Republic of Niger

Ex-Post Evaluation of Japanese Grant Aid Project
"Project for Construction of Classrooms for Primary Schools
in the Regions of Maradi and Zinder"

External Evaluator：Chiaki Yamada, INGÉROSEC Corporation

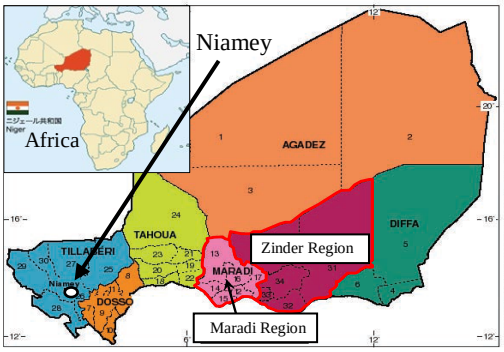
0. Summary

The objective of this Project was to enable appropriate school management and improve the hygienic learning environment by constructing permanent classrooms to replace straw-hut classrooms and toilets at primary schools in the regions of Maradi and Zinder, thereby contributing to an improved educational environment in primary education[1] in the target areas. This Project was highly relevant to the Niger's development plan that focused on improving the accessibility of primary education and its development needs as the educational environment in the two target regions needed to be improved urgently. The Project was also in accordance with measures taken under Japan's ODA policy toward Niger. Therefore, the relevance of the Project is high. Although the project cost was as planned, the project period exceeded the plan. The efficiency of the plan is therefore rated as fair. The construction of school facilities and toilets and the procurement of desks and chairs contributed to increase the number of students who study in an improved environment and decrease the number of students per classroom. The school environment was therefore remarkably improved. The provision of toilets helped to improve the school attendance by girls, and the financial burdens required for reconstruction of straw-hut classrooms were decreased in most of the target schools. The Guideline for activities formulated under the project soft-component (hereafter referred to as the "Guideline") and the manuals for guiding school management and O&M were confirmed to have been used on only a very limited basis, and school O&M was not implemented as expected under the Project. On the other hand, an increase of the students' motivation to study was confirmed as a project impact, so the effectiveness and impact of the Project are rated as high. Concerning the institutional aspect on O&M, a lack of teachers caused some undermanned schools teacher allocation, but the roles and responsibilities of each agency including schools related to the Project became clear. School management and O&M for schools on technical aspects were, however, not appropriately implemented based on the Guideline and manuals. Persons related to school management recognized the necessity of securing funds for school management and O&M and secured them accordingly. However, as the revenue and expenditure for school facilities was inaccurately recorded, appropriate fund management such as keeping records of revenue and expenditure is hoped to take place in the future. Under these circumstances, the sustainability of the project effect is rated as fair.

In light of the above, this Project is evaluated to be satisfactory as a whole.

[1] Educational system in Niger comprises preschool education (3 years), primary education (6 years), first secondary education (4 years), later secondary education (3 years : the same as high school in Japan), and higher education (the same as universities and vocational schools in Japan).

1. Project Description



Project Location

Hawan Dawaki Centre School in Maradi Region, constructed by the Project

1.1 Background

Recognizing education as one of the most important developmental issues of the country, the Government of Niger formulated a "10-year Educational Development Plan (PDDE) (2003-2012)" in 2001. The plan aimed to increase the Gross Enrollment Rate (GER) of primary education to 70% by 2012. The Government of Japan provided Grant Aid and Technical Cooperation Projects and the Government of Niger concurrently implemented a Special Program of the President (LPSP)[2] calling for the construction of 1,000 schools every year for 4 years, starting in 2001. These projects have helped to improve access to education. In fact, the GER of primary education in Niger had increased to 63% as of 2006.

