



The HALO Trust Zimbabwe / The Beit Trust Final Project Report June 2026



The GPZ 7000 detectors captured on arrival, securely packaged in their original boxes and ready for deployment in the field.

Grant Information

Beit Minute No: 7433

Amount: £36,000

Duration: January 2026 – December 2026 (one year)

Purpose: Procurement of landmine detectors – GPZ 7000

Status: Successfully completed

Project Summary

Under the current project, HALO Zimbabwe successfully procured six Minelab GPZ 7000 detectors using Beit Trust funding, representing a strategic investment in enhancing mine clearance efficiency and capability. To ensure the effective deployment and immediate operationalisation of this equipment, a combined Operator and Senior Manager training course was conducted from 10–15 May 2026. The training was designed not only to build operator capacity, but to prepare teams for the transition to GPZ-based primary search as a core clearance methodology.

This transition is expected to deliver significant operational benefits, including:

- Improved performance in highly mineralised soils
- Reduced dependence on mechanical ground preparation
- Increased effectiveness in deep-buried mine environments
- Elimination of Missing Mine Drills (MMDs), saving productive time
- Enhanced safety of deminers

By directly linking equipment procurement with structured capacity building, the project ensures that the detectors are fully integrated into field operations, maximising return on investment. Overall, the deployment of the GPZ 7000 detectors, supported by targeted training, is expected to substantially increase clearance productivity and contribute to bringing forward Zimbabwe's national mine clearance completion timeline.

NB: All detectors, as evidenced on the cover page have been clearly branded with Beit Trust stickers, ensuring donor visibility in the field and highlighting the Trust's direct contribution.

Strategic Rationale

Zimbabwe's minefields present a complex operating environment, characterised by highly mineralised soils and areas where mines have shifted and become deeply buried over time. These conditions have historically constrained clearance progress, reducing the effectiveness of conventional detection methods and increasing both operational time and cost. The introduction of Minelab GPZ 7000 detectors represents a strategic shift in approach, enabling HALO Zimbabwe to overcome these long-standing challenges and significantly improve clearance efficiency.

The key operational advantages of the GPZ 7000 deployment include:

- **Improved performance in highly mineralised soils**
The GPZ detectors significantly reduce interference caused by mineralisation, leading to fewer false signals (“red chips”) and allowing deminers to maintain a faster and more consistent workflow.
- **Enhanced effectiveness in deep-buried mine environments**
The technology is particularly well suited to washaway areas, where mines are often buried deeper, enabling more effective primary search in areas previously considered slow and resource intensive.
- **Elimination of Missing Mine Drills (MMDs)**
The GPZ 14” coil can detect R2M2 mines at depths of at least 32 cm, removing the need for routine MMDs. This improves safety while also reducing time spent on repetitive procedures.
- **Reduced reliance on mechanical ground preparation**
The ability to operate effectively in difficult soil conditions decreases the need for mechanical assets, lowering operational costs and simplifying logistics.
- **Increased operational flexibility and productivity**
With greater detection confidence and reduced interruptions, teams can deploy more rapidly and sustain higher output across varied terrain.

Training Overview

Following the procurement of the GPZ 7000 detectors, a structured training programme was delivered to ensure their effective and safe integration into operations. The course was conducted over five days (10–15 May 2026) and included both HALO personnel and Zimbabwe Mine Action Centre Quality Control officials, reinforcing alignment between operational and oversight functions. A total of nine HALO staff and two ZIMAC QC officials participated in the training. Among the HALO team, the training covered a wide range of roles including the Deputy Unit Commander, Training & QA Manager, Training & QA Officer, Supervisor, Community Outreach Team Supervisor, two Deminer Medics, and two Team Commanders, ensuring that both leadership and frontline staff were equipped with the necessary skills to maximize the detectors’ impact.

The training took place at the newly established training area in one of HALO’s field camps (Kasika camp), which is equipped with six GPZ lanes ranging from Easy to Hard. Designed to replicate operational conditions, the site meets all minimum requirements for effective detector training, including sufficient space for multiple lanes per participant, representative soil similar to target minefields, and a variety of controlled buried metal signals. These signals range from large to very small, and are positioned near obstacles, on undulating terrain, and in close proximity to one another to simulate realistic challenges. The ground also incorporates medium mineralised soils, permanent marking sticks, and printed maps of all signal placements. Each lane includes 1–2 buried R2M2 mine simulants, with difficulty levels calibrated to Easy, Medium, and Hard, ensuring participants gain confidence and competence across progressively complex scenarios.

