





# **Chimanimani Wash for Sustainable Development**

## **END OF PROJECT REPORT**



Nyamusundu primary school handwashing demonstration







## 1.0 Executive Summary

Chimanimani WASH for Sustainable Development aimed to contribute to the achievement of Sustainable Development Goals (SDGs) 6 – Clean Water and Sanitation and SDG 7 – Affordable and Clean Energy. This has been achieved through improved access to safe and clean drinking water; improved access to sanitation facilities; improved knowledge and behaviours on good hygiene practices; and the provision of renewable energy to students, teachers, their families and surrounding communities of the targeted two primary schools; Thabanchu and Nyamusundu.

The project was originally scheduled to be completed by the 31st of September 2019. However, the project suffered a major set-back when Cyclone Idai struck Southern Africa, including the project area of Chimanimani. The cyclone derailed the progress of the project, which by then was at 80% and 90% complete in Tabanchu and Nyamusundu respectively. Due to urgent humanitarian needs, focus and priority were shifted to the emergency response.

Cyclone Idai caused extensive damage to school infrastructure and had significant negative impact on project activities. Damaged facilities included the Nyamasundu solar system and pipeline, as well as the Tabanchu water treatment system, pipe support pillars, weir dam and pipeline. After a rapid assessment carried out in May 2019 and shared with the Isle of Man, a modifier was granted by the donor in order to tackle the damage and put the project back on track.

Despite the challenges posed by the cyclone, the project has successfully achieved the planned outcomes, contributing to the achievement of Sustainable Development Goals 6 and 7. This has resulted in a reduction in the incidence of diarrhoeal disease (according to Ward 1 Environmental Health Technician (EHT)) among the vulnerable and disadvantaged communities through improving WASH, renewable energy facilities, and services. Reparation and construction work on project infrastructure was completed in line with the Build Back Better principle, ensuring future sustainability.

Significant investment in water supply systems enabled the project to reach 1,312 people with safe, clean and sustainable water access, achieving 92% of the project target of 1,427 people. The internal reflection carried out by Caritas Mutare found that by the end of the project, 92% of households in target locations had access to safe, clean and sustainable water for multiple uses, compared to just 56% at baseline.

The project has achieved increased access to sanitation at schools and in target areas through the construction of flush toilets and the construction of Blair latrines in the community. The sanitation coverage in schools has increased from an average baseline ratio of 29 users per squat hole for males and 30 for females to meeting the national standards of 1:25 for boys and 1:20 for girls. The schools now have sanitation facilities suitable for persons with disabilities which are also able to accommodate menstrual hygiene management for female learners. The flush toilets have been the signature







success of the project, with district officials promoting this approach for government, INGO, NGO and private sector works.

The project has also successfully achieved its target for widescale behaviour change in communities in adopting positive WASH behaviours. In total, 92% of the target population are demonstrating improved hygiene and sanitation knowledge, attitudes and practices, exceeding the baseline of only 33% who practised handwashing after defecation or urination. This result reflects the extent of usage of project infrastructure (including latrines and water points), and the ownership of knowledge promoted by the project. Hygiene conditions have improved widely amongst targeted households and the communities at large. Most of the households have constructed decent latrines. Despite 590 latrines being destroyed by Cylone Idai in the two wards, the overall sanitation coverage has increased from 85% at baseline to 90%. Handwashing facilities are visible at homesteads. During the group discussions held for the endline internal reflection, it was evident that health and hygiene promotion has been well received. Respondents demonstrated understanding and were knowledgeable about the key messages, such as the need to have rubbish pits, pot racks and handwashing facilities.

The establishment of a Photovoltaic (solar) energy system at Nyamusundu primary school has led to improved access to clean energy for 237 pupils (112 boys and 125 girls) and eight teachers (3 female and 5 male). The availability of electricity along with water has made Nyamusundu primary school more habitable and attractive to qualified teachers. The school has been able to retain all qualified teachers and even attracted two additional ones during the project period. The solar energy system installed at the school has several benefits including utility bill savings of US\$227 per month, reductions in greenhouse gas emissions, demonstrating environmental stewardship and creating learning opportunities for pupils. In addition, the school has been unaffected by the national grid stage 2 load shedding, where consumers spent up to 18 hours per day without electricity<sup>1</sup>.

