Cyclone Idai (March 2019) and Cyclone Desmond (January 2019), clearly demonstrates that we will not wait for a decade any longer. The pattern is beginning to show a shift towards more frequent extreme weather events. Although we cannot be conclusive without further meteorological data, we should be concerned about the frequent occurrence of such events. Deterministic models are being used to predict cyclones in both developing and developed countries.

Zimbabwe must prepare for every rainy season with the expectation for extreme weather events such as cyclones. Every season is becoming potentially dangerous and the risk of cyclonic activity is on the rise. In order to have higher certainty, we need a wider year range with several decades, whilst taking note of recent drastic changes.

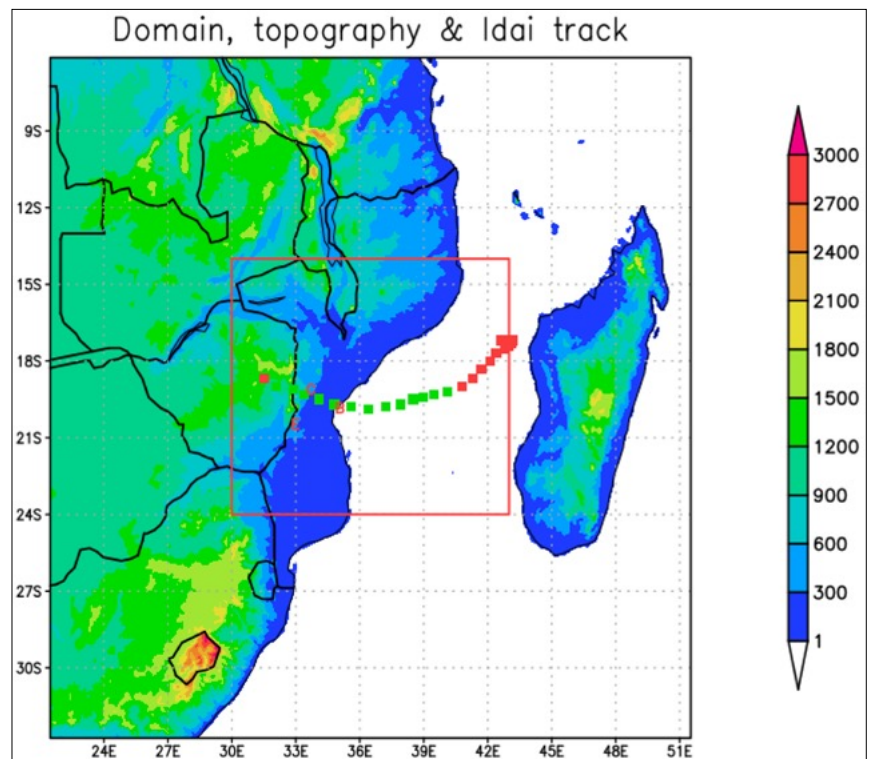
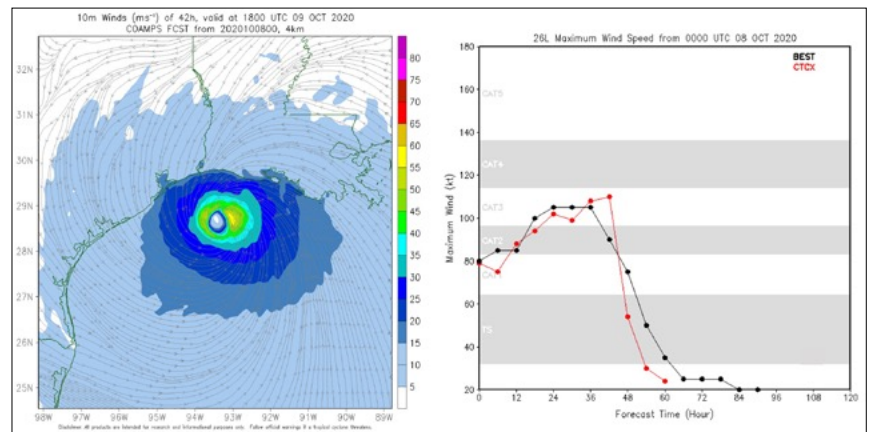
Undertaking hind-casts and forecasts is needed in order to inform the public accordingly, as the fight against climate change heats up. It may well be that the country is headed to a more frequent cyclonic activity especially in the Eastern part of the country.

The economic damage caused by cyclones is enormous and it also affects social and human development. Cyclone Eline alone, in the year 2000 resulted in loss of US\$ 309 million worth of property and infrastructure.

Rebuilding after such disasters is necessary but at the same time costly. The key question is how to better prepare for these unfortunate eventualities. Since the year 2000, Zimbabwe has experienced over 35 cyclones, with some of them being downgraded.

Eline (2000) and Idai (2019) remain the most devastating but we must not ignore those with a moderate or lower magnitude. There are other cyclones that came such as Cyclone Dineo (2017), Cyclone Eloise (2021) and Cyclone Japhet (2003) which need attention and should be considered in the development of predictive models. Whether big or small, cyclonic activity must be carefully documented in order to inform the science of modelling.

As we look into the future, we must treat each year as a possible cyclonic year, each cloud as potentially bearing devastation. The magnitude is what may be unknown. Prediction, anticipation and preparedness can assist in saving lives. The 2022 to 2023 season should be treated with caution, just in case the ideas of another cyclone are in the horizon. Stay safe and know what to do in the event of a cyclone.



#CycloneIdai

1 month ago in March

Mozambique
Dedza, Zumbo, Morrumbene, Inhambane provinces

1.85

million people are affected

602 people have died
1300 people are injured

THE WORST DISASTER

in Mozambique's recent history

faced by a triple threat

- 1 Cyclone 170-190 km/h sustained winds (category 3)
- 2 Flood 3,000 square kms covered by floods
- 3 Cholera 5,000 cases have been confirmed so far

RED CROSS RESPONSE

IFRC and Mozambique Red Cross will support at least

Staff and volunteers are working around the clock to support communities

set up a field hospital that has the capacity to support up to

150,000 people

in Nhamatanda and surrounding areas as well as provide treatment for cholera

25,000 people provided with emergency relief items

provided more than

42 latrines and 308,000+ litres of clean water

200,000

people with shelter, water, sanitation and hygiene, livelihoods and basic needs, disaster risk reduction, protection, gender and inclusion as well as local Red Cross capacity strengthening

To reach these people, we are appealing for CHF 31 million

For more information go to:

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100

1919-2019

ENHANCING CLIMATE PARTNERSHIPS: WHAT ARE THE AVAILABLE FUNDING MECHANISMS FOR SMALL GREEN INITIATIVES IN ZIMBABWE?

■ Tendai Guvamombe

Article 6 of the Paris Agreement on Climate Change talks about enhanced partnerships and collaborations to tackle climate change. It also relates to parties having wider options for choosing voluntary corporations.

The same article further articulates that “The Conference of the Parties serving as the meeting of the Parties to the Paris shall assist developing country Parties to cover effects of climate change to meet the costs of adaptation.”

Some of the support referred to, include promoting mitigation and adaptation ambitions through finance, technology transfer and capacity building among other priority areas.

The interventions articulated on the enhanced partnership article aims to set deliverables in advancing sustainable development and ensuring poverty eradication.

Basing on the above chronicled facts, the aim of this article seeks to unravel some of the existing funding opportunities for green initiatives in Zimbabwe at local levels.

The Green Business Gazette (GBG) held an in-depth interview with Tsitsi Wutawunashé National Coordinator UNDP-Global Environment Facility Small Grants Programme. The engagement was to potentially find out the latest interventions offered by the funding institution for small green initiatives in Zimbabwe.

The Global Environment Facility Small Grants Programme (GEFSGP) is a corporate programme of the Global Environment Facility and is implemented by the United Nations Development Programme (UNDP).

It was established in 1992 after the Earth Summit in Rio de Janeiro, Brazil and the Zimbabwean Chapter of the Global Environment Facility Small Grants Programme (GEFSGP) was found in 1993.

Biodiversity, Climate Change, land degradation, chemicals, international water and capacity building knowledge management are some of GEF thematic areas.

“Since its inception, GEFSGP has allocated USD7,420,794.67 and has supported 199 projects nationwide covering the different activities that are aligned to the 5 thematic areas. The core of the projects is on environmental rehabilitation and conservation coupled with improvement of livelihoods. In terms of co-financing, the programme mobilized USD2,846,402.85 in cash and USD 14,647,510.74 in kind.”

GEF is also determined to continue supporting green initiatives in Zimbabwe in the areas of plastics and waste management in the upcoming programmes.

“The Plastics and Waste Initiative falls under the Chemicals Thematic Area and will continue to be supported under the current and upcoming Operational Phases as long as the funds are available. This is an area of growing concern globally

and GEFSGP seeks to support demonstrations that can be scaled up or replicated through SGP and other funding sources. There is still much work to be done in order to achieve the Goal of Zero Plastic Waste.”

GEF supported the Zimbabwe Sunshine Group (ZSG) to establish a green waste enterprise that is expected to bring sustainable development and poverty eradication in Epworth.

The Green Business Gazette (GBG) journalist also engaged the United States of American Embassy in Harare. This was to bring light to the latest interventions offered by the Embassy in promoting the development of green initiatives among communities.

US Embassy Deputy Political Chief and Grants Officer Hilleary Williams, told Green Business Gazette that the Embassy has made some interventions to advance green initiatives in Zimbabwe. The Ambassador’s Special Self-Help (SSH) Program and President’s Emergency Plan for AIDS Relief (PEPFAR) Small Grants Fund.

The Embassy puts out calls for proposals on its official website and this happens on annual basis.

“The U.S. Department of State puts out calls for proposals for climate change and environmental related projects – usually once a year. The U.S. Embassy will post targeted Notice of Funding Opportunities on our website at that time.

