Kingdom of Eswatini

FY2023 Ex-Post Evaluation Report of

Japanese Grant Aid Project

"Project for Construction of Secondary Schools Aimed at Promoting Inclusive Education"

External Evaluator: Junko Noguchi

Foundation for Advanced Studies on International Development

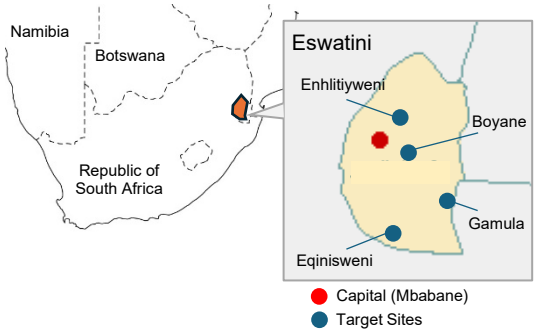
0. Summary

This project was implemented to improve the learning environment that took into consideration children with disabilities by constructing secondary schools and providing equipment in Eswatini,[1] thereby contributing to equitable access to secondary education for children with disabilities and realizing the government's policies of promoting inclusive education. It is relevant with the development policies of Eswatini of promoting inclusive education and the development needs of rehabilitating and developing secondary education facilities and promoting enrollment of students with special education needs (SEN). Also, Japan's ODA policy toward Eswatini prioritized human resource development and improving the basic livelihoods of the socially vulnerable; thus, the project relevance and coherence are high. Although the project period exceeded the plan, affected by the pandemic of COVID-19, the project cost was within the plan, and the efficiency of the project is high. The facilities and equipment provided under the project have been utilized, and it is expected that the number of enrolled students in the essential environment appropriate for students with disabilities will reach the target. Teachers' lessons and students' attitudes and social skills have also improved. Therefore, effectiveness and impacts of the project are high. Slight issues have been observed in the institutional/organizational, technical, and financial aspects including the current status of operation and maintenance; however, there are good prospects for improvement/resolution. Therefore, sustainability of the project effects is high.

In light of the above, this project is evaluated to be highly satisfactory.

[1] Swaziland is the ex-country name. It was changed from the Kingdom of Swaziland to the Kingdom of Eswatini in 2018. In this report, Eswatini is used as the country name even for the situation before 2018, with some exceptions such as the name in the document title.

1. Project Description



Project Location
(Created by the Evaluator with the map from the website of the Ministry of Foreign Affairs of Japan.)

School Facility Developed by the Project (Eqinisweni Secondary School): Classroom Block on the Left Side and the Admin & Labs. Block on the Right Side (Photo taken by the evaluator[2])

1.1 Background

The government of Eswatini had invested in human resource development as one of its key strategies to achieve sustainable economic and social development and eradication of absolute poverty. It had set a goal of achieving a net enrollment rate[3] of 80% in junior secondary education[4] by 2022, but in 2013, the rate was only 28%. Factors hindering enrollment included overcrowding in secondary schools in urban areas and long-distance commuting in rural areas. The government promoted inclusive education, intended to achieve educational equity through the expansion of enrollment of all children, including those with disabilities. It designated model inclusive schools[5] and was working to promote inclusive education through teacher training and the development of facilities and equipment, but as of 2015, there were only nine model primary schools and one model secondary school. Given this situation, the government of Eswatini requested grant aid for the development of secondary schools to provide inclusive education in four regions across the country.

1.2 Project Outline

The objective of this project is to improve the learning environment, especially for children with disabilities, by constructing secondary schools and providing equipment in Eswatini, thereby contributing to equitable access to secondary education for children with disabilities and realizing the objectives of Eswatini's education policy promoting inclusive education.

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[2] Other photographs inserted in this report were taken by the evaluator during the field survey.
[3] The net enrollment rate is the number of students in an official age group for a given level of education who are enrolled in any level of education, expressed as a percentage of the corresponding population.
[4] In Eswatini, secondary education consists of a five-year curriculum: the first three years (Forms 1 to 3) for junior secondary education and the second two years for senior secondary education (Forms 4 and 5). To advance to senior secondary education, students must pass an examination at the end of Form 3. Secondary education is not compulsory or free.
[5] Schools that enhance the promotion of inclusive education by training teachers on inclusive education and procuring materials, as well as day class facilities to respond to special education needs (SEN).

Grant Limit / Actual Grant Amount	1,723 million yen / 1,723 million yen
Exchange of Notes Date / Grant Agreement Date	June 2017 / June 2017
Executing Agency	Ministry of Education and Training (MOET)
Project Completion	November 2020
Target Area	Regions of Manzini, Hhohho, Shiselweni and Lubombo
Main Contractors	(Construction) JP Joint Venture, Du-Van Developers and Mormon Electrical-Joint Venture (Equipment) Afritool (Pty) Ltd., Computronics Systems (Pty) Ltd.、Websters (Pty) Ltd.、Siyemtili Motors (Pty) Ltd.
Main Consultants	Matsuda Consultants International, Co., Ltd., INTEM Consulting, Inc.
Preparatory Survey	November 2015 to March 2017
Related Projects	Knowledge Co-Creation Program: "Education System for Children with Disability" (2017 to 2019)," Strengthening Inclusive Education System for Children with Disabilities" (2020 to 2022)," "Inclusive Education System for Children with Disabilities" (2023).

2. Outline of the Evaluation Study

2.1 External Evaluator

Junko Noguchi, Foundation for Advanced Studies on International Development

2.2 Duration of Evaluation Study

This ex-post evaluation study was conducted with the following schedule.

Duration of the Study: October 2023 to February 2025

Duration of the Field Study: February 18 to 29, 2024, June 16 to 20, 2024

3. Results of the Evaluation (Overall Rating: A[6])

3.1 Relevance/Coherence (Rating: ③[7])

3.1.1. Relevance (Rating: ③)

3.1.1.1 Consistency with the Development Plan of Eswatini

In the *National Development Strategy: Vision 2022* (1997), one of the priority strategies was investment in human resource development, including primary and secondary education. In the succeeding *Eswatini National Development Plan* (2023-2027), human resource

[6] A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory

[7] ④: Very High, ③: High, ②: Moderately Low, ①: Low

development has remained a priority, and one of the education sector's goals is to improve access to inclusive education and lifelong learning opportunities. The *National Education and Training Sector Policy* (2011, 2018) and the *Education Sector Strategic Plan* (2022-2034) are intended to improve the quality of and access to secondary education, as one of the key strategic areas, by improving access in disadvantaged areas, rehabilitating and developing facilities, and improving access for learners with SEN.

Therefore, the project is relevant with the development policies of Eswatini at the time of both ex-ante and ex-post evaluation.

3.1.1.2 Consistency with the Development Needs of Eswatini

In Eswatini, primary education became free in 2010, and the net enrollment rate in 2015 was as high as 95%. On the other hand, the net enrollment rates for junior secondary and senior secondary education in the same year were 28% and 15%,[8] respectively, indicating a significant access challenge. In addition to the high cost of tuition, a lack of facilities was identified as a factor that discouraged students from attending secondary school. In 2013, the numbers of primary and secondary schools were 619 and 273[9] and increased to 667 and 322,[10] respectively, in 2023. However, the number of secondary schools remained low relative to the number of primary schools at the time of ex-post evaluation. In terms of the number of students with disabilities at the secondary education level, there is only one school for the deaf in the Lubombo region and one model inclusive secondary school in the Manzini region.

Therefore, the project is relevant with Eswatini's development needs at the time of both ex-ante and ex-post evaluation.

