Lao People's Democratic Republic

FY2023 Ex-Post Evaluation Report of Grant Aid Project

"The Project for Improving Secondary School Environment in the Central and Southern

Provinces"

External Evaluator: Nomoto, Ayako, International Development Center of Japan Inc.

0. Summary

This project was implemented to improve access to secondary education and the learning environment in four central and southern provinces in Laos by upgrading secondary school facilities and equipment, thereby contributing to improving the quality of secondary education. The project is consistent with Laos's development plan and needs at both the time of planning and ex-post evaluation, and its relevance is high. Although there were no specific plans, implementation, or outcomes of collaboration with other development partners, there were some collaboration and outcomes with other projects of the Japan International Cooperation Agency (JICA), and the project is consistent with Japan's ODA policy for Laos. Thus, the relevance and coherence are high. The project produced outputs almost as planned, the project cost was within the plan, and the project period slightly exceeded the plan. Therefore, the efficiency of the project is high. As for the effectiveness of the project, the set indicators "number of classrooms which can be used continuously" and "additional number of students who may attend the project school" achieved their targets, and as qualitative effects, students' and teachers' satisfaction with the facilities and furniture was high, and the learning environment improved. As for the project's impacts, the quality of education has improved, as seen in the improvement of teachers' motivation to teach and classroom management and students' motivation to attend school. Thus, this project has mostly achieved its objectives, and therefore, the effectiveness and impacts are high. The operation and maintenance of the project are fine in terms of institutional/organizational and technical aspects; however, there are some problems in terms of financial aspect. Therefore, the sustainability of the project effects is moderately low. In light of the above, this project is evaluated to be satisfactory.

1. Project Description



Project Location(s) (source: provided by JICA)



Image 1: A school building developed under the project (source: taken by the evaluator)

1.1 Background

The Lao government set a national goal to break away from the Least Developed Countries by 2020, and there was a growing need in Laos to develop industrial human resources with literacy, basic computing skills, and other skills that can cope with more advanced technologies. In response to this, the primary education sector in Laos has been improving its school environment and accessibility by increasing the number of schools, and the Gross Enrollment Ratio (GER) in primary education reached 118.4% in 2015 (Source: Ministry of Education and Sports, hereinafter referred to as "MOES," 2015). However, the national average of GER for lower secondary education, equivalent to junior high school in Japan, was 78.1%. GER for lower secondary education in Khammouane, Savannakhet, Saravan, and Champassack provinces, which belong to the central and southern region with exceptionally high poverty rates, was 67.8%, 62.6%, 55.8%, and 62.9%, respectively (Ibid), which was particularly lower than the national average. In addition, some secondary schools could not maintain an appropriate learning environment due to aging facilities. Therefore, the environmental improvement of secondary schools in these four central and southern provinces became urgent to increase access to secondary education and improve the learning environment.

1.2 Project Outline

The objective of this project is to improve access to secondary education and the learning environment by upgrading secondary school facilities and equipment in four central and southern provinces in Laos, thereby contributing to improving the quality of secondary education.

	Detailed Design: 46 million yen / 46	
	million yen	
Grant Limit / Actual Grant Amount	Construction: 1,369 million yen / 1,089	
	million yen	
Euclosed of Nation Data	Detailed Design: May 2017/ June 2017	
	Construction: October 2017/ October	
/ Grant Agreement Date	2017	
Executing Agency(ies)	Ministry of Education and Sports (MOES)	
Project Completion	November 2020	
	20 districts in Khammouane,	
Target Area	Savannakhet, Saravan, and Champassack	
	provinces	
	Chaleundy Construction Sole Co., Ltd.	
	ST Construction Sole Co., Ltd.	
Main Contractor(s)	Sokexai Phathana Construction Company,	
	Ltd.	
	Somphamith Construction Co., Ltd	
Main Consultant(s)	Mohri, Architect & Associates, Inc.	
Preparatory Survey	February 2016 - February 2017	

2. Outline of the Evaluation Study

2.1 External Evaluator

Nomoto, Ayako, International Development Center of Japan Inc.

2.2 Duration of Evaluation Study

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

Duration of the Study: August 2023 - December 2024

Duration of the Field Study: November 12 - December 2, 2023 and May 6 - May 10, 2024

2.3 Constraints During the Evaluation Study

Of the 37 target schools, the field visits were conducted in ten schools by the evaluator with a local survey assistant and in another ten schools by the assistant alone; thus, a total of 20 schools was visited. The status of the 17 schools that were not visited was determined based on information provided by the executing agency.

3. Results of the Evaluation (Overall Rating: B¹)

3.1 Relevance/Coherence (Rating: 3^2)

- 3.1.1. Relevance (Rating: ③)
 - 3.1.1.1 Consistency with the Development Plan of Laos

At the time of planning, the Lao government positioned education as a priority area in the *Eighth Five-Year National Socio-Economic Development Plan (2016-2020)*, and in particular, the promotion and improvement of basic education was a prerequisite for sustainable economic growth and poverty reduction and a priority for promoting human resource development. In response, lower secondary education was made compulsory in 2015, and the *Education Sector Development Plan (2016-2020)* (hereinafter referred to as "*ESDP 2016-2020*") aimed to improve GER of secondary education to 85% by 2020. The plan identified improving access in rural areas as a challenge for further spreading secondary education. This project was positioned as a measure to realize these plans by improving access and the learning environment by upgrading the facilities and equipment of secondary schools in the central and southern region.

