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sustainable environment, education & development

Final Report

Project Sekoly: Facilitating safe learning environments at Manambaro and Lanirano Primary Schools

Prepared for
Guernsey Overseas Aid & Development Commission



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1. Summary

Project Aim: To increase classroom capacity and improve sanitation and hygiene practices at Manambaro and Lanirano Primary Schools, thereby increasing students' learning time and health outcomes.

Location: Manambaro Rural Commune and Fort Dauphin Urban Commune, Anosy Region, southeast Madagascar

Project Duration: 11 months

Project Budget: £60,336

Context: Madagascar's struggling education system is a telling symptom of the country's severe underdevelopment. Currently ranking 161/189 on the UNDP Human Development Indexⁱ, Madagascar experienced an 86% drop in public investment in educational infrastructure following the 2009 political coup and resulting instabilityⁱⁱ. The heaviest burden of this lack of resources was effectively absorbed by the most remote and vulnerable communities, like those in the Anosy region, where 52% of children between 6 and 10 years old have never been to schoolⁱⁱⁱ. Poor educational outcomes are further exacerbated by under-funded school Water, Sanitation and Hygiene (WASH) infrastructure provision and maintenance^{iv}. Poor WASH practices across schools lead to high incidence of preventable illness and a large number of missed school days^v.

Project Summary: Between April 2018 and January 2019, SEED Madagascar (SEED) has been working with two beneficiary primary schools to provide them with improved classroom and WASH infrastructure, as well as comprehensive WASH education. In the long term, this project aimed to increase the number of children in full-time education, as well as improve general hygiene and sanitation practices at the school, ultimately improving student health and education outcomes.

In August 2018, SEED completed activities at Manambaro Primary School in the remote Anosy region of Madagascar. This phase of the project provided the school with a two-classroom building, a three-cubicle Ventilated Improved Pit (VIP) latrine block and WASH sensitisation and education sessions. The teachers successfully delivered SEED's WASH curriculum to all students in the 2017-2018 school year.

As of January 2019, construction activities at Lanirano Primary School are nearing completion, with only paint-work and furniture remaining to complete the new two-classroom building and VIP latrine block. In addition to the construction element of the activities, Project Sekoly facilitated the delivery of the WASH curriculum to all students in the 2018-2019 school year and is currently in the process of piloting WASH nudges.

Objective 1: Increase number of students receiving full-time education by 307, by constructing four fully-furnished classrooms at Manambaro and Lanirano schools

Objective 2: Reduce latrine-to-student ratio from 1:349 to 1:149 at Manambaro Primary School

Objective 3: Support the delivery of 66 WASH lessons for 698 beneficiaries at Manambaro Primary School

2. Activity Detail

Duration of Project Activities:	April 2018 – February 2019 (11 months)
Manambaro Primary School:	April 2018 – August 2018 (5 months)
Lanirano Primary School:	September 2018 – February 2019 (6 months)



Community Development volunteers Rowan (left) and Regan (right) working at Manambaro Primary School in July under the supervision of SEED's Volunteer Coordinator, Nick



The new classroom building in Lanirano Primary School in early January 2019

2.1 Preparations and Sustainability

Prior to the commencement of project activities, SEED's Project and Construction teams held pre-project meetings with key stakeholders, including the Head-Teachers and the parent-teacher associations of Manambaro and Lanirano Primary Schools, as well as local and regional educational authorities. During these consultations, responsibilities of each party were outlined and agreed upon, ensuring a high level of buy-in of all partners and beneficiaries.

Building materials were sourced locally where possible, with the Manambaro community contributing all sand for the construction process and both communities contributing water. The remaining materials were transported from the nearby urban communes, with the windows, doors and furniture parts being constructed by carpenters in Fort Dauphin. Whilst the materials were being sourced, both communities helped clear the site of any debris, ensuring construction could commence smoothly and without delay.

A key element of Project Sekoly is ensuring that participating schools have the knowledge and tools essential to maintain their new infrastructure and sustain positive WASH practices beyond the completion of project activities. The WASH education sessions will be delivered to all students at the beginning of each school year, ensuring that the students and staff do not return to poor WASH practices over time. Additionally, the new infrastructure has been designed to withstand extreme weather, while requiring minimal maintenance.



Community Development volunteers have been working alongside SEED's experienced construction team in Manambaro

In line with its commitment to upskilling local labour, Project Sekoly employs members of local communities to be part of the construction team wherever possible. Eight local workers were employed in Manambaro and 11 in Lanirano. Additionally, as part of SEED's Community Development programme, teams of international volunteers assisted with the construction activities at both schools. This has allowed for greater building efficiency and has been essential to minimising costs.

2.1.1 Ground-breaking ceremonies

On the 7th of April, a traditional ground-breaking ceremony held at Manambaro Primary School was attended by SEED's Project and Construction teams, as well as members of the Manambaro community and representatives of local education authorities. SEED's Community Development volunteers were also present to witness the proceedings. The event was marked by speeches from community elders, the Mayor of Manambaro, SEED's Head of Construction and parents of enrolled students. The speakers highlighted the commencement of project activities as a key milestone in the community's efforts towards safeguarding every child's right to a primary education. Representatives of the community committed to being active partners of Project Sekoly, safeguarding the upkeep of the new infrastructure and encouraging positive WASH practices.