3.1.1.3 Appropriateness of the Project Plan and Approach

This project was implemented as a grant aid program utilizing local contractors (formerly Grant Aid for Community Empowerment). By applying local specifications and design and utilizing local contractors and materials proactively, this program makes it possible to respond flexibly to local conditions and reduce costs while at the same time requiring advanced project management skills to ensure process control and quality. A lesson learned from similar projects in the past was to "collect sufficient information on the financial and technical capabilities of local contractors from the survey stage to avoid construction schedule delays due to the low financial and technical capabilities of small local contractors." In this project, based on this lesson, the following measures were taken to ensure that financially strong construction contractors participate in bidding by increasing the size of the order lots, conducting direct

[8] UNICEF Eswatini (2017) *Education Budget Swaziland 2017/18*.
[9] Preparatory Survey Report. Data source: MOET (2015) *Annual Education Census 2013*.
[10] Data provided by MOET.

interviews to ascertain technical capabilities, and setting a cutoff in the bid price to limit bids at unfeasible prices. The lesson was applied in this way to increase technically and financially reliable local contractors' interest in participating in the bidding process.

3.1.2 Coherence (Rating: ②)

3.1.2.1 Consistency with Japan's ODA Policy

In the *Country Assistance Policy for the Kingdom of Swaziland* (2014), the basic policy of assistance was to support development for poverty reduction. In particular, the support was planned for poverty reduction and social stability to enhance the socially vulnerable groups' living standards. The priority was the improvement of human resource development and basic human needs of the socially vulnerable groups. Therefore, the project was consistent with Japan's ODA policy for Eswatini at the time of ex-ante evaluation.

3.1.2.2 Internal Coherence

Any collaboration/coordination between the project and other JICA interventions was not clearly planned at the time of ex-ante evaluation and not implemented.

3.1.2.3 External Coherence

Any cooperation/coordination with other Japanese agencies, other donors, or private companies was not clearly planned or implemented.

In light of the above, the project is relevant with the development policies and needs of Eswatini. The project plan and approach was appropriate. Additionally, it was consistent with Japan's ODA policy. Therefore, its relevance and coherence are high.

3.2 Efficiency (Rating: ③)

3.2.1 Project Outputs

3.2.1.1 Outputs of the Japanese Side

(1) Facility Construction and Equipment

Facilities were constructed as planned in the project, as shown in the following table.

A resource room was constructed in the Administration Block as an inclusive secondary school facility. The resource room was planned to be used to host day classes for students with disabilities from other schools as needed, for rehabilitation for students with physical disabilities, as a cool-down space for students with emotional disabilities, and for communication

Photo 1 Walking with the Handrail

between students with disabilities with students without disabilities or teachers. The passageways are equipped with handrails to help students with visual and physical disabilities move around (Photo 1).

Table 1 Outputs of the Japanese Side (Facility Construction): Plan and Actual

(Unit: Number of Buildings)

Building	Components	Plan by Site				Actual
		M1	S1	H4	L1	
2-Classroom Block	Classroom (40 students) x 2.	1	1	1	1	As planned.
3-Classroom Block	Classroom (40 students) x 3.	1	1	1	1	As planned.
Science & ICT Labs Block	Science Lab. and Preparation Room, ICT Lab., Preparation Room.	1	1	1	1	As planned.
Home Economics Labs Block	Cooking Lab., Preparation Room and Storeroom, Sewing Lab., Preparation Room, Storeroom.	1	1	1	1	As planned.
Agriculture Lab Block	Animal House, Storeroom, washing yard.	1	1	1	1	As planned.
Administration Block	Head Teacher's Office, Deputy Head Teacher's Office, Accountant's Office, Secretary's Room, Teachers' Room, tea service, Resource Room, Storeroom.	1	1	1	1	As planned.
Feeding Kitchen	Feeding kitchen, pantry, firewood storage, delivery porch.	1	1	1	1	As planned.
Male Toilet	Toilet stools, urinals, booth for wheelchair, handwashing faucets.	1	1	1	1	As planned.
Female Toilet	Toilet stools, booth for wheelchair, handwashing faucets, incinerator.	1	1	1	1	As planned.
Staff Toilet	Toilet stools, booth for Wheelchair, handwashing faucets, incinerator.	1	1	1	1	As planned.
Staff House	Semi-detached x 2.	2	2	2	2	As planned.

Source: Preparatory Survey Report, Project Monitoring Report (PMR), Final Version, interview with the project main consultant.
Note: M1: Boyane Secondary School in the Manzini region, S1: Eqinisweni Secondary School in the Shiselweni region, H4: Enhlitiyweni Secondary School in the Hhohho region, L1: Gamula Secondary School in the Lubombo region.

Box 1 Introduction of the Enviro-Loo Toilet

In Eswatini, in the areas where water and sewage systems are not available, the standard type of latrine is a pit-type latrine, in which a pit is dug under the latrine and a shed is built with an odor vent (pit-type latrine). Even with an odor vent, however, the odor is still generated, so toilet buildings and other facilities must be set up at a sufficient distance from each other. When the toilet tank is full of waste, the building and tanks need to be disposed of.

In this project, this toilet type was replaced with a unit system (Enviro-Loo) produced in the neighboring Republic of South Africa (Figure 1, Photo 2). In this Enviro-Loo type, all the water in the waste evaporates, and therefore does not cause soil contamination, and the volume is reduced to about 5% of the original volume because the solid content is semi-solidified. In addition, the odor bents' strong natural ventilation function greatly suppresses odor. This advantage was expected to allow toilet buildings and other facilities to be installed adjacent to each other, reducing the burden of moving.

Photo 2 Toilet Building of the Project (Back Side)

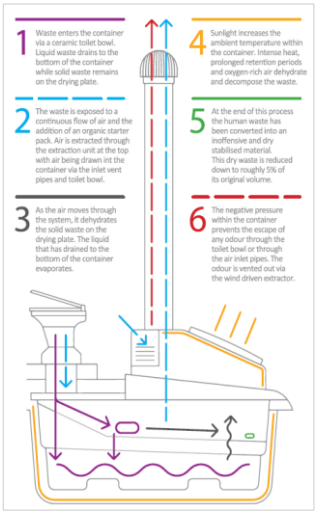


Figure 1 Enviro-Loo Toilet

This toilet type was introduced in the "Project for Construction of Primary and Junior Secondary Schools in the Limpopo Province" (2004) in the Republic of South Africa, and its effects and maintenance status were confirmed during the project planning phase.

Source: Preparatory Survey Report, interviews with the project main consultant and JICA South Africa, Enviro-Loo website: https://enviro-loo.com (Accessed on July 8, 2024).

Equipment was procured as planned as shown in the following table.

Although students with severe visual and hearing impairments were highly likely to attend the target schools as model schools in each province, the timing of their acceptance could not be envisioned at the planning time, so the procurement of equipment necessary for the education of students with mild disabilities was planned and implemented in this project. Eqinisweni Secondary School is adjacent to a model inclusive primary school, where two students with severe visual impairments were enrolled in 2015, and they were expected to attend Eqinisweni Secondary School. Therefore, equipment for severely visually impaired students was provided only at this school.[11]

Table 2 Outputs of the Japanese Side (Equipment Procurement): Plan and Actual

Equipment	Planned Components	Actual
Inclusive Education (IE)	Photocopy machines, desktop PCs with software for visual impairment, desktop PCs, Projectors, screens for projector, laptop PCs, book binding machines, voice recorders, portable magnifiers, white boards, goal balls, school buses.	As planned.
IE Equipment (only at Eqinisweni School)	Perkins Braillers, scanner, embosser, slates and stylus set, Braille globe.	As planned.
ICT	Desktop PCs, projectors with mount, screens with mount, printers.	As planned.

[11] Preparatory Survey Report.

Home Economics	Electric sewing machines, over locker sewing machines, dress forms, electric stoves, gas stoves, refrigerators.	As planned.
Administration	Desktop PCs, printers.	As planned.
Science Lab	Microscopes, human body models, human head models, human eye models, human heart models, power supply devices, motor/generator units, steam engine units, aneroid barometers, high tension power supplies, cathode ray deflection tubes, Hoffman's volt ammeters, dissecting sets, micrometer screw gauges, vernier callipers, displacement vessels, stop clocks, optics kits, Lens sets, circuit board sets, galvanometers, voltmeters, ammeters, sliding rheostat resistors, mass hanger sets, dynamics trolleys, balances, gas burners, stand retorts, distillation sets.	As planned.
Feeding Kitchen	Pots.	As planned.

Source: Preparatory Survey Report, PMR Final Version, interview with the project main consultant.

