Republic of Madagascar

Ex-Post Evaluation of Grant Aid Project

The Project of the Primary School Construction Phase II in the Republic of Madagascar

(Le 2e projet de Construction d'écoles primaires en République de Madagascar)

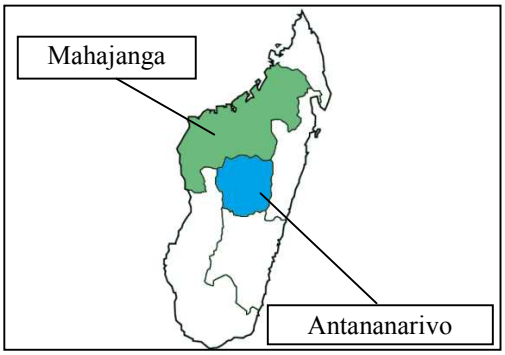
External Evaluator: Haruo Ito, ICONS Inc.

0. Summary

The Project of the Primary School Construction Phase II in the Republic of Madagascar (hereinafter: the Project) was implemented to support classroom construction in Antananarivo and Mahajanga provinces. Its goal was to improve the education setting by alleviating classroom shortage, which was caused by population growth and aging school facilities. The ex-post evaluation revealed that the Project's purpose corresponded to the development policy and needs of Madagascar, and to the Official Development Assistance (ODA) policy of the Japanese government. Therefore, the relevance of the Project is considered high. The results of the field survey show that the effectiveness and impact of the Project are also high because of the increase in the number of pupils who benefited from it and the reduction of the pupil-classroom ratio. The improvement in the quality of education and achievements of the pupils brought about by the remediation of multiple classes are likewise seen as positive impacts. On the other hand, although the project cost was reduced, the total cost would have been higher than the original estimate if all of the classrooms had been constructed. Meanwhile, since project duration slightly exceeded that of the plan, efficiency is rated as fair. The sustainability of the Project is also evaluated as fair, as some problems have been observed in the structural and financial aspects of the operation and maintenance system. For example, the budget allocation for each school's management board (called FAF [Fiarahana miombona Antoka ho Fampandrosoana ny sekoly]), which plays a role in maintaining school facilities, has been decreased since the political turmoil in 2009.

In light of the above, the Project is evaluated as satisfactory.

1. Project Description



Project Location

School Building Supported by the Project (Mahajanga)

1.1 Background

In 1988, 30% of Madagascar's economic growth was achieved through its structural adjustment plan,

with assistance from the World Bank and International Monetary Fund since 1983. However, political turbulence in 1991 reduced productivity, causing the economy to contract and go into depression. The budget for primary education has been cut under the austere fiscal policy, and the government has not been able to construct school buildings. In addition, since the start of the Project, population has grown by more than 3.0% yearly, increasing the number of school-age children as well. However, the country's net enrolment rate fell from 70% in 1991 to 65% in 1995 due to the aging of existing public primary schools, facility damage, and shortage of teachers. The government formulated the Second National Education Improvement Plan (PNAE-2) in 1997 in an effort to address the increase in the net enrolment rate—from 80% in 2005 to 97% by 2015; its priority was to improve basic education. Classroom renovation and construction were being undertaken by donors such as the World Bank, but the lack of classrooms and teaching materials continued to confront the country. Thus, the government requested this Japan's Grant Aid for General Projects for financial assistance for primary school facilities and related equipment, followed by the Primary School Construction Project in Madagascar in 1997 and 1998.

1.2 Project Outline

The Project aimed to alleviate the classroom shortage caused by population growth and aging school facilities through the provision of classrooms in Antananarivo and Mahajanga provinces.

Grant Limit/Actual Grant Amount	Term 1:897 million yen/872 million yen Term 2: 928 million yen/914 million yen
Exchange of Notes Date (Grant Agreement Date)	Term 1: 28 June 2004 Term 2: 1 August 2005
Implementing Agency	Ministry of Education and Scientific Research (MENRS), (currently, Ministry of National Education [MEN])
Project Completion Date	Term 1: 8 March 2006 Term 2: 13 March 2007
Main Contractors	Konoike Construction Co., Ltd.
Main Consultant	Matsuda Consultants International Co., Ltd. Atelier d'Architecture et d'Urbanisme Co., Ltd (joint venture)
Feasibility Studies, etc.	10 October 2003–30 April 2004
Related Projects (if any)	The Primary School Construction Project (1997–1998)

2. Outline of the Evaluation Study

2.1 External Evaluator

Haruo Ito, ICONS Inc. (Senior Consultant)

2.2 Duration of Evaluation Study

Duration of the Study: November 2012–November, 2013

Duration of the Field Study: 12 January–9 February 2013; 30 March 2013–13 April 2013

3. Results of the Evaluation (Overall Rating: B[1])

3.1 Relevance (Rating: ③[2])

3.1.1 Relevance to the Development Plan of Madagascar

The Poverty Reduction Strategy Paper (PRSP) was drafted in 2003, coinciding with the development of the Project's Basic Design Study by the government. In the education sector, PRSP emphasises the reform of the education system, universalisation of basic education, and improvement of the quality of education, thereby confirming the Project's goal of improving the educational environment.

