THE WATER & TOILET PROJECT

Why did we need to do this?

Like most ordinary people in rural Zambia, the school struggles with power water and sewage. Our electricity supply is erratic (there's rarely any power during daytime), and we don't have any mains water or drainage.

- Four years ago, friends at a local farm kindly dug a borehole on the school site. This supplies drinking water to our raised 10,000-litre tank; but it uses an electric pump, and does not supply enough water for drinking,flushing toilets & irrigating crops.
- Our primitive squat-toilets and latrines had been built for 70 children, but these had become dilapidated,outdated, unhygienic, and needed replacing. They were also wholly inadequate for today's 500 learners.
- Staff were using two old w/cs (toilets) in a dingy shed. 15 years ago, these were adequate for two teachers; however, they weren't appropriate for twenty staff, plus visitors and volunteers.
- Three years ago, supporters generously funded a small, modern, brick toilet-block which contained six w/cs for secondary girls. Although these were clean and popular, they usually had no light and needed to beflushed with buckets of precious drinking water carried from the school's water tank.
- In practice, the building taught us that 'western style' toilet facilities (which depend on electricity for water, lighting and ventilation) are not the best approach in rural Zambia.

What have we done?

We've improved and increased our water-supply, and built hygienic, sustainable toilets for 500 learners.

- We've linked to a free water-supply from a local reservoir. Its water is not fit to drink, but it's fine for flushing toilets, washing hands and irrigating crops.
- We've dug and laid an extensive network of underground pipes for this supply, and installed a new 20,000-litre tank to store it. We're now using this 'non-potable' water in our sinks, toilets and showers, and to irrigate our crops.
- We've installed two extra 2,500-litre tanks to store more drinking water. We've placed one close to ourschool kitchen to save staff from lugging endless buckets of water across the site.
- We've emptied, cleaned, repaired and up-graded all our septic tanks and soakaways. They're now fit for purpose and do what we need. We've also adapted our small, modern toilet block for staff and visitors, and replaced our rickety raised-tank stand with a new heavy-duty one.
- We've demolished our collection of old, dark, dilapidated mud-block toilets, and replaced them with one steel-frame building which contains 19 w/cs, 1 wheelchair-access toilet, 6 trough sinks, 4 trough urinals, 10 showers & 4 drinking fountains.
- This new building doesn't use electricity, and has an inverted roof to maximise natural light and ventilation. It harvests rain-water, and recycles its waste-water to flush the urinals.
- We've laid a network of gravel paths to link the toilet block with the classrooms, and have also installed a wire fence around the entire site (the new toilets and showers were too tempting for some local people).

How much did everything cost?

The whole project (goods, labour, tools, transport, fees & taxes) cost ZMW 1,500,000.

- The good news is that this is exactly what we planned, so we 're pleased to have finished on budget. In truth, however,we only achieved this because several Zambian and South African companies donated materials or provided goods at generous discounts.
- The bad news is that the Zambian government's actions before the general election meant, in terms of pounds, dollars and euros, the project cost 30% more than we planned.
- Back in July, £46,000 ($61,000) bought ZMW 1,500,000. By the end of August, however, £68,000 ($90,000) was needed to buy the same amount.

Who do we thank?

One of the UK's leading designers of school facilities, Mr Richard Wilson, kindly guided our thinking and designed the new building for free.

- One of our directors in the UK planned and oversaw the project, and a Zambian architect, Mr Tonny Makosa, managed the construction and liaised with the Zambian authorities.
- The school's headteacher, Ms Mulemba Sakuwaha, was the fulcrum. Alongside managing the school and teaching, she did all the purchasing, persuading and liaising — and kept the labourers in line.
- Many Zambian and South African companies provided goods and materials at generous discounts, but four were particularly generous.
- Mukwashi Trust School salutes Elite Steel, Micmar, Ifuba Products and BSI Steel. Their advice, support, kindness and generosity helped us achieve more than we dared hope.
- In any project of this size, most people do what is required while a few disappoint; but, just occasionally, someone goes beyond the call of duty.
- Ms Margaret Shamufundo was the guardian angel who intervened and rescued the project when all seemed lost at a Zimbabwe border crossing. Thank you.
- Then, of course, there are the 113 friends and supporters in 16 countries who, between them, contributed the funds we needed last autumn. Your generosity has made a significant and lasting difference.
- 30% of the 113 have been friends of the school for many years, while 30% started supporting in the last 18 months. We thank you. 40%, however, are 'new friends'. We welcome and thank you.

What does it look like?

It's been impossible to take good photos during the construction. The cameras on staff mobile phones are somewhat limited, and we've been restricted by the corrugated iron safety screening.

Now, however, we've commissioned a local professional photographer to visit the school once the screening is down. His photos will be displayed here soon.

How do I give?

Please visit the school's support website and follow the simple instructions.

Click here

You can give in Pounds, US Dollars, Euros or Canadian Dollars.

MUKWASHI TRUST SCHOOL