One small school bus was provided to each of the target schools to help students with disabilities commute to school (Photo 3). It is a minibus (15-seater), a common vehicle in the country. The rear seats fold down to accommodate wheelchairs.

Photo 3 School Bus

(2) Consulting Services

Consulting services such as detailed design, bidding assistance, and construction/procurement supervision were conducted as planned.[12]

3.2.1.2 Outputs of the Eswatini Side

Responsibilities of the Eswatini side were fulfilled as planned, as shown in the following table.

Table 3 Major Responsibilities of the Eswatini Side: Plan and Actual

	Plan	Actual
Detailed Design and Bidding	Acquisition of construction permits.	As planned.
	Removal of existing trees and roots on the site and existing fence.	As planned.
During the Construction	Payment of bank transfer fees.	As planned.
	Support for obtaining entry visas and permissions to stay in the country.	As planned.
	Customs procedures for products; exemption from customs duties.	As planned.

[12] Interview with the project main consultant, PMR Final Version.

	Exemption from value-added tax for services and products procured in the country.	As planned.
	Securing a means of water supply and connection of supply, up to the water receiving tank.	As planned.
	Drawing in and contracting electrical power.	As planned.
	Procurement and connection of propane gas tanks.	As planned.
After the Handover	Procurement of furniture, office supplies, furnishings, etc. not included in the project.	As planned.
	Installation of outer perimeter fence and tree planting on the site.	As planned.

Source: Preparatory Survey Report, PMR Final Version, JICA internal documents, questionnaire answer from MOET.

3.2.2 Project Inputs

3.2.2.1 Project Cost

The planned total project cost was 1,797 million yen (Japanese side: 1,723 million yen, Eswatini side: 74 million yen). The actual cost was 1,765 million yen (Japanese side: 1,723 million yen, Eswatini side: 42 million yen), which was within the plan.

The actual input on the Eswatini side was smaller than planned because local materials (river sediment and water) were used to build the perimeter fences, and those labor costs were not incurred due to support from community residents. On the other hand, the increase in the cost of the water supply was due to the change from an electric pump to a solar-powered pump. No functional problems were observed due to this change in the specifications of the water supply pumps and perimeter fence.[13]

Table 4　Cost Borne by the Eswatini Side: Plan and Actual

(Unit: 1,000 Emalangeni (E))

	Plan	Actual
Fees on the bank account, payment transfer.	56	62
Fee on public notice of tender.	90	143
Land preparation, removal of existing trees, roots and obstacles.	1,443	1,680
Securing a means of water supply and connection of supply up to the water reservoir tank.	470	852
Drawingin of electricity power supply.	401	564
Procurement and connection of propane gas tanks.	5	4
Installation of outer perimeter fence.	5,088	1,684
Total	7,553	4,898

Source: Preparatory Survey Report, PMR Final Version, interview with the project main consultant.

[13] Interview with the project main consultant, questionnaire answer of MOET.

3.2.2.2 Project Period

The planned project period from the signing of the grant agreement to the start of facility operation was 31 months (June 2017 to December 2019). The actual period was 42 months (June 2017 to November 2020). During the COVID-19 pandemic, the government of Eswatini implemented a lockdown starting in March 2020, with construction work suspended from March 27 to June 21. Excluding this period, the recalculated project period was 39 months (ratio against the plan: 126%), which exceeded the plan.

As shown in the table below, the construction period exceeded the plan, which was the main reason for the extended overall project period, because the main construction materials were imported from the neighboring Republic of South Africa, but it took time for logistics to normalize after the COVID-19 lockdown was eased. In addition, the deteriorating financial situation of the construction contractors due to the COVID-19 pandemic caused some delays in material procurement.[14]

Table 5 Project Period: Plan and Actual

	Plan	Actual
G/A Signing	June 2017	June 2017
D/D	July 2017 to January 2018 (7 months)	July 2017 to January 2018 (7 months)
Tender notice	January 2018	March 2018
Tender	April 2018	April 2018
Construction	June 2018 to December 2019 (19 months)	August 2018 to November 2020 (25 months)
Completion	December 2019	November 2020

Source: Preparatory Survey Report, PMR Final Version, interview with the project main consultant.

In light of the above, the project outputs were produced as planned. Regarding the input, although the project period exceeded the plan, the project cost was within the plan. Therefore, efficiency of the project is high.

3.3 Effectiveness and Impacts[15] (Rating: ③)

3.3.1 Effectiveness

3.3.1.1 Quantitative Effects (Operation and Effect Indicators)

(1) Number of Classrooms Utilized with the Essential Environment Appropriate for Students with Disabilities

In this evaluation, the “essential environment appropriate for students with disabilities” is interpreted as an environment developed by the project, equipped with a wide passageway for wheelchairs (Photo 4), wide door, educational equipment for SEN, and so on. As the

[14] Interview with the project main consultant.
[15] Regarding the sub-rating, Effectiveness and Impacts are to be considered together.

following table shows, student enrollment began the year after the school buildings were completed, and all classrooms have been in use at each target school. Due to the shortage of classrooms, as discussed later, it is certain that all 20 classrooms will be in use in the target year of 2025.

Photo 4 Passageway to the Toilet Block

(2) Number of Enrolled Students Provided with the Learning Environment Appropriate for Students with Disabilities

In 2024, the total number of students enrolled in the four target schools was 687 (Table 6).[16]

Table 6 Number of Classrooms and Enrolled Students Provided with the Essential Environment Appropriate for Students with Disabilities

Indicator	Baseline	Target	Actual Value			
	2016	2025	2021	2022	2023	2024
		5 years after completion	1 year after completion	2 years after completion	3 years after completion	4 years after completion
1. Number of Classrooms in Use, Provided with the Essential Environment Appropriate for Students with Disabilities (room)	0	20	20	20	20	20
2. Number of Enrolled Students Provided with the Essential Environment Appropriate for Students with Disabilities (person)	0	700	405	671	670	687
(For Reference) Number of Students with Disabilities among the Total Enrolled Students	NA	NA	39	66	61	71

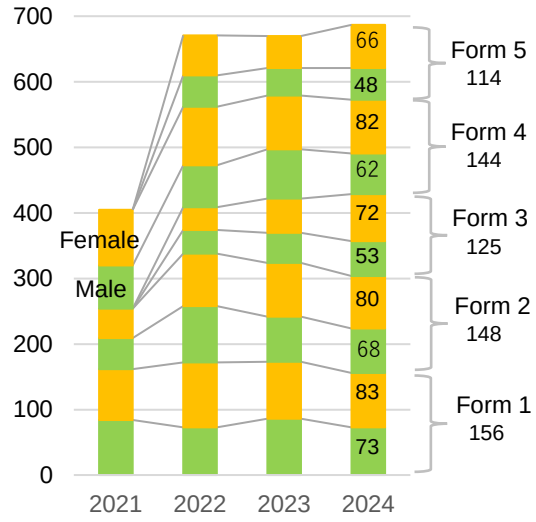
Source: Ex-ante Evaluation Sheet, data provided by the target schools.
Note: The target year was set in the ex-ante evaluation as 2024 (5 years after project completion), but this was revised to 2025 because the project was completed in 2020. The achievement level in 2025 was estimated based on the actual numbers up to 2024. The target for Indicator 2 was set at 800 (i.e., 40 per classroom capacity x 5 forms x 4 schools), but the policy document developed in 2018 changed the capacity to 35 per classroom, so the target was revised to 700 in the ex-post evaluation. MOET (2018) *National Education and Training Sector Policy 2018.*

Considering the slight increase from the previous year, it is presumed that the number of enrolled students will reach the target of 700 in 2025. The total number of students enrolled in 2021 was 405, less than 60% of the target, due to the lack of enrollment in Forms 3 and 5. This is because no students transfer from other schools for these final forms, as students in these

[16] Each school has a registration period at the beginning of the school year. In principle, acceptance is determined on a "first-come, first-served" basis, within a limit of 35 students per class, but because the schools are model inclusive secondary schools, SEN students and students from economically disadvantaged families are given priority. However, in 2024, three of the four target schools accepted more applications for registration than they could accommodate.

forms take a national standardized exam upon completion for entrance to the next education level or take an entrance examination. In 2021, a small number of students transferred to Form 2, resulting in a low enrollment.