There is, however, a distinct gap in the GER of primary education between urban and rural areas. In the Maradi and Zinder regions targeted under the Project, the GER of primary education remained lower in rural areas than in urban areas. Furthermore, approximately one-third of the classrooms (most are in rural areas) in Niger were straw-hut classrooms, and roofs and walls of these classrooms needed to be replaced every year. This was a great burden on people in the local communities, and straw-hut classrooms hardly provided an appropriate learning environment from the beginning as they were vulnerable to sand and rain being blown in. Classrooms were not only lacking, but were also overcrowded due to the rising numbers of students arising from the country's sharp population growth of over 3% annually (3.2% increased per year).

Under these circumstances, the Government of Niger requested the Government of Japan to replace the straw-hut classrooms with permanent classrooms and furnish them with desks and chairs in Maradi and Zinder regions where school enrollment rate remains low and where an extremely poor learning environment (e.g., where many classrooms were built from straw) was confirmed. The Government of Japan implemented the Project through Grant Aid for Community Empowerment based on the active use of the local specifications, designs, and equipment in operation, in response to the request from the Government of Niger and in accordance with Education Policy Guidance in Niger.

[2] Policy of the ex-president Mamadou Tandja (Incumbency:1999-2010)

1.2 Project Outline

The objective of this Project is to implement school management appropriately and improve the hygienic learning environment in primary schools by constructing permanent classrooms to replace straw-hut classrooms and toilets in the regions of Maradi and Zinder, and thereby to contribute to an improved educational environment in primary education in the target areas.

Grant Limit / Actual Grant Amount		1,018 million yen/ 1,018 million yen
E/N[3] Date		February, 2007
Implementing Agency		At the project planning stage: Ministère de l'Education de Base et de l'Alphabétisation (MEBA) At the ex-post evaluation: Ministère de l'Enseignement Primaire, de l'Alphabétisation, de la Promotion des Langues Nationales et de l'Education Civique (MEP/A/PLN/EC)[4]
Project Completion Date		June, 2010
Concerned parties to the Project[5]	Main Contractors	20 construction companies and 2 furniture companies
	Consultants	Outline Design：Daiken Sekkei, INC. Consultant for Detailed Design (D/D)/Supervision : Agence d'Etudes, de Conseils et d'Assistance (AGECAS) Soft Component (Supervision)：Earth and Human Corporation Soft Component (Operation): Organisation Nigerian des Educateur Novateur (ONEN)[6]
	Procurement Agent	Japan International Cooperation System (JICS)
Outline Design (O/D)		December, 2006
Detailed Design (D/D)		December, 2007
Related Projects		<Grant Aid Project> ・The Project for Construction of Primary Schools in Dosso and Tahoua Regions (2003-2005) <Technical Cooperation Project> ・Human Resources-Human Resources-Primary Education (Phase I : January, 2004-July, 2007, Phase II : August, 2007-January,2012) ・The project on support to educational development through community participation (School for All) (May,2012-May, 2016) ・Project on Strengthening of Mathematics and Science in Secondary Education in Niger (SMASSE-NIGER) (Phase I : October, 2006-October, 2009, Phase II : March, 2010-September,2013) <Other International Organization and donors> ・Kreditanstalt für Wiederaufbau (KfW) "Primary School Education Project" (2002-2005) ・International Development Association (IDA) " Project for Development of Basic Education" (2003-2007)

[3] In other words, E/N is "Exchange of Notes"

[4] Accompanied by the inauguration of the new Cabinet in 21st April, 2011, the name of the ministry was changed from MEBA to MEP/A/PLN/EC. MEP/A/PLN/EC is for use in this report.

[5] As this Project was implemented through Grant Aid for Community Empowerment, or Japanese Grant Aid Type II, local consultants for D/D and supervision, local contractors and local furniture companies were selected.

[6] ONEN is a local non-governmental organization that implemented soft-component activities. It was employed by Earth and Human Corporation.