As for the Lao development policy at the time of the ex-post evaluation, the *Ninth Five-Year National Socio-Economic Development Plan (2021-2025)*, in one of the priority issues, "Improved quality of all levels of education and conditions created for access to education" under the priority issue "Improved quality of human resources," aims at (i) expanding the education network from early childhood education to vocational education and university education at the central and local levels, including at the grassroots-level and in remote areas, and (ii) ensuring equal rights in accessing education for rural residents, vulnerable groups and those with special needs, and pay special attention to the needs of women. In addition, the *Education and Sports Sector Development Plan 2021-2025* (hereinafter referred to as "*ESDP 2021-2025*") aims to improve intake, progression, and graduation rates at all levels, and especially improve access to lower secondary education in rural areas.

Thus, the Lao government's development policy at the time of planning was to improve access to secondary education in rural areas, and the policy at the time of ex-post evaluation also stated that access should be improved in rural areas, especially in lower secondary education. Thus, the project, which aimed at improving access to secondary education and learning environment by upgrading secondary school facilities and equipment, is consistent with the development plan.

3.1.1.2 Consistency with the Development Needs of Laos

Table 1 shows GER for the lower secondary education of the national average and four provinces covered by the project at the time of planning and ex-post evaluation.

¹ A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory

² ④: Very High, ③: High, ②: Moderately Low, ①: Low

At the time of planning, the national average of GER for lower secondary education was 78.1%. GER in Khammouane, Savannakhet, Saravan, and Champassack provinces, which belong to the central and southern region with exceptionally high poverty rates, was 67.8%, 62.6%, 55.8%, and 62.9%, respectively, which were particularly low compared to the national average.

At the time of the ex-post evaluation, GER of lower secondary education of the project's target provinces of Khammouane, Savannakhet, Saravan, and Champassack were 68.5%, 60.3%, 59.7%, and 56.4%, respectively, still lower than the national average of 74.7%.

	•	•
	2015 (At the time of project planning)	2023 (At the time of expost evaluation)
National Average	78.1%	74.7%
Khammouane Province	67.8%	68.5%
Savannakhet Province	62.6%	60.3%
Saravan Province	55.8%	59.7%
Champassack Province	62.9%	56.4%

Table 1: Gross Enrollment Ratio of the Target Provinces and the National Average

Source: MOES

Thus, both at the time of planning and at the time of the ex-post evaluation, GER for the lower secondary education in the four target provinces was below the national average, and the need for facilities subject to this project is high.

3.1.1.3 Appropriateness of the Project Plan and Approach

No problems were generally observed with the project plan and approach. About consideration and fairness to marginalized people, the project planned and implemented installing separate toilets for boys and girls, wheelchair-accessible toilets, and ramps, and thus, a certain degree of consideration was given. Nonetheless, in actual operation, the number of students with disabilities entering regular schools is limited. However, this is not a problem of facilities and equipment, but rather, according to MOES and school officials, a lack of awareness for the need of education among parents of children with disabilities and a lack of teachers' ability to accommodate children with disabilities. This problem stems from something other than the framework of the facility improvement project under the grant aid scheme. As for girls, as described below (see "3.3.1 Effectiveness" and "3.3.2 Impacts"), they are not necessarily marginalized in the target areas of the project in terms of the number of students enrolled in school and the dropout rate. However, in light of the current situation where girls are disadvantaged due to lack of proper operation despite the installation of gender-separated toilets (see column below: "Detailed Analysis of Leave No One Behind (LNOB)"), the estimation of number of toilets required should have been more precise. Also, awareness-raising should have been conducted more on using separate boys' and girls' toilets.

3.1.2 Coherence (Rating: ③)

3.1.2.1 Consistency with Japan's ODA Policy

This project is consistent with Japan's ODA policy. The *Country Assistance Policy for the Lao People's Democratic Republic* (April 2012) set "improvement of educational environment and human resource development" as a priority area, and the improvement of the learning environment in secondary schools under the project was an area that Japan was emphasizing at the time of planning.

3.1.2.2 Internal Coherence

In the grant aid project "The Project for Improving Secondary School Environment in the Southern Provinces" (2014), new construction and reconstruction of lower secondary school facilities in Saravan Province, the target area of this project (no overlapping schools to be supported), was expected to have synergistic effects. As mentioned above ("3.1.1.2 Consistency with the Development Needs of Laos"), GER in Saravan Province has improved to a certain extent, which is considered a contribution of this project and the above project, and thus has internal coherence.

3.1.2.3 External Coherence

No specific collaboration with other agencies and development partners was planned, and no particular outcomes were identified for collaboration during project implementation.