Figure 2 shows the number of enrolled students by form and gender. In 2024, the number of enrolled students (687) by grade was 156 in Form 1, 148 in Form 2, 125 in Form 3, 144 in Form 4, and 114 in Form 5. The number of enrolled students decreased as students moved up through the forms due to student dropouts. In particular, the large decrease in the number of students in Form 3 and Form 5 from the previous school year is presumably due to the additional cost of taking the national standardized exam, which is a financial burden for parents and guardians. In addition, the number of students enrolled in Form 4 was higher than that in Form 3 in the previous year because some students transferred to the project schools after completing Form 3 in other schools.[17]



Source: Created with the data provided by the target schools.

Figure 2 Enrollment of the Four Target Schools by Form and Gender

In terms of gender, there was a large proportion of female students in all forms. Of the total of 687 students, 383 (56%) were female students. The number of students enrolled at the secondary education level nationwide also had a large proportion of female students (52% in 2023).[18]

All schools indicated that the main reason for student dropouts was the difficulty in paying school fees.[19] School fees were set by each school and ranged from 5,090 Emalangeni (E) to E6,348 in the four project schools. To this would be added the cost of taking the national standardized exam (approximately E1,300 for Form 3 and E4,000 for Form 5). Students identified as orphans and vulnerable children (OVC)[20] in their community, such as AIDS orphans and children from economically disadvantaged families, are eligible for the reduced fees, but many parents are unable to make advance or interim payments on time.[21] The next most common reasons for dropout were students' disinterest in education, pregnancy of female students, and migration for family reasons.

[17] Interviews with the head teachers of Enhlitiyweni Secondary School, Boyane Secondary School and Eqinisweni Secondary School.
[18] Data provided by MOET.
[19] Interviews with the head teachers and teachers of the target schools.
[20] HIV orphans, HIV-infected children, children with disabilities, children of economically disadvantaged families, etc.
[21] Interview with the head teachers of the target schools.

(3) Number of SEN Students among the Total Enrolled Students

For reference, Table 6 includes the number of SEN students among the total enrolled students. In 2024, a total of 71 SEN students were enrolled in the four target schools, accounting for 10% of the overall total. Their disability types are varied: physical, intellectual, developmental, visual, hearing, and a combination thereof.[22][23] There are some blind students, but no deaf students. Considering that the percentage of SEN students among the total number of students in regular and special schools nationwide was 2% in 2013,[24] it can be said that the development of the project schools has helped improve SEN students' access to schooling in inclusive secondary schools. SEN students who wish to commute to school by school bus do so (22 students in 2024).

3.3.1.2 Qualitative Effects (Other Effects)

(1) Practice of Inclusive Education

It can be said that inclusive education has been mostly practiced using the facilities and equipment developed by the project. First, as mentioned above, the newly established model inclusive secondary schools with barrier-free facilities and equipment for SEN have a larger percentage of SEN students than regular schools, and education is provided in an environment where students can learn together regardless of whether they have disabilities. Whereas the primary goal of regular schools is to improve students' academic achievement, inclusive secondary schools also aim to improve social skills. The head teacher of Boyane Secondary School said, "We not only want to improve academic achievement but also to foster a culture

Photo 5 Dance Practice at the School Spare Site

[22] Interview with the head teachers of the target schools.

[23] According to the Household Income and Expenditure Survey conducted by the National Statistics Office (CSO) in 2016-2017, self-reported disability types included visual (4%), hearing (5%), learning (2%), and physical (1%). World Bank (2021) *Eswatini Education Sector Analysis*. Original data is from CSO (2017) *Household Income and Expenditure Survey 2009-2010*. In addition, in the survey CSO conducted in 2020-2021, 12.6% of children surveyed reported having some functional difficulties, including behavior control (4.0%), adaptation to change (2.2%), anxiety (1.7%), vision (1.6%), hearing (1.4%), depression (1.4%), and memory (1.3%). CSO (2024). *Eswatini Multiple Indicator Cluster Survey 2021-2022, Survey Findings Report*.

[24] Preparatory Survey Report. Original data is from MOET (2015) *Annual Education Census 2013*.

of acceptance among students." At Enhlitiyweni Secondary School, visited for the ex-post evaluation, students were enjoying dance practice, soccer, and board games during their lunch break. During dance practice, the students seemed to enjoy themselves regardless of gender or disability (Photo 5).


Photo 6 Lesson Scene

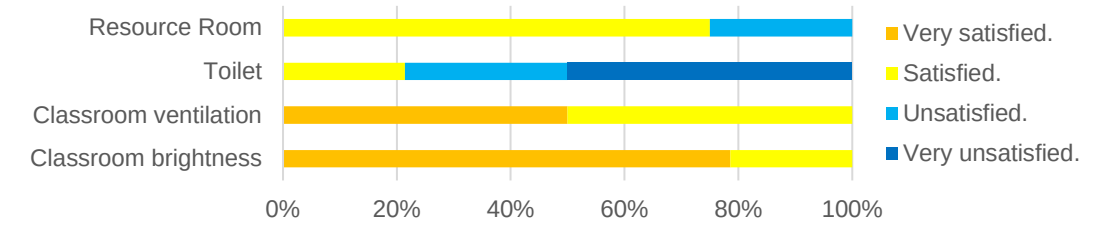
Second, teachers develop and implement lesson plans based on SEN students' needs. For example, at Gamula Secondary School, teachers prepare lesson preparation notes for each subject. In addition to references to previous lessons and lesson objectives, teachers describe the number of SEN students, type of disability, and support equipment needed in the notes, and they plan their activities, activities for students without SEN, and activities for SEN students. In the section on support equipment, the plan for using the projector, laptop PC, magnifier, and other equipment procured under this project is explained. Similarly, support equipment has been utilized in other target schools to meet SEN students' needs. At Eqinisweni Secondary School, a Brailler was installed in the Resource Room, and visually impaired students have been using the Braille materials produced using this printer. One teacher commented, "The availability of supportive equipment has helped me to plan how to teach SEN students from the lesson preparation stage."[25]

(2) Satisfaction with Facility Usability

Teachers and students mostly rate brightness and ventilation in the classrooms positively (Figure 3, Figure 4). Both teachers and students commented that there was sometimes too much glare for students with visual impairments. Regarding ventilation, there were some comments that there was an odor coming from the toilet block. Regarding the Resource Room, both teachers and students expressed dissatisfaction. The reasons given were that the room was not used for its intended purpose, as it was usually used for regular classes, and that the room was too small. In addition, teachers, students, and parents greatly appreciated the wide and flat passageways, the classrooms' spaciousness, and the handrails along the walls that help students move around.

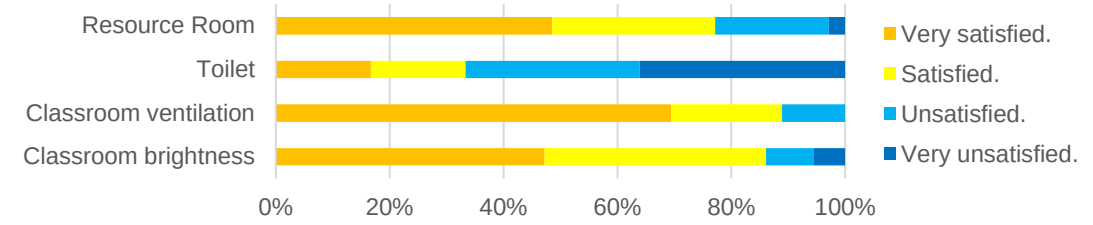
On the other hand, ratings for the Enviro-Loo Toilet (Box 1) were low. Teachers and students who responded with dissatisfaction rated the toilets as "good for the environment" but expressed negative opinions, such as "waste looks close," "it smells," "there is no practice of waste pumping and it is psychologically unacceptable," and "it is expensive to maintain and manage."[26]

[25] Interview with the teachers of Gamula Secondary School.
[26] Interviews with the teachers and students of the target schools.