2. Outline of the Evaluation Study

2.1 External Evaluator

Chiaki Yamada (INGÉROSEC Corporation)

2.2 Duration of Evaluation Study

Duration of the Study: October, 2015 - November, 2016

Duration of the Field Study: February 6 - 14, 2016 and May 8 - 12, 2016

2.3 Constraints during the Evaluation Study

The project target regions of Maradi and Zinder border on Nigeria and are identified as restricted areas subject to a high risk of iniquitous acts such as terrorist attacks. Security issues thus made it impossible for Japanese external evaluator to conduct the field survey. To execute the ex-post evaluation of the Project, the Japanese external evaluator held interviews with MEP/A/PLN/EC (the Implementing Agency), AGECAS (a consultant for D/D and Supervision), and ONEN (the organization that conducted soft component activities for collecting project information) in Niamey. Due to limitations in budget and time, 28 schools[7] (approximately 41%) out of the 68 target schools were selected and monitored through the field study and beneficiary survey[8] of the ex-post evaluation by local consultants. Interviews were also conducted with the Regional Directorate of Education in both the Maradi and Zinder regions to collect additional data.

3. Results of the Evaluation (Overall Rating：B[9])

3.1 Relevance (Rating：③[10])

3.1.1 Relevance to the Development Plan of Niger

3.1.1.1 Relevance to Higher Development Plan

During the project planning stage, the “Poverty Reduction Strategy Paper (PRSP) (2002-2015)” issued in the development planning for Niger called for “improvement of access to high-quality social service” in four prioritized sectors: prioritized primary

[7] Twenty-eight schools were chosen by extracting every third school in the list of schools arranged by department. After considering the geographical locations of the schools (e.g., the distances from departmental capitals and road conditions to the schools), the 28 target schools of the beneficiary survey were finally determined. If schools taken in the first selection were not easily reached, the next schools in the list were taken as targets.

[8] The survey team interviewed 257 beneficiaries (23 school principals, 78 teachers called by the principals, 80 Comité de Gestion Décentralisée des Etablissements Scolaires (CGDES) members and 76 parents) in 28 out of 68 target schools, in target 2 regions from February to March 2016. The gender balance among CGDES members and parents was considered for avoiding unbalanced gender of beneficiaries (Breakout of gender: 103 men and 154 women).

CGDES : Based on the Ministerial Order released on 22nd February 2012, COGES (Comité de Gestion des Etablissements Scolaires) was changed to CGDES. In this report, CGDES is taken. CGDES comprises a school principal, a teachers’ representative, three parent representatives, 1 representative from educational mothers’ associations, and one student representative (seven persons in total). CGDES that exclude one student representative and accordingly comprise 6 members are confirmed.

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

[10] ③: High, ②: Fair, ①: Low

education, public healthcare, HIV/AIDS prevention, and water hygiene. The educational development plan mentioned in the PRSP assigned priority to primary education as an educational sector policy. The LPSP targeted the construction of 4,000 new schools from 2001 to 2004 (1,000 schools per annum).

During the ex-post evaluation, "Stratégie de Développement Accéléré et de Réduction de la Pauvreté (SDARP) (2008-2012)," formulated as the 2nd PRSP based on the lessons learned from the PRSP, stressed that equal access to education opportunities increases school enrollment rate. The "Plan de Développement Economique et Social (PDES) (2012-2015)", the successor of SDARP, singled out the education sector as a sector of the highest priority.

The Implementing Agency confirmed that the PDES, whose period of validity was extended for one year up to the end of 2016, continues to improve the delivery of basic social services such as education. The "Programme du Président Issoufou Mahamadou pour la renaissance du Niger (2011-2015)[11]", the successor of LPSP, targeted free education for all children up to the age of 16 years old and the construction of 2,500 classrooms over a one-year period up to 2015.

3.1.1.2 Relevance to Education Sector Plan

During the project planning stage, three sub-goals were set for achieving the GER to 70% in primary education by 2012, according to the PDDE: 1) Improved access to education, 2) Improved educational quality, and 3) Improved educational system and policy. "Loi d'Orientation du Système Educatif (LOSEN)" (1998) described education as a citizens' right and recognized it as a national issue of the highest priority.