**“Our children are very important to us.
Primary education is an investment in their future.”**
– Mayor of Manambaro, speaking at the ground-breaking ceremony



A community elder speaking to the attendees at the ground-breaking ceremony

In Lanirano Primary School, the ground-breaking was held on the 27th of August, prior to commencement of construction activities. Speeches were delivered by community elders, local government representatives, SEED's Head of Construction and the Chef ZAP (the superintendent of schools in Manambaro and surrounding communes). Volunteers participating in SEED's Community Development Programme also attended the ceremony. As in Manambaro, all participants asserted their commitment to education and maintaining the new infrastructure, while SEED committed to consulting with all key stakeholders over the course of project activities



Lomba, SEED's Head of Construction, and the Chef fokontany of Lanirano leading the ground-breaking ceremony in late August

2.2 Construction Activities

2.2.1 Classroom buildings

The construction team employed the same construction techniques to deliver two new classroom buildings at both Manambaro and Lanirano primary schools. The activities commenced at Manambaro Primary School in April when the team dug the foundations and framed them with wire for reinforcement. Specialist masons used the traditional method of reinforced rock-weaving to complete the foundations. Building posts were then constructed from reinforced concrete. Cement breezeblocks were assembled on-site by a specialist team and used to raise the walls of the classrooms in Manambaro. This allowed for increased efficiency and reduced the cost of material transport. However, due to the increased cost of cement, breezeblocks were no longer cost-effective five months later and clay bricks were used in Lanirano in September. Once fully erected, the walls were rendered by specialists. A wooden-beam frame for the roof was installed and painted before the corrugated iron roofing panels were secured onto the building.

The construction team came back to the lower structure of the classrooms to stabilise the internal foundations by filling them with sand. They then moved on to rendering the floor and constructing the concrete veranda and steps using rock-weaving; a preferred technique in the region due to its ability to withstand extreme weather. The teachers' desks and chairs, blackboards and concrete cupboards were prepared by a carpenter in Fort Dauphin, while the students' benches were all constructed on-site ensuring the transport cost was

kept minimal. Once all the walls were painted, and the furniture installed, construction of the classrooms was complete.

With the additional two classrooms providing space for 120 students, the Headmistress of *Manambaro Primary School* will be able to reshuffle year-groups among classrooms to optimise their class-time, *allowing 201 students in Years 4 and 5 to complete full days of school.*

At *Lanirano Primary School*, the same kind of re-organisation of students *will allow at least 279 of those in Years 3, 4 and 5 to complete full days of school.*



The completed classroom building at Manambaro (above) and the one in Lanirano (below) pictured in early January 2019.

2.2.2 VIP latrine block

As with the classroom buildings, the same building techniques were utilised to construct VIP latrine blocks at both schools. The construction team began digging the pit for the latrine block in Manambaro in late April, while in Lanirano construction began in late September. In both cases, the pit was then lined with concrete reinforced with wire, and a reinforced concrete slab was prepared on-site before being placed on top to isolate the waste compartment from the latrine cubicles. As with the classroom building, cement breezeblocks were assembled on-site by a team of local specialists. These allowed for increased efficiency when raising the walls of the latrine block and the team moved on to constructing a wooden frame for the roof in early June. The corrugated iron roof was installed only a week later. The concrete steps and two gender-separated concrete urinary areas on each side of the blocks were completed by early July and December, respectively. Finally, the walls of the new blocks were rendered and painted, completing the building.

The new VIP latrine block provides three extra cubicles for 698 students at Manambaro Primary School, and together with the already-existing two, *a latrine-to-student ratio of 1:140 has been achieved.*

Likewise, in Lanirano, the three new latrines, when combined with the existing usable cubicles, *allow for a latrine-to-student ratio of 1:71.*



The newly-constructed WASH infrastructure next to Lanirano (above) and Manambaro (below) Primary Schools' existing facilities

2.3 WASH Education

SEED's holistic approach to improving WASH outcomes requires that the provision of WASH infrastructure be accompanied by beneficiary sensitisation and education sessions, to encourage positive hygiene and sanitation practices, and ensure the new infrastructure is maintained in the future. SEED's WASH curriculum provides a comprehensive five-lesson plan, complete with interactive activities to make it suitable and engaging for primary school students.

17 teachers and an additional number of parents attended the first session, comprising **triggering and sensitisation** to the severity of consequences of poor WASH practices. All 17 teachers also attended the following **teacher training** sessions, which were delivered by SEED's WASH Coordinator and provided teachers with the knowledge and skills to deliver WASH education to their students.

The WASH curriculum for primary schools has been designed by SEED's Head of WASH and comprises key topics and principles of positive hygiene and sanitation practice. These include:

- **Handwashing** and the importance of using soap, ash or other cleaning agents,
- **Latrine use** and the hazards of open defecation
- **Latrine maintenance**, including cleaning guidelines, organising a cleaning schedule and strategies for preventing bad smells (e.g. using ash or charcoal powder)
- Different methods of **water treatment**, including straining, boiling, chlorinating or using the three-pot treatment.