In 2007, upon the Project's completion, the Madagascar Action Plan 2007–2012 (MAP) was developed as a replacement for PRSP, which had been due for completion by 2006. To mitigate the extreme poverty of many people and attain 'poverty reduction through economic growth', MAP prioritised the education and health sectors.

Moreover, during the ex-post evaluation period, the achievement of the indicators of 'Education for All' was reportedly being threatened by the reduction of donor support due to political turbulence and the transitional government's lack of a clear educational strategy. Under these circumstances, the Mid-term Plan for Education 2013–2015 (Plan intérimaire pour l'éducation 2013–2015) has been drafted by the Ministry of National Education (MEN) and donors as a tentative sector development plan during the political stabilisation process. Increasing the number of primary school buildings will be one of the targets of the Mid-Term Plan under the overarching goal of expanding basic education.

For the above reasons, the project goal is highly relevant to the country's development plan, both at the project initiation and the ex-post evaluation.

3.1.2 Relevance to the Development Needs of Madagascar

The number of enrolled children had been steadily increasing before the Project's initiation, especially in the capital Antananarivo, driven up by high population growth (more than 3.0% per annum), the distribution of subsidies according to the number of children, and promotion of free primary education by the government. In 1999–2000, there were about 2.2 million pupils in the public and private primary schools and in 2002–2003, about 2.85 million; thus, since 1998–1999, the number of enrolled pupils had increased 1.3 times. The enrolment rate in primary education in Mahajanga was 99.8% (national average: 103%) and total entrance rate, 102% (national average: 107%), which shows that Mahajanga is one of the less developed areas in the field of education. Therefore, the selection of target areas for the Project, Antananarivo and Mahajanga, which had high population growth and low education indicators, corresponded to the development needs of the government. The number of pupils in primary schools has increased because of the sensitisation of community members and heightened parent awareness of the importance of education.

The school-age population in the primary level has been expanding because of increase of learning motivation through the sensitization for local residents (see Table 1). However the proportion of

[1] A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory
[2] ③: High, ②: Fair, ①: Low

temporary classrooms built by the communities (13.5% in 2012). Moreover, Madagascar is hit by cyclones every year, and damaged roofs and building frames have not been fully repaired. Meanwhile, as existing classrooms age, school building programs by donors remain suspended because of the political turbulence of 2009. New classrooms have been constructed with the support of parents and community members, but the shortage of classrooms remains serious nevertheless because of the deterioration of the community members' living standards. The ex-post evaluation revealed that the implementation of the Project corresponded to the needs of Madagascar.

Table 1: School-Age Population at the Primary Level (between 6 and 10 years old)

2007–2008	2008–2009	2009–2010	2010–2011
2,680,136	2,760,137	2,842,525	2,927,374

Source: Plan intérimaire pour l'éducation 2013–2015

3.1.3 Relevance to Japan's ODA Policy

In regard to Japan's aid policy for Madagascar during project initiation in 1997, the promotion of 1) basic human needs (education, health and medical care, and water supply); 2) infrastructure for regional development; 3) agriculture, fisheries, and the environment; and 4) human resource development was a priority in the policy consultation of the Ministry of Foreign Affairs. Thus, the Project's goal of improving the educational environment was consistent with Japan's aid policy.

Since the Project is compatible with the country's development plan, development needs, and Japan's ODA policy, its relevance is considered high.

3.2 Effectiveness[3] (Rating: ③)

3.2.1 Quantitative Effects (Operation and Effect Indicators)

(1) Number of Pupils in the Target Schools

The results of the beneficiary survey[4] revealed that the number of pupil increased slightly, from 29,508 during the preparatory survey in 2006–2007 and 29,860 at the project completion in 2009–2010, to 29,719 during the ex-post evaluation in 2011–2012 (see Table 2).

Table 2: Number of Pupils and Classrooms in Each Target School

	Target Provinces	2003–2004 Baseline	2008–2009 Project Completion	2011–2012 Ex-post Evaluation
Number of Pupils	Mahajanga	21,402	22,254	23,693
	Antananarivo	15,903	16,486	16,894
	Total	37,305	38,740	40,587
Number of Classrooms	Mahajanga	248	n.a.	476
	Antananarivo	142	n.a.	303
	Total	396	n.a.	779[5]

Source: Beneficially Survey

[3] The sub-rating for effectiveness is to be set in consideration of impact.
[4] Sample size = 56 schools: 18 in Antananarivo province and 38 in Antananarivo province. Two of the original target schools were excluded due to the impassability of the access roads during the rainy season.
[5] The Project built 109 new classrooms and rebuilt 223, for a total of 332. The current number of classroom has increased because of the classroom building implemented by the local government and community.