During the ex-post evaluation, the following three sectors were designated as priority issues in the "Programme Sectoriel de l'Education et de la Formation (2014-2024)" formulated as the new policy document the successor of PDDE: 1) Improved equal access to primary education, 2) Improved education quality and education relevance, and 3) Improved operation and management of the education sector. LOSEN has also remained in place during the ex-post evaluation and the priority of primary education has not been changed.

Accordingly, the Project was consistent with the Higher Development Plan and Education Sector Plan during both the project planning stage and ex-project evaluation.

3.1.2 Relevance to the Development Needs of Niger

The target regions of Maradi and Zinder were the 2nd and the 3rd most populated regions of Niger after the Niamey capital district during the project planning stage. They have the highest proportion of straw-hut classrooms requiring replacement. Poorer learning environments were prominent in these target regions. As shown in Table 1, the GER in the

[11] Policy of Mr. Mahamadou Issoufou, who served as president from 2011 to the ex-post evaluation.

Zinder region remained 10% lower than the national average in Niger. There were also wide gaps between urban and rural areas in the GER of schoolchildren: 66% and 75% in the urban areas and 45% and 34% in rural areas of Maradi and Zinder regions, respectively. The shortage of classrooms was the major factor behind the lower enrollment rate at these schools and because of this, many schools were reportedly limiting the number of applications accepted. In terms of the gender gap, the GER for girls stood at 42% and 35% in Maradi and Zinder, respectively, slightly lower than the national average of 43%. According to the interviews with the Implementing Agency, while there was no big difference in the GER in the two target regions compared to the national average, large populations were confirmed and the absolute numbers of students who studied in poor learning environments was high. Furthermore, Maradi region had a high rate of classrooms that need repairs and the Zinder region was below the national average in terms of the GER. Thus, the target areas selected for this Project was rated as relevant.

The GERs in the two targeted regions were increased in the ex-post evaluation, but the rate in the Zinder region still remains lower than the national average. The GER in the across-Maradi region increased to 87%. In the urban areas it notably climbed beyond 100%, while in the rural areas it reached 61%. There still exists an urban-rural gap[12]. It was also confirmed, as of the ex-post evaluation, that the need for improved access to schools was still high in both the Maradi and Zinder regions. Table 1 shows the GER and Net Enrollment Rate (NER) in the Zinder region, in the Maradi region, and in Niger overall in 2005/2006 and from 2010/2011 to 2013/2014. Note that some figures drop between 2012/2013 and 2013/2014 due to a revision in the estimated number of students (the denominator) in the statistics from the 2012 census[13].

Table 1 GER and NER in Zinder and Maradi regions and national level
(2005/2006, 2010/2011-2013/2014) (Unit : %)

Area	Item	2005/2006	2010/2011	2011/2012	2012/2013	2013/2014
Maradi	GER	61.0	105.8	91.4	97.9	87.2
	NER	57.0	80.3	82.7	85.4	65.2
Zinder	GER	49.0	89.9	92.3	82.1	67.7
	NER	43.0	68.4	72.1	72.6	55.0
National	GER	59.0	99.8	97.9	99.2	82.9
	NER	54.0	76.1	79.2	82.0	71.3

(Source : Statistiques De L'Education De Base et Alphabetisation Annuaire、2005/2006, 2010/2011, 2011/2012, 2012/2013, 2013/2014)
(Notes: GER=Gross Enrollment Rate: number of students of any age enrolled at any grade, regardless of age / number of population of the corresponding age group x100
NER=Net Enrollment Rate: number of children enrolled at each grade who belong to the age group that officially corresponds to primary schooling / total population of the same age group) x100

[12] Statistiques De L'Education De Base et Alphabetisation Annuaire (2013-2014)
[13] Before the National Census conducted in 2012, the total number of students (the denominator) was calculated based on the results of the National Census conducted in 2005. The National Census conducted in 2012 pointed out that the actual numbers of students exceeded the estimates. The enrollment rate was thus put on review.