The provision of the flush toilets and solar energy has been extremely well received at Thabanchu primary school as it has raised high morale within the teachers and pupils. This has attracted a lot of attention from within the surrounding schools. Neighbouring school authorities are continuously enquiring on who funded the institution on the projects. This project has uplifted the face of Thabanchu primary school which is no considered a model within the district and province.

## 2.0 Aims and Objectives

#### Aim

To contribute to the achievement of Sustainable Development Goals (SDGs) 6 – Clean Water and Sanitation and SDG 7 – Affordable and Clean energy

#### **Objectives**

- i. To improve access to water for multiple uses for targeted schools and community in Chimanimani;
- ii. To improve access to sanitation facilities for the targeted schools;

<sup>&</sup>lt;sup>1</sup> https://www.sundaymail.co.zw/zim-making-strides-to-ease-load-shedding







- iii. To improve knowledge and behaviours on good hygiene practices;
- iv. To improve access to green energy at targeted schools.

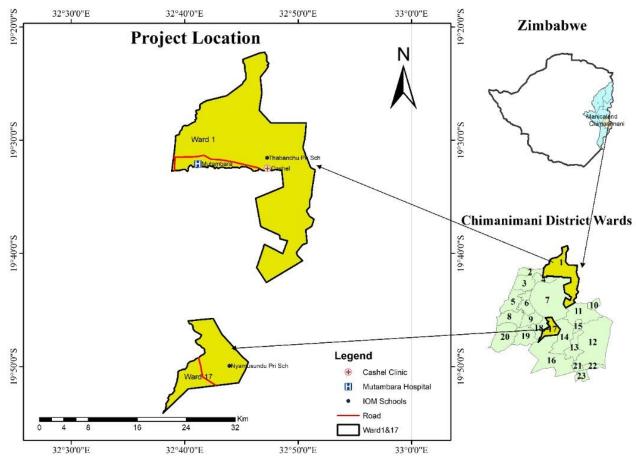


Figure 1: Project Area

#### 3.0 Progress on Outcomes and Activities

#### 3.1 Improved access to water for multiple uses.

In March 2019, Tropical Cyclone Idai devastated the Eastern provinces of Zimbabwe. The cyclone affected an estimated 270,000 people, claimed at least 634 lives, with at least 257 people missing as of 7 April 2019<sup>2</sup>. According to the Manicaland Cyclone Idai Disaster Report (12 April 2019) the hardest hit district was Chimanimani, where at least 169 died and 232 people injured. A total of 1,291 households (6,545 people) were affected in Wards 1 and 17, the wards targeted by the project. A total of 115 families were displaced, 105 of which were in Ward 17. Most tragically of all, 17 people from Ward 17 were killed, including three children from Nyamasundu primary school.

Water sources were damaged and washed away by the cyclone. In Wards 1 and 17, three and ten boreholes were washed away respectively, resulting in most people

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<sup>&</sup>lt;sup>2</sup> https://en.wikipedia.org/wiki/Cyclone\_Idai







accessing water from unprotected sources. Solar piped water schemes established by the project were also unearthed and damaged. To meet commitments and community needs, CAFOD requested additional funding and rehabilitated the two solar piped schemes. The project rehabilitated and extended two piped water schemes where 7.5km of pipeline was extended to 8km with nine multiple tap stands to reduce the walking distance and meet demand at peak periods. Storage tanks were also installed to increase elevated storage to compensate for peak usage. All water points and catchment areas were protected and stabilised by the community.