The programme combined classroom-based theory with extensive practical exercises. Core areas covered included:

- Detector setup, maintenance, and configuration
- Ground balancing, noise cancellation, and test piece verification
- Sweep pattern mapping and signal detection techniques

- Isolation of signals in both simple and complex environments
- Task management approaches, including team-based drills and quality control
- Full SOP review, with emphasis on the transition from MMDs to primary search

Training was progressive, with participants moving from basic operational handling to applying skills in increasingly complex scenarios, including mineralised soil conditions and obstacle-heavy terrain. The training also placed emphasis on confidence building and standardisation, ensuring operators not only understood the equipment but could apply it consistently in field conditions.

Training Outcomes

The training achieved a 100% pass rate, with the majority of participants passing on their first attempt and all successfully qualifying following a retest. This reflects strong engagement from participants and the effectiveness of the training approach. Overall performance was high, supported by prior exposure to the equipment, which allowed the training to focus on refining techniques and improving operational efficiency.

Key strengths observed included:

- Strong understanding of detector functionality
- Rapid improvement in signal identification and isolation
- Good adaptability to varying ground conditions

Minor areas for improvement were identified, primarily related to consistency and efficiency, but these showed clear progress over the course of the training and will continue to be strengthened during field deployment. The training demonstrated that, with structured preparation, operators can quickly reach a high level of competence with GPZ detectors, supporting rapid and effective scale-up of primary search operations.

Operational Efficiency Gains

The shift to GPZ-based primary search is expected to deliver measurable gains in both time and cost efficiency, directly improving clearance outputs.

One of the most immediate benefits is the elimination of Missing Mine Drills. On average:

- Approximately 10 MMDs are conducted per day
- Each takes around 3 minutes
- Resulting in 30 minutes saved per team per day

Over time, this represents a substantial increase in productive clearance time. Additional efficiency gains include:

- Faster progress in mineralised soils due to reduced false signals
- Less downtime caused by difficult ground conditions
- Reduced reliance on mechanical assets, lowering operational costs
- Improved workflow through better signal confidence and reduced rework

These factors combine to increase the area cleared per team per day, making operations both faster and more cost-effective.

Contribution to National Completion Targets

Zimbabwe's national mine clearance timeline has been consistently affected by difficult terrain, soil conditions and the presence of deep buried mines, all of which slow progress and increase operational complexity. The deployment of GPZ 7000 detectors directly addresses these constraints. By enabling faster and more effective clearance in previously challenging areas, the technology allows HALO to increase productivity without a proportional increase in resources.

The cumulative effect of reduced operational delays increased daily output and expanded capability in difficult environments is expected to result in a meaningful acceleration of clearance progress. This has direct humanitarian and developmental implications. Faster clearance means:

- Earlier release of safe land to communities
- Increased agricultural and economic use of formerly hazardous areas
- Reduced exposure of local populations to mine-related risks

As GPZ primary search is scaled across operations, it is anticipated to play a significant role in bringing forward Zimbabwe's overall mine-free completion timeline.

Budget Summary

A total of 97% of the allocated budget has been spent, as detailed in the table below. HALO is awaiting the final invoice from the freight clearing agent, which is equal to the remaining balance (£1,119.21), completing full spend out of the funds.

Budget line	Budgeted cost (GBP)	Actual (GBP)
Freight	2,851.31	2,137.43
Detectors	33,148.50	26,727.76
Spares	0	6,015.41
Total	35,999.81	34,880.60

Conclusion

The procurement and deployment of the Minelab GPZ 7000 detectors, supported by targeted training, represents a transformational step in HALO Zimbabwe's operational approach. By ensuring that equipment investment is matched with structured capacity building, the project has successfully translated donor funding into practical, field-level impact. The transition to GPZ-based primary search enhances efficiency, improves safety and reduces costs, while also enabling operations in previously challenging environments. The evidence from training and initial implementation indicates that this approach will significantly strengthen clearance performance. As deployment expands, the GPZ detectors are expected to contribute directly to accelerating progress toward Zimbabwe's national mine clearance goals.