Thus, in terms of relevance, the project is consistent with Laos's development plan and development needs, and there are no problems with the project plan or approach. Regarding coherence, the project is consistent with Japan's ODA policy. While no specific collaboration or outcomes were identified in terms of external coherence, there was internal coherence, as collaboration and outcomes were identified. Therefore, its relevance and coherence are high.

3.2 Efficiency (Rating: ③)

3.2.1 Project Outputs

The project newly constructed or renovated facilities, and furnished equipment such as blackboards, desks, and chairs in 37 lower secondary schools in Khammouane, Savannakhet, Saravan, and Champassack provinces. The outputs were generally produced as planned, as shown in Table 2. 238 classrooms were newly built or refurbished, four fewer than the planned value of

242 classrooms. Before the detailed design study (February 2019), the circumstances leading to the change were discovered, such as additional school buildings being constructed at two of the target schools in Savannakhet Province. In light of this, the number of classrooms covered by the project was recalculated and decreased. According to the executing agency, of the two schools that saw a decrease in the number of classrooms constructed, in one school, four classrooms were built through community donations. For the other school, 13 classrooms were renovated. These constructions by the Lao side are not considered problematic based on the objectives of the project, which are to improve access and the learning environment.

Target School	Classroom		Library/Storage		Toilet booth	
	Plan	Actual	Plan	Actual	Plan	Actual
Group 1 (Note): Champassack Province (12 schools) + Saravan Province (5 schools)	126	126	12	12	73	73
Group 2: Khammouane Province (5 schools) + Savannakhet Province (15 schools)	116	112	16	16	71	71
Total	242	238	28	28	144	144

Table 2: Facilities Developed under the Project

Source: Documents provided by JICA

Note: Due to the large number of construction sites scattered over a wide area, the construction of this project required the use of multiple contractors, taking into account the size of the anticipated construction contractors. Therefore, the project was divided into two construction groups based on geography and construction volume, and the number of contract lots was further divided.

3.2.2 Project Inputs

3.2.2.1 Project Cost

Table 3 shows the planned and actual project costs (on the Japanese side). The planned cost was 1,415 million yen, while the actual cost was 1,135 million yen within the plan (80% of the plan).

Plan	Actual	Ratio against the Plan
1,415 million yen	1,135 million yen	80%
(Detailed Design: 46	(Detailed Design: 46 million	
million yen, Construction:	yen, Construction: 1,089	
1,369 million yen)	million yen)	

Table 3: Project Cost

Source: Documents provided by JICA

3.2.2.2 Project Period

The project period was 40.5 months actual versus 40 months planned, slightly exceeding the plan (101% of plan)³. The delay was due to the lockdown caused by the COVID-19 outbreak. All Group 2 construction was suspended for 47 days from April 1 to May 17, 2020, and the Group 2 contract period was extended to account for the suspension period. Meanwhile, the contractor's workers on some lots continued the work by mistake despite being officially instructed to suspend the work. The work portion did not meet the structural requirements, and the contractor was instructed to dismantle and reconstruct the construction portion. As a result, the construction of the building in question took time.

Item	Plan	Actual
Total Period (G/A-Start of the	May 2017 - August 2020	June 2017 - November 2020
operation)	(40 months)	(42 months)
(Breakdown)		
G/A – Detailed Design	3 months	June 2017 to September 2017
Detailed Design	7 months (Group 1), 4 months	September 2017 - June 2018
	(Group 2)	(Group 1)
		February 2019 - July 2019
		(Group 2)
Construction	22 months	November 2018 - December
		2019 (Group 1)
		November 2019 - November
		2020 (Group 2)

Table	$4 \cdot$	Proi	iect	Ρ	eriod
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Source: Documents provided by JICA

Thus, outputs were produced almost as planned, project costs were within the plan (80% of plan), and the project period slightly exceeded the plan (101% of plan). Therefore, the efficiency of the project is high.

- 3.3 Effectiveness and Impacts⁴ (Rating: ③)
- 3.3.1 Effectiveness
 - 3.3.1.1 Quantitative Effects (Operation and Effect Indicators)

³ The calculation excludes 47 days directly affected by COVID-19 from the actual results for the project period.

⁴ When providing the sub-rating, Effectiveness and Impacts are to be considered together.

1) Operational and effect indicators

Table 5 shows the actual values at the time of planning, target values, and actual values after completion of the project for the operation and effect indicators set at the time of planning. The targets for the indicators "number of classrooms which can be used continuously" and "additional number of students who may attend the project school" were achieved (the number of classrooms other than that constructed under the project includes those that are still in use or newly built).