Of the 332 classrooms constructed by the Project, 223 were old classrooms that were rebuilt. The Project set the indicator showing that the educational environment for 17,840 pupils will improve once the old classrooms are rebuilt[6]. The results of the beneficiary survey proved that 19,657 pupils studying in 223 rebuilt classroom. This shows that the Project has accomplished the original target. On the other hand, the pupil-classroom ratio has increased. However, as regards the improvement of the learning environment in the target schools, many of the classrooms constructed by the community or Malagasy government before the Project were makeshift classrooms with noise and leaking roofs, and an insufficient number of desks and chairs. For the 19,675 pupils now studying in the classrooms rebuilt under the Project, the learning environment has improved.

Classroom with Clay Wall Constructed by the Community

(2) Pupil-Classroom Ratio

The results of the beneficiary survey show that the average pupil-classroom ratio in the target schools has slightly decreased (see Table 3). However, the pupil-classroom ratio of 54.8 after the project completion in 2008–2009 fell short of the 46.6 target[7] set in the project preparatory survey. The reason was that the increase in the number of pupils (Table 2) was not considered in setting up the indicator.

Nevertheless, the national ratio of 50 pupils per class was almost attained. Moreover, the significant improvement in the 95.5 pupil-classroom ratio before the Project (2003–2004) is a sign that overcrowding in classrooms has been eliminated. Therefore, by relieving teachers of the heavy burdento handle many pupils in a class and promoting contact between them and the pupils, the Project has improved the quality of learning.

[6] The formula: 223 rebuilt classrooms×50 (average number of pupils par classroom) × 1.6 (the rate of double-shift schools) = 17,840

[7] The formula: 37,363 pupils (36,403 in the target schools + 960 pupils in new schools) in 505 classrooms (396 existing + 109 built by the Project) × 1.6 (the rate of double-shift schools) = 46.6.

Table 3: Pupil-Classroom Ratio in Target Schools

2003–2004 (Baseline)	2007–2008 (Target)	2008–2009 (Completion)	2011–2012 (Ex-post Evaluation)
95.5	46.6	54.8	50.2

Source: Beneficiary Survey

With regard to the number of teachers in the target schools, principals in 76.8% of the schools replied that the number of teachers has increased since the project completion. This self-help effort of the Malagasy side—the allocation of the necessary number of teachers—also helps improve the learning environment.

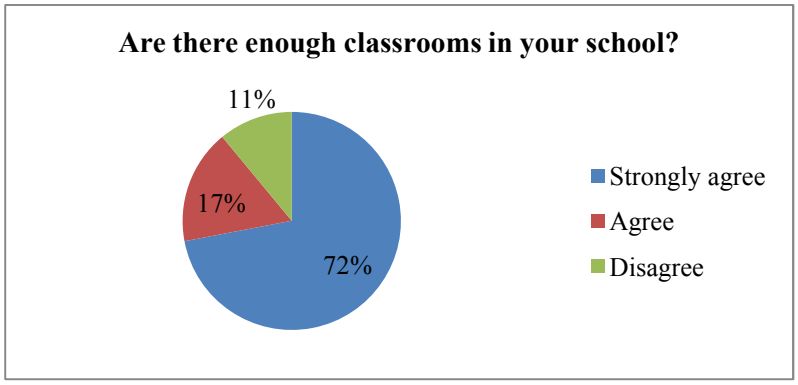
(3) Fewer Double-Shift Classes

By increasing the number of classrooms, the Project has helped reduce the need for double-shift classes. From 96.4% before the project implementation, the number of schools practising double shifting decreased 35.7 percentage points to 60.7% after the project completion. The reduction in double-shift classes allows the target schools to secure standard class hoursr and the teachers are able to conduct lessons in the morning, when pupils have better concentration. This positively affects the pupils' performance and raises their final exam passing rate. The reduction in double-shift classes has also encouraged parents to send their children to school because the latter would no longer have to commute in the late afternoon.

3.2.2 Qualitative Effects

(1) Pupil Satisfaction with the Number of Classrooms

A beneficiary survey was conducted on 246 pupils in the target schools regarding their satisfaction with the Project's classrooms construction. Around 90% replied that they 'strongly agree' or 'agree' to the question 'Are there enough classrooms in your school?' (see Figure 1). This implies that the Project installed a sufficient number of classrooms in the target schools.



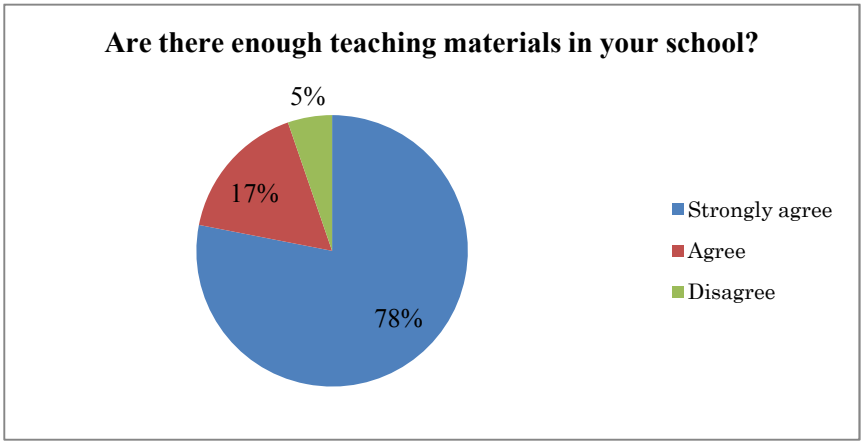
Source: Beneficiary Survey

Figure 1: Pupil Satisfaction with the Number of Classrooms

(2) Pupil Satisfaction with the Teaching Materials

To the question 'Are there enough teaching materials in your school?', 95% of the pupils replied that they 'strongly agree' or 'agree' (see Figure 2). Therefore, the effectiveness of the procurement of teaching

materials was confirmed. However, some of the procured teaching materials (dice, letter boards, etc.) have not been fully utilised in certain schools.