“The Ambassador’s Special Self-Help (SSH) Program started in Zimbabwe in 1980 and focuses

on community-initiated income-generating projects. These projects can relate to natural resource management, wildlife conservation, water/sanitation initiatives, nutrition programs, and other community projects. It is distinct from the larger-scale assistance carried out locally by the U.S. government. This program focuses on providing targeted grants to assist small-scale (\$2,000-\$8,000), short-term (less than 12 months), community-driven development projects that improve economic and social conditions at the local level. The SSH program in Zimbabwe has awarded more than \$1 million for community-driven projects during the past ten years.”

“President’s Emergency Plan for AIDS Relief (PEPFAR) Small Grants Fund, invests in income-generating activities that improve care, support, and economic conditions for people living with HIV/AIDS (PLWHA).”

The Zimbabwe’s revised Nationally Determined Contributions on Climate Change (NDC) has been updated becoming an economy wide NDC.

Energy, Waste, Industrial Processes and Product Use (IPPU) and Agriculture, Forestry and Other Land Use (AFOLU) are the four (4) Inter governmental Panel on Climate Change (IPCC) sectors that have been added.

This has informed small scale green interventions in the energy, agriculture and waste sectors at local levels. The impact of nature based carbon removing solutions has been also topical.

WORLD BICYCLE DAY CELEBRATED IN HARARE



■ Michael Nott

Many Zimbabweans grew up around bicycles – parents cycled to work and back on a daily basis and children used bicycles to get to school or visit friends. In rural areas cycling is still one of the most popular forms of transport as it is cheap, reliable and bike maintenance costs are relatively low. Sadly, in recent years cycling infrastructure has been overlooked by city planning where routes are prioritised for cars, not bicycles. This has made it dangerous for cyclists and even pedestrians because there are no set pathways for pedestrians and cyclists in the country.

It was inspiring to see the team at the Department of Works' Traffic and Transportation Office of the City of Harare, take centre stage in co-ordinating and hosting the celebrations of the humble bicycle in Harare on Saturday the 4th of June 2022.

The day was first commemorated by professor Leszek Sibilski at the United Nations General Assembly in New York in 2018. It is officially commemorated on the 3rd of June every year in countries around the world but the main events in Harare took place on Saturday the 4th to allow more working people to take part in the event. The theme of the global event this year was to celebrate and honour the bicycle's diversity, individuality and endurance providing a sustainable and eco-friendly means of transportation for over 200 years. Celebrations in Harare also focused on the safety aspects of cycling in the City, in view of a number of recent road deaths.



The World Bicycle Day celebrations neatly tied in with the World Environment Day on the 5th of June which was running under the theme “Living Sustainably in Harmony with Nature”. Cycling reduces air pollution and our dependency on fossil fuels. It is a viable alternative in a world faced by a global crisis where transportation worldwide accounts for 22% of greenhouse gas emissions.

The streets of Harare CBD around Africa Unity Square were shut down to motor vehicle traffic from 6.00am to 12.00am to allow a group of around 300 cyclists – men, women and children of all ages and from all walks of life – to enjoy the freedom of the City in safety. The cycling event started at MiGym in Rolf Valley at 7.00am and by just after 8.00am most cyclists had arrived safely at Africa Unity Square. Cyclists then proceeded on a route around Harare’s usually busy streets to celebrate the day.

Cyclists and other guests supporting the event received a presentation from a representative for the Royal Netherlands Embassy, Mr. Harry Davies. He pointed out the physical, mental, financial and environmental benefits of cycling as a way of life. Cycling is an integral part of the lifestyle of city dwellers in the Netherlands with well-established infrastructure of bike lanes and bike sharing options. Ambassador Udo Volz from Germany then addressed the crowd pointing out that in the city of Munich, which is twinned to Harare, has many residents that use bicycles on a daily basis. He also referred to Mexico City, his previous posting, where motor vehicle traffic in the city is closed down on Sunday mornings to allow cyclists and pedestrians safe access. Thereafter, the Honourable Mayor of Harare, Mr. Jacob Mafume, gave his speech suggesting ways in which Harare could move forward in promoting the cycling culture. He proposed that the City should look into the maintenance and upkeep of bicycle related infrastructure, in particular safe cycle lanes. He also proposed various other ideas which the City could follow up on, including the establishment of cycle tracks for the City’s institutes of higher learning so that students from Universities and Polytechnics as well as other establishments can cycle safely to and from classes.

The day included other interesting activities such as bike market, a bike repairs workshop, a BMX demonstration and kiddies’ bike activities. The day demonstrated that there’s a huge potential to develop the ‘bike industry’ in the country with support for local manufacturers and repair services as well as tapping into funding for creating a safe bike environment. Buffalo Cycles’ stand provided fascinating information about their World Bicycle Relief project which extends across Africa and includes other developing countries. According to their website their aim is, “Empowering individuals to access education, healthcare and economic opportunities through life-changing bicycles.” Find out more about the financial implications of their programme at www.worldbicyclerelief.org.

Just one of the exciting new developments was hosted by Asambe who promote e-bikes and e-scooters for both locals and tourists, particularly in the resort town of Victoria Falls. It would seem that cycling is a new business opportunity just waiting to be developed further. Bike sharing options could be a new industry providing many

employment opportunities and income generating projects.

The City of Harare organised the Harare Bike Day with assistance from stakeholders such as Asambe, Bikes4Zim, Buffalo Bicycles in co-operation with World Bicycle Relief, Clean and Green Zimbabwe in co-operation with Miracle Missions, Chovha, JM Busha54, Inspired Zimbabwe (INZI), Road Safe Zimbabwe, Traffic Safety Council of Zimbabwe, and Triathlon Zimbabwe. Support was provided by City of Munich, the Royal Netherlands Embassy, and GIZ. Sponsors included Bike Addicts, Bitumen World, BMX Harare, CIMAS, Ecocash Holdings, Econet Wireless, the Embassies of India and Switzerland, Fedex, Hitbay, Homestyle Bricks, National Foods, PJM Lifelink Ambulance, PJM Security and Response, Quality Paints, Pepsi, Practical Energy Solutions, Safeguard, and Zimpact. The help and support of such a wide range of companies and organisations shows that the future of cycling in Zimbabwe is bright, and that we can and should move towards a more sustainable and environmentally-friendly transport solution.





On a more sombre note Road Safe Zimbabwe erected a 'ghost bike' in the Square attached to a Cycle Path sign. Other 'ghost bikes' will be installed around the City in the next few weeks where cyclist accidents have taken place. The idea is to make motorists more aware of cyclists and to behave in a more courteous and considerate way to other road users. It also highlights the need for better infrastructure, like dedicated and well-maintained cycle tracks to make cycling a more attractive and safe choice.

CAN THE WORLD AFFORD A FURTHER INCREASE IN TEMPERATURES?

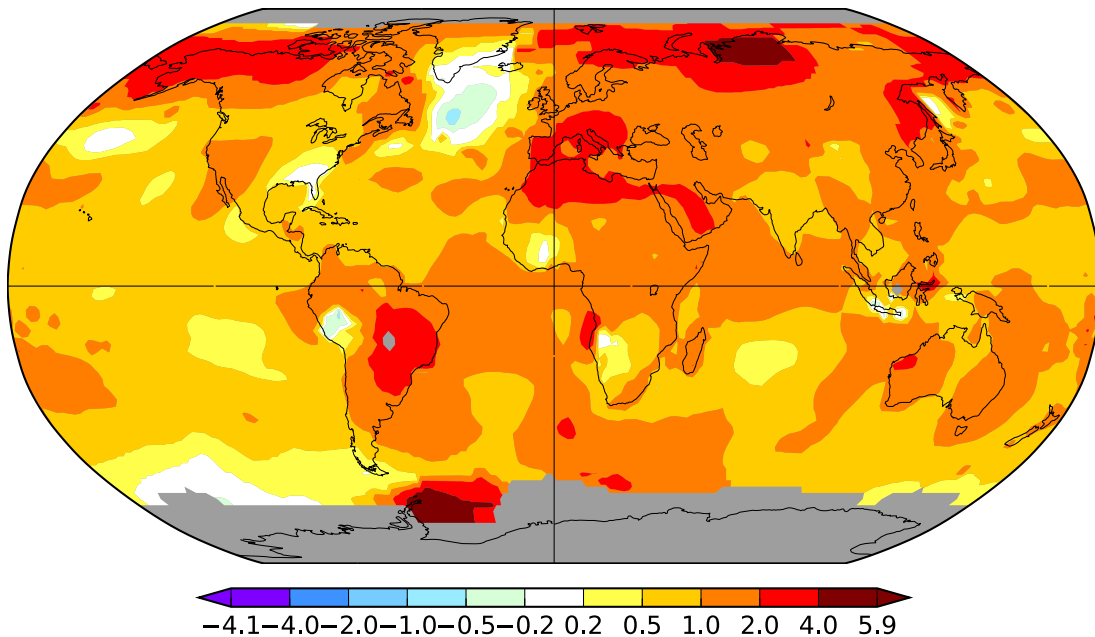
■ Wadzanai Manyame

Increased frequency and intensity of storms and cyclones, melting of glaciers, heatwaves, desertification, droughts, hurricanes, wild and bush fires have become a norm to the day to day living of humanity in the world today. Most of these rather natural events have been devastating threatening survival and development. Their increase in occurrence have come as a result of increase in temperatures that are being experienced in the world as a result of climate change exacerbated by human activities.