Photographs

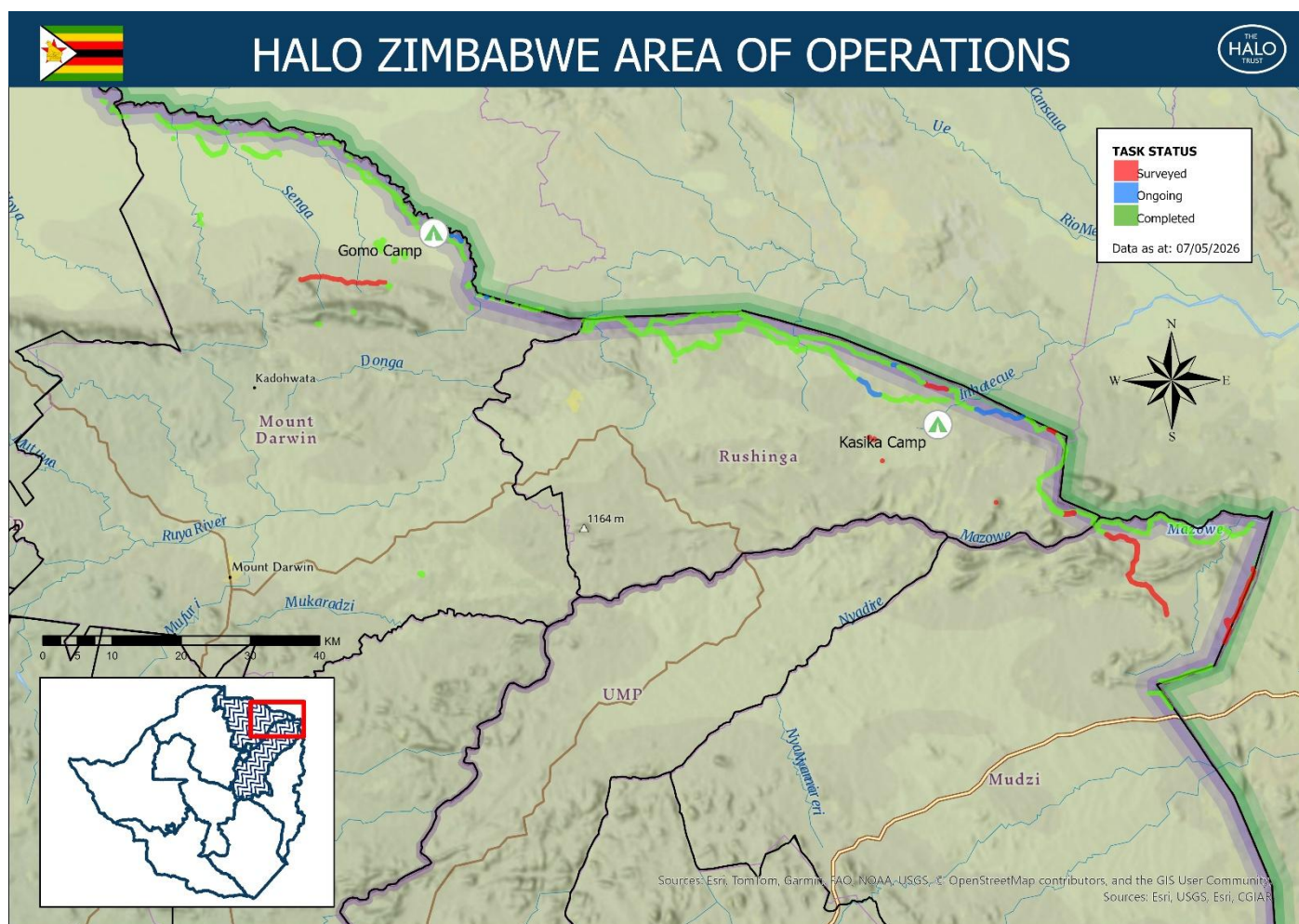
Pictured Below: HALO Staff and ZIMAC QC Officials during Minelab GPZ training



Pictured Below: The GPZ detectors in use in the minefield



Area of Operations Map



The map above illustrates HALO's operational areas and the status of minefields as of May 2026. To date, HALO has released more than **20 million square metres** of land and cleared over **244,000 anti-personnel mines**, representing 24% of all landmines destroyed globally. In 2024 alone, HALO was responsible for clearing 77% of the mines in Zimbabwe, underscoring its pivotal role in both national progress and the wider global mine action effort.

Thank you

We would like to express our sincere thanks to the trustees of The Beit Trust for their support through this grant. Thanks to your generosity, our mine clearance operations in Zimbabwe are more efficient and we will be able to return land to communities more quickly – improving the lives and livelihoods of people who have lived in the shadow of minefields for so many years. Thank you.