All 698 students completed the WASH curriculum before the completion of the 2017-2018 school year.



Students of Manambaro Primary School

2.4 Additional Activities at Lanirano Primary School



Community Development volunteers and SEED's construction team digging the foundations at Lanirano Primary School in September

2.4.1 WASH education

As in Manambaro Primary School, the provision of WASH infrastructure has been accompanied by the training of teachers in the delivery of SEED's WASH curriculum.

The school's administration invited parents and teachers to attend an interactive **triggering and sensitisation** session delivered by SEED's WASH Coordinator, with teachers then continuing on to two **teacher training** sessions. These meetings took place between the 14th and 17th January 2019 and covered all previously described topics: **handwashing**, **latrine use**, **latrine maintenance**, and **water treatment**.

All teachers who have completed the training are set to deliver the WASH curriculum to their students before February 8th, whereby all students will have completed 6 sessions.

2.4.2 WASH nudges pilot

For the first time in the history of the Sekoly Project, SEED Madagascar is piloting WASH nudges as part of WASH activities at Lanirano Primary School. These are defined as **"environmental cues engaging unconscious decision-making processes to prompt behaviour change"**^{vi}. An inexpensive concrete handwashing point is currently being installed in the vicinity of the latrines and will be connected to the school's piped water system. A set of inexpensive nudges have been designed and will be installed around the WASH facilities to encourage students to follow positive hygiene practices, effectively supplementing SEED's WASH curriculum, including **correct latrine use** and **handwashing with soap**.

Students' WASH practices will be monitored throughout the pilot to gauge the effectiveness of the initiative.

3. Results

3.1 Objectives

Objective 1: Increase number of students receiving full-time education by [at least] 307, by constructing four fully furnished classrooms at Manambaro and Lanirano Primary Schools.

With construction activities complete, Project Sekoly successfully provided Manambaro Primary School with a new two-classroom building, fully furnished with 40 student benches and desks, two teacher desks and chairs, two blackboards and two concrete cupboards. With the additional 120 classroom places, the Headmistress of the school has been able to move students between classes to optimise class-time for each student so that Years 4 and 5, with a total of 201 students, are able to complete full days of school.

At Lanirano Primary School, Project Sekoly has provided matching infrastructure: a two-classroom building, fully furnished with 40 student benches and desks, two teacher desks and chairs, two blackboards and two concrete cupboards. As in Manambaro, with the new 120 classroom places the Headmistress reshuffled the groups to optimise class-time for each student, allowing 279 students in Years 3, 4 and 5 to complete full days of school.

These figures present a significant increase from pre-project attendance rates, whereby a total of 162 students at both schools were receiving full days of lessons.

Objective 2: Reduce latrine-to-student ratio from 1:349 to 1:140 at Manambaro Primary School.

Manambaro Primary School also received a three-cubicle latrine block with gender-separated urinary areas. The latrine-to-student ratio has therefore been reduced from 1:349 to 1:140.

Objective 3: Support the delivery of WASH lessons for 698 beneficiaries at Manambaro Primary School

All students at the school completed SEED's WASH curriculum, delivered by Manambaro Primary School teachers.

3.2 Additional Achievements

Utilising the remaining funding from other donors, Project Sekoly was able to provide Lanirano Primary School with WASH facilities and education sessions to match those delivered to Manambaro Primary School. Additionally, Project Sekoly has piloted WASH nudges at Lanirano Primary School; a method which has been shown through other international WASH initiatives to improve WASH behaviours among primary school students^{vi}. Therefore, in addition to fulfilling the intended objectives, Project Sekoly accomplished the following:

Achievement 1: A newly-constructed three-cubicle VIP latrine block allowed a latrine-to-student ratio of 1:47 to be achieved at Lanirano Primary School.

Achievement 2: All 424 students at Lanirano Primary School complete SEED's WASH curriculum by 8th of February 2019.

Achievement 3: WASH nudges have been installed around the new sanitation facilities to encourage positive WASH practices.

4. Handover ceremony at Manambaro Primary School

On 27th of November SEED's Project and Construction teams attended the official inauguration ceremony at Manambaro Primary School, during which the new infrastructure was handed over to school administration.



"I remember sitting on the floor in these same classrooms, because there was not enough space for all of us to sit. I am so happy to see the new buildings completed."

Lomba, SEED's Head of Construction (left)

"If you own cattle, it can be stolen. If you are a rice farmer, you can be left with nothing to harvest. But once you have an education, no one can take it away from you."

Mayor of Manambaro, (right)



"We must do our part to take care of our schools across the Anosy region. We must work with NGOs to prevent them from falling into disrepair. Education is too important."

Chef de Region Anosy (left)

5. Financial Report

The total budget for this project is £60,336, with the total for Manambaro school being £30,121 and the total for Lanirano school being £30,215. Please find the breakdown of spending relevant to the OADC's funds of £26,973.18 for the period of 1st of April – 30th of November 2018 in the accompanying document.



Lomba, SEED's Head of Construction, and Manambaro Primary School Headmistress viewing the new classrooms

6. References

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