At Thabanchu primary school, water was connected reaching to the school and benefiting the school garden. A total of 643 pupils (319 boys and 324 girls) and 15 teachers (10 female and 5 male) now have access to safe and clean water for drinking, handwashing and sanitation purposes. The garden currently has a good maize crop and vegetables. The school produces 60 bundles of vegetables per term worth approximately US\$120. The surrounding communities, who contributed unskilled labour and locally available building materials, also benefited from the piped water scheme through water taps connected along the pipeline. Thanks to this, they no longer fetch water from the school premises which would interfere with learning. All the equipment and infrastructure damaged by Cyclone Idai was successfully replaced and repaired including the solar panel stand, sand filtration systems, the installation of pipe support pillars. Unearthed parts of the pipeline were trenched and installed.

At Nyamusundu primary school, a 3.5km pipeline with four community distribution points was established. A total of 237 pupils (112 boys and 125 girls) and eight teachers (3 female and 5 male) now have access to water for drinking, handwashing and sanitation purposes. A school garden was established at a new site to replace the one which was extensively damaged by Cyclone Idai. The gardens have enabled the schools to diversify vegetables contributing to the government infant school feeding programme, reducing vulnerability to malnutrition and generating income through sales of vegetables.

## **Water Point Committees (WPC)**

Water Point Committees (WPCs) are essential for safeguarding the social gains brought about by improved access to safe and clean water for multiple uses. The main function of WPCs is to manage the community water supply system and infrastructure at the institutions and in communities. The WPC oversees the day to day operations and maintenance, and supervises implementation of the committee's constitution, which governs and protects the water usage, regulates infrastructure repairs and maintenance, and manages conflicts.

The project reconstituted and trained two piped water scheme WPCs; a 14-member (9 female and 5 male) and a nine-member (8 females and 1 male) WPC for Tabanchu and Nyamusundu schools respectively. The ward EHTs also trained WPCs constituted by women responsible for managing community distribution points. The selection of additional female committee members was led by School Development Committee







(SDC) representatives. Each WPC purposely has at least 60% women representation. The representation of women is key as they are the community members most affected by adequate positioning and functioning of the water points. Within these committees, the project ensured that women were taking active leadership roles (chairperson, secretary and treasurer) to ensure equitable access to the water facilities. Women, girls and people living with disabilities were specifically consulted in the design and location of WASH infrastructure. The siting and height of water taps was designed for safety and accessibility for women, children and people living with disabilities whilst meeting minimum SPHERE standards. Community-based piped water scheme mechanics (2 females and 2 males) were trained by the contractor during installation.

The WPCs established a social contract with communities and leaders to enable enforcement of the constitutions developed to govern water use and maintenance. Effective running of these committees achieved impressive results in mobilising community members actively participated in the project. For example, community members mobilised by the WPCs contributed all labour for trenching and backfilling of 8km of water pipeline. The WPC also played a pivotal role in sensitizing and raising community awareness regarding the need to maintain and safeguard the water infrastructure provided. The WPCs, as responsible community arms, also came up with bylaws safeguard the water infrastructure, for example by banning brick moulding at water points.



Figure 2: Thabanchu Primary School pupil demonstrating handwashing

## 3.2 Improved access to sanitation.

All 20 seat flush toilets (10 seats for Nyamusundu Primary and 10 seats for Thabhanchu Primary) for teachers and pupils were completed at schools. In addition, a 10-squat hole latrine block was constructed at Tabanchu primary school in response to emerging needs resulting from Cyclone Idai. The local Environmental Health Technician (EHT) monitored the construction and certified each stage completed. The design of the Blair toilets was modified due to underlying rock formations which prevented digging of pits to the required depth. The toilet pits were therefore constructed upwards resulting in higher cost than budgeted for. Multiple handwashing stations were installed to reduce queues during peak demand periods for hand washing, such as school break times.







Inclusion was prioritised throughout the project. The installation of flush toilets with menstrual hygiene facilities made schools more accessible for girls, who previously missed lessons while menstruating due to a lack of adequate facilities. The construction of shower facilities helped to improve dignity and self-care, especially for girls. The two flush toilets were designed to accommodate children with disabilities and were thus fitted with wheelchair ramps and supporting bars in line with SDG 6 (Water and Sanitation for All).

