



## Construction of a Rainwater Harvesting Tank & Latrines at Chalinga Primary School



### Introducing African Revival:

Our vision is **an Africa where every child has equal access to quality education**, as we believe education is the key to overcoming poverty. Since 2005, we have worked with primary and nursery schools in Uganda, Zambia, and South Sudan. We don't just provide infrastructure; we empower whole communities – pupils, teachers, and parents – to transform schools into thriving learning environments that build better futures.

### Overview of Project:

<b>In-Country Office</b>	Zambia
<b>Project Name</b>	Construction of a Rainwater Harvesting Tank and Latrines at Chalinga Primary School.
<b>Project Location</b>	Chalinga Primary School, Zimba District, Southern Province, Zambia.
<b>Historical support</b>	African Revival has not previously implemented any project at this school.
<b>Is the project located within an existing programme or new?</b>	This project is part of AR's water and sanitation infrastructure development in community and primary schools.
<b>Project Goal and Outcomes</b>	<b>Project Goals:</b> Improve sanitation and hygiene to improve quality of education at Chalinga Primary School. <b>Outcome 1:</b> Rainwater harvesting tank constructed. <b>Outcome 2:</b> Drainable latrines for pupils and staff constructed with ISSB.
<b>Target Population</b>	450 pupils (219 girls, 231 boys) and 10 teachers
<b>Life of Project</b>	Within 3 months (November 2023 – January 2024)
<b>Project Budget</b>	<b>£22,061</b>
<b>Funding source(s)</b>	African Revival
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**Background:**

Chalinga Primary School is located in the Zimba District of Southern Zambia, about 52km from Zimba town, where the main sources of income are cattle rearing and cereal farming. The school was founded in 1999 by the community, before being upgraded to a government primary school in 2002. There are 450 enrolled pupils (219 girls, 231 boys) and 10 teachers, from 458 households in the Chalinga community. The furthest distance travelled by pupils to reach the school is 10km. Chalinga Primary School has a 1x2 standard classroom block and an incomplete 1x2 block constructed by the community. There are eight staff houses constructed by the community.

Before this project commenced, the school did not have its own water source and used a community borehole about 500 metres away. In the dry season, when the water table is low, the borehole dries up, so the school and community used to have to fetch water from shallow open wells near a stream. Zimba District Council attempted to dig a borehole at the school, but it was dry and therefore unsuccessful. The time taken to walk and collect water kept children from attending school. Water from the open wells could not be stored, boiled or treated, but was consumed by staff and pupils, increasing the likelihood of water-borne diseases.

Prior to this project, the school had only two latrines for boys, two for girls and two for staff and their standard was below the government recommendation. There were not enough latrines for the number of pupils and they were not well-maintained, due to the lack of water supply. The latrine:pupil ratios were 1:116 for boys and 1:110 for girls. There were no handwashing facilities at the school, so pupils and staff were further at risk from water-borne diseases. Disease leads to absenteeism of both pupils and teachers and therefore the loss of many learning hours.

**Project Inputs:**

Before the project commenced, African Revival agreed with the community - parents and teachers – they would contribute river sand, stones, bricks and other local materials for construction. As well as providing upfront materials, the community also provided labour. Parents were scheduled to assist the professional builder that we hired - helping to dig the foundations, moulding bricks and supplying water and housing for the builders. Community involvement is important for a sense of ownership and helps ensure good value for money.

The contracted builder, Konnie Simapuka, commenced construction on 13<sup>th</sup> November 2023, with AR's Construction Coordinator, Dave Sangweni, on hand to supervise and motivate the community. The latrines were built with eco-friendly Interlocking Stabilised Soil Blocks (ISSB), which are moulded on-site and then cured, rather than fired, so they do not require trees to be chopped down or burnt for charcoal. ISSB bricks also require less cement to both make and build with. The Chalinga community was outstanding in their timely support, enthusiasm and participation, compared to other communities we have worked with in the past, and this helped us complete the project in record time - much quicker than the planned three months.

Dave Sangweni provided MHM training and reusable sanitary pads to some female pupils, as well as WASH and maintenance training to all pupils and staff.

**Project Outputs, Outcomes and Impact:**

- Construction of 1x 75,000L rainwater harvesting tank.
- Construction of 1x4 girls' VIP drainable latrine block with one washroom, using ISSB bricks - improving the latrine/pupil ratio from 1:110 to 1:55.
- Construction of 1x4 boys' VIP drainable latrine block with one urinal, using ISSB bricks - improving the latrine/pupil ratio from 1:116 to 1:58.
- Construction of 1x2 staff VIP drainable latrine block using ISSB bricks.
- Construction of three handwashing stands using ISSB bricks.
- MHM training for 114 girls aged 13+, with provision of 60 packs of reusable sanitary pads.
- WASH & maintenance training for pupils and staff.

450 pupils and 10 teachers at Chalinga Primary School will immediately benefit from improved WASH - access to clean water for drinking and washing, hygienic latrines with handwashing facilities and MHM/WASH training. The project will contribute to reduced incidence of water-borne diseases and better health in the school and surrounding community, leading to reduced absenteeism - particularly for girls who tend to stay at home during menstruation if they do not have proper facilities to use at school. Girls now have designated latrines, a washroom, access to water for washing, and reusable sanitary pads. Improved infrastructure at the school will increase enrolment, attendance and attainment over time. There will be reduced health costs incurred by families due to disease, and participation in community development projects has been encouraged.

**Pictures**

*Rainwater harvesting tank – under construction and completed*



*Latrines and handwashing stands*

**Challenges:**

Although construction finished earlier than expected and we could have completed the whole project in January, we were unable to carry out training and water sampling/testing, due to prolonged school closures as a result of a Cholera outbreak in Zambia. Schools reopened late (on 12<sup>th</sup> February) and on 23<sup>rd</sup> February, we carried out the remaining activities: MHM training, maintenance workshop, WASH, and message writing on the water tank. Water sampling and testing are still to be done - the tank has not yet collected any water due to a drought.

**Sustainability:**

African Revival creates significant impact and sustainability through close engagement with education governing bodies, headteachers, parents and local community leaders. We have been working in these rural locations since 2005 and in doing so we have built long-standing and trusting relationships. We listen and assess critical needs, working diligently with education officials, ensuring support at many levels.

Training provided to the school community will ensure the new structures are used and maintained correctly. Spare parts are available locally at low cost.

**Monitoring & Evaluation:**

Monitoring and evaluation of this project will include maintenance of the infrastructure - our construction coordinator, Dave Sangweni, will visit in six months' time, to ensure there are no structural defects. We will also obtain PLE data to track end of year exam performance.

**Budget Summary:**

This project was funded by African Revival and the final cost was **£15,276**, with an underspend of £6,785, because most of the contingency was not needed, despite increasing fuel costs during 2023. There was also a favourable exchange rate increase in early 2024. These funds will be reallocated by Trustees to further improve sanitation at other schools.

This school community was a delight to work with and will receive one of the first of African Revival's Read Together workshops in Zambia, along with a wheelable library.

**The children, teachers and parents of Chalinga Primary School would like to thank African Revival for their commitment and support.**



*Girls receiving reusable pads during MHM training*

**Report prepared by:**

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