	Baseline value	Target value	Actual value
	2016	2023	2023
		2 Years After	2 Years After
		Completion	Completion
Indicator 1: The number of classrooms which	212	454	475
can be used continuously			
Indicator 2: The additional number of students	0	2,620	3,460
who may attend the project schools			

Table 5: Operation and Effect Indicators

Source: documents provided by JICA and the executing agency

Note: (1) The target value for Indicator 1 is 454 classrooms, which is the sum of the baseline value of 212 classrooms in use as of 2016, plus 242 new classrooms constructed under the project. (2) The target value for Indicator 2 is 2,620 students, which is calculated by subtracting the number of existing students in 2016 (15,540) from the target value of the number of classrooms that can be used continuously in 2023 (454 classrooms x 40 students per classroom). (3) Of the Indicator 1 actual number of classrooms, 238 new classrooms were developed under the project. (4) The actual number of students for Indicator 2 is 3,460, which is calculated by subtracting the number of existing students in 2016 (15,540) from the actual number of classrooms that can be used continuously in 2023 (475 classrooms x 40 students).

2) A Supplementary Indicator

Since the indicators set at the time of planning are indicators that will be achieved at the same time as output is produced as planned, the actual number of students enrolled in the target schools was set as a supplementary indicator.

	Baseline value	Actual value			
	2016	2023			
		Total	Boys	Girls	
1. The number of students	15,540	11,124	5,292	5,832	
enrolled					
(Breakdown)					
Khammouane Province	2,175	1,604	756	848	
Savannakhet Province	5,795	4,195	2,023	2,172	
Saravan Province	2,373	1,374	613	761	
Champassack Province	5,197	3,951	1,900	2,051	
2. Number of students per	40	23			
classroom	(Appropriate value)				

Table 6: Number of Students in the Target Schools

Source: Documents provided by JICA and the executing agency

The number of students enrolled in the target schools at the time of the ex-post evaluation was 72% of the number expected at the time of the project planning, but this was mainly due to external factors. The recent deterioration of the economic situation in Laos due to the sharp drop in the Lao kip, the accompanying suppression of economic activities, and rapid inflation have had an impact on the field of education, and according to interviews with each school during the site visits, the dropout rate is high, and the number of students is decreasing. Reasons for students dropping out of school included going to work to help their families, many families emigrating near the Thai border, and the lack of favorable employment opportunities after completing secondary education, therefore the inability to find motivation to study.⁵ In some cases, although not anticipated at the time of the project planning, schools were built in the neighborhood, and students were enrolled in schools closer to their homes. As of the ex-post evaluation, the number of male and female students enrolled in the target schools was about the same, or that of female students is slightly higher in all provinces, with no differences between the sexes.

3.3.1.2 Qualitative Effects (Other Effects)

1) Learning environment

⁵ According to MOES data, the dropout rate is higher in the six central and southern provinces, including the four target provinces of this project, than in the nation as a whole (see Table 7 for dropout rate figures). According to MOES, common causes of dropout include long-term and seasonal population shifts, economic and financial difficulties of families, increased demand for labor in large cities and neighboring countries, distance of educational facilities from home, and low expectations of employment after graduation.

At the time of planning, the qualitative effect was expected to be "an appropriate learning environment for students and an environment conducive to teaching for teachers." Interviews with students and teachers at the schools visited⁶ revealed that students and teachers were highly

satisfied with the facilities and furniture. Many voiced improvements in the learning environment, such as the size and brightness of the classrooms, the use of individual chairs with backrests, the ease of viewing the blackboard, the reduction of weather effects (rain and dust, cold and heat), and the reduction of noise from other classes. Many teachers also commented that the reduced number of students per classroom and the larger classrooms allowed for desk-to-desk instruction and better attention to students.



Image 2: A classroom with brightness ensured by lighting and windows (Source: taken by the evaluator)

2) Use of facilities for other purposes

At the time of the site visits, mainly due to the surplus of classrooms as the number of students was lower than expected, but there were many cases where classrooms were used for other purposes, including the following: (i) classrooms were used as teachers' rooms or meeting rooms, (ii) in many cases the library was used as the principal's office, (iii) toilets were used for the principal and teachers, and students were not allowed to use them, and (iv) in many schools, the toilets that had been constructed through this project were used jointly by both boys and girls. In some cases, female students were uncomfortable with the fact that the toilets were used jointly by both sexes and in some cases, they did not use the school toilets.

3.3.2 Impacts

3.3.2.1 Intended Impacts

Data on dropout rates were collected as a quantitative effect, categorizing the assumed effect of "improvement in the quality of secondary education" as an impact. Although data limited to the target schools were unavailable, the dropout rates for the four target provinces are shown in Table 7.

⁶ Ninety-five (25 male students, 49 female students, eight male teachers, nine female teachers, and four representatives from village education development committees and parents' associations) were interviewed in ten schools in four provinces.

	18–19 academic year			23–24 academic year		
	Total	Girls	Boys	Total	Girls	Boys
Khammouane Province	10.6	9.5	11.7	15.6	14.1	17
Savannakhet Province	11.1	10.1	12.1	19.1	18	20.3
Saravan Province	14	13.4	14.5	23	23.2	22.9
Champassack Province	11.9	10.6	13.1	17.2	17.2	17.3
National Average	9.5	9.1	10	12.4	12.3	12.5

Table 7: Dropout Rates in the Target Provinces

(Unit: %)

Source: MOES

The dropout rate in the target provinces the target schools belong has worsened compared to before the implementation of the project. As mentioned above ("3.3.1.1 Quantitative Effects"), the dropout is mainly due to the worsening economic situation in Laos. Interviews with each school during the site visits indicated that the number of dropouts has increased in many schools, so it is difficult to say that the quality of education has improved from the perspective of dropouts.