The sanitation structures, which included teachers' toilet, were built according to the government approved plan. These flush toilets played an important role in attracting qualified teachers to the schools as they are easy to use, have privacy and are convenient. In the case of Tabanchu, some teachers were previously staying at the nearby business centre, about 5km away, resulting in absenteeism and lateness for work. Solar energy and flush toilets made the rural schools more attractive and reduced the temptations for teachers to leave and work in towns. The targeted schools are now more habitable due to electricity, tap water and sanitation facilities and are now more attractive to qualified teachers.

### District Education Officer Speech

"I am humbled to stand before you as I witness the great work that Caritas Mutare has done with the assistance from their partner CAFOD. The flush toilets are the first of their kind in Chimanimani district if not in the Provincial's rural schools. These facilities are easily accessible and provide privacy, convenience and comfort as compared to our usual squat holes. These facilities also come in hand for use to our children living with disability. On the other hand, these toilets have been made feasible by Caritas Mutare because of the Piped Water Scheme (PWS) which feeds running water into these toilets. The PWS on its own is a game changer as it also serves clean and safe drinking water to many surrounding households through community taps. I implore other development partners here present to take a leaf and emulate what Caritas Mutare has managed to achieve. I would also want to thank Caritas Mutare for its perseverance on this project as at some point we were not convinced that this project will come to its completion due to challenges faced during the Cyclone Idai. Well done Caritas and your funding partners for such splendid work. Thank you". (Mr Chinyanga – District School Inspector)

The construction of the first flush latrines in the district rural schools has been hailed as a huge success, demonstrating that technology can serve pupils even in rural and remote locations. It had long been perceived that flush toilets are a luxury that poor and rural communities cannot accommodate. However, the installation of these in Chimanimani rural schools has shattered this perception. Such retrogressive perceptions have hindered progress for many years and stifled creative solutions. The two targeted schools are now receiving regular learning visits by other school authorities and NGOs and Tabanchu was selected as a venue for hosting the World Toilet Day commemoration in 2019, recognising it as a model example of what can be







achieved. This project has demonstrated to district officials that it is entirely possible for rural children to have the same opportunities as urban children. After having witnessed their effectiveness, local authorities now recommend the flush toilets to other development organisations intending to construct school toilets (if funds and availability of adequate water permit).

CAFOD has implemented the ZimCats (demand-led sanitation) approach, which strives

attaining towards zero open defecation villages in project areas. The two-pronged strategy included supporting communities to 'own' the issue of their own sanitation, as well as triggering communities to replicate initiatives to create open defection free zones, and competitions for villages to achieve Defecation free' 'Open (ODF) status. To date, 566 households constructed have their latrines. The project has witnessed great examples of community solidarity; for example, several volunteers helped digging latrines for the most vulnerable households. However, ODF status could not be achieved by the



Figure 3: Latrine under construction at Mugadzeya homestead in Ward 17

villages during the project life because 105 and 485 latrines in Wards 1 and 17 respectively were destroyed by Cyclone Idai. Monitoring visits have confirmed that households are improving their hygiene behaviours through the reconstruction of potracks for proper cleaning of utensils, tippy taps next to latrines for handwashing, and rubbish pits for waste disposal.









Figure 4: Thabanchu Blair toilet pit digging





Figure 5: Thabanhu Blair toilet block

The project nearly achieved its target for the number of people with access to sustainable supply of adequate safe and clean water for multiple uses reaching 880 school pupils, 23 teachers and at least 92% of targeted 250 community households. The internal reflection report shows that 1,312 people in Chimanimani Wards 1 and 17 now have improved access to water according to SPHERE standards (350 persons/tap; 15 litres of water per person per day). School and community targets and indirect).







Achievements within this outcome have been exceptional, particularly considering that the target schools and communities were in extremely remote locations and surviving with limited-to-no services from government or other NGOs. This project brought water to the most difficult-to-reach areas. Quotes from KIIs and FGDs during the internal reflection show the impact of the action for the communities:

#### **NYAMUSUNDU PRIMARY SCHOOL HEAD APPRECIATION**

"Nyamusundu Primary school greatly appreciates the WASH and the Solar energy projects facilitated by Caritas Mutare with support from CAFOD and Isle of Man at this institution. Solar power has made us happy and has enabled us to effectively teach ICT at our school. This has been made much easier with donated ICT equipment by our partner (Caritas Mutare) in form of four tablet phones, colour printer, projector and desktop. As school authority, we cherish this donation and cordial working relationships demonstrated thus far" (Mr Lovemore Masendeke – Nyamusundu Primary School Head).