Source: Beneficiary Survey

Figure 2: Pupil Satisfaction with the Teaching Materials

3.3 Impacts

3.3.1 Intended Impacts

(1) Result of the Elementary Certificate of Primary Education

For the past three years, the average passing rate in the final examination of primary education (Certificat d'Etudes Primaires Elémentaires [CEPE]) in the target schools has exceeded the national average. Various factors contribute to the passing rate in the final exam, and the improved learning environment resulting from the Project's classroom construction is considered one of them, according to the field survey interviews[8]. Meanwhile, 96.4% of the target schools responded that the learning motivation of the pupils (e.g. increase in the attendance rate and attitude towards their studies) has improved since the Project built new classrooms.

Table 4: Passing Rate of CEPE in Target Schools[9]

	2008–2009	2009–2010	2010–2011
National average	78.5%	76.9%	74.4%
Target schools	79.5%	86.6%	86.0%

Sources: MEN, DREN, and Beneficiary Survey

(2) Enhancement of the FAF[10] Function by the Soft Component

Seminars on school operation and maintenance analysis, budget planning and accounting, facilities check and maintenance, and operation of the pupils' congress were implemented as the Soft Component of the

[8] In addition to the beneficiary survey, the Japanese consultant visited 15 schools in the two provinces—7 in Antananarivo and 8 in Mahajanga—to interview principals, teachers, pupils, and FAF members, and check the condition of the school facilities.

[9] Sample size: only 28 target schools in Antananarivo province.

[10] FAF (Fiarahana miombona Antoka ho Fampandrosoana ny sekoly) means 'school development partnership' (Partenariat Pour le Développement des Etablissements Scolaires = PPDES). FAF is a sort of school management committee that each school is required to install under ministerial ordinance No. 2002/1007, issued in 11 September 2002. The committee has seven or eight members, composed of residents, principals, teachers, pupils, etc.

Project. The positive impacts of the Soft Component on the enhancement of the FAF function have been confirmed, such as holding a General Assembly regularly to discuss school maintenance problems, strengthening participation in school activities, and ensuring the transparency of the FAF fund by reporting to community members how it was used. However, the activities of FAF members and the monitoring of FAF activities by Direction Régional de l'Education Nationale (DREN) and Circonscription Scolaire (CISCO) have been constrained by the low budgetary allocation, decrease in subsidies for FAF, and transfer of FAF members who attended the seminars. As a result, the continuity of the said positive impacts has been impeded. Moreover, the fact that only 46.4% of FAF (26 out of 56 schools) is currently involved in the maintenance of school facilities further dampens the positive impacts.

(3) Reduction of the Burden of School Maintenance on the Community

Across the country, 13.5% of primary school classrooms are makeshift structures built in 2012 with the support of the community. Low-standard materials were used, such as wood or mortared adobe bricks and galvanised iron for the roofs. Therefore, regular building maintenance and the repair of roofs, doors, and windows damaged by cyclones were a burden on the school staff and community members. The results of the interviews show that the construction of classrooms by the Project—using high quality materials, mortar, etc.—did away with roof leaks and ensured proper ventilation, thereby reducing the schools' maintenance expenses.

(4) Sanitary Improvement through the Installation of Toilets

Before the Project, few pupils used toilets because schools either had an insufficient number of toilets or none at all. The results of the beneficiary survey show that the sanitary environment has been improved in 91.1% of the target schools with the installation of toilets by the Project. Moreover, the improvement in health conditions brought about by the pupils' behavioural change (e.g. lower incidence of diarrhoea) is identified as a synergistic effect of health education; specifically, the instruction on the proper use of the toilet by other donors (United Nations Children's Fund [UNICEF] or non-governmental organisations).

3.3.2 Other Impacts

(1) Impacts on the Natural Environment

Negative impacts of the noise from school construction sites, soil disposal, and sewer water from toilets were not identified in the field survey.

(2) Land Acquisition and Resettlement

To be listed as a prioritised school construction site, documents proving site ownership (Certificat d'Immatriculation et de Situation juridique) have to be presented, and the target area should have no squatters. Since the classrooms, toilets, and water supply facilities of the Project were constructed on existing school sites, the Project has had no problem in the resettlement of residents.

The Project has largely achieved its objectives; therefore, its effectiveness and impact is high.