Teachers and students were interviewed during the site visits regarding "changes in teachers" motivation to teach and classroom management" and "changes in students' motivation to attend school" as qualitative effects (see footnote 6 for those interviewed and the number of people interviewed). Regarding "changes in teachers' motivation to teach and classroom management," many teachers commented that the classrooms were spacious enough and that the improved soundproofing made it easier to introduce group activities (discussions, presentations, Q&A) in class, which was not possible in the past due to noise between neighboring classrooms. These new activities improved students' understanding. Regarding the "change in students' motivation to attend school," many students at all schools visited said that the improved functionality of the classrooms and furniture increased their ability to concentrate on and understand the lessons. The reasons for this include: before the project, three to four students shared a bench, but now they can use individual chairs due to the provision of furniture under the project; the school building constructed under the project has sufficient lighting; the classrooms are soundproofed and noise from neighboring classrooms is reduced; the classrooms are less affected by the weather (before the project implementation, the sound of rain was loud when it rained and the classrooms were darkened because the windows were closed); the rooms are spacious, and the blackboards are less reflective than the previous ones, making it easier to read text.

3.3.2.2 Other Positive and Negative Impacts

1) Impacts on the Environment

The project was judged to have minimal adverse impacts on the environment under the *JICA Guidelines for Environmental and Social Considerations* (formulated in 2010) and was classified as Category C. According to the interviews with the executing agency, Provincial Education and Sports Service (hereinafter referred to as "PESS"), District Education and Sports Bureau (hereinafter referred to as "DESB"), and the target schools visited, no negative impacts on the environment have occurred.

2) Resettlement and Land Acquisition

The project was implemented on the sites of existing schools, and according to interviews with the executing agency, PESSs, DESBs, and the target schools during the site visits, no land acquisition or resettlement has occurred.

3) Gender Equality, Marginalized People, Social Systems and Norms, People's Well-being and Human Rights

The project was expected to improve the school enrollment ratio of girls and students with disabilities by installing gender separated toilets, wheelchair-accessible toilets, and ramps. However, there was no clear positive impact on school enrollment (see column: "Detailed Analysis of Leave No One Behind (LNOB)" below).

Regarding the enrollment of female students, interviews with female students during the site visits⁷ revealed that although the toilets installed by the project are cleaner and more comfortable than before, most female students answered that the availability of (gender-segregated) toilets does not impact their motivation to and actual school enrolment. In addition, as mentioned above ("3.3.1.2 Qualitative Effects"), in many cases, toilets were not gender-segregated in actual operation, and many female students said that they usually did not use school toilets and were not comfortable using them.

Regarding wheelchair-accessible toilets and ramps, there were no wheelchair users in the schools visited, and no particular impact on improving enrollment of students with disabilities was observed.

Thus, indicators, "number of classrooms which can be used continuously" and "additional number of students who may attend the project schools" achieved the targets, and as qualitative effects, students' and teachers' satisfaction with the facilities and furniture is high, and the learning environment has improved. As impacts, the quality of education has also improved as teachers' motivation for teaching and classroom management has improved, and students' motivation to attend school has increased. Thus, this project has mostly achieved its objectives, and therefore, the effectiveness and impacts of the project are high.

⁷ See column: "Detailed analysis of Leave No One Behind (LNOB)" for those interviewed.

Column: Detailed Analysis of Leave No One Behind (LNOB)

In order to understand the extent to which the provision of gender-segregated toilets, wheelchair-accessible toilets, and ramps had an impact on improving enrollment ratio and closing the gap for girls and students with disabilities and to draw lessons for effective grant aid, (i) Focus groups at target and non-target schools (conducted with a total of 74 female students (including two students with disabilities) at four target and four non-target schools), and (ii) interviews with MOES Inclusive Education Center, PESSs, DESBs, target schools, and Lao Disabled People's Association, were conducted.

1. Separate toilets for boys and girls

Neither the target nor the non-target schools indicated that the installation of gendersegregated toilets was a facilitating or inhibiting factor for the students to attend or absent from school.

In the target schools, there were cases where boys and girls were not considered to use the toilets separately as a practical operation. In those cases, female students did not like sharing the toilets with male students and did not use them often. Many also said that there were not enough toilets to begin with. In such cases, they would go to a nearby store, a relative's or friend's house, or go home to use the toilet. Sometimes, especially during menstrual periods, they ask permission from their teachers to miss part of their classes. While many students reported little or no impact on their understanding of the classes or their grades due to the support of their friends, a few students reported a slight impact.