3.1.3 Relevance to Japan's ODA Policy

The Medium Term Policy on Official Development Assistance (ODA) (2005) declared that people's capacity would be strengthened through education in the aid approach toward the realization of "Human Security." The Project was consistent with the Medium Term Policy, which expands the basic social services including education, are important for poverty reduction. Japan's ODA Country Data Book (2006) stated that the sectors addressing Basic Human Needs (i.e., education, healthcare, water provision, and rural development) are to be important objects of focus in the work done to contribute to the improvement of the poverty situation in Niger based on the implementation process of the PRSP. Speaking on the concretization of expanded aid for Peace in Africa at the Tokyo International Conference on African Development (TICAD) Conference on Consolidation of Peace held in 2006, the Government of Japan strongly advocated the proactive implementation of Grant Aid and Technical Cooperation Project for community development in the water, hygiene, and education sectors with an emphasis on human security. The Project which contributes to an improved educational environment is therefore relevant to Japan's ODA policy.

As mentioned above, this Project has been highly relevant to Niger's development plan (including education sector policy) and development needs, as well as Japan's ODA policy. Its relevance is therefore high.

3.2 Efficiency (Rating：②)

3.2.1 Project Outputs[14]

3.2.1.1 Outputs from Japanese Side

This Project constructed 253 solid classrooms and 233 toilet booths in 68 schools in the Maradi and Zinder regions. Metallic storage racks and desks and chairs for students and teachers were also provided as major equipment. As shown in Table 2, classrooms, toilets, and equipment were all provided in the Zinder region as planned, while the addition of 2 target schools in the Maradi region required the addition of 6 classrooms and 6 sets of equipment to the planned numbers. These increases were covered with the remaining budget as a result of tender, so there was no change of project cost.

It has been confirmed that the soft component activities with the aim of capacity

[14] The Project was implemented by the Procurement Guidelines of the Japanese Grant Aid. There were initially 79 target schools in total (33 in the Zinder region and 46 in the Maradi region) when O/D was conducted, but the D/D after the E/N signing newly set the number to 66 (33 schools in the Zinder region and 33 in the Maradi region). The decrease of the number of planned schools in the Maradi region was caused by the decrease of the number of schools constructed within the E/N grant limit due to the sudden rise of raw material costs and fluctuation in exchange. As the project outputs determined during the O/D are likely to be changed during the D/D after the E/N is signed, the planned values are considered as baseline values after the D/D (Departmental Directorate of Education).

development for Comité de Gestion Décentralisée des Etablissements Scolaires (CGDES)[15] officers from the Departmental Directorate of Education (hereafter referred to as "Departmental CGDES officer") were confirmed to have been conducted as planned. The achievements of the soft components activities are shown in "3.3 Effectiveness."

Table 2 Planned and Actual Outputs (Facilities and Major Equipment) (Japanese side)

Region	Item		Planned	Actual	Difference
Maradi	Facilities	Number of target schools	33	35	2 schools increased
		Number of classrooms	117	123	6 classrooms increased
		Number of toilets	81	81	As planned
	Equipment	Desk and chair for students	117	123	6 sets increased
		Desk and chair for teachers	117	123	6 sets increased
		Metallic storage rack	117	123	6 racks increased
Zinder	Facilities	Number of target schools	33	33	As planned
		Number of classrooms	130	130	
		Number of toilets	152	152	
	Equipment	Desk and chair for students	130	130	
		Desk and chair for teachers	130	130	
		Metallic storage rack	130	130	

(Source：Documents provided by JICA)

(Notes：A desk-and-chair pair for students is integrated for two students. One set is for 25 desks and chairs. The unit for desks and chairs is a "set." The unit for a metallic storage rack is a "rack.")

3.2.1.2 Outputs from Niger Side

According to the Implementing Agency, it is confirmed that the costs for both the removal of existing buildings in target schools and the implementation of soft component activities such as traveling expenses and daily allowance for Departmental CGDES officers were covered by the Niger side.