Source: Interview results of 14 teachers of the target schools.

Figure 3 Teachers' Evaluation on Facility



Source: Interview results of 36 students of the target schools.

Figure 4 Students' Evaluation on Facility

Box 2 Lack of Classrooms

As mentioned above, although satisfaction with the well-equipped classrooms is high and inclusive education has been practiced there, the educational environment is not comfortable at times when there are not enough classrooms. In this project, as described above, in addition to regular classrooms for each form (5 classrooms in total), a science laboratory, an ICT laboratory, a home economics laboratory, and an agriculture laboratory were also constructed. In addition to the general core subjects, two to four elective subjects may be offered in each form during the same period. For example, at Enhlitiyweni Secondary School, nine subjects are offered during the third period on Mondays: mathematics for Form 1; religion and history for Form 2: mathematics for Form 3; mathematics for Form 4; and sewing, economics, history, and English literature for Form 5. During this period, the laboratory rooms (Photo 7) and the Resource Room need to be used, but the environment is not necessarily suitable for teaching other subjects, as the home economics laboratory room and the science laboratory room have high desk boards, the ICT laboratory room has a PC on each desk, and the Resource Room is too small. At Eqinisweni Secondary School, agriculture classes are held in the same space as the animal house for rabbits and other small animals, with only chairs (Photo 8), no desks, and a strong odor, making for a harsh environment for teachers and students.

Photo 7 Class of Other Subjects at the Home Economics Laboratory Room

Photo 8 Animal House for Giving Classes

Source: Interviews with the head teachers and teachers of the schools, direct observation during the field survey.

3.3.2 Impacts

3.3.2.1 Intended Impacts

(1) Changes in Teachers

Although the project did not involve training for teachers or any other technical support related to inclusive education, it seems that there have been changes in the teachers' thinking and attitudes as a result of them being placed in an inclusive education environment with facilities and equipment and accommodating SEN students in a school called an "inclusive secondary school." Several teachers in the target schools answered that the design of the facilities and assistive equipment that took into account disabilities have motivated them to accommodate SEN students and practice inclusive education. In addition, teachers of all target schools commented that they have accommodated students with disabilities, who make up 10% of the total students; have understood each student's disability and learning speed when preparing the lesson plan; and now they are more aware that each student has unique needs. In particular, they noted that there has been a change in their thinking and techniques regarding time management so that each student can make progress in classes with students with different disabilities and learning speeds.

(2) Changes in Students

As shown in the table below, there have been many changes in the students as a result of them studying at inclusive secondary schools. However, it is difficult to pinpoint this project's impact because these changes have occurred not only due to the facilities and equipment but also due to many other factors, such as the students' characteristics, class content and methodologies, and relationships with classmates. On the other hand, SEN students made a few comments, such as "There is no change," and "Being given too much affirmative treatment in waiting lists, etc. emphasizes their disabilities and sometimes makes them lose confidence." Some parents commented, "Because of their intellectual disabilities, teachers' guidance and repetitive learning have not led to improved grades. We are worried about their future career path."

Table 7 Positive Changes in Students at the Target Schools

Perspective	Positive Changes in Students
Head Teachers and Teachers	• Attitudes of students without disabilities have changed, as they provide their classmates with disabilities with necessary support (helping students with disabilities understand the class, etc.). Students have come to care about each other in a learning environment together rather than in segregation, and the teasing of SEN students has decreased. They are taught about helping each other at the beginning of the school year.

	• Teachers change the allocation of time in class based on the student's needs, and the students have become more aware of this and more conscious of time. • Students have come to understand each other.
Parents and Guardians	• [SEN] With teachers' support and sufficient time, SEN students have improved their concentration and writing skills. • [SEN] SEN students have come to think that they are normal as they have made friends. • [SEN] SEN students have been motivated to come to school by the school bus. • [SEN] SEN students have come to love reading letters in Braille. • [SEN] SEN students have become willing to go out, even if they had not done so often.
Students	• [SEN] SEN students have become able to finish the task because teachers wait for them. • [SEN] SEN students now feel free to ask for support, even if they were afraid to do so in primary school. • Students without disabilities have had good opportunities to learn about diversity. • Students have come to understand that they are all equal. • Students without disabilities have come to learn how to care for students with disabilities after they became friends and communicated with them. They have not been afraid of communicating with students with disabilities. • Students had thought that SEN students should study in other schools, but now they think they should accommodate students with disabilities in the same school. They have understood that they can study together.

Source: Interviews with the head teachers and teachers, parents and guardians, and students of the target schools.

Note: [SEN] at the beginning of the sentence indicates a change in SEN students. More SEN students and parents/guardians of SEN students were interviewed than students without SEN and parents/guardians of students without SEN during the field survey, and as a result, answers about changes in SEN students were collected.

(3) Expansion of Inclusive Education

The contribution of the target schools as model inclusive schools in their respective regions to the promotion of inclusive education was expected as a long-term impact. However, at the time of ex-post evaluation, no official programs had been undertaken in any region to share the experiences of the target schools with other schools or to accept teachers and students from other schools. Instead, information sharing takes the form of personal contacts among teachers and explanations of inclusive education by SEN Inspectors at workshops for head teachers in each region at the beginning of each school year.[27] On the other hand, teachers of the target schools said that they would like to share their experiences in inclusive education, but that they are too busy preparing for and teaching their classes to accept teachers and students from other schools.

MOET, with support from UNICEF, has developed the *Standards for Inclusive Education*

[27] In September 2024, a workshop was held by SEN Inspectors and others for the School Management Committees in the schools nearby the target schools. Information provided by JICA South Africa Office.

(2019). It specifies nine standards and indicators for practicing inclusive education that can be implemented and monitored by MOET and school stakeholders. Facilities are listed as part of the Standards for School Accessibility. In 2023, MOET selected three primary schools and three secondary schools as pilot schools from each region to explain the standards and review each school against the standards to verify these standards and indicators and disseminate them to schools nationwide. Based on this review's results, the standards will be revised and rolled out nationwide in the latter half of 2024 or later.[28] Four of the target schools of this project were selected as pilot schools. It is expected that the project schools will share their experiences as the standards are rolled out nationwide in the future.

3.3.2.2 Other Positive and Negative Impacts

(1) Impacts on the Environment

This project was classified as Category C based on the *JICA Guidelines for the Confirmation of Environmental and Social Consideration* (April 2010) for sensitive sectors because it was judged to have minimal undesirable impacts on the environment. The project had no environmental impact.

(2) Resettlement and Land Acquisition

There was no resettlement or land acquisition in the project.

(3) Gender Equality

Gender-related impact of the project could not be confirmed from the interviews with teachers or students.

(4) Marginalized People, Social Systems and Norms, and People's Well-being and Human Rights

The lack of secondary schools has been an issue related to access to secondary education, and as already mentioned, the establishment of new secondary schools under the project has made it easier for students living in the neighborhood, including SEN students, to commute to and enroll in school. In addition, for parents whose children with disabilities have had the opportunity to attend school, there has been an increased sense of security and happiness that their children are attending school and studying with students without disabilities as well as an increased sense of fulfillment in their lives, as they have more free time to spend on their own.[29]

[28] Interview with the Department of Research and Planning of MOET.
[29] Interviews with the parents and guardians of the target schools.

In light of the above, the facilities and equipment the project has provided have been utilized, and it is expected that the number of enrolled students in the essential environment appropriate for students with disabilities will reach the target. Teachers' lessons and students' attitudes and social skills have also improved. These improvements are largely due to the teachers' knowledge and skills, but it can be said that they were also made possible in part by the facilities and equipment. Therefore, this project has mostly achieved its objectives, and effectiveness and impacts of the project are high.

3.4 Sustainability (Rating: ③)

3.4.1 Policy and System

As previously mentioned, human resource development is a priority in the *Eswatini National Development Plan* (2023-2027), and one of the goals of the education sector is to improve access to inclusive education and lifelong learning opportunities. In the *Education Sector Strategic Plan* (2022-2034), improving the quality of and access to secondary education is one of the key strategic areas. The government of Eswatini has been enhancing inclusive education in regular schools rather than expanding special needs schools.