2. Installation of wheelchair-accessible toilets and ramps

There were no students using wheelchairs in either the target or non-target schools. According to the principals, teachers, and the Village Education Development Committee (hereinafter referred to as "VEDC") at the schools visited, students with disabilities, including wheelchair users, are often discouraged from continuing on to lower secondary school after primary school; the VEDCs and primary schools encourage them to go on to lower secondary school, but it is ultimately the decision of the students and their parents. In addition, many students go on to special-needs schools or vocational schools. There are also many cases of students dropping out of primary school. In some cases, primary school teachers are unaware of special-needs schools and cannot provide appropriate support for students to advance to higher education. The above reasons were the factors that hinder the enrollment, and there was no direct impact of the installation of wheelchair-accessible toilets or ramps on school enrollment.

3. Challenges in promoting inclusive education and gender equality and how grant aid can be more effective

It is generally considered a common effect that the installation of separate toilets for girls and boys and the installation of disabled-accessible toilets promote the enrollment and attendance of girls and students with disabilities. In RAISING CLEAN HANDS IN LAO PDR (2016, UNICEF), "With separate toilets for girls and boys, students are assured of privacy and dignity, a particularly important factor for keeping girls in school. With inclusive and accessible sanitation facilities, children with special needs are able to attend school". *ESDP 2021-2025* calls for the expansion of inclusive water and sanitation (WASH) facilities (inclusion of people with disabilities, girls, and ethnic minorities). Thus, the installation of wheelchair-accessible toilets (and ramps) and gender-segregated toilets under the project is necessary in this respect and consistent with Lao government policy.

However, as noted above, the interviews under this ex-post evaluation do not indicate that the installation of toilets in the project is a significant facilitator/disincentive for girls and people with disabilities to enroll or attend school.

Regarding girls' education, the Gender Parity Index (GPI) for final year enrollment in lower secondary education has gone from 0.94 in 2015-16 to an almost gender equal 0.97 in 2019-20 (source: *ESDP2021-2025*). Also, as shown in Tables 6 and 7, the number of boys and girls enrolled in the project's target schools is almost equal, and the dropout rate of girls in the target provinces is not higher. Having already largely achieved gender equality, it is not necessarily necessary to promote gender equality and install toilets for this purpose. Nonetheless, as mentioned above, the insufficient number of toilets in the target schools and the fact that both sexes share them cause inconvenience and discomfort to female students compared to male students. In this regard, future cooperation may include examining the appropriate number of toilets installed and raising awareness among teachers and students to ensure that boys and girls use separate toilets.

Regarding students with disabilities, the *ESDP 2016-2020* pointed out the need to understand the actual situation of children with disabilities since the situation of children with disabilities, including out-of-school children, is unknown. According to the MOES Inclusive Education Center, information on the actual situation of children with disabilities is still being compiled, and it is difficult to say for sure at this point since the direction of inclusive education will be discussed after the information is compiled. Nevertheless, they think the challenges for regular schools to accept children with disabilities are (i) parents' lack of understanding of the need for access to education for children with disabilities, (ii) teachers not receiving training/education to accommodate children with disabilities, and (iii) inadequate facilities to accommodate the children with disabilities. The MOES Inclusive Education Center believes that "(ii) training for teachers" has the most significant potential for support. Based on the opinions of the Inclusive Education Center, areas of future support may include training for teachers in inclusive education in collaboration with technical cooperation or soft-component (technical assistance).

At the same time, according to interviews conducted at schools and VEDCs during the site visits, support for raising awareness among teachers and parents at the primary school level is considered necessary.

3.4 Sustainability (Rating: 2)

3.4.1 Policy and System

As indicated in "3.1.1.1 Consistency with the Development Plan of Laos," policies such as the *Ninth Five-Year National Socio-Economic Development Plan (2021-2025)* and *ESDP 2021-2025*, which include improving access in rural areas, especially in lower secondary education, ensure that policies and systems are in place.

3.4.2 Institutional/Organizational Aspect

In Laos, schools and communities are responsible for the operation and maintenance of schools. VEDC, established in each village, works with schools to solve various education-related problems, including school operation and maintenance and support for children's schooling. According to the interviews conducted during the site visits, schools are mainly responsible for the operation and maintenance of facilities and equipment, and they discuss and consult with VEDC as necessary and regularly. The VEDC is functioning in each of the schools visited and is heavily involved in the management of the schools. However, more emphasis is placed on school operation, support for children's schooling, and developing and implementing development plans. While the function and capacity of the VEDCs in the schools interviewed were fine, the PESSs and DESBs noted that VEDCs have fixed terms of office, and in some cases, their functions and activities do not continue due to turnover.

DESBs receive reports from each school on operations and facility management, inspect each school twice yearly, and provide advice as needed. For maintenance and management that each school or VEDC cannot handle, applications are submitted to DESB and PESS.

Thus, each school's operation and maintenance structure is clear, and there is a follow-up system from PESS and DESB, which generally ensures sustainability in terms of institutional/organizational aspect.

3.4.3 Technical Aspect

The facilities are designed to facilitate repairs and other work without difficulty. School teachers do minor maintenance for chairs, desks, windows, and doors, and there are no problems in dealing with them. In the event of electrical system malfunctions, teachers cannot handle such repairs, and repairs are outsourced to outside companies.