3.4 Efficiency (Rating: ②)

3.4.1 Outputs

(1) Outputs of the Japanese Side

The project provided classrooms, principal's offices and warehouses, toilets, and water supply facilities to 58 schools in the two target provinces. In 2004, when the country was hit by a record number of cyclones, some collapsed school facilities were renovated with financial support from MEN or other donors, so that the request for school buildings from the Japanese government was amended. As a result, though there was no change in the target schools' accomplished number of classrooms, the planned number of principal's offices/warehouses was decreased (see Table 5).

Table 5: Planned and Accomplished School Facilities

	Plan			Accomplishment		
	Total	Term 1	Term 2	Total	Term 1	Term 2
Target schools	58	27	31	58	27	31
Classrooms	343	175	168	332	169	163
Principal's offices/warehouses	48	17	31	45	15	30
Toilets (number of schools)	56	25	31	55	24	31

Sources: Baseline Survey Report (2004) and Defect Report (2007)

Furniture and equipment were also procured for the 58 target schools (see Table 6).

Table 6: Procured Furniture and Equipment

Furniture equipment	Teaching materials
Classroom: desks/chairs for pupils, cabinet Principal's office/warehouse: desks/chairs for principals, cabinets	Ruler, carpenter's rule, tape measure, abacus, large dice, letter board, terrestrial globe world map, plumb, thermometer, barometer, balance, weight for balances, large domino

Source: Defect Report (2007)

(2) Soft Component

The Soft Component seminars of the Project have been implemented in 20 target schools as planned (10 each in Antananarivo and Mahajanga). Seminar topics included the purpose of the Soft Component, facility check and analysis, school management/budget planning/accounting, diagnostic facilities and developing a maintenance plan, and the creation of a student council composed of pupils from each grade. A total of 1,189 participated in the seminars in Terms 1 and 2 (see Table 7).

Table 7: Number of Participants in the Soft Component Seminars

	Facility check/analysis	Management/ budget/accounting	Maintenance	Student council	Total
Term 1	107	110	83	198	498
Term 2	164	128	159	240	691
Total	271	238	242	438	1,189

Source: Soft Component Completion Report (term 1: 2006; term 2: 2007)

(3) Outputs of the Malagasy Side

The Malagasy side carried out its responsibility according to plan; it obtained the necessary land and expedited construction and equipment procurement. However, due to the inability of the Malagasy side to supply electricity in 3 schools (out of 14 that were visited in the ex-post evaluation), some fluorescent lamps were unused.

3.4.2 Project Inputs

3.4.2.1 Project Cost

While the original project cost was placed at 1,825 million yen, 98% or 1,786 million yen was actually disbursed, thus keeping the Project within the budget (see Table 8). However, if the cost of the 11 unbuilt classrooms and one toilet unit were included (estimated at 46.8 million yen[11], excluding supervision cost), the actual project cost would have exceeded the planned cost.

Table 8: Planned and Actual Project Cost (unit: million yen)

	Plan	Actual
Term 1	897	872
Term 2	928	914
Total	1,825 (Grant limit)	1,786 (98% of plan)

Sources: Baseline Survey Report (2004) and Defect Report (2007)

3.4.2.2 Period of Cooperation

While the Project undertook construction simultaneously in several sites, efficiency was achieved by carrying out the construction of different construction groups in three or four sites in shifts, depending on the size of the classrooms. The project period for each term was set at 19 months, inclusive of detail design (see Figure 9). There were slight delays in the construction periods—103% in Term 1 and 102% in Term 2—but the reasons for the delays were not identified.

Table 9: Planned and Actual Project Implementation Period

	Planned	Actual	Actual/Planned
Term 1	19 months	19.6 months (20 Jul. 2004 to 8 Mar. 2006)	103%
Term 2	19 months	19.3 months (3 Aug. 2005 to 3 Mar. 2007)	102%

Sources: Baseline Survey Report (2004) and Defect Report (2007)

In the implementation of the Soft Component, there was some delay in Term 1 (108%) but none in Term 2 (see Table 10). The reason for the delay during Term 1 was not identified.

Table 10: Planned and Actual Soft Component Period

	Planned	Actual	Actual/Planned
Term 1	12 months (1 Feb. 2005 to 31 Jan. 2006)	13 months (1 Mar. 2005 to 31 Mar. 2006)	108%
Term 2	12 months (1 Feb. 2006 to 31 Jan. 2007)	12 months (1 Apr. 2006 to 15 Mar. 2007)	100%

Sources: Baseline Survey Report (2004) and Defect Report (2006, 2007)

[11] Computation: 4 million yen (cost per classroom) × 11 unbuilt classrooms + 2.8 million yen (cost of unbuilt toilet) = 46.8 million yen. (Derived from the Baseline Survey Report 2004)

Although the project cost was within the plan, the original planned outputs were reduced. Moreover, as project duration slightly exceeded the planned period, the efficiency of the Project is considered fair.

3.5 Sustainability (Rating: ②)

3.5.1 Institutional and Operational Aspects of the Implementing Agency

Table 11 shows the maintenance management system in each administrative level.