Therefore, it is judged that there are no issues regarding policy and system aspects, including the prospect.

3.4.2 Institutional/Organizational Aspect

The Directorate of Secondary Education of MOET is responsible for secondary education, and SEN Inspectors under the directorate oversee inclusive education. MOET has a regional office in each region. Similarly, the SEN Inspector is in charge of inclusive education in primary and secondary schools in the region. For public secondary schools, the central government funds finance the construction of new facilities. In addition, schools that provide school lunches receive in-kind cooking materials (beans, flour, oil, etc.). Other than these, the operation and maintenance of secondary schools is the responsibility of each school, except for the payment of teachers' salaries.

The table below shows the staff number in each target school. Each school is staffed with 13 to 14 teachers. Head teachers are also in charge of giving classes. In all schools, classes are conducted according to the timetable, but there is a shortage of teachers to offer a wide range of elective classes and to enhance inclusive education. In addition, teachers are in charge of multiple subjects, and they said that it takes time to prepare for classes. At Boyane Secondary School, one teacher was transferred to another school for promotion purposes in the middle of 2023, and the vacancy had not been filled as of June 2024. MOET has been aware of this issue and plans to address it at the earliest opportunity in consultation with the Teaching Service

Commission which manages teacher assignments.[30]

In Eqinisweni Secondary School where IE equipment was installed, one support staff member with a specialization in counseling has been hired part-time to provide consultation to teachers and students on inclusive education.

Table 8 Number of Teachers and Support Staff in Target Schools (Unit: Person)

	Boyane	Eqinisweni	Enhlitiyweni	Gamula
Head Teacher	1	1	1	1
Teacher (Core Subjects)	9	4	5	5
Teacher (Agriculture)	1	1	1	1
Teacher (Home Economics)	2	4	2	2
Teacher (ICT)	1	1	1	1
Teacher (Others)	0	2	4	3
Secretary	1	1	1	1
Bus Driver	1	1	1	1
Kitchen Staff	1	1	1	1
Groundsman and others	4	3	1	5
Total (Teachers)	14	13	14	13
Total (Support Staff)	7	6	4	8

Source: Questionnaire answers from the target schools.

The school buses are operated by MOET headquarters, which hires the drivers and is responsible for refueling and maintenance. At Enhlitiyweni Secondary School, the hired driver for 2024 did not show up, and the bus was not in operation as of February 2024. Later, MOET hired a new driver, and by June 2024 the bus was in service. The buses are in operation at the other schools. However, because the buses are refueled in the capital on weekends, the bus for Gamula Secondary School, which is located far from the capital, is not operated on Mondays. MOET is planning to discuss this issue with the transportation department so that refueling can take place in each region.[31]

In light of the above, roles for the operation and maintenance of the facilities and equipment provided under the project have been clear. There is a need to establish a wide range of elective subjects and increase the number of teachers to enhance inclusive education, but there are prospects for improvement through MOET's response.

Box 3 Practice of Inclusive Education (Story of a Training Participant in Japan)

I participated in the JICA Knowledge Co-Creation Program on "Strengthening the Inclusive Education System" from January to February 2023. Based on my action plan developed in the training, I implemented an exchange program between the School for the Deaf (8 students) and Form 3 students

[30] Interview with the Department of Research and Planning of MOET.
[31] Interview with the Department of Research and Planning of MOET.

of a regular primary school (24 students) from June 2023. Once a week, the students spent a day together, including classes and lunch. They learned together in one classroom, and teachers from the School for the Deaf explained the program using sign language. To introduce the program, the Regional Education Office sent a letter of explanation to the families of both schools and obtained their consent to participate in the program. Parents' understanding of the children's interaction also improved. Teachers at the regular school learned simple sign language, and the children's social skills improved. Students enjoyed playing and tried communicating with each other. Students at the regular school were also invited to the "Deaf Day" event. The purpose of the exchange was to let the students without disabilities see the situation by themselves, notice barriers, and remove them. I hope I can do something similar at Gamula Secondary School. My motivation is my love for SEN students. I am motivated by the fact that when I was a teacher in a regular school, I was not able to deal adequately with students with disabilities.

Source: Interview with the SEN Inspector of the Lubombo region.

3.4.3 Technical Aspect

Daily maintenance at each school includes classroom and passageway cleaning, waste removal from the toilet, and equipment inspections, which teachers, students, and cleaners have performed without technical problems. Repairs that the school cannot handle, such as replacing door locks and faucet lever handles, have been outsourced to outside companies. Procured equipment has been managed in the inventory.

Regarding inclusive education practices, there are eight teachers at Eqinisweni Secondary School and two to three teachers at each of the other three schools who have a bachelor's degree in inclusive education or SEN or are currently taking courses in these areas. Moreover, in each region, inclusive education presentations to head teachers and workshops initiated by teachers or inspectors have been conducted. Teachers who have knowledge of inclusive education sometimes provide advice to other teachers at school, and teachers who participate in workshops share the content with other teachers. One teacher from Gamula Secondary School stated that he understands the concept but putting it into practice is difficult, so continuous support has been needed. On the other hand, there is insufficient time for teachers to share their experiences within their schools or with other schools.[32] It should be noted that subjects related to inclusive education and SEN have been compulsory in teacher training programs since 2015.

As explained above, there have been no technical problems regarding the daily maintenance of facilities and equipment. Further improvement and continuous technical updating for inclusive education practices have been needed, but a certain degree of improvement can be expected through the development of MOET's promotion and workshops on "Inclusive Education Standards" in each province.

[32] Interview with the head teacher of Enhlitiyweni Secondary School.

3.4.4 Financial Aspect

As stated earlier, each school has handled everything except teacher salaries, cooking materials for school lunches, and operation and maintenance of the school bus with its budget. Each school collects revenues from school fees collected from students' parents or guardians, which have increased through 2024, following a similar trend to that of enrollment since 2021 (Table 6, Annexed Table 2). The table below shows the revenues and expenditures in 2023. Because school fees are set differently by school (E5,090 to E6,348), the four schools' revenues also differ.

Table 9 Revenue and Expenditure at the Target Schools in 2023 (Unit: E)

		Expected at Planning	M1	S1	H4	L1
Revenue	Tuition	NA	118,024	620,587	71,322	763,695
	Others	NA	1,006,979	219,900	804,961	19,270
	Total	980,000	1,125,003	840,487	876,283	782,965
Expenditure	Personnel	240,000	134,820	128,238	119,415	121,559
	Electricity	49,169	28,000	31,950	16,000	36,600
	Gas	2,988	0	0	0	0
	Repair/Maintenance	106,039	102,131	155,996	63,620	91,855
	Communication	NA	19,023	6,440	24,206	40,896
	Others	NA	791,735	405,725	606,119	429,730
	Total	NA	1,075,710	728,348	829,360	720,641

Source: Preparatory Survey Report, questionnaire answers from the target schools.
Note: The expected revenue amount at the time of planning was calculated based on a school fee of E4,900 per student and a student enrollment of 200. The amounts differ among the schools due to differences in the definition of each revenue item and expense at each school. Also, due to the rounding of decimal points, the total amounts of expenditure differ from the sum of the individual expenditure items in the table. M1: Boyane Secondary School in the Manzini region, S1: Eqinisweni Secondary School in the Shiselweni region, H4: Enhlitiyweni Secondary School in the Hhohho region, L1: Gamula Secondary School in the Lubombo region

Every year, an expenditure plan is prepared to match the anticipated revenues, and actual payments are made after approval by the School Management Committee. The gas fee was envisioned as the cost of LPG gas for the cookers and experimental burners, but no school has a gas fee as an expense item, and expenditures are made for necessary expenses for home economics and science. Repair, and maintenance of facilities and equipment included the purchase of cleaning supplies, plumbing repairs, replacement of lights, maintenance of equipment (copy machines, computers, etc.), purchase of equipment supplies, replacement of windowpanes, replacement of faucet lever handles, and repair of doors. As will be discussed later, although problems were identified with facilities and equipment at each school, the budget has not been sufficient to immediately address these repairs and maintenance.[33]

[33] Interview with the head teachers of the target schools.