As for cleaning, all of the schools visited have students assigned to clean daily in shifts, and in many cases, the school is cleaned by all students once a week.

Thus, the design facilitates repairs and other work so minor repairs can be handled, and appropriate cleaning is carried out so that maintenance techniques are generally ensured.

3.4.4 Financial Aspect

As described in "3.4.2 Institutional/Organizational Aspect," the community is responsible for the operation and maintenance of the schools. The necessary operation and maintenance costs for each school are covered by the School Block Grant (hereinafter referred to as "SBG") from MOES, registration fees collected from students, and donations from the community. Table 8 shows the revenues of the schools visited.

			(Unit: Lao Kip)
	2020	2021	2022
SBG	18,820,625	15,714,375	13,952,813
Registration Fee	9,005,063	7,860,500	6,599,625
Donations from the community	14,593,500	12,995,125	12,900,125
Others	18,750	12,500	81,250
Total	42,437,938	36,582,500	33,533,813

Table 8: Revenue of Target Schools

Source: An average of 16 responded schools out of 20 schools visited.

SBG is a program that distributes operation and maintenance costs based on the number of students and is supposed to provide 70,000 Lao Kip per student per year starting in 2019. However, the average amount of SBG of schools that responded above was about 36,000 Lao Kip per student per year, and interviews with MOES also indicated that the amount provided was about 33,000 Lao Kip. Registration fees were collected by five schools at the sites visited. It depends on each school, but funds from the SBG or donations cover maintenance costs. Community donations are not always in the form of monetary contributions but sometimes in the form of materials or labor. One of the schools visited leased part of the school's land to generate income.

The immediate maintenance cost for this project's facilities is removing sediment from the toilets (once a year). However, since many schools have not yet removed the sediment because removal is still functionally unnecessary, and the walls, ceilings, and fixtures are to be repainted 10 years after completion (2030), no significant maintenance costs are required in the immediate future. In addition, since no severe defects have occurred except for some (see "3.4.7 Status of Operation

and Maintenance" below), the schools have generally secured funds to make minor repairs. However, due to limited financial resources, many schools cannot immediately act on repairs, and it takes time to respond. There were two schools where electrical cables were stolen but were not immediately replaced due to the limited financial resources.

Thus, no large-scale maintenance costs are required in the immediate future, and SBG and community donations can meet minor repairs. However, financial sustainability is partially an issue, as MOES does not pay SBG the stipulated amount.

3.4.5 Environmental and Social Aspect

No significant risks to the sustainability of the project effects from an environmental and social standpoint are observed.

3.4.6 Preventative Measures to Risks

No risks that were not anticipated at the time of the planning occurred during the project's implementation.

3.4.7 Status of Operation and Maintenance

Interviews with each visited school and PESSs revealed no severe defects in any target schools, except two schools in Champassack Province, discussed below. In the schools visited, there were broken doorknobs, gaps due to deformation of the wood of windows and doors, and defective bolts to support window frames. These defects were primarily due to the nature of the materials. However, considering the technology of Laotian lumber mills and based on experience in school construction in Laos, more desirable manufacturing methods were adopted for the wood, and gaps in the wood due to age-related deterioration were within expectations and not considered a severe problem. On the other hand, the damage to the doorknobs is due to inappropriate use by students and other users. Although teachers repair them as needed, there are cases where they are left unattended for a while due to frequent breakage and limited financial resources.



Image 3: A classroom after cleaning



Image 4: Broken doorknob



Image 5: A toilet kept clean

(Source: All photos taken by the evaluator)

During the site visits, it was confirmed that in two schools in Paksong District, Champassack Province, one classroom had ceiling damage due to deterioration of ceiling panels in one classroom (damaged in 2021), and a total of six classrooms and one library had deformed ceilings. Regarding this issue, the schools with damaged ceilings prepared repair plans and submitted them to the Paksong DESB and the Champassack PESS, but they were not adopted. In addition, since the defect warranty period had expired, PESS did not report the situation to MOES and JICA, and they were unaware of the problem. The current status found during this ex-post evaluation was referred to the JICA Laos office and the project implementation consultant. The project implementation consultant visited the sites and inspected the test laboratory to identify the cause of the problem. Based on the discussion with JICA, the implementation consultant explained the cause of the damaged and deformed ceiling materials identified then, and the tentative countermeasure plan⁸ to MOES, Champassack PESS and Paksong DESB, and also explained that the consultant would conduct another investigation and advise the Lao side of the final countermeasure plan (e.g., removal of deformed parts of ceiling panels and others). The Lao side has also expressed that they will act well based on the recommendations.

As mentioned above ("3.3.1.2 Qualitative Effects (Other Effects)"), some use for other than the intended purpose is observed. According to the DESBs, PESSs, and the schools, each school has the right to decide on the use, and the DESB is informed after the decision. The DESB visits schools in its district once or twice a year, and the DESB provides advice on desirable classroom use when the number of students per classroom is not desirable. The DESB does not give any specific guidance on using classrooms for other purposes at the time of the ex-post evaluation.