#### **COMMUNITY MEMBER**

"We are over the moon with this water project and electricity at our school. Thank you very much Caritas and your donors for this wonderful work. We never in our lives dreamt that we could have this amazing development in our community. We are now able to fetch water nearby our homestead and this has made our lives easier and better. Thank you very much and God Bless you" (Tasiiwa Mwarisa – Community Member).

Ensuring availability of water for uses beyond human consumption was critical to succeeding in achieving targets for this outcome. Households can now access water for domestic tasks (such as cooking, washing dishes, and personal hygiene). The two schools now have access to water for handwashing, toilet cleaning, construction as well as vegetable gardening.

#### 3.3 Improved knowledge on health and hygiene.

School hygiene and nutrition clubs were established and trained during the first year of the project. The club membership has grown from about 30 pupils to 80 members (45 girls and 34 boys) at Nyamusundu primary school and 54 members (40 girls and 14 boys) at Thabanchu primary school. The schools were advised to establish two health clubs, one for infants and one for juniors. They also engaged two health club facilitators, a male and female, to cater for the different age and gender needs of learners. Open discussions on topics such as puberty, menstrual and personal hygiene are being discussed with age appropriate club members. A learner centred, interactive PHHE approach was used to ensure effective child participation. Children, through the hygiene and nutrition clubs, were consulted on the design of WASH facilities and are actively engaged in monitoring their use and upkeep. Within schools, the hygiene and nutrition







club members are taking leading roles and raising awareness among their peers on the proper use of toilets, conducting spot checks routinely and providing reports to the school administration every month on the state of school toilets.



Figure 6: School Health Club members at Nyamusundu during interactive PHHE session

Interactive health and hygiene sessions have helped sensitise senior learners on hygiene, nutrition and `taboo` subjects such as menstruation. Girls in upper primary school informed project staff that access to water at the school was the most important factor affecting their attendance. They have asked that all future WASH projects also include information on menstruation for others to learn. Boys were also taught about menstruation and upholding dignity across gender, as often boys would mock girls who had stained their clothes due to lack of proper sanitary wear. This is attributed to lack of knowledge and information.

School hygiene competitions were held monthly to motivate school children and ensure that their learning environment is clean and that good hygiene behaviours are practiced. Each school set aside a hygiene month per term which focused on an agreed hygiene theme. Nyamusundu focused on handwashing while Thabanchu set themes on clean







classroom and school environments. During each month, the clubs conducted awareness campaigns around the chosen theme at school and community level.

School and community health clubs successfully carried out health and hygiene initiatives, including clean-up sessions and door to door campaigns. They identified hot spots in the business and residential areas and targeted these spots with bespoke campaigns.

The Community Health Clubs, with the assistance from the local Village Heath Worker have embraced the innovation of using an all-weather friendly Tippy-Tap "Chigubhu gear" as hand washing facility. This innovation is affordable and simple, and it ensures vulnerable rural groups gain access to running water for hand washing. The Tippy-Tap innovation has largely been constructed in the community at household level, and is commonly installed near the latrine.

The targeted schools and communities conducted good hygiene education and awareness raising to prevent outbreaks of diarrhoeal diseases such as cholera and typhoid. With the emergence of



Figure 7: A Village Health Worker demonstrating handwashing with Tippy-Tap

Covid-19, the school and community hygiene and nutrition clubs were also educating the school children and the surrounding community on the potentially deadly virus's signs, symptoms and its prevention methods. A total of 187 pupils (97 boys and 110 girls) and 50 infants (15 boys and 15 girls) from Nyamusundu primary and 535 pupils (267 boys and 268 girls) and 108 infants (52 boys and 56 girls) from Thabanchu Primary and 460 people (307 females and 153 males) in the community were reached with information on Covid-19 and good hygiene in general.