Because parents or guardians are responsible for paying school fees, including those of OVC, it is difficult to increase school fees, and the expenditures are being made within the revenues.[34]

Each school has a budget to support teacher capacity building, such as transportation costs for attending workshops.

Although there were comments that the budget for maintenance has not been sufficient, daily maintenance and repairs costs have fallen within the budget, and inclusive education has been practiced. Therefore, there have been no major financial problems.

3.4.5 Environmental and Social Aspect

No negative environmental or social impacts or risks have been reported to MOET or confirmed during the interviews at the target schools. Presumably, they are not likely to occur in the future.

3.4.6 Preventative Measures to Risks

Migration due to deteriorating security conditions was identified as a risk factor for project implementation at the time of planning, but the security situation remained stable after the start of the project and no responsive action was required. After the project started, COVID-19 spread and the risk of health hazards to consultants, contractors, and other related personnel was assumed, so measures were taken to reduce the risk of infection in compliance with the instructions from the government of Eswatini and the WHO guidelines.

3.4.7 Status of Operation and Maintenance

3.4.7.1 Status of Facility and Equipment

Passageways, classrooms, and laboratory rooms have been cleaned and utilized along with equipment. The following are defects observed at the target schools.

Table 10 Facility Malfunctions Observed in the Target Schools

School	Issues Observed
Boyane	Broken windowpanes, broken door glass, leakage from the kitchen ceiling, incinerator malfunction, broken faucet lever handles in the courtyard, clogged drains in the drinking space.
Eqinisweni	Malfunction of the door locks and fittings, broken windowpanes, leakage from the ceiling of the kitchen and the staff room, fallen plates from student desks, fallen sheets from student chairs, incinerator malfunction.
Lubombo	Malfunction of the door locks, fittings and handles, fallen plates from student desks, broken windowpanes, incinerator malfunction, broken faucet lever handles in the animal house, clogged drains in the drinking space, broken pipe in the rainwater tank,

[34] Interview with the head teacher of Boyane Secondary School.

	malfunction of the propane gas tank.
Gamula	Leakage from the head teacher's room ceiling, malfunction of the door locks and fittings, broken windowpanes, incinerator malfunction, broken faucet lever handle in the toilets, broken pipe in the rainwater tank, malfunction of the lights in the animal house.

Source: Direct observation at the target schools, interviews with the head teachers of the target schools.


Photo 9 Faucet Lever Handle

The common problems identified were broken door locks and fittings, broken windowpanes, clogged drains, broken faucet lever handles (Photo 9), and malfunctions of the incinerator for sanitary products. Of these, the faucet lever handles introduced as part of the project are not the ones that can be opened and closed by turning the handle but are universally designed to be easily opened and closed by simply moving the long lever to the left or right. Although opening and closing the faucet does not require force, it has a structure that is easily broken. At Eqinisweni Secondary School, the lever handles were frequently damaged due to students' mischief, requiring many handles to be removed. In addition, most of the incinerators for used sanitary products in all schools were out of order. MOET is to share the project contractors' contact information with each school. Each school was willing to address the abovementioned issues so that the budget would be available during 2024.[35]

Regarding the Enviro-Loo toilets (Box 1) introduced by the project, at Eqinisweni Secondary School, only the teachers' booths have been in use. The use of the booths for boys and girls has been discontinued because the waste did not solidify and it was therefore difficult to remove it. The reason for the lack of solidification is thought to be due to the lack of functioning odor vents.[36] Students have been using the pit-type toilets that had been temporarily constructed during the construction period. The Enviro-Loo toilets are scheduled to be renovated into flush toilets after 2024 with an international NGO's support.[37] At Gamula Secondary School, male staff toilets have not been in use. The size of the tray to receive waste was not suitable, so it has not been used since the completion of the project.[38] At Enhlitiyweni and Boyane Secondary Schools, both staff's and students' toilets have been in use, but the multipurpose booths have not been used because there was still no wheelchair user.

3.4.7.2 Maintenance of Facility and Equipment

As regular maintenance, students sweep classrooms daily and wipe them weekly under

[35] Interview with the head teachers of the target schools.
[36] Interview with the head teacher of Eqinisweni Secondary School.
[37] Interview with the head teacher of Eqinisweni Secondary School.
[38] Interview with the head teacher of Gamula Secondary School.

teacher supervision (Photo 10). The groundsmen or cleaners also sweep the passageways and toilets and clean the drains and rainwater tanks every semester or year. For the toilets, the school cleaners or outside companies remove the waste twice a week. Annually, E680 to E8,400 is spent on desiccants for the waste, and E30,000 to 35,000E is paid for outsourcing to an outside company.[39]

Photo 10 Cleaning after Classes

In addition, maintenance has been performed as needed to the extent budgeted. In 2023, the following was paid for: cleaning supplies, uniforms for groundsmen, security guards, kitchen staff and cleaners, plumbing repairs, light replacement, brush cutter, site fencing installation (Boyane Secondary School), light replacement, equipment inspection (copy machine, PC, printer, brush cutter), equipment supplies (Eqinisweni Secondary School), the lockable storage, brush cutter, replacing windowpanes, repair of bells, inspection of sewing machines and fire extinguishers (Enhlitiyweni Secondary School), inspection of copy machines and PCs, inspection of plumbing in the kitchen and toilets, replacement of broken faucet handles and kitchen lights, repair of doors in the classrooms, laboratory rooms, and administration block (Gamula Secondary School).

Slight issues have been observed in the institutional/organizational, technical and financial aspects including the current status of operation and maintenance; however, there are good prospects for improvement/resolution. Therefore, sustainability of the project effects is high.

4. Conclusion, Lessons Learned and Recommendations

4.1 Conclusion

This project was implemented to improve the learning environment that took into consideration children with disabilities by constructing secondary schools and providing equipment in Eswatini, thereby contributing to equitable access to secondary education for children with disabilities and realizing the government's policies of promoting inclusive education. It is relevant with the development policies of Eswatini of promoting inclusive education and the development needs of rehabilitating and developing secondary education facilities and promoting enrollment of SEN students. Also, Japan's assistance policy toward Eswatini prioritized human resource development and improving the basic livelihoods of the socially vulnerable; thus, the project relevance and coherence are high. Although the project period exceeded the plan, affected by the pandemic of COVID-19, the project cost was within the plan, and the efficiency of the project is high. The facilities and equipment provided under the

[39] Interview with the head teachers of the target schools.

project have been utilized, and it is expected that the number of enrolled students in the essential environment appropriate for students with disabilities will reach the target. Teachers' lessons and students' attitudes and social skills have also improved. Therefore, effectiveness and impacts of the project are high. Slight issues have been observed in the institutional/organizational, technical and financial aspects including the current status of operation and maintenance; however, there are good prospects for improvement/resolution. Therefore, sustainability of the project effects is high.

In light of the above, this project is evaluated to be highly satisfactory.

4.2 Recommendations

4.2.1 Recommendations to the Executing Agency

Sharing the Project Target Schools' Experiences to Promote Inclusive Education

Although the project target schools were expected to serve as model inclusive secondary schools in their respective region, they have had few opportunities to share their experiences of inclusive education using the facilities and equipment provided under the project with other schools. It is recommended that MOET share the target schools' good practices as well as their challenges and how to deal with them with other schools for mutual learning. First, MOET should set aside time for information sharing during the activities for rolling out *the Inclusive Education Standards* after 2025. Second, as a mid-term response, MOET should establish a platform on the Internet to consolidate examples of inclusive education practices and related information, provided that the Internet is in place. This is expected to enable each teacher to access the necessary information at the necessary time and immediately apply it to their classes and other activities.