June

L-OTI(°C) Change 1880-2022

1.11



An ongoing study is being done by NASA's Goddard Institute for Space Studies (GISS) and it has been noted that an increase in temperature of 1.1 degrees celsius has been experienced since 1880. Only this 1 degrees celsius has resulted in such devastating effects where lives have been lost, animals have perished, infrastructure destroyed forcing the world

to remodel its way of think, living and planning. What more damage can a further increase in the temperatures cause? Can the world afford it? As it seems there are some parts of the world that are still struggling from effects of climate related disasters that have occurred 2 or 3 years back. Phenomenon such as these, take a day or 2 to destroy years of development

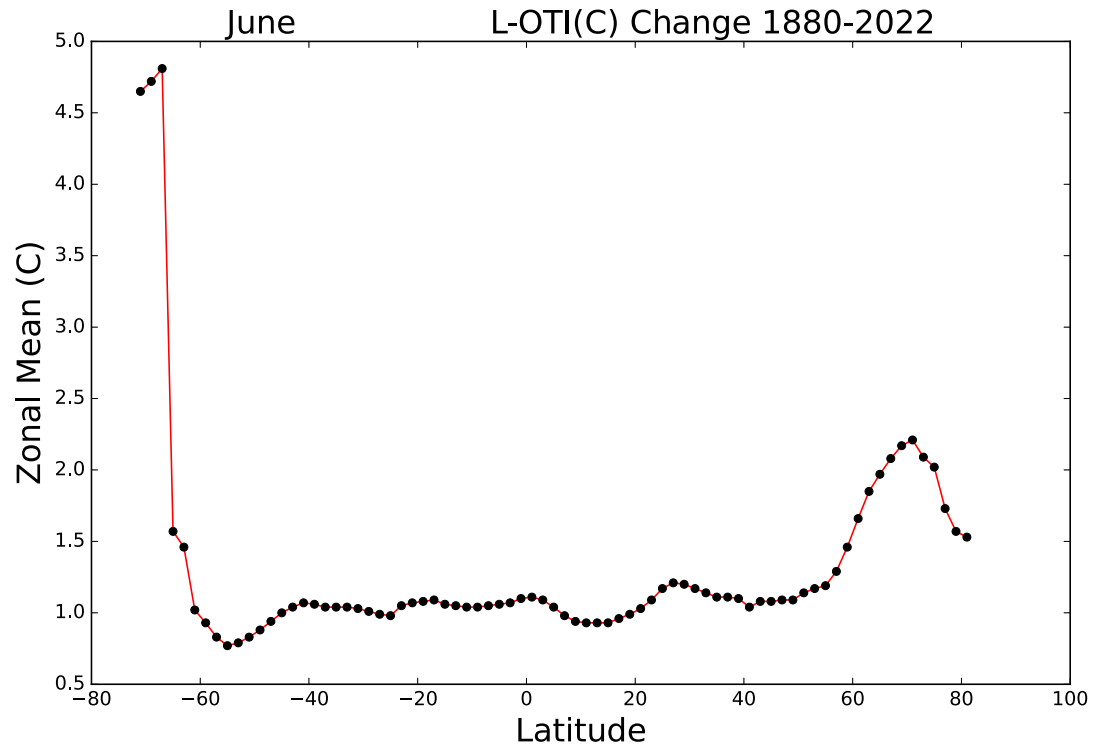
and it will also take years to rebuild that is if the efforts are not undermined by another disaster. Looking deeply into this one then really wonders, 'Can the world afford a further increase in temperatures? If not, what should be done?' Resilience, mitigation and adaptation have become the talk of town. Time is being spent and funds are being

channelled to work towards the fight against climate change. Will the world succeed? Global warming is a natural process, that is the increase in temperatures was bound to happen. However, man has played a significant role in speeding up the process and now can the same man afford to slow down for the sake of saving the world and humanity.

It has been envisaged by different researchers through climate model simulations that an increase in temperature by 1.1 to 5.4 degrees celsius will be experienced by 2100. Following these predictions, the world has come together as a Conference of Parties (COP) under the United Nations Convention on Climate Change (UNFCCC) to work towards reducing global temperature increases. The goal has been set under the Paris Agreement to reduce global warming to below 2 degrees celsius and continue pursuing efforts to reduce the temperature increase to 1.5 degrees celsius. This comes after Heads of States, business people and the general public have seen how devastating the effects of high temperature can be.

The US National Oceanic and Atmospheric Administration (NOAA) reported that 20 major climate disasters were experienced in 2021. These costed US\$145 billion in damage and claimed approximately 688 lives. Economic costs of up to US\$274 million and US\$3 billion were experienced in Zimbabwe and Mozambique respectively, from Cyclone Idai that hit the countries in 2019. 1,297 lives were lost and more than 3 million people were directly affected and were left in need of assistance. To date the physical, economic, social, and psychological effects are still being felt in the areas that were hardest hit. Heatwaves are constantly being experienced in India, Pakistan and South-East Asia leading to death from heat strokes and heat related illness. Bushfires are also making headlines in Australia threatening lives, destroying forests, infrastructure and wildlife population especially koalas.

The world has changed and it is changing, it will continue

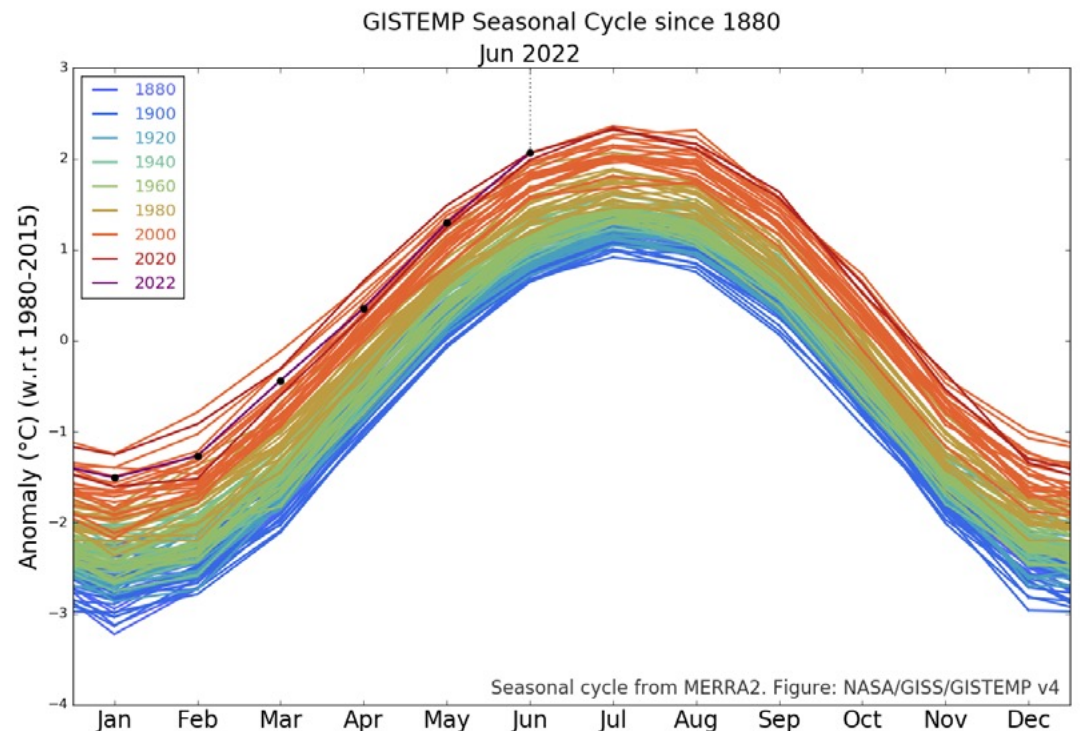


to change if robust action is not taken. Temperatures will continue to rise and this will affect disease patterns. Temperature sensitive diseases such as malaria will increase, sea levels will rise by 1 to 8 feet by the year 2100. Hurricanes will become stronger, an increase in droughts and heatwaves will be experienced as well as changes

in precipitation patterns. Desertification and changes from arid to non-arid land will be experienced, food security will be threatened, poverty will increase and inequality experienced.

In conclusion, increase in temperatures makes life unbearable. It affects the

ecosystems and biodiversity and significantly threatens life. The world feeds off of its natural resources for all that it does be it in agriculture, mining, manufacturing, and service provision. If the natural system is affected or crippled then the earth will not be able to support human life leading to increase in disease ailments and death.





CLIMATE FINANCING — BETTER SAID THAN DONE?

■ Innocent Nhire

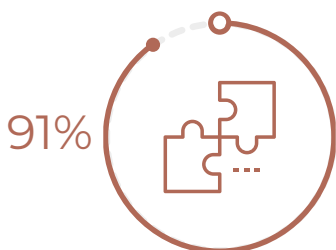
The bulk of greenhouse gas (GHG) emissions come from a few nations, with highly industrialized economies releasing noticeably more CO₂ per person than low and middle-income nations. Developing nations have been seeking greater climate justice for decades after realizing these imbalances. Although the Paris Agreement of 2015 acknowledges that different nations have distinct roles to play and varying capacities, there are still significant gaps on how this pertains to money. It is crucial to examine how specific characteristics sustain and exacerbate disparities across countries, and to especially examine international climate financial flows through the lens of climate justice.

Challenges from the source: In 2019, the private sector contributed 49% of the total annual climate finance, compared to the public sector's 51% (\$321 billion). What is remarkable is that in the economically developed regions of Western Europe, the US and Canada, and Other Oceania private financing, sponsored the majority of climate related projects, whereas the rest obtained their climate investments mostly from public sources. It is even more important to change investment patterns and encourage the private sector to engage in emerging economies because the increase in climate finance is anticipated to come from the private sector. Private money, runs the risk of shielding the most underprivileged populations in low-income nations from access to chances for growth if the correct terms are not negotiated in the contractual agreements.