Table 11: Organisations and Their Roles in School Maintenance

Related organisations		Roles in school maintenance
National	MEN	Developing school construction and rehabilitation plans nationwide, school monitoring, and budget management. Seven technicians are assigned to school facilities.
Provincial	DREN	The Planning Division of DREN contacts CISCO and MEN in regard to the development of the plan for school rehabilitation and monitoring, and budget management. DREN scarcely has technicians for school facilities.
District	CISCO	Developing school rehabilitation plans at the district level, school monitoring, and budget management. CISCO has no technicians for school facilities.
Zone	ZAP	School monitoring and reporting to CISCO. ZAP has no technicians for school facilities.
School level	FAF	Maintenance of school facility by FAF members using FAF funds.

Sources: Ex-post evaluation

At the national level, the Department of Land Assets and Infrastructures in MEN has seven technicians; it is in charge of the infrastructure school rehabilitation plan and monitoring school facilities. Moreover, one or two persons in the Planning Divisions of DREN (regional level) and CISCO (district level) are responsible for budget management and monitoring school facilities. The maintenance of facilities at the school level is the duty of FAF members, but their activities are limited by insufficient FAF funds. The results of the beneficiary survey show that an FAF has been established in all target schools[12]. However enhancing the school maintenance system by activating the functions of FAF remains an issue, as only 26 out of 56 (46.4%) of the FAF in the target schools are involved in school maintenance activities. In addition, although indispensable, the periodical monitoring of FAF activities in target schools by CISCO and the Zone Administrative Pédagogique (ZAP) is hampered by an insufficient budget.

3.5.2 Technical Aspects of the Implementing Agency

The evaluation team confirmed that the engineers of the Land and Facilities Management Office, the department in charge of school infrastructures in MEN, have sufficient skills for monitoring and developing the facility repair plan. In the regional level, DREN and CISCO also have the skills for the periodical monitoring and budget management of school facilities. However, DREN and CISCO allocate a limited number of technicians for the maintenance of school facilities.

The Soft Component was aimed at detecting school facility conditions; however, the maintenance being

[12] FAF has managed and maintained school buildings since 2002, after the establishment of FAF in each school was legislated by ministerial ordinance.

carried out at present does not require any special techniques. In fact, after the completion of the Project, actual school maintenance has not required special skills, as current repairs are limited to door locks and revarnishing—something that even residents or school staff are capable of doing. In addition, since members of FAF school maintenance committees in some schools are composed of electricians, plumbers, carpenters, and plasterers, they are considered to have enough skills for the task. On the other hand, only 39% of target schools have utilised the maintenance manuals developed by the Soft Component, as school maintenance activities reportedly involve only daily cleaning or simple repairs.

3.5.3 Financial Aspects of the Implementing Agency

The national budget for the construction and maintenance of school buildings is lodged in the Directorship of Land Asset and Infrastructures of MEN, and is distributed according to the prioritised applications from DREN or each school. However, the budget is insufficient, so that MEN is unable to construct new school buildings. Therefore, only the emergency repair of school facilities that were damaged by cyclones or other natural calamities is prioritised. Table 12 presents the national budget of MEN for school facilities.

Table 12: National Budget of MEN for School Facilities

Unit: 1,000 Malagasy ariary (MGA)

	2010	2011	2012
Rent, water, electricity, and communication	0	45,000	15,000
Furniture	0	41,462	35,000
Transportation	15,000	161,862	75,000
Maintenance	0	25,000	25,000
School buildings	127,500	38,826,000	1,358,044
Total	142,500	39,099,324	1,508,044

Source: MEN

In addition to the national budget, governmental subvention to FAF (FAF fund) is distributed to each school according to the number of pupils. The fund is intended for buying pupils' textbooks and stationery, but part of it has actually gone to the maintenance of school facilities. The FAF fund had been increased each year (see Table 13), but political turbulence has caused its suspension. The purpose of the FAF fund is to reduce the financial burden of parents, so that schools do not generally require contributions from them. On the other hand, the Fikambana'ny Ray-Amandrenin'ny Mpianatra (FRAM) [13] requires contributions from parents however most of the contributions are spent in the salary of part-time teachers hired by FRAM to compensate for the lack of the full-time teachers.

[13] The salaries of full-time teachers and subsidies of part-time teachers hired by FRAM are paid by the national government.

Table 13: Governmental Subvention to FAF

(in MGA)

	2010	2011	2012
Total	4,743,810,340	6,298,995,563	7,803,999,990
Total per pupil	961	924	2,000[14]

Source: MEN

Compared to the cost of maintaining other school facilities, that of the Project's target schools is low, as the work involves only daily cleaning and simple repairs (repainting, replacement of door locks, etc.) because of the high quality of the construction. Therefore, the average operation and maintenance cost of each target school is only 183,930 MGA (about 7,725 yen) per year (see Table 14). Since the priority of the FAF subsidy is textbooks and stationery, it is not enough to cover the repair of damaged toilets and windows, however the minimum maintenance activities of each target school are conducted within the budget.