Thus, the facilities and furniture are generally well maintained, although there are some minor damages due to age and inappropriate use. There are problems such as damaged or deteriorated ceilings in two schools in Champassack Province, but they are scheduled to be resolved.

Thus, some issues have been observed in the financial aspect and are not expected to be improved/resolved. Therefore, the sustainability of the project effects is moderately low.

⁸ Based on the test results at the testing institute, it is considered that the ceiling damage was not caused by defective installation but by changes in the properties of the ceiling material due to environmental changes after installation. The two schools are located on a plateau in Paksong District, Champassack Province, which has a cool and relatively rainy climate throughout the year, and the ceiling material is likely to have been exposed to a humid environment for a long period due to prolonged rains. As a result, the ceiling material became wet, which reduced its strength and probably led to damage. Ceiling material is common, and similar incidents have not occurred at schools constructed in the same district or province in the past using the same material. Therefore, the situation could not have been foreseen.

As for the classrooms with damaged ceilings, there is no safety issue if the classrooms are used with the ceiling materials removed, and there is no significant impact on the indoor temperature environment. As for the five problematic classrooms in the two target schools, although it is desirable to replace the ceilings, considering the financial burden on the Lao side, removing the ceiling materials alone will not pose a problem as a response.

4. Conclusion, Lessons Learned and Recommendations

4.1 Conclusion

This project was implemented to improve access to secondary education and the learning environment in four central and southern provinces in Laos by upgrading secondary school facilities and equipment, thereby contributing to improving the quality of secondary education. The project is consistent with Laos's development plan and needs at both the time of planning and ex-post evaluation, and its relevance is high. Although there were no specific plans, implementation, or outcomes of collaboration with other development partners, there were some collaboration and outcomes with other projects of JICA, and the project is consistent with Japan's ODA policy for Laos. Thus, the relevance and coherence are high. The project produced outputs almost as planned, the project cost was within the plan, and the project period slightly exceeded the plan. Therefore, the efficiency of the project is high. As for the effectiveness of the project, the set indicators "number of classrooms which can be used continuously" and "additional number of students who may attend the project school" achieved their targets, and as qualitative effects, students' and teachers' satisfaction with the facilities and furniture was high, and the learning environment improved. As for the project's impacts, the quality of education has improved, as seen in the improvement of teachers' motivation to teach and classroom management and students' motivation to attend school. Thus, this project has mostly achieved its objectives, and therefore, the effectiveness and impacts are high. The operation and maintenance of the project are fine in terms of institutional/organizational and technical aspects; however, there are some problems in terms of financial aspect. Therefore, the sustainability of the project effects is moderately low. In light of the above, this project is evaluated to be satisfactory.

4.2 Recommendations

4.2.1 Recommendations to the Executing Agency

1) Securing maintenance costs

Although each school receives donations from the community, the designated amount of SBG, part of the financial resources for operation and maintenance, has not been provided as planned. It is necessary for each school to further enhance its funds (some schools lease land to generate income and others) and for MOES to provide SBG as stipulated.

Although the facilities in this project do not require large-scale repairs in the immediate future, DESB and PESS are expected to follow up on the schools' repair plans and financial plans and secure the necessary budgets in case the schools have difficulty in securing such funds if the walls, ceilings, and fittings are required to be repainted in 2030, or urgent large-scale repairs are needed.

2) Correction of use of facilities for other purposes

Regarding the use of facilities for other purposes, it is desirable that they be used as planned, except for extra classrooms due to decreased students. In particular, the shared use of the toilets by boys and girls differs from the project's original intent and MOES policy. Furthermore, it leads to discomfort and inconvenience for female students when using the toilets. It is also undesirable from a hygienic point of view, as sanitary products are not properly disposed of, creating a risk of infection.

4.2.2 Recommendations to JICA

JICA needs to follow up with the two schools in Paksong District, Champassack Province, where the ceilings have been damaged and sloped, to identify the cause, determine countermeasures, and follow up on the Lao side's response.

4.3 Lessons Learned

Determining the number of toilets to be constructed based on a better understanding of the needs

Despite the installation of separate toilets for boys and girls in the project, in many of the schools where site visits were conducted, the toilets were used jointly by boys and girls. As a result, many female students did not use the school toilets, and female students were disadvantaged. According to interviews with each school, the actual situation of joint use by both sexes was because there were not enough toilets in the first place, which was not in line with the intention of this project. In this project, the number of toilet booths was determined based on the number of classrooms that could be used after the project was implemented. The number of students per toilet booth was set at 75, following the MOES's School Construction Guideline (December 2009), which stipulates that the number of students per toilet booth should be between 45 and 75). Although the number of toilet booths provided follows the regulations, it is the minimum number required. For more effective use of the toilet booths and for female students to have the same benefits as male students, it is necessary to determine the number of toilet booths following the regulations and with a better understanding of actual needs.

5. Non-Score Criteria

5.1 Additionality None

(End)