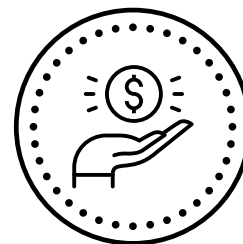
Debt Bias: The preferred and traditional method for providing climate funding is still debt as a financial instrument. The majority (around 61%) of the \$384 billion in climate finance raised in 2019–20 was in the form of debt, with only 12% of it coming from public institutions and 75% of it being issued at market rates at the project level. On the opposite end of the spectrum, grants account for only 6% of total flows, while equity investments account for 33% of the whole mix. Debt-laden investments are unsustainable alternatives that frequently come with unfavourable conditions and do not necessarily correspond with the demands of developing countries or their most vulnerable populations given that many of them are already in debt distress, which has been made worse by the epidemic.



Adaptation is Relatively Ignored: About 90% of the overall climate financing donated and mobilized by industrialized countries went toward climate mitigation, while just 7.4% went toward adaptation. Projects that fulfilled both objectives received an additional 2.5 percent of pledges. As opposed to adaptation, which has more regional benefits, attempts to reduce global warming are at the centre of climate negotiations and financing. Due to their extreme vulnerability to looming climate shocks, low and middle-income countries are those that require adaptation financing the most. This is because of their poor resilience to climate change and they do not have widespread access to cash, particularly from private sources.



Sectoral Preferences: Nearly half of all climate funding supplied and mobilized in 2019 went to the energy and transportation sectors. Nearly 54% of the mitigation finance flows to the renewable energy sector in 2019–20 were provided by private investors. Low-carbon transportation accounted for 31% of all mitigation funding during that time. It is simpler to make a financial case for energy and transportation projects today than it is for agriculture, forestry, or land-use initiatives since they are more commercially viable. Investments and innovation in these industries will have a significant impact on the results of cumulative emission reduction at both the global and local level because many developing economies rely more heavily on the agriculture sector.



Unclear Status of the US\$100-Billion Commitment

In any case, the US \$100 billion commitment made at COP 16 is still in place, despite not being sufficient to close the gap in developing countries' transition financing, and the commitment's deliverable has been delayed by a few years, leaving less developed countries with more promises than guarantees.

The current financial system is incapable of applying a climate justice prism when making investment decisions and fails to incorporate measures related to climate change into its capital allocation and distribution procedures. The continued reliance on financial mechanisms to pursue development goals exposes the shortcomings of financial instruments to achieve climate parity and necessitates a new paradigm that will allow an effective allocation of capital along with an ideal pathway for carbon reduction, particularly in the Global South. Financial systems must be restructured by active legislation at an international level since the private sector lacks incentives to invest through a lens of climate justice. The marginal cost of reducing emissions is substantially lower in low- and middle-income nations and the environmental benefit may be maximized at the lowest possible cost, public funding should be used to catalyse and direct private flows there.

Delivery and tracking of funds are currently challenging since the various organizations within the climate finance ecosystem all operate in silos with conflicting mandates. A Green Bank established by an international organization like the United Nations Framework Convention on Climate Change that provides services like co-lending, risk mitigation, and credit enhancements (like guarantees, first loss capital, and green bonds) may prove to be an all-encompassing solution for combining and allocating both public and private capital toward mitigation and adaptation projects, particularly in developing nations. Additionally, it can support the advancement of framework standardization, disclosure transparency and innovation in financial instruments and regional institutions. In order to level the playing field by advancing the interests of the Global South in the pursuit of an equitable and just climate transition, platforms like the G20—particularly with the troika formed by Indonesia, India, and Brazil—must advance the agenda of climate finance and jointly influence other member-nations in defining and implementing inclusive policies. To expedite the pathway to carbon reduction and fulfil the promises of constructing an equitable and sustainable global economic system, the primacy of climate justice in climate finance talks and transactions need to be reviewed and re-established.

EPWORTH GETS FIRST GREEN WASTE ENTERPRISE

■ Tendai Guvamombe

Epworth, one of the densely populated residential suburbs in Zimbabwe is moving towards a successful implementation of a waste management green enterprise.

The project will be viewed as a success story for country's climate action plan, as envisioned in the Zimbabwe's Nationally Determined Contributions on Climate Change to United Nations Framework Convention on Climate Change (UNFCCC).

Zimbabwe Sunshine Group(ZSG) is the implementing agent of the project and this is expected to transform livelihoods of the local people. The project earned a show of support from US Embassy in Harare and Global Environment Facility(GEF).

ZSG also partnered the Environment Management Agency(EMA) and Epworth Local Board.

The project's full functionality will attract more than 500 direct and indirect green jobs at the Waste Transfer Station(WTS). This news crew recently visited Epworth and observed a Waste Transfer Station and Administrative Foyer rightfully located at

the centre of a massive and widening degraded land.

Since the establishment of the Waste Transfer Station, the surrounding area is gradually recovering from the man-made open cast that went through degradation over the past 10 years.

According to Mr Clever Ndarowa, a Monitoring and Evaluation Officer with Zimbabwe Sunshine Group(ZSG), the project will be community driven anchoring on waste reduction, creation of green jobs and this will directly feed into national documents on Climate Change Adaptation and Mitigation.

"The project will be community driven and is expected to create more than 800 direct and green jobs. One of the main objectives of the project is to achieve waste reduction through recovery. It is most probable that by rolling out the programme we are also fulfilling climate action programmes enshrined in our national documents such as the Economy-Wide NDC and the National Development Strategy(NDS1)."

A survey conducted by Zimbabwe Sunshine Group(ZSG) before the inception of the programme, indicate that Epworth is one of the residential suburbs in Harare that generates a lot of waste.

This has been causing multiple effects such as bringing bad emerge to the local community and hazardous Health effects.

Apart from this, 64 percent of Epworth population are unemployed constituting youths and women. A street survey conducted by ZSG also indicate that more than 50 percent of the population has little knowledge on waste management and more than 40 percent are interested in taking part in the waste management project.

"We are expecting a tune of more than 800 individuals and families to benefit directly and indirectly from Epworth Waste Management Project," Mrs Claris Mandoreba Head of Projects Zimbabwe Sunshine Group(ZSG) hinted.

One of the most commendable deliverable areas of the green waste enterprise is the value addition component which has been a limiting factor in the waste management local circles.

This will ensure the sustainability of the green waste enterprise through a sophisticated waste management value chain that will assist in reaching success stories of an industrial symbiosis.

The role of Funding Partners

US Embassy and UNDP through Global Environment Facility(GEF) extensively supported the development of a waste management hub in Epworth. This become the first community driven project to be core funded with embassies and climate finance institution.

The bilateral gestures marks the fulfilment of Paris Agreement on Climate Change of 2015 which calls for enhanced partnership in tackling climate action programmes. This therefore translate into a meaningful engagement that will see communities adapting to climate change at local levels.

According to Tsitsi Wutawunashe National Coordinator UNDP-Global Environment Facility Small Grants Programme, the support allocated to Zimbabwe Sunshine Group seeks to complement existing work that is being implemented under the concept of Zero Waste To Landfills program.

"The center in Epworth was initially supported by the US Embassy in Harare and co-financed (4%) by the Environmental Management Agency.

"The project supported by GEFSGP seeks to achieve the following: access to running water, drilling a borehole, to provide clean water, procurement of additional 3-wheeler electric vehicles, procurement of a shredder to be installed at the centre"

In the fullest of time GCF will also avail five(5) machines in the quest to promote the campaign for promoting reusable bags through local production in Epworth.

"In addition, the campaign promoting reusable bags through local production will also take place in Epworth. Epworth will be allocated 5 machines. The machines in Epworth will generate income through production of textile products/bags that are an alternative to plastics."

In an interview with US Embassy Deputy Political Chief and Grants Officer Hilleary Williams the support that backdates to 2019 seeks to multiple challenges in Epworth emanating from unsustainable waste management practices. Some of these include poverty alleviation and the quest to tackle plastic solution.

"In 2019, the U.S. Embassy in Harare awarded a grant to the Zimbabwe Sunshine Group (ZSG) through the President's Emergency Plan for AIDS Relief (PEPFAR) Small Grants Fund to establish a recycling center in Epworth. The U.S. Embassy selected the ZSG project to alleviate poverty and tackle plastic pollution by providing integrated solid waste management through recycling."

According to the Embassy, the project will form part of an industrial symbiosis offering waste management best practices. The model will also address poverty, sex work, cholera outbreaks and among plethora of challenges in Epworth.

"ZSG's project pays community members on the spot for delivering plastic waste collected around their neighbourhoods. ZSG hires staff from the Epworth community to process and sell the waste to larger recycling companies. By collecting waste to sell for recycling, vulnerable peoples, including former sex workers, now earn income, minimizing waste, and contributing to the sustainable development of their community."

CAN CRUSHERS PBC is an export based recycling project, to recycle Aluminium beverage cans in South Africa, as there are NO facilities of this kind, in Zimbabwe.

The benefits to Zimbabwe is the earnings, in US\$, for ALL Zimbabweans, be it humanitarian, by buying cans from vendors, schools, clubs, restaurants, church organisations, or, any other like operations.

The RBZ collects a retention, from the Exports in FOREIGN CURRENCY, and pays RTGS, an equivalent amount.

We, at CAN CRUSHERS, are looking for interested parties to fund this operation, as we are experiencing obstructions, caused by the conditions to raise financial backing from Financial Institutions, locally based.

CAN CRUSHERS has ALL the necessary DOCUMENTATION necessary to begin exports, all we need is a likeminded organization, that is concerned for the ENVIRONMENT, with CORPORATE RESPONSIBILITY to assist the operation, which is HUMANITARIAN, ENVIRONMENTAL, SOCIALLY CONCERNED for PLANET EARTH, and ZIMBABWE.