Table 14: Average Operation and Maintenance Costs of the Target Schools

(in MGA)

	2010	2011	2012
Classroom	41,677	50,423	86,764
Furniture	18,477	16,500	18,559
Equipment, spares	128,153	117,605	78,607
Total	188,307	184,528	183,930

Source: Beneficially Survey

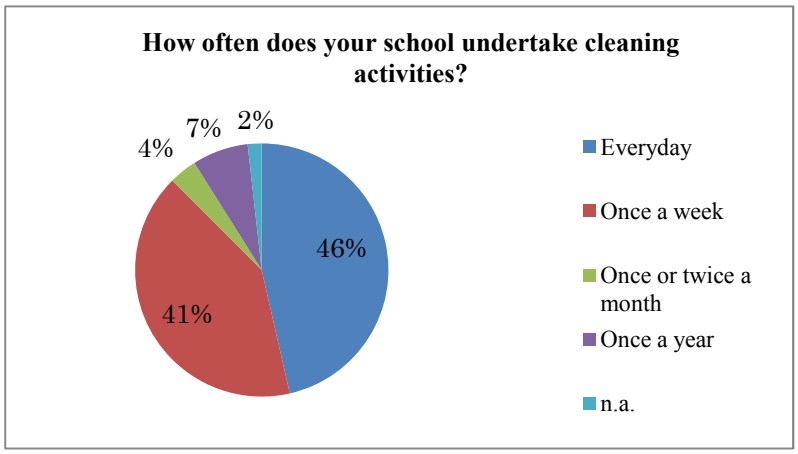
Meanwhile, UNICEF distributes the Fonds Catalytique Local (FCL)[15] to the schools to compensate for the insufficiency of the FAF fund. Though the FCL fund also prioritises the textbooks and stationery of the pupils, part of it can be used to improve the learning environment by maintaining the school facilities.

3.5.4 Current Status of Operation and Maintenance

In its school visits, the ex-post evaluation team confirmed that the school facilities established by the Project were sufficiently maintained. Further, the results of the beneficiary survey show that 87% of the target schools rotate pupils and teachers in cleaning the school building at least once a week (see Figure 3).

[14] The amount of subsidies to FAF per pupil in public schools was increased because the allocation to private schools has been suspended since 2012.

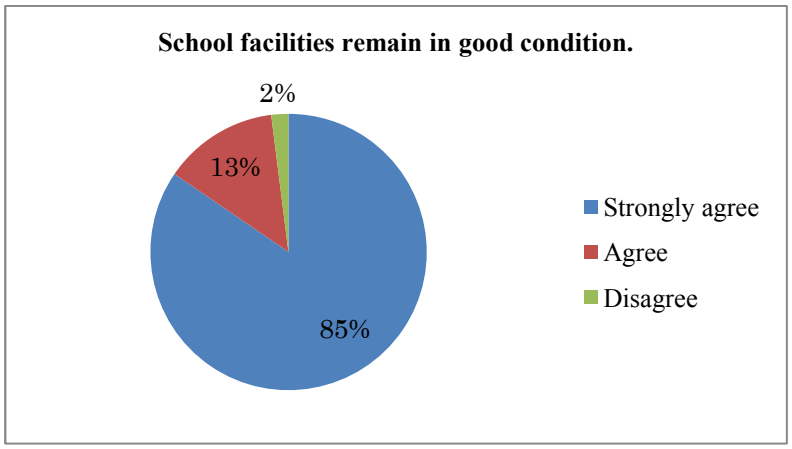
[15] The total FCL fund in 2012 was 9,449,940,000 MGA. Unlike the FAF subsidy, which is based on the number of pupils, the FCL fund is distributed at a flat rate according to the school criteria.



Source: Beneficially Survey

Figure 3: Cleaning of Facilities in Target Schools

In the beneficiary survey, 98% of the pupils ticked either 'strongly agree' or 'agree' to the statement 'School facilities remain in good condition' (see Figure 4). This implies that the facilities of the target schools have been maintained at an acceptable level.