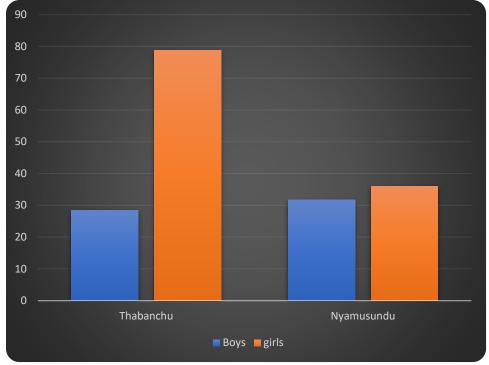


Figure 8: Thabhanchu and Nyamusundu Primary Schools Health Club Active Members

School hygiene and nutrition clubs have been critical to good hygiene promotion initiatives, as they use an interactive approach that engages pupils in dialogue and encourage attendance at schools. Children learned that they are a part of the solution by raising health and hygiene awareness through drama, poems and clean-up campaigns and that they can lead their communities by example.

#### 3.4 Improved access to clean energy.

The establishment of a five-kilowatt Photovoltaic (solar) energy system at Nyamusundu primary school has led to improved access to clean energy for 237 pupils and eight teachers. A new inverter was replaced after being damaged by lighting when Cyclone Idai disaster struck. The solar system is providing electricity directly benefiting the staff and students at the institution. The system lights up three teachers' cottages, the headteacher's office and a classroom. School pupils and staff are now able to use desktop computers while students also use four tablets for the school hygiene clubs learning sessions. The project provided video and hygiene themed music to the school. This successful intervention has boosted morale of both the teachers and children at the school and they now can work late without lighting issues causing problems.

Teachers are now able to use computers and recharge phones and other electronics at the school. The school is now printing individual pupil's end of term examination reports; previously teachers had to write reports on the board. The school now also has night lights, which keep the surrounding lit and provide security. The renewable power







is available every day of the year, even in cloudy weather. The solar energy is excellent value for money; the tariff to join the national grid would be US\$225, whereas the panels require little maintenance and are expected to last over 25 years before being replaced. Additionally, it is not affected by the regular load shedding suffered by users of the national electricity supplies.



Figure 9: Nyamusundu solar energy system (left) and storeroom for the solar system (right)

#### 4.0 Sustainability

Caritas Mutare has a permanent presence in the province and therefore continues to work with the key stakeholders and other organisations in the district. The involvement of the community at all levels of programming has been key to sustaining the project's achievements. Caritas Mutare and CAFOD ensured sustainably of the programme through building the capacity of communities in a collaborative way by training community-based committees. Sustainability of the operation and maintenance of the water points has been built into the project. This was achieved through water user committees' formation and regular training. The project has trained plumbers to undertake maintenance and repair, reducing delays that the remote communities might face in accessing skilled maintenance workers.

Water Point Committees are tasked with collecting water user fees to maintain and repair the water source. There has been buy-in from communities and local leaders to collect user fees for stockpiling pipeline fittings. The harmonised work approach exhibited by the government stakeholders, community, CAFOD and Caritas Mutare has fostered a sense of ownership to targeted communities. Engagement of local builders in construction of the infrastructure and the communities' active participation and contribution is a testament of project ownership and sustainability. The involvement of







local EHTs and Community Health Workers (CHWs) in the project will go a long way in supporting and monitoring the project.

Where piped water schemes are shared between schools and communities, the project learned that conflicts could arise on water use and management. Wide consultations of different groups were done during the design phase. Strong water management committees, with representation from all users, including the School Development Committees (SDC) were equipped with adequate information on supply and demand as well as use (flow meters) to make decisions on use and management. Schools were supplied with separate water storage tanks for uninterrupted supply and separate water points to ensure child safety.

Sustainability has also been enabled thanks to trained SDCs, who agreed to budget for WASH and encourage parents to contribute towards repair and maintenance of WASH infrastructure.