**We, can be contacted on email cancrusherspbc@gmail.com.
or Whatsapp +263 736 255 681 for the CEO Mike Abrahams**



FIFA[®]



FIFA WORLD CUP
Qatar 2022

GREEN CARD



FOR THE PLANET

FIFA LAUNCHES GREEN CARD IN TIME FOR THE FIFA WORLD CUP QATAR 2022

■ Tawanda Muzamwese

As the FIFA World Cup to be held in Qatar beckons, FIFA has launched the Green Card which is aimed at mainstreaming sustainability into the world's most beautiful game. FIFA president Gianni Infantino led the process of launching the Green Passport and has been joined in the campaign by the world's greatest player – Edson Arantes Dos Nascimento, better known as Pele.



Sustainability is very essential in the world of football due to the potential environmental impacts associated with stadium construction, material usage, energy usage in stadiums, waste generation during matches and chemical usage in painting, cleaning and other ancillary activities. Therefore, the launch of the Green Card will ensure commitment in terms of environmental protection from the football stakeholders around the world.

The FIFA President reiterated that FIFA aims to deliver a carbon neutral World Cup to be held in Qatar in November and December 2022. Teams, fans and sponsors will have a role to play in ensuring that the World Cup is friendly to the planet.

Movement towards sustainable materials and green procurement is necessary, kit manufacturers for example have over the years greatly improved the sustainability of their football kits. Teams which use green colours should also encourage their fans to act responsibly and prevent damage to vegetation.

Amongst the host of stars who have lifted the Green Card there is the aforementioned Pele, Lothar Matthaus, Pierluigi Collina and Maxi Rodriguez.

Veteran coach Arsene Wenger raised the Green Card whilst imploring stakeholders to adopt resource efficiency and in particular water conservation.



The Senegal National team also endorsed the Green Card alongside the President, his Excellency Macky Sall.

This development should inspire other sporting disciplines to get serious on preserving the environment. Due to the power of sport to influence billions of people across the world, sporting associations can influence sustainable consumption and production patterns in different parts of the world. Due to the fact that the World Cup in Qatar will feature many fans to the level of over 2 million to grace Qatar, the green card becomes a relevant initiative to ensure that these fans adopt green living whilst following their favourite teams at the global extravaganza.

Consideration of greening football spans from the time stadiums are conceptualised. These stadiums must undergo Environmental and Social Impact Assessment (ESIA). The assessment should develop Environmental and Social Management Plans (ESMP). The procurement of green materials can better enable football stadiums to be using environmentally friendly materials. Promoting waste recycling from waste generated from stadiums during matches is also inevitable in the 21st century.

Adopting renewable energy technologies such as solar energy is gaining momentum in many stadiums across the world as well as energy efficient lighting. The realities of climate change are now apparent to football stakeholders. If football does not play a part the impacts will continue to contribute to global warming. It is also key to realise that player safety can be compromised by climate change. In an attempt to address climate change, FIFA has launched a Climate Change Stadium.

Wherever you are in the world, please lift your green card and support the work by FIFA in greening football across the world.





WASPS AS INDICATORS OF ECOLOGICAL TERRITORY — THE ZIMBABWEAN EXPERIENCE

■ Calvin Manika

Insects such as bees and hornets are not welcome to many human beings occupied spaces. In that category there are wasps. Wasps are mainly known for causing discomfort but they are essential to the environment as part of biodiversity. In some regions people find it difficult to tell the difference between wasps and hornets, their territories are similar. Wasps can occupy a home garage, gardens and bushes resulting in people overlooking their importance in the ecosystem.

Wasps appearances varies across a range of their species but mostly they have shared features. In Zimbabwe, they are usually referred to as 'mago' in the local Shona language, the same local name for hornets.

"They prefer human habitats and plant fields. They can mount their nest at the office door way, houses, forests or bushes, where they become part of the ecosystem, occupy a certain territory and defend it. Anyone who passes through or disturbs the nest risks being stung. People end up avoiding such places for their safety," says Norman Hungwe, an agro-ecologist.



Wasps defend their territories, for such purposes as mating, nesting, roosting, or feeding. In most cases they exhibit territorial behaviour to people who pass through their territory. This involves aggression. The territory acts as a spacing mechanism and a means of providing resources among a segment of the population and denying it to others.

According to Natural History Museum (NHM), wasps range in size depending on their age and species. Wasps are usually small insects with 2 sets of wings and 6 legs like hornets and have a tiny waist. They also have chewing mouthparts to chew prey and other food sources. Female wasps have stingers which are used to lay eggs, they also use the ovipositor to sting when threatened.

In Zimbabwe and all over the world, wasps have a bad record with a number of people having



taken a thorough study about these tiny insects. These insects have a paramount role to play in the ecosystem, equally important like other animals, insects and plants. A variety of solitary and social species make up hundreds of wasp types in Zimbabwe. The most commonly seen wasps are the black and yellow social species, common in rural areas and farms.

Tinaye Makanga, a pest control specialist based in Harare says, wasps help in natural pest control and are important in keeping the ecosystem balanced.

“Wasps are very good predators of spiders and other small insects. Of course, humans have reasons to avoid them or destroy them in case they occupy their habitats, but they help us a lot from other dangerous insects. World over, wasps are in thousands which means other insects are preyed on daily. The ecosystem relies on wasps, if only we can appreciate their presence more than the pain of a sting. These are facts many people do not know,” Makanga says.

Wasps are so adept at controlling pest populations that the agriculture industry now regularly deploys them to protect crops.

According to a research by the Natural History Museum in the United Kingdom, every year especially in summer, wasps prey over millions of pest insects such as flies. The capture of insects makes wasps beneficial to their environs, and humans becomes the ultimate beneficiaries.



Researchers say wasps also play a valued role as a pollinator as they fly in the fields and gardens from one plant to another in search of food, thereby spreading pollen grains. Their contribution to pollination may be lower than that of bees, but is still appreciated.

In a report by the Society of Environmental Toxicology and Chemistry titled, ‘The Wasp as a Terrestrial Indicator of Environmental Metal Composition: Evidence from Zimbabwe,’ the scientists examined wasps from different sites in Harare for metal concentrations.

Elevated concentrations were found at 2 presumed-polluted sites (a platinum mine and a known polluted lake) located near a metal-enriched geological feature (the Great Dyke). A site in Harare Urban and a nature reserve served as reference points. Wasps from the visited sites under research

had higher concentrations of various metals in comparison with those from other sites. Pollution is the major source of these metals.”

“Due to the fact that wasps form a complex part of the food web and ecology, studies on the transfer of metals to wasps’ predators are needed, especially given that some birds specialize in feeding on hymenopterans,” the report adds.

A research by this reporter shows that, the aculeate wasps are ubiquitous across ecosystems and exhibit diverse co-evolutionary and exploitative associations with other organisms. Wasps perform important ecosystem services as parasites, predators, biological indicators, pollinators, decomposers and seed dispersers; economic benefits can be experienced through their roles in natural pest management and biological.



INTERVIEW WITH PEACE WUTAWUNASHE FROM TRIGERSHOT ENGINEERING – RENEWABLE ENERGY EXPERTS



Trigershot Engineering is a red-hot renewable energy service provider, which has hit the Zimbabwean market by storm. Specializing in residential, commercial, industrial and institutional renewable energy projects, we take a deep dive into their operations. Their solar projects are leaving a legacy in society and helping fight climate change whilst creating green jobs. To get more insights, the Green Business Gazette (GBG) interviewed the founder of Trigershot Engineering – Mr Peace Witawunashe.

GBG: May you briefly introduce yourself

PW: My name is Peace Wutawunashe and I am a holder of a Degree in Banking and Finance, a qualified Project Management Professional (PMP) and I am currently in pursuit of a Master's Degree in Renewable Energy. I am a young and vibrant entrepreneur driven by the desire to provide simple and reliable solutions to the problems plaguing Zimbabwe and Africa at large. This has driven my will to venture into providing engineering solutions particularly in the renewable energy sector.

I am the founder and CEO of Trigershot Engineering, an innovative and dynamic entity providing top-notch and state-of-the-art engineering design, procurement, construction and project management (EPCM) services for residential, commercial and industrial infrastructure. We have young and enthusiastic engineers who are

abreast with cutting-edge solutions in the renewable energy sector.

GBG: What is the main mission, vision and core-business of Trigershot Engineering?

PW: Our mission is to be the engineering company of choice, producing quality projects within budget and meeting performance specification. We aim to be at the forefront in the construction industry and utility scale power projects, building on its extensive experience of medium to large scale projects. The company is well positioned to meet the challenges of the rapidly growing global market. We value integrity, professionalism, promote health and safety and we have respect for diversity. Trigershot Engineering's core-business is that it specializes in solar photovoltaic systems design and installations. We are also experts in civil and structural engineering.

GBG: Which products and services are offered by Trigershot Engineering?

PW: We offer a wide range of products and services. These include complete EPC service, engineering, procurement and operation and maintenance complete EPC. I will explain these in detail one by one. On complete EPC service, Trigershot offers complete end-to-end consultancy services and solutions from resource assessment and feasibility analysis of the site to the designing and installation of the solution.

When it comes to engineering services, the

core team of in-house design experts uses cutting-edge software to design layouts and choose the best technology for renewable energy solutions. Trigershot produces optimized design for lowest capital cost and higher ROI after thoroughly studying the long-term energy prediction analysis. We have young and innovative engineers who are familiar with various solar systems that include but are not limited to; large commercial solar systems, high volume solar water pumping, household solar systems and solar water heating.

Trigershot Engineering prides itself in its access to the best and genuine technology solutions facilitated by its wide experience across global supply chains and long-term component partnerships it shares with equipment suppliers such as VICTRON ENERGY, PHOCOS GLOBAL, PYLON-TECH and FREEDOM WON, to mention a few. Hence, we offer procurement services.

