

Carbon credits:

SCALING UP SAFE WATER PROJECTS

The **Zambian Project's Water Wells** initiative was started in 2009 with an aim to better the lives of rural communities in Western Zambia by addressing fundamental needs that serve as the foundation for sustainable and improved livelihoods. WhyAfrica visited the project as part of their 2023 WhyAfrica Road trip through Namibia, Zambia, Angola, Malawi, Botswana, and South Africa. **By Joshua Kilani**

Contaminated water is responsible for a large percentage of sicknesses and diseases globally, with Sub-Saharan Africa being the most vulnerable. This is particularly the case in Western Zambia where most of the population lives in remote villages with no access to good, clean water sources.

This lack of clean drinking water exposes the population to diseases and dehydration, especially impacting infants and children leading to a high child mortality rate.

In these isolated villages, the task of fetching water is physically strenuous and time-consuming, requiring up to four hours of walking during dry months to collect untreated surface water from lakes or rivers. This reduces the community's capacity to engage in education, agriculture, and other vital tasks, negatively impacting efficiency, productivity and long-term well-being.

Access to clean water is a big challenge

Unlike single-dose vaccines, water systems need to function continuously, day and night, over the long term, therefore the biggest challenge is sustaining the infrastructure, post-installation.



Joshua Kilani is Managing Director at Xpotential Mining Services (XMS)

Xpotential Mining Services

This is why many independent safe water projects experience setbacks soon after their installation. Once the initial implementation is complete, the community often encounters challenges in maintaining the system effectively, such as geographical distances from markets, availability of parts, and the need for technical expertise.

Against these odds the Zambian Project's Water Wells initiative was started in 2009 with an aim to better the lives of rural communities in Western



- ◀ The **Zambian Project's Water Wells** initiative was started in 2009. To date, they have successfully established more than 150 wells, ensuring safe and clean drinking water for close to 50,000 individuals.
- ▼ Water is life but for many children in Western Zambia, access to clean drinking water is not always possible.



Images by Leon Louw for WhyAfrica

Zambia by addressing fundamental needs that serve as the foundation for sustainable and improved livelihoods.

While the journey has been arduous, their determination remains unwavering. To date, they have successfully established more than 150 wells, ensuring safe and clean drinking water for close to 50,000 individuals.

Across a more than 200,000km² area with approximately one million residents in dispersed villages, their ambitious aim is to provide access to safe drinking water to every person in Western Zambia. To realise this vision, they've partnered with Xpotential Mining Services (XMS) to leverage the financial potential of voluntary carbon markets for scaling up.

Scaling up the provision of safe drinking water

The project involves the installation of water wells to access clean groundwater, reducing greenhouse gas (GHG) emissions by minimising the need for fossil fuels and non-renewable biomass in water purification.

The Zambian project will remain responsible for the

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on-ground project implementation, with Xpotential Mining Services strategically guiding the activities to generate carbon credits.

XMS will facilitate the sale of these credits on the Voluntary Carbon Markets, directing the proceeds back into the project. This injection of funds will enable the project to expand operations and construct a greater number of wells than would have been possible without the support of carbon credits.

Market based solutions to social challenges

Rural communities with no access to water distribution systems rely on fossil fuels and non-renewable biomass for water purification. However, boiling water poses several detrimental consequences, for instance;



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burning coal releases greenhouse gases, and specific methods of wood combustion can do the same. Additionally, indoor pollution resulting from wood or coal burning significantly contributes to respiratory illnesses. The continuous demand for wood contributes to deforestation in impoverished nations.

A carbon credit is a market-based financial instrument, essentially a tradable certificate representing a reduction in greenhouse gas emissions. These credits play a crucial role in bridging the financial gap required for investing in sustainable alternatives to the practices above.

The project's commitment to carbon reduction is underscored by its registration on The Verified Carbon Standard (VCS), an esteemed framework for carbon offset programs. This guarantees that the project's carbon reductions are accurately calculated and thoroughly reviewed, confirming its significant positive contribution to reducing greenhouse gas emissions and fostering sustainable livelihoods in alignment with SDG 1, 3, 6 and 13. ■

Offsetting your personal carbon footprint



In the global carbon market, major corporations such as Coca-Cola reduce their carbon emissions by supporting projects that mitigate CO₂. This essentially means that those responsible for pollution are contributing to the provision of safe drinking water in rural communities. It's a financing approach that rewards successful emission reduction efforts.

Additionally, carbon credits offer an innovative opportunity for individuals to offset their personal carbon footprints, further boosting funding for project activities.

To offset your carbon footprint visit our store at <https://www.xmservices.co.za/>

Alternatively contact us for more details
Joshua Kilani is Managing Director at Xpotential Mining Services (XMS)