The access to a reliable water source and electricity has attracted education investment from other funders. For example, one development partner renovated and painted two teachers houses to improve the status of the school. The institution also received furniture for grades 6 and 7. Other development partners also provided combined Child Protection sessions to the school pupils from grades 4 to 7. Another partner also donated a desktop computer and first aid kit. These initiatives were coordinated by the school and the project to complement each other.

#### 5.0 Stakeholder involvement

Caritas Mutare and its partner CAFOD continues to participate in national and district level cluster fora (WASH, Shelter/NFI, Food Security, Early Recovery) and submitting plans through WASH cluster 4W matrix (Who What Where When) tracking. CAFOD and Caritas Mutare have been working collaboratively with relevant stakeholder groups to understand the water, sanitation and hygiene operational issues and jointly develop solutions, including post project management issues on WASH infrastructure. Joint planning and monitoring visits with key stakeholders including the District Development Coordinator, Rural District Council, Ministry of Health and District Development Fund (DDF) were conducted to secure buy-in and check on progress. This was done also to appreciate progress and give input in ensuring appropriateness of interventions and ensuring the relevant stakeholders take charge in monitoring interventions, such as latrine construction stages and pipe water scheme installation. Visits enabled stakeholders to appreciate progress being done in the communities for rebuilding and rehabilitation initiatives.

The project established complaints handling mechanisms for obtaining feedback from stakeholders. Regular and continuous monitoring was conducted by CAFOD and partner Caritas Mutare along with feedback sessions, with specific attention to reaching differing vulnerable groups. The feedback from all stakeholders was captured and considered. Complaints monitoring and analysis was done on a regular basis with the results fed







back into the project. Programmatic complaints on being left out and convenient location of water points were received and responded to. The school requested ICT equipment which was honoured through provision of four tablets for use in interactive sessions for health clubs, preloaded with hygiene themed videos, music and photos.

An adaptive programme approach was embraced to incorporate feedback received from various stakeholders, including beneficiaries. Extensive consultations were done with beneficiaries to gather their expectations and aspirations. The Council and District Stakeholders were part of the project decision-making team. Feedback resulted in the changes being made to scope of works and infrastructure established, for example the position of water points. Meeting dates and times with beneficiaries were adjusted to include weekends as requested by communities.

#### 6.0. Conclusion

The project has made a strong contribution towards achievement of Sustainable Development Goals (SDGs) 6 – Clean Water and Sanitation and SDG 7 – Affordable and Clean Energy. Whilst this project is not the sole contributor to the impact statement, evidence from the internal reflection, key informant interviews, and institutions (such as health centres) reveal that there has been marked improved WASH services and access to renewable energy. Key informants interviewed (School Head) revealed that, the provision and easy access to water within the school has resulted in improved pupils' personal hygiene, institutional cleanliness and gardening activities.

School enrolment has increased by 16% overall from 532 to 643 and 224 to 237 for Thabanchu and Nyamusundu primary school respectively (as confirmed by the headmasters). By increasing water and sanitation facilities and energy, qualified teacher retention has increased. The access to a reliable water source, sanitation and energy has attracted education investment from other development partners including Save the Children, World Vision and Kapnek Trust. The reliable water sources on school premises are enabling the school to produce vegetables for the infant feeding programme. Additionally, it enables pupils to undertake practical subjects such as agriculture, ensuring that schools effectively apply the government's education policy of "Competency Based Curriculum through Experiential Learning".

The project targeted the areas of greatest need, particularly communities most vulnerable to climate-related shocks. By targeting institutions such as schools and health centres, the project ensured wide coverage and access. Increased access to water has positively impacted women and vulnerable groups (elderly, children and the sick) as they spend less time and energy fetching water; most households now travel less than 1km to their nearest water source.

In conclusion, this project has positively impacted the lives of targeted households and their communities – contributing to improved quality of life and reduced vulnerabilities. Communities continue to thrive from safe, clean and accessible water, improved







hygiene and sanitation behaviours, and linkages to district and government stakeholders.