As I mentioned above we also offer operation & maintenance complete EPC services. In this regard we offer post commissioning monitoring operations and maintenance support with tailor made O&M packages for smooth operation. With our monitoring systems integrated with the inverter, you can monitor real time generation activities. We have introduced innovative ways of providing unparalleled after sales service to the customer.

GBG: Take us through your journey and motivation in establishing a renewable energy enterprise.

PW: To say I have always had a huge inclination towards business and entrepreneurship would be an understatement. Even at nursery school my response to the “What do you want to be when you grow up?” question was, “I want to be a business man and sell ‘gonyets’ or trucks.” As is the common case for most of my agemates, I went through the various stages of schooling right up to degree level with hopes of landing a high-paying job and eventually becoming rich. Regardless of being a high-end performer at my job during the attachment year, I was not at peace. My search for self-actualization led me into finally starting this business.

Knowing that a business can only be as sustainable as its cause, I had to look for a genuine problem to solve. I must admit, it was a strenuous and daunting task. Alas, the answer was right in front of me when I had to spend a week at an off-grid rural homestead, yet I still needed to be online. This, coupled with my desire to make a difference as a young person and as a responsible citizen of Zimbabwe, resulted in me embarking on this journey. One thing led to another and today our company stands amongst the fast-growing initiatives offering energy solutions. With time I began to understand the dynamics of climate change, and the negative impacts of fossil fuels on the future of mankind, let alone the answers that renewable energy provides to the electricity crisis as well.

GBG: Currently, which parts of the country have you done renewable installations? Do you have any plans for expanding into the region and beyond?

PW: Presently, we’ve done works in various cities in the provinces of Masvingo, Harare and Manicaland. We aim to cover the



rest of Zimbabwe and establish a sound regional presence within the next five years. To achieve this, we already have working relationships with manufacturers such as Phocos Global and plans are already underway to have us feature on their global success stories as a way of promoting renewable energy in Africa.

GBG: Which stakeholders and partners do you work with?

PW: We identify as a youth-centered entity, working hand in hand with various NGOs, several residential clients, the mining sector, industrial players and commercial establishments. We also work together with polytechnics and educational institutions.

GBG: How is the market receiving your products and services and are there any lessons learnt in the process?

PW: Our entry into this already flooded market was not easy in terms of gaining our own market share, however, we’ve managed to realize fast-tracked growth by constantly reviewing our processes and being innovative. We’ve since learnt the huge need to strike a balance between the needs and wants of the clients, especially when it comes to renewable energy solutions. We’ve designed and implemented systematic structures to keep up with inventions in the industry. We acknowledge the role that research and development plays in this sector. We have also noted the need to always and by all means strive to offer world-class products and solutions.

GBG: What is your role in climate change mitigation and adaptation as an organization?

PW: Following the COP26 held in November 2022, Zimbabwe,

among other member-states made a commitment and submitted its Revised Nationally Determined Contributions (NDCs). The country also upgraded its ambition of reducing emission from 33% to 40% by the year 2030. Zimbabwe is also working hard to achieve the Sustainable Development Goals, particularly SDG number 7 on affordable and clean energy. The world is faced with the need to reduce its carbon footprint from all parts of the planet. Triggershot Engineering and other organizations alike play a huge role in the materialization of these aims. Every energy load taken off the grid equates to a significant reduction in carbon emissions. Our role therefore is to provide clean and affordable energy alternatives and assist in the reduction of the use of fossil fuel to the places furthest from the grid. We also work to provide green jobs.



Given the climate change impacts like droughts that continue to bedevil our nation, we support communities including marginalized groups with energy solutions that help in extracting water to improve their production through solar powered systems from any water source. This enables them to have all year-round production and improve food security. In addition, our processes are guided by the government's drive towards Vision 2030 and UNDP goal of 'leaving no one behind' and we strive to ensure that the solutions we offer are responsive to the needs of women, youth and persons with disabilities. The measures embedded within these will see the nation of Zimbabwe adapting smoothly to climate change as well as enhancing the livelihoods and wellbeing of the different groups we serve.



GBG: In your own view as an expert, what potential is there in the renewable sector in terms of boosting energy generation and efficiency in Zimbabwe?

PW: Vast potential is within Zimbabwe as far as renewable energy harvesting is concerned. To start with, our solar irradiation averages 20MJ per square metre and 3000 hours of sunshine per year which translates to about 109GW. Based on estimates, Zimbabwe has a wind energy resource potential of 39.3 GW, geothermal potential of about 50MW, hydro-energy potential of more than 2000MW along Zambezi River and mini-hydro sites and dams. Biomass, bagasse and bio-waste are also abundantly available for exploitation



Parallel to this, power generation from the five main power stations as of 08 July 2022 was recorded as 1320MW. Certainly, with these numbers, investments in renewable energy will boost energy generation and efficiency in Zimbabwe.

GBG: There has been instances where some members of the public say that solar power is not as effective as hydroelectric or thermal power. What do you have to say to this from an expert's point of view?

PW: A key point to note is that renewable energy is INTERMITTENT. This is not the case for solar power alone. In simple terms, most renewable energy resources come together with a need for storage facilities. Because of this, the solar power solutions have high installation costs though they then offer low running and

maintenance costs. Moreover, the maximum efficiencies recorded in photovoltaic panels to date is 22.6% by SUNPOWER. Though these facts stand, they cannot be a basis for judging solar as ineffective as it still meets energy demand, when the system is properly sized and proper storage systems in terms of batteries are installed.

GBG: The world is currently raving about going green. What potential does Zimbabwe have across all sectors (residential, commercial, industrial and mining) in harnessing solar power and going green?

PW: The biggest consumers of land and energy happen to be within the residential, commercial, industrial and mining sectors. Incorporation of renewable energy by these sectors will see Zimbabwe achieving massive gains.

Advantages of solar power and going green include:

- The energy is renewable (the sun never runs out, at least in the foreseeable future)
- Reduced electricity import bills
- Diversity in applications
- It is environmentally friendly (to mention just a few)

GBG: Do you have any sustainability policies and standards that you use that guide your products and operations?

PW: Our processes and company policies are largely guided and intertwined by the National Energy Policy (2012), Renewable Energy Policy (2019) and the Biofuels Policy (2019). We strive to keep up with the offerings from ZERA (Zimbabwe Energy Regulatory Authority) in this regard.

GBG: What are your final words of encouragement to stakeholders who have not yet adopted renewable energy in Zimbabwe?

PW: It is sad to say that most people believe when they see, yet more often than not, tragedies become apparent when it's already too late. Climate change is real! So is Global Warming and the Greenhouse Effect!

The fight against these cannot be avoided. Let us all play our part in fighting this challenge of climate change by embracing and advancing renewable energy technologies in the home, at work, in industry and as a nation at large. A thousand miles begin with a step and let's start now to walk the talk of reducing greenhouse gas emissions individually and corporately.



PESTICIDES AND ENVIRONMENTAL EFFECTS

■ Tawanda Muzamwese

The global consumption of pesticides has been on an exponential rise due to the high demand for food production. With the world population being at a current 7 billion people, an additional 2 billion will be added by 2030 to make the world a 9 billion rendezvous. Chemicals are needed in our daily lives as they have great efficacy in dealing with pesticides. However, their effects can be deadly if improperly managed.

A more sustainable approach to dealing with pests is imperative as the pesticide problem persists. There are many documented effects of pesticides which the layman needs to understand. Due to their chemical nature, pesticides are toxic to human health and the environment. Some pesticides have known capabilities of polluting water, soil and air. In addition, the pesticides have a long residence time in the environment and take time to be decomposed. Birth defects can arise due to pesticides as well as development of certain chronic diseases.



The toxicology of pesticides is even greater in children than adults due to the fact that young children are still developing their nervous systems. It is therefore essential to ensure that children are protected from pesticide exposure. Suicidal fatalities globally have a significant portion attributable to oral ingestion of pesticides. Their safekeeping is therefore necessary to prevent abuse.

Key elements of pesticide safety include training, awareness, chemical labelling and using novel pest management practices such as Integrated Pest Management (IPM). Integrated Pest Management uses traditional methods such as natural enemies and crop rotations.

Controlling routes of exposure through Personal Protective Equipment is an imperative reality if the battle to fight pesticide pollution is to be won. The use of Material Safety Data Sheets (MSDS) is a necessary step towards attaining safe pesticide use.

Pesticide containers continue to give a headache to people all over the world and also the stockpiles of expired pesticide are wrecking serious havoc in our communities.

Over the last decade, the streets of Harare, Zimbabwe have been characterised by the increase in the number of people who are selling pesticides illegally. Some of the pesticides have bright attractive colours such as yellow and pink such that you can easily misconstrue them to be sweets. Some have a fruity smell and must never be near the reach of children as they may consume them unknowingly. Registration of all pesticide selling outlets should be a priority for the protection of the environment, the people who use them and non-target animals that might get in contact with them, if we are to attain sustainable development.



GHS HAZARD PICTOGRAMS



GHS01: Explosive



GHS02: Flammable



GHS03: Oxidizing



GHS04: Compressed Gas



GHS05: Corrosive



GHS06: Toxic



GHS07: Harmful



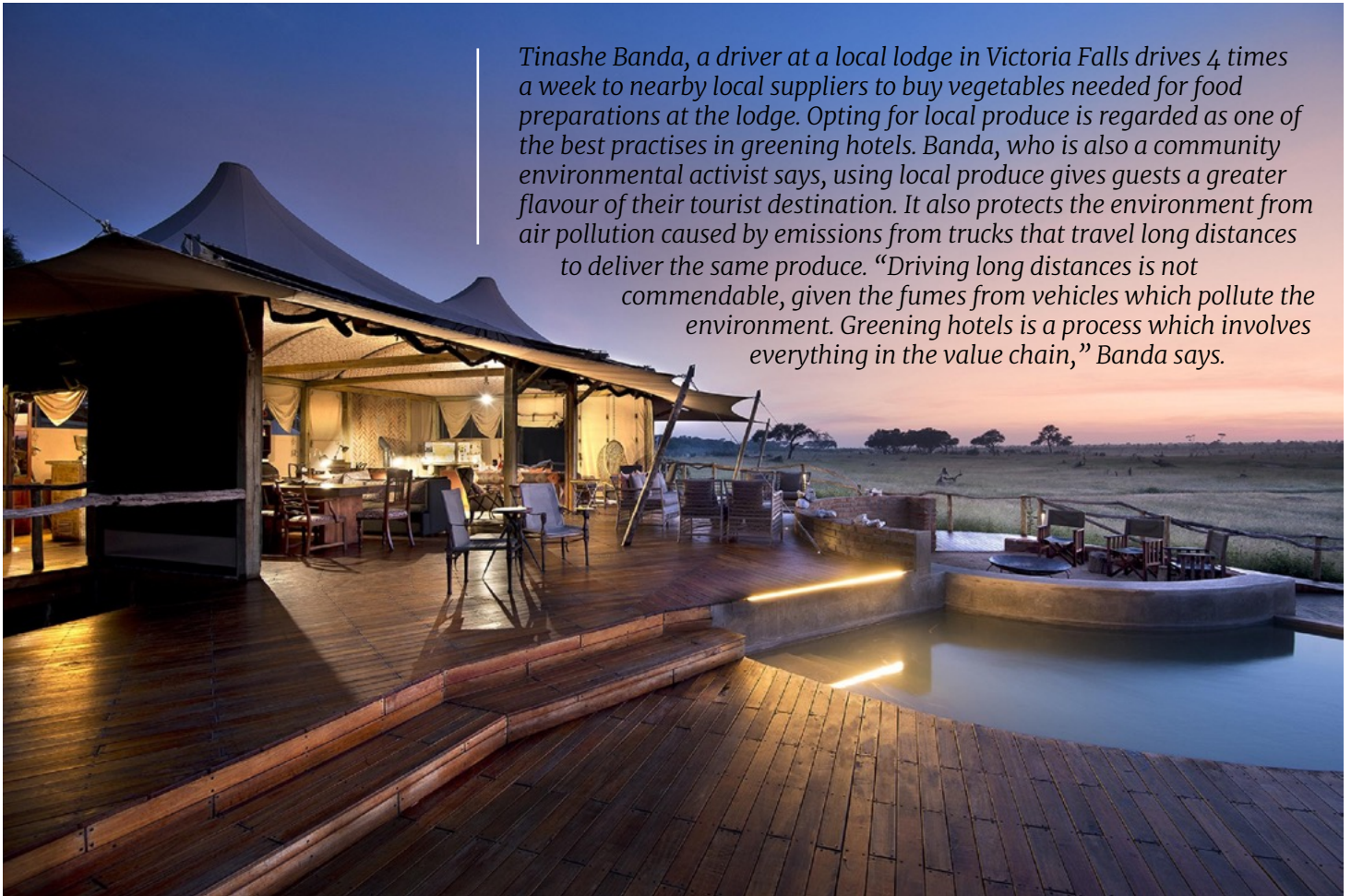
GHS08: Health Hazard



GHS09: Environmental Hazard

GREENING ZIMBABWE HOTELS — RE-INVENTING THE TOURISM AND HOSPITALITY INDUSTRY

■ Calvin Manika



Tinashe Banda, a driver at a local lodge in Victoria Falls drives 4 times a week to nearby local suppliers to buy vegetables needed for food preparations at the lodge. Opting for local produce is regarded as one of the best practises in greening hotels. Banda, who is also a community environmental activist says, using local produce gives guests a greater flavour of their tourist destination. It also protects the environment from air pollution caused by emissions from trucks that travel long distances to deliver the same produce. “Driving long distances is not commendable, given the fumes from vehicles which pollute the environment. Greening hotels is a process which involves everything in the value chain,” Banda says.

The resort city of Victoria Falls remains one the world’s favourite tourist’s destination. Mosi-a-Tunya or the ‘Falls’ are the major attraction, being one of the world’s 7 natural wonders. The city is naturally positioning itself to offer attractive initiatives which tourists find hospitable and welcoming. Green hotels are hotels which are environmentally-friendly and adapt to water and energy conservation measures. Thembelani Ncube, an environmentalist says, greening hotels has made thousands of tourists to visit Victoria Falls more than once.

“In the new economy, environmentally friendly policies have become a central issue for firms. The increasing attention given to the benefits of those policies has prompted research on the development of environmental management systems that encourage employees to engage in environmental activities,” Ncube explains.



Eco-consciousness is becoming a priority for many businesses, focusing on more environmentally sustainable ways of doing business. Hotels are trying to reduce their environmental impacts through eco-friendly best-practices in maintenance work and services offered. Environmentalists say, when hotels go green, they pose less damage to the environment, lower operational and incidental costs and most importantly goodwill from guests.

According to the Sustainable Hospitality Alliance, the hotel industry contributes about 1% of carbon emissions released globally. The alliance notes that hotels must be at the forefront in reducing carbon emissions by 2030 in the fight against climate change.

Eco friendly hotel trends are now emerging in more hotels across the world, from reducing water usage to larger scale projects to reduce carbon emissions, and various practises adopted in greening hotels. An observation in some of the hotels in Zimbabwe shows that they are forming green teams to harness the latest sustainable hotel ideas. Ncube says, the involvement of the hotel employees gives them a sense of ownership of green strategies, and more commitment to long-term adoption strategies.

“Employees are an important asset in greening hotels, induct them and always recognise their efforts through different motivational packages. Organizational citizenship behaviours for the environment is stronger when hotels

are managed by hands-on management,” Ncube says.

Zimbabwe became the first country in Africa to embrace the green tourism concept, an idea which was conceived in 2014. This was as a result of recommendations from the United Nations World Tourism Organisation (UNWTO) which was co-hosted by Zimbabwe and Zambia in 2013. The government implored the tourism sector to start implementing the project. The pilot project was launched in the resort city of Victoria Falls in 2016.

Some of the cited best practises on green hotels are minimizing usage of water and generation of waste water. Environmentalists note that, while guests are entirely in control of how much water

they use in their rooms, the hotel can encourage them to consider using water more mindfully, measures and techniques can be introduced to ensure water management by guests. Reducing plastic throughout the hotel has been said to have potential to reduce millions of tonnes of plastic ending up in oceans every day. Prudence Moyo, another environmentalist says reducing the use of plastic products in hotels has far reaching benefits in creating an eco-friendly environment.

Moyo explains that, greening involves, water and energy efficiency in hotels, hotels switching to wooden key cards and e-processing of most of the paperwork, thus hotels must embrace technology and be eco-conscious.

“Employees are an important asset in greening hotels, induct them and always recognise their efforts through different motivational packages.” – Thembelani Ncube



“Looking at hotels on a larger scale, one may notice that there are changes that could be made to the setup making it more environmentally friendly and giving guests the natural feel of the environment.

Replacing metal beams with natural materials such as dark hardwood, or even creating a living plant wall to bring a burst of green into the lobby space can enhance the space,” Moyo says.

According to the International Labour Organisation (ILO), more than 1.2 billion jobs depend on a stable environment and ecosystems. The Green Initiative aims to scale up the ILO’s knowledge, policy response and capacity to manage a just transition toward greener economies and a sustainable future.

Experts add that it is necessary to provide yearly staff training on green practices throughout the buildings and grounds and post information in break rooms and guest areas. Greening hotels include the planting of a wildlife habitat on the property. Basic elements include fresh water like bird bath; plants and feeders that provide nourishment for



birds, insects, and rocks, trees, bushes and bird houses for shelter and nesting.

Green Tourism Award Holders in Zimbabwe are Somalisa (Hwange National Park) in Gold category, Ilala lodge (Silver), and Victoria Falls hotel in Bronze. Many other hotels join in the three categories.



ECOTOURISM IN ZIMBABWE

As the world reels from the ongoing effects of human induced climate change many businesses are looking for more sustainable solutions that are less damaging to the environment. The tourism industry generates millions of dollars in profits each year, plus providing employment for many disadvantaged or under resourced communities. In addition, the COVID pandemic has caused major upheavals in the tourism industry and forced many tourism operators as well as travellers to relook at the business of leisure and travel.

■ Michael Nott



‘Ecotourism’ has become the new buzz word for environmentally concerned people – but what exactly is it and how does it work?

According to the website nativeplanet.com, The International Ecotourism Society (TIES) defines ecotourism as “responsible travel to natural areas that conserves the environment and improves the well-being of local people”.

In Zimbabwe one of the leaders in the field of ecotourism is the Communal Areas Management Programme for Indigenous Resources CAMPFIRE. CAMPFIRE was set up by the Zimbabwean government in 1989 with support from USAID. The aim was to develop a programme for the sustainable exploitation of natural resources like wildlife and indigenous forests while creating an income and livelihood for local communities. This marked a substantial change to colonial policies which made it illegal for locals to benefit from wildlife on their land in any way. CAMPFIRE is administered through Rural District

Councils who allocate contracts for safari hunting and tourism while returning revenue to the local communities. While the issuing of hunting licences is controversial there have been some observable benefits – a decrease in illegal poaching and better management of wildlife populations, in particular for elephants and buffaloes. Local communities are better informed about environmental protection and more involved in preserving the existing ecosystem. Other benefits include increased income for local communities as well as the development of infrastructure like roads, schools and clinics. Employment opportunities have been created for game monitors, guides and staff at various lodges and accommodation facilities. At the Mahenye Ward in Chipinge, for example, game viewing lodges have been established – as opposed to hunting concessions. This has meant that the wild population of major wildlife species has increased as animals are seen as a valuable resource rather than a threat to crops and community safety. Public awareness has increased for preserving the environment and reduced the incidents of illegal tree cutting and unsustainable fishing practices.