3.2.1.3 Type/Details of Changes on the Project Components during the Project

As shown in Table 3, six points had been changed since O/D and D/D. According to the interview survey with the Implementing Agency, JICS, and AGECAS, all the changes from O/D reflected the local environmental conditions such as desert climates subject to frequent sandstorms, and the perspectives of the convenience for the schoolchildren and O&M, so they were appropriate and necessary to generate the project outcomes. It also has been confirmed that none of these changes affected the results of the project. The points changed from D/D were generally necessitated by the unavailability of materials initially planned for purchase. An inland country like Niger sometimes faces unstable supplies in its markets. Some materials required cannot be sourced for months at a time, resulting in delays in construction periods. It is therefore considered appropriate to replace these materials with

[15] The main duty of Departmental CGDES officers is to monitor O&M for school facilities. The roles of the Departmental Directorate of Education are shown in Table 8. The administrative units in Niger are region, department, commune, and village (community), in descending order.

substitute materials of similar quality and durability. Some points were changed from the O/D and D/D for the above reasons. All of the changes, however, were considered appropriate to the project effects.

Table 3 Changes from the O/D and D/D and the reasons for the changes

Changes from O/D	Changes from D/D	Reasons for the changes
In Maradi and Zinder regions：		
・Berms were added to three outer walls of classrooms		・Prevent the erosion of the classroom foundations by rainfall and sands
・The steel double doors of the outer windows with louver of the classrooms were changed to steel flash windows (two departments in Zinder and three departments in Maradi)		・Prevent the invasion of large amounts of sand caused by sandblasting
・The steel double doors of the outer windows of the classrooms were changed to steel flash windows with louver (two departments in Zinder and three departments in Maradi)		・Prevent the invasion of large amounts of sand caused by sandblasting
・The wire netting of the external ventilation portion and steel frame was changed to iron louver		・Low durability and inappropriately constructed
	・Roof materials were changed from steel plates and aluminum zinc alloy (0.6 mm thick and 55% fusion) to steel plate and a fused zinc coat (0.6 mm thick) (two departments in Zinder and two departments in Maradi)	・The specified roof materials were unavailable in the market during construction.
In Maradi Region：		
	・School buildings were relocated inside of the school sites (four schools)	・Administrative requests by schools

(Source : Documents provided by JICA, Results of the interview survey with the Implementing agency, JICS, and AGECAS)

3.2.2 Project Inputs

3.2.2.1 Project Cost

The actual project cost from the Japanese side was as planned, at 1,018 million yen, the same amount specified in the E/N (100% of the plan, or 97% of the plan after subtracting the costs for the two additional schools constructed (actual number of schools constructed increased from 66 to 68)). The cost from the Niger side was supposed to cover both the removal of existing buildings in the target schools and the implementation of soft component activities such as traveling expenses and daily allowance for Departmental

CGDES officers totaling 7 million CFA (approximately 1.56 million yen, 1 CFA = 0.22363 Japanese yen, as of O/D). While the interviews with the Implementing Agency indicated that the expenses for the implementation of the soft component and removal of existing buildings had been disbursed, no expenditure records with which to compare the planned total cost and actual total cost were available.

3.2.2.2 Project Period

The planned project period was a total of 29 months between February 2007 (E/N date) and June 2009. The actual project period was longer than planned (140% of the planned period), totaling 40.7 months between 1st February 2007 and 23rd June 2010[16]. The main reason for the extension was a lack of human resource at AGECAS, the D/D and Supervision consultant. The original implementation schedule specified that construction in the two target regions was to be started at the same time. But according to the interviews with JICS and AGECAS, limitations in the human resource capacity of AGECAS made it difficult for them to conduct the construction work at the same time in the two target regions. The construction was therefore extended in the implementation schedule after the construction commenced. The human resource capacity of AGECAS could not be assumed during the D/D period, so the construction period could not be extended. It also took an unexpectedly long time to reselect contractors to replace contractors who were dropped due to canceled contracts.

Although the project cost was within the plan, the project period exceeded the plan. The efficiency of the project is therefore rated as fair. As no information on the project cost from the Niger side is available, the planned and actual costs were compared only from the Japanese side.