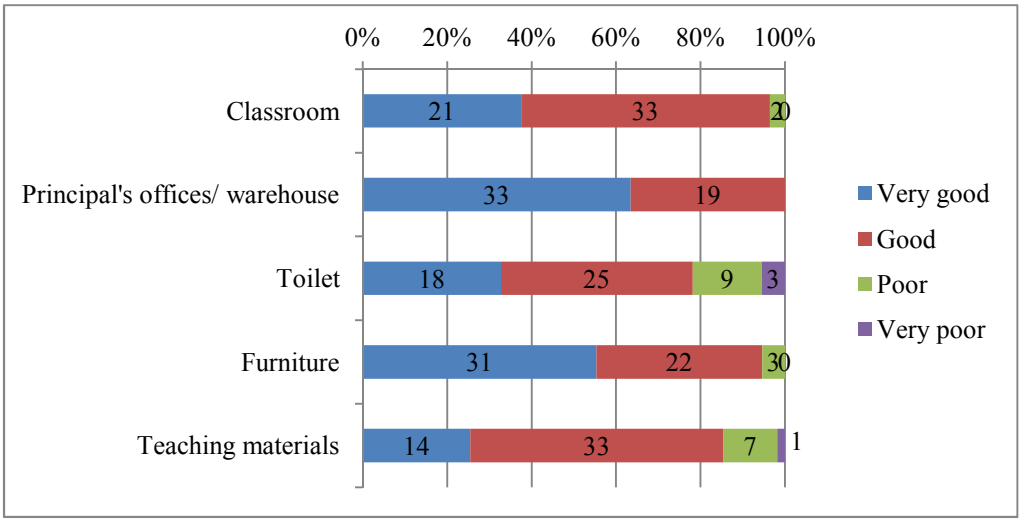
Source: Beneficially Survey

Figure 4: Pupils' Opinions about the Maintenance of School Facilities

On the other hand, cracks in the floor of the classroom building, the lack of window glass panes, leaks in the rainwater tank, theft of water taps and rain gutters, damage to toilet doors, and damage to furniture by pests has been confirmed in some schools.

The beneficiary survey revealed problems[16] with unused teaching materials because of insufficient maintenance, unclean toilets due to improper use by pupils, the undesired free access to toilets by neighbouring residents, and the lack of water for cleaning (see Figure 5).

[16] Certain water supply facilities cannot be used because they were damaged or the water taps were stolen.



Source: Beneficially Survey

Figure 5: Operation and Maintenance Conditions of the School Facility

Problems have been observed in the structural and financial aspects, and current maintenance condition of water supply facilities. Therefore, the sustainability of the Project's effects is fair.

4. Conclusion, Lessons Learned, and Recommendations

4.1 Conclusion

The Project of the Primary School Construction Phase II in the Republic of Madagascar (hereinafter: the Project) was implemented to support classroom construction in Antananarivo and Mahajanga provinces. Its goal was to improve the education setting by alleviating classroom shortage, which was caused by population growth and aging school facilities. The ex-post evaluation revealed that the Project's purpose corresponded to the development policy and needs of Madagascar, and to the ODA policy of the Japanese government. Therefore, the relevance of the Project is considered high. The results of the field survey show that the effectiveness and impact of the Project are also high because of the increase in the number of pupils who benefited from it and the reduction of the pupil-classroom ratio. The improvement in the quality of education and achievements of the pupils brought about by the remediation of multiple classes are likewise seen as positive impacts. On the other hand, although the project cost was reduced, the total cost would have been higher than the original estimate if all of the classrooms had been constructed. Meanwhile, since project duration slightly exceeded that of the plan, efficiency is rated as fair. The sustainability of the Project is also evaluated as fair, as some problems have been observed in the structural and financial aspects of the operation and maintenance system. For example, the budget allocation for each school's FAF, which plays a role in maintaining school facilities, has been decreased since the political turmoil in 2009.

In light of the above, the Project is evaluated as satisfactory.

4.2 Recommendations

4.2.1 Recommendations for the Executing Agency

(1) Activation of FAF Functions

FAF, the main actor in the operation and maintenance of school facilities, is not functioning properly. This confirms that the government subsidies and the monitoring done by the local education authorities—DREN and CISCO—are insufficient. To resolve this issue, FAF functions need to be reactivated by securing the FAF subsidies, replacing FAF members and conducting a retraining in budget management, and developing the action plan to enhance the facility operation and maintenance system developed by the Project. In order to activate the FAF functions, DREN and CISCO should restart their monitoring of FAF, which has been suspended due to the current budget shortfalls.

(2) Use of the 'School for All' Model to Ensure the Sustainability of the School Management Committee

'School for All'[17] is a technical cooperation project for school management of the Japan International Cooperation Agency (JICA), which is being implemented in West African countries. Its monitoring, training methods, and training manuals can be adopted in Madagascar for promoting the effective maintenance of school facilities through school management committees such as FAF. By applying the 'School for All' model in the Soft Component of the school building project, instead of using inconsistent approaches, an effective operation and maintenance system can be established.

(3) Necessity of Repairing Toilets

The field survey of the ex-post evaluation discovered remarkable damage in toilets. To improve maintenance conditions and repair the damaged toilets, the government is expected to provide guidance to pupils for appropriate toilet use, secure the water source for cleaning the toilets, and prevent the free access of neighbouring residents to the toilets.

4.2.2 Recommendations to JICA

None

4.3 Lessons Learned

(1) Outer Wall Installation and Secure Water Sources in School Facilities

In terms of the maintenance of facilities in the Project, the damage to and unsanitary conditions of toilets in the target schools were frequently observed in the ex-post evaluation. This was caused by the unauthorised use of school toilets by local residents and lack of water for cleaning. Some schools have yet to install a gate and fence and provide water supply inside the school land—both original burdens of the government of Madagascar—due to the lack of budget. Therefore, these two aspects should be considered for inclusion in outputs of the Japanese side.

[17] Inclusive education can be achieved through the activation of FAF by using the 'School for All' model, which has been promoted by UNICEF. (Members of MEN who are in charge of the project of UNICEF were able to visit the school management improvement project of JICA in Niger.) In the interview of the ex-post evaluation, the person in charge of MEN pointed out that training manuals and the monitoring system would be effective in activating FAF functions.