Some eco-friendly lodges and getaways include the African Bush Camps Foundation which has outlets across Zimbabwe, Zambia and Botswana focusing on education, community empowerment, and conservation. Some of their lodges are situated at Bumi Hills in the Matusadona National Park, Somalisa Camps in Hwange, Nyamatusi Camps in Mana Pools and Khayelitshe House in Matopos. Founded by professional safari guide Beks Ndlovu African Bush Camps has grown to become the most genuine safari experience in Zimbabwe and the region. Their lodges and accommodation are tied in with their conservation company to benefit communities and the eco-system. They also assist with wildlife conservation and support organisations like the Bumi Hills Anti-Poaching unit.



Imvelo-Bomani tented lodges are situated in the Ngamo Forests in the south-eastern part of Hwange National Park. The tented lodges have minimal impact on the environment yet offer guests luxurious and comfortable accommodation including air-conditioning, satellite TV and fine wines on request. Guests can enjoy game drives, game walks and night drives to view the local wildlife. Imvelo Safari lodges have been assisting local communities in for 10 years in areas like Tsholotsho, Hwange, Bulilima and Matobo. Holiday makers vacationing at Bomani and Camelthorn in Hwange are encouraged to take a trip to visit local communities and explore their lifestyles.



Sapi Explorers Camp is another tented facility situated within a huge privately-run wildlife reserve of the 120 000-hectare Sapi Concession near Mana Pools and overlooking the Zambezi River. Operating through Great Plains Conservation the small camp of only 5 tents offers guests an unforgettable experience while still maintaining their green credentials. The camp is solar powered and has systems for recycling waste water as well as a bio-digester. Construction of the camp included recycling local hardwood.

In the south east region of Zimbabwe, you'll find the Malilangwe Wildlife Reserve which hosts the very exclusive and opulent Pamushana Lodge which has six up-market villas. The Malilangwe Reserve has successfully regenerated a 400km² area of the lowveld at the same time helping to support and develop local communities. Their efforts have seen an increase in the population of Black and White Rhinos, Eland and Sable, wild dogs and Oribi. Their programme also helps to mitigate conflict between animal and human populations and increases awareness of the value of wildlife. Malilangwe also has their Malilangwe Neighbour Outreach Programme developing community projects. It's helped local rural people to take control of their wildlife resources and view animals and the ecosystem as an income generating asset.



These are just a few tourism venues in Zimbabwe offering more environmentally aware accommodation and vacation options. Others include Chilo Gorge Safari Lodge, Mavuradonha Eco Wilderness Lodge, Ground Hornbill Safaris, Imire Lodge and Wild Horizons which has various accommodation choices in Victoria Falls. These, and many others, are committed to preserving the environment, uplifting local communities and educational programmes for visitors and residents.
For more information a good place to start is www.greatplainsconservation.com or www.matriarchafrica.com

ZIMBABWE POISED TO ATTAIN A GREEN ECONOMY

■ From the Editors Desk

As Zimbabwe gallops ahead towards becoming an Upper-Middle-Income country by the year 2030, there are promising signs of the attainment of the Green Economy. This article takes stock of some of the milestones of the country in the quest to deal with environmental sustainability challenges.

The National Development Strategy NDS 1 provides a framework for growing the economy whilst at the same time addressing natural resources and environmental issues. Over the years, the country has shown serious promise in the quest for greening the economy.

The government of Zimbabwe has developed policies such as the National Renewable Energy Policy, Environmental Policy and Strategies, National Climate Policy and other cornerstone regulations to drive sustainable development.

GREEN BUILDINGS

Zimbabwe has set a framework of green buildings with key stalwarts such as the Eastgate in Zimbabwe standing tall as key examples of energy efficiency green design. New housing developments are seeing greater application of solar geysers in order to save energy. These case studies can be scaled-up and replicated

RENEWABLE ENERGY

The number of people adopting renewable energy technologies such as solar energy is increasing by the day. Biogas has also become a growing energy source especially in areas where organic waste is available in significant quantities.

ENVIRONMENTAL STANDARDISATION

An increasing proportion of companies are going towards international environmental standards such as ISO 14001:2015 promulgated by standards bodies such as Standards Association of Zimbabwe among others. Greater adoption of standards is allowing more companies from Zimbabwe to export their products and services.



SETTING CLIMATE TARGETS

The Government of Zimbabwe submitted the Nationally Determined Contribution target of 40% reduction in Greenhouse Gas Emissions to the UNFCCC by the year 2030. Attaining this target will help Zimbabwean industry to be competitive and sustainable.

MAINSTREAMING SUSTAINABILITY IN CURRICULA

There is an increased level of teaching concepts of sustainability in different academic institutions. With more collaboration on sustainability in curricula, there is massive potential to enable us to teach our children young.

COLLECTIVE EFFORT

It is every citizen's effort to play a part into making Zimbabwe attaining a Green Economy. The journey starts now. Each small step taken will help to achieve "giant leaps". A Green Economy is possible in our time.

SCHOOL ENVIRONMENTAL CLUBS KEY TO FUTURE ENVIRONMENTALISM

As the old adage says – Catch them young! The world is beginning to see numerous initiatives targeting young children in the fight against environmental problems. The world is where it is today in terms of environmental problems due to irresponsible adult behaviour. Key examples of environmental problems include climate change, ozone depletion, water pollution, chemical toxicology and electronic waste. One of the reasons is the fact that there are very few specific programmes to educate children on the importance of the environment.

School environmental clubs have started to proliferate at a high rate with better coordination and improved structures. A number of schools have come up with waste management programmes, tree planting,

environmental awareness and environmental innovation classes. Some School environmental clubs have organised environmental debates focusing on issues that are bedevilling the planet. Work on protecting the planet is work to be taken very seriously, if sustainable development is to be achieved,

What are you doing at your school environmental club?

Please get in touch with the Editor-in-Chief of the Green Business Gazette on zimgreengazette@gmail.com to pitch your School Environmental Club and we will feature it in the upcoming issues of the green business gazette. We are seeking school environmental clubs with good examples that can be showcased and up scaled for the benefit of society.



COULD PERSISTENT COLD SPELLS BE SIGNALLING CLIMATE CHANGE?

Persistent cold spells coupled with wet showers in the middle of the year across some Southern African countries are beginning to make some sectors of the populace to attribute it to climate change. Whilst it is expected that the areas are cold during this time, some unusual climatic patterns are beginning to emerge. Could these be signs of climate change or it is just a rare fluke of coincidence? Many people have found the current winter season in Southern Africa to be unusually colder than previous years. In some cases, the cold has been associated with some rainfall activity.

The understanding of climate change is necessary for stakeholders to have a clear view of things. Climate change is not only about temperature increases but also associated with changes in other weather parameters. The unpredictability of weather parameters and the inability to plan based on past weather records is becoming an issue of concern in many countries in Africa.

The key question that is coming to mind is whether these changes are sustained over a number of years or they are fluke and unusual years. Whatever the case may be, the winter in Southern Africa has

been unusually cold and many people have tried to keep themselves warm. We cannot ignore such phenomenon. The realisation that is growing, is that climate change can have varying effects and they manifest themselves in a different manner.

The future is not in our hands, unless we take drastic action for dealing with climate change. Governments across the world are called upon to ensure that climate change is mainstreamed into national development.

Ground frost could be noted in several areas across Zimbabwe and persistent cloud cover and showers in some parts of winter. Scientists and researchers are called upon to work on research in the area of climate change to attempt to explain the causes of the current peculiar weather patterns.

The Green Business Gazette will be providing seasonal weather forecasts in the upcoming issues to ensure that you have information related to the weather conditions to manifest in upcoming periods.



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ISO 14001 GAINS GROUND ACROSS THE WORLD



The new license to operate is here. ISO 14001:2015 Environmental Management Systems is gaining ground as the default international standard on environmental management. The standard is very important for any organisation that intends to protect the environment and achieve sustainable development in its operations. The standard was first established in 1996, revised in 2004 and the latest version was promulgated in 2015. Companies can also seek certification upon undergoing environmental audits.

The many benefits associated with ISO 14001 include increased legal compliance, access to international markets, improved market share, natural resource savings and improved corporate image. The pressure on environmental issues is increasing across the world and hence, the need for companies to take seriously issues of the environment.

In over 200 countries, ISO 14001 rules the roost and is implemented widely. Not because it is being forced on companies, but because it is value adding. After all, it is a voluntary standard and the choice is yours.

Exporting into the world's best markets can be a nightmare for companies which do not implement international standards such as ISO 14001:2015.

The rise of civil society and non-governmental organisations has caused many companies to be humiliated due to environmental activism. Corporate Social Responsibility is now a swansong, including the need to protect the environment.

If your company has not yet implemented international standards such as ISO 14001:2015, it could be necessary to take the giant leap forward in order to secure the future of both the company and future generations. Keep it Green-Get Certified-Become competitive.

BENEFITS OF ISO 14001:2015



Demonstrate compliance with statutory and regulatory requirements



Improvements in overall environmental performance and compliance



Increase leadership involvement and engagement of employees



Provide a framework for using pollution prevention practices to meet EMS objectives



Improve company reputation and confidence of stakeholders through strategic communication



Positive image on environmental issues which attracts new customers and business partners



Achieve strategic business goals by incorporating environmental issues into business management



Encourage better environmental performance by integrating suppliers into business systems



Provide a competitive and financial advantage through improved efficiencies and reduced costs



Improves efficient use of scarce environmental management resources



Organizations using ISO 14001 have found success across a range of areas, including

1. Reduced energy and water consumption
2. A more systematic approach to legal compliance
3. Improved overall environmental performance



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