3.3 Effectiveness[17](Rating：③)

As no operation indicators were provided at the project planning stage, the "Operational status of the school facilities (classrooms and toilets) constructed by the Project, the status of the use of major equipment (desks, chairs, and metallic storage racks) procured by the Project," and "The number of students per classroom constructed by the Project" were set as supplementary operation indicators. As described in "2.3 Constraints during the Evaluation Study," no data was available on the quantitative effects in the 68 schools targeted by the Project. Therefore, the evaluation was conducted by analyzing data collected through the beneficiary survey conducted in 28 of the 68 targeted schools.

[16] 23rd June is the last day when school equipment such as desks and chairs was handed over.
[17] The sub-rating for Effectiveness is to be assigned in consideration of the evaluation of the Impact.

3.3.1 Quantitative Effects (Operation and Effect Indicators)

(1) Operational status of the school facilities (classrooms and toilets) constructed by the Project and status of the use of major equipment (desks, chairs, and metallic storage racks) procured by the Project

All of the classrooms developed and all of the metallic storage racks procured under the Project were confirmed to have been in use as planned. On the other hand, according to the result of the beneficiary survey, toilets were broken in 2 out of 22 schools where toilets were developed and desks and chairs for students and teachers were confirmed to be unusable in 5 out of 28 schools. Repair of toilets with broken basins is under planning by CGDES. As desks and chairs were assumed to be consumable supplies, a purchase plan is under discussion. The operational status of school facilities and major equipment is shown in Table 4.

Table 4 Operational status of school facilities and status of use of major equipment

Item	Facilities		Major equipment		
	Classrooms	Toilets	Desks and chairs for students	Desks and chairs for teachers	Metallic storage rack
Number of items provided	96	81	2,350	112	96
Number of items used	96	80	2,266	104	96
Number of items not used	0	1	84	8	0
Percentage of utilization (%)	100	99	96	93	100

(Source：Beneficiary Survey)

(Note：A desk-and-chair pair for students is integrated for two students. One set is for 25 desks and chairs. The unit for desks and chairs is a “set.” The unit for a metallic storage rack is a “rack.”)

(2) Number of students per classroom

In the project planning stage, the criteria of MEP/A/PLN/EC set the standard number of students accommodated per classroom at 50. The beneficiary survey confirmed that principals in nine schools imposed enrolment ceilings of 50 students per classroom in the project planning stage, although many more students wished to enter school. Further, about 86% (147 out of 171 classrooms) of the classrooms surveyed in the beneficiaries’ survey accommodated more than 50 students (see Table 5).

The MEP/A/PLN/EC criterion remains 50 students per classroom, but the percentage of classrooms accommodating more than 50 students was reduced in the ex-post evaluation. According to the result of the ex-post evaluation, classrooms accommodated more than 50 students in around 37% of the 28 schools visited (35 out of 96 classrooms). This result can be judged to have helped improve the learning environment even though classrooms accommodating more than 50 students were confirmed. The lowest number

of students per classroom was 18, followed by the second lowest of 21. Both classrooms were in the same school which has a small number of students at all grades. So the community where they are located appears to have a low population of school-age children. The number of students per classroom is currently lower than the 50 per classroom capacity, however, the number of students is expected to increase in the future. It is therefore considered appropriate to build classrooms based on the MEP/A/PLN/EC criterion of 50 students per classroom.

Table 5 Number of students per classroom developed by the Project

Number of students per classroom	The number of classrooms (%)	
	At the project planning stage	At the ex-post evaluation
Less than 31	2 (1%)	12 (12%) (18/classroom at minimum)
More than 30, less than 41,	10 (6%)	28 (29%)
More than 40, less than 51	12 (7%)	21 (22%)
More than 50, less than 61	96 (56%)	19 (20%)
More than 60 students	51 (30%) (121/classroom at maximum)	16 (17%) (80/classroom at maximum)
The number of classrooms	Total 171 classrooms (100%)	Total 96 classrooms (100%)

(Source：At the project planning stage：O/D report (27schools targeted), At the ex-post evaluation：Beneficiary Survