



A Final Report for

# SEKOLY PROGRAMME: EMAGNEVY

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Improving Health and Education in rural Madagascar

October 2022

## Summary

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### Context

**Madagascar remains one of the poorest and least developed countries in the world.**<sup>1</sup> Children bear the brunt of this burden, with over 70% of Malagasy children living in poverty.<sup>2</sup> Despite 63% of children completing primary school, only 35.5% of children graduate from lower secondary school.<sup>3</sup> These issues are amplified in rural schools across Madagascar's under-resourced Anosy region, where over half (51.5%) of children aged six to ten years have never attended school.<sup>4</sup>

Moreover, **6,900 Malagasy children die annually from water, sanitation, and hygiene (WASH) related diseases.**<sup>5</sup> Insufficient, or even non-existent, WASH infrastructure in schools contributes to the transmission of diseases, and impedes academic achievement.<sup>6</sup> In Madagascar, it is estimated that only 37% of schools have access to basic sanitation services, whilst 63% have no access to drinking water from an improved water source.<sup>7</sup> Female students are further disadvantaged due to a lack of menstrual health and hygiene management (MHM) facilities, which prevents them from safely managing their menstruation in school, contributing to school absenteeism.<sup>8</sup>

### Project Sekoly as a Solution

SEED Madagascar's (SEED's) Sekoly Programme aimed to improve health and education in Madagascar's rural Anosy region by providing vital education and WASH facilities for 350 students and 10 teachers annually in Emagnevy Primary School. To complement this infrastructure, SEED has used a train-the-trainer approach to deliver WASH education sessions to teachers, enabling them to promote sustainable hygiene and sanitation practices, such as handwashing and safe MHM.

SEED has constructed a total of two classrooms, and made repairs to Emagnevy Primary School's existing school building. This additional space means students no longer need to share classrooms, and they are now able to attend full days of school in a safe learning environment. To reduce teacher absenteeism, housing was built for the headteacher, their family, and one further teacher.

SEED constructed three latrines and made repairs to one existing latrine. Additionally, two handwashing stations and a MHM facility were installed at Emagnevy Primary school. In partnership with Tatirano Social Enterprise, a 10,000-litre rainwater harvesting system was installed. When full, this system will provide clean drinking water to students, teachers, and the local community for up to two months without needing replenishment. To empower the local community to independently sustain the WASH infrastructure improvements, a WASH management committee has been established and all 10 teachers have been trained to lead WASH education.



*Students of Emagnevy Primary School participating in WASH Education sessions.*



## Activity Detail

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### Construction Activity

#### Classroom Building

Construction activities for the two-classroom school building at Emagnevy Primary School were completed in January 2022. The foundations were excavated and built using concrete and reinforcing bar structural support. Floors and walls were erected using cement blocks with wooden beams installed to support the tin roofing. Windows and doors were made on site and fitted before painting activities commenced. SEED finalised repairs to the existing school building in February 2022 and provided 70 desk-benches for students. Each classroom has been furnished with a blackboard, lockable cupboard, and teacher's chair and table. The provision of education infrastructure at Emagnevy Primary School will enable 350 students to attend full days of lessons in safe and high-quality learning environments.

#### Teacher Accommodation

The construction of the three-room teachers' house was completed in February 2022 and is providing the Headteacher, their family, and one additional teacher with free, safe, and reliable accommodation. By integrating furnished teacher housing into school projects, teacher retention is improved and the school attracts higher-quality teachers, both enhancing school management and security, and minimising staff absenteeism.



*The completed school building and teacher accommodation at Emagnevy Primary School.*

## WASH Facilities

The construction of three gender-segregated, ventilated improved pit (VIP)<sup>1</sup> latrines, and repair of one existing latrine at Emagnevy Primary School are complete. SEED installed two handwashing stations, equipped with WASH behavioural ‘nudges’<sup>2</sup> and an informative mural, prompting students and teachers to practice good hygiene. In collaboration with Tatirano Social Enterprise, SEED installed a 10,000-litre rainwater harvesting system that provides the school and community with a two-month supply of clean water when full, before needing replenishment. The students and community have access to clean drinking water, reducing the transmission of WASH-related illnesses. Additionally, a MHM facility was constructed, with access to running water from the rainwater harvesting system, empowering female students to manage their menstruation in school with privacy and dignity.

The provision of WASH facilities in Emagnevy will help promote safe WASH practices amongst the 350 students and 10 teachers annually, through reliable access to latrines, handwashing stations, MHM facilities, and drinking water.



*Front view of the newly constructed latrine blocks at Emagnevy Primary School with behavioural nudges (top), side view of the latrine block with mural and handwashing stations (bottom).*

<sup>1</sup> Ventilated improved pit latrines are designed to increase air circulation, minimising smell and disease transmitting flies.

<sup>2</sup> Nudges are environmental features that are created to ‘nudge’ a person’s decision-making. In this case, a concrete path with footprints painted leading from the latrines to handwashing stations are being constructed to encourage students to wash their hands.

## WASH Education and Capacity-Building

To complement the improved WASH infrastructure, SEED has trained 10 teachers at Emagnevy Primary School to deliver WASH education sessions to a total of 350 students annually. Additionally, a WASH committee, comprising of teachers and parents, has been established to maintain the new infrastructure. SEED delivered WASH education training to WASH committee members and teachers in Emagnevy, covering topics such as handwashing, latrine use, latrine maintenance, and water treatment. These activities promote good WASH practices amongst students, and build the capacity of the community to sustainably manage the new WASH facilities.



*Students working together on to complete activities during a WASH education session at Emagnevy*

## Sekoly Maintso

The production and transportation of building materials to school sites produces carbon dioxide emissions that contribute to climate change, disproportionately impacts communities such as Emagnevy. Project Sekoly Maintso (Green School in Malagasy) offsets the carbon footprint of the Sekoly Programme through carbon offsetting.

The emissions produced during the construction of Emagnevy School are calculated at 67,966 kgCO<sub>2</sub>e. In March 2022, SEED planted 325 *Acacia mangium* trees in Emagnevy in a carbon offset plantation, which will offset the emissions over a period of 10 years. An additional 325 *Acacia* trees have been planted in a resource use plantation, providing the community with a sustainable wood resource. Given the high demand for wood in the community, the creation of a resource use plantation will ensure that the trees from the offset plantation are protected. Alongside this, 144 fruit trees of six different species – including custard apple, papaya, and mandarin have been planted between the plantations and behind Emagnevy Primary School. These fruit trees will provide a sustainable source of nutrition for the school students as well as the wider community. To protect the plantation sites, signboards have been placed and a 'living' fence using regenerative native species has been planted around the site. Additionally, the students of Emagnevy Primary School received education on the importance of protecting the environment.

## Community Handover

The handover ceremony for the school was held in mid-September 2022, after students had returned from their summer holiday. Responsibility for maintaining the schools and the equipment was formally transferred back to Emagnevy community. The ceremony involved speeches, a community blessing of the new buildings, and a traditional Zebu sacrifice.



## Sustainability and Monitoring

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### Sustainability

The Sekoly Programme ensures sustainability through complimenting the smart, durable design of our infrastructure with capacity building of the school community, enabling them to enact and sustain positive WASH behaviours. The school buildings and WASH facilities have been designed to withstand extreme weather conditions and require minimal maintenance. SEED empowers students and teachers with the knowledge and tools to sustain new infrastructure and positive WASH practices. A train-the-trainer approach is used to build the capacity of teachers so they can deliver interactive WASH education sessions. Operating independently of SEED, teachers will deliver these education sessions to the students annually.

### Monitoring, Evaluation, and Learning (MEAL)

Over the duration of the project, SEED has monitored the progress of activities at Emagnevy through regular visits and departmental reviews. A baseline assessment of WASH knowledge and behaviours was carried out before construction began, and an endline survey was conducted upon project completion. The RAG-system (red-amber-green) was used to track activities and the progress of project outputs was regularly updated and reviewed by the management team. Follow-up visits, including observational monitoring by SEED staff, will be carried out within six months of project end. During these visits, SEED staff will assess the ongoing maintenance of WASH infrastructure and the adoption of improved WASH practices among teachers and students.

## Finances

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The project was completed under budget. The repair of both the existing school infrastructure, and latrine facilities at Emagnevy Primary School required less metal sheet roofing, cement, and wood resulting in underspend across construction material lines. In January 2022, SEED conducted a risk assessment of the existing groundwater well at Emagnevy Primary School and deemed it unsafe to use. As a result reduced expenditure was required across cement, rebar, and handpump lines for the well repair on site.

The underspend of £5,412.96 will kindly be allocated to the next education infrastructure project, Programme Sekoly: Sarisambo. If you would like more information about this upcoming project, please do not hesitate to get in touch.

## References

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<sup>1</sup> UNDP (2020). Human Development Report 2020. Available at <http://hdr.undp.org/>

<sup>2</sup> UNDP (2020). Human Development Report 2020. Available at <http://hdr.undp.org/>

<sup>3</sup> United Nations Educational, Scientific and Cultural Organization (2021). Madagascar. Available at <http://uis.unesco.org/country/mg>

<sup>4</sup> World Bank (2018). The Deep South. Available at

<https://documents1.worldbank.org/curated/en/587761530803052116/pdf/127982-WP-REVISED-deep-southV27-07-2018-web.pdf>

<sup>5</sup> UNICEF (2018). Drinking Water, Sanitation and Hygiene in Schools: Global baseline report 2018. Available at <https://data.unicef.org/resources/wash-in-schools/>

<sup>6</sup> WHO and UNICEF (2015). 25 years progress on sanitation and drinking water. Available at

[http://www.wssinfo.org/fileadmin/user\\_upload/resources/JMP-Update-report-2015\\_English.pdf](http://www.wssinfo.org/fileadmin/user_upload/resources/JMP-Update-report-2015_English.pdf)

<sup>7</sup> UNICEF (2021). WASH and COVID-19. Drinking water, sanitation and hygiene by country, 2000-2020. Available at <https://data.unicef.org/topic/water-and-sanitation/covid-19/>; UNICEF (2021). WASH and COVID-19. Drinking water, sanitation and hygiene in schools. <https://data.unicef.org/topic/water-and-sanitation/covid-19/>

<sup>8</sup> SEED Madagascar (2021). A Rapid Needs Assessment Report for Project Mahampy - MHM. Available at

<https://madagascar.co.uk/application/files/1916/1614/0794/2021.03.16-Mahampy-MHM-RapidAssessmentReport.pdf>