4.2.2 Recommendations to JICA

Selection of Participants for the Training in Japan

Participants of the Knowledge Co-Creation Program have been implementing activities to promote inclusive education based on the training outputs, which have been generating positive changes. To promote not only specific activities through MOET's program but also activities at the regional and school levels, when Eswatini officials participate in the Knowledge Co-Creation Program on "Inclusive Education System for Children with Disabilities" (2024-2026), it is recommended that selection priority be given to those who are in a position and willing to actively diffuse the project experience, such as SEN Inspectors or head teachers.

Introduction of Japanese Databases Related to Inclusive Education

During discussions with MOET on measures for the nationwide promotion of inclusive education, presenting an example of the Japanese database for supporting the establishment of

inclusive education systems, MOET expressed interest and would like to consider the possibility of creating a similar database in Eswatini. It is recommended that the Human Development Department introduce the contents of the database to the SEN-related section of MOET.

4.3 Lessons Learned

Introduction of a New Toilet Type in the Target Country

The Enviro-Loo Toilet was introduced for this project. This toilet was developed in the neighboring Republic of South Africa and had been installed in the past JICA project, but it was a new toilet type in Eswatini and has not been diffused there to date. At the time of ex-post evaluation, most toilets were not in use at one of the four target schools, and they were not well evaluated in the other three schools. The main reasons for this were the cost of maintenance and unfamiliarity with waste removal. In the future, when a toilet system is introduced that has not been used in the target country, it is advisable to fully explain and discuss the advantages and possible challenges of introduction to not only the implementing agency but also the parties who will be in charge of operation and maintenance at the time of the preparatory survey and then carefully consider whether the new type would be introduced or not.

Promotion of Inclusive Education

The government of Eswatini has been aiming at accommodating SEN students in nearby schools whenever possible by transforming regular schools into inclusive schools, rather than expanding special needs schools. SEN students enrolled in the project target schools accounted for 10% of the total enrolment, and their disability types varied, including physical disabilities, intellectual/learning disabilities, developmental disabilities, visual disabilities, hearing disabilities, and multiple disabilities. This project was highly regarded for its wide passageways with no steps, wide doorways for classrooms and toilets, and handrails. Recorders for repetitive learning, magnifiers, and Brailler were also considered useful. In countries such as Eswatini, where inclusive schools are being expanded, school facilities need to be provided in a way that makes it easy for SEN students to attend school. School facility improvement projects have generally included ramps as a consideration for disabilities. In the future, it is important to estimate the likelihood of the target schools accepting SEN students, the types of disabilities based on the country's and the area's demographic information at the preparatory survey and to reflect them in the design of facilities and procurement of equipment as much as possible.

5. Non-Score Criteria

5.1 Performance

None.

5.2 Additionality

None.

(End)

Annexed Table 1: Number of Enrolled Students in the Learning Environment Appropriate for Students with Disabilities (Total of the Target Schools)

		2021		2022		2023		2024	
		Enrolled Students		Enrolled Students		Enrolled Students		Enrolled Students	
			SEN Students		SEN Students		SEN Students		SEN Students
Form 1	Male	84	11	73	13	86	10	73	11
	Female	78	5	99	6	87	5	83	6
	Total	162	16	172	19	173	15	156	17
Form 2	Male	47	8	86	13	69	13	68	13
	Female	45	2	80	5	82	3	80	6
	Total	92	10	166	18	151	16	148	19
Form 3	Male	0	0	36	7	46	5	53	10
	Female	0	0	35	1	52	6	72	10
	Total	0	0	71	8	98	11	125	20
Form 4	Male	66	8	64	8	75	5	62	3
	Female	85	5	89	5	82	6	82	7
	Total	151	13	153	13	157	11	144	10
Form 5	Male	0	0	48	5	42	6	48	3
	Female	0	0	61	3	49	2	66	2
	Total	0	0	109	8	91	8	114	5
Total	Male	197	27	307	46	318	39	304	40
	Female	208	12	364	20	352	22	383	31
	Total	405	39	671	66	670	61	687	71

Source: Data provided by the target schools.

Annexed Table 2: Number of Enrolled Students in the Learning Environment Appropriate for Students with Disabilities (By Target School)

			2021		2022		2023		2024	
			Enrolled Students		Enrolled Students		Enrolled Students		Enrolled Students	
				SEN Students		SEN Students		SEN Students		SEN Students
Gamula	Form 1	Male	24	1	19	2	23	0	17	0
		Female	18	1	29	1	24	0	28	1
		Total	42	2	48	3	47	0	45	1
	Form 2	Male	17	0	18	0	15	2	17	0
		Female	18	0	22	0	20	0	21	1
		Total	35	0	40	0	35	2	38	1
	Form 3	Male	0	0	10	0	7	0	11	2
		Female	0	0	11	0	9	0	13	1
		Total	0	0	21	0	16	0	24	3
	Form 4	Male	26	1	17	1	19	1	13	0
		Female	19	1	25	1	26	0	17	0
		Total	45	2	42	2	45	1	30	0
	Form 5	Male	0	0	12	0	10	1	9	0
		Female	0	0	9	0	9	0	20	0
		Total	0	0	21	0	19	1	29	0
	Total	Male	67	2	76	3	74	4	67	2
		Female	55	2	96	2	88	0	99	3
		Total	122	4	172	5	162	4	166	5
Boyane	Form 1	Male	19	7	15	4	15	4	20	3
		Female	22	3	21	1	18	1	17	1
		Total	41	10	36	5	33	5	37	4
	Form 2	Male	13	7	21	7	19	4	18	4
		Female	9	1	21	3	18	1	18	1
		Total	22	8	42	10	37	5	36	5
	Form 3	Male	0	0	16	7	12	4	15	3
		Female	0	0	12	1	16	2	18	2
		Total	0	0	28	8	28	6	33	5
	Form 4	Male	18	3	15	3	19	2	13	2
		Female	23	2	24	2	19	3	28	3
		Total	41	5	39	5	38	5	41	5
	Form 5	Male	0	0	17	3	11	2	15	1
		Female	0	0	19	2	19	1	15	1
		Total	0	0	36	5	30	3	30	2
	Total	Male	50	17	84	24	76	16	81	13
		Female	54	6	97	9	90	8	96	8
		Total	104	23	181	33	166	24	177	21
Eqinisweni	Form 1	Male	15	3	19	4	21	5	14	6
		Female	20	1	20	3	22	4	18	1
		Total	35	4	39	7	43	9	32	7
	Form 2	Male	17	1	17	3	15	4	18	7
		Female	18	1	23	2	21	2	24	4
		Total	35	2	40	5	36	6	42	11
	Form 3	Male	0	0	10	0	10	1	11	2
		Female	0	0	12	0	20	4	20	7
		Total	0	0	22	0	30	5	31	9
	Form 4	Male	16	4	19	4	19	2	18	1
		Female	19	2	21	2	21	3	23	3
		Total	35	6	40	6	40	5	41	4
	Form 5	Male	0	0	12	2	13	2	10	1
		Female	0	0	14	1	13	1	18	1
		Total	0	0	26	3	26	3	28	2
	Total	Male	48	8	77	13	78	14	71	17
		Female	57	4	90	8	97	14	103	16
		Total	105	12	167	21	175	28	174	33
Enhlitiyweni	Form 1	Male	26	0	20	3	27	1	22	2
		Female	18	0	29	1	23	0	20	3
		Total	44	0	49	4	50	1	42	5
	Form 2	Male	0	0	30	3	20	3	15	2
		Female	0	0	14	0	23	0	17	0
		Total	0	0	44	3	43	3	32	2
	Form 3	Male	0	0	0	0	17	0	16	3
		Female	0	0	0	0	7	0	21	0
		Total	0	0	0	0	24	0	37	3
	Form 4	Male	6	0	13	0	18	0	18	0
		Female	24	0	19	0	16	0	14	1
		Total	30	0	32	0	34	0	32	1
	Form 5	Male	0	0	7	0	8	1	14	1
		Female	0	0	19	0	8	0	13	0
		Total	0	0	26	0	16	1	27	1
	Total	Male	32	0	70	6	90	5	85	8
		Female	42	0	81	1	77	0	85	4
		Total	74	0	151	7	167	5	170	12

Source: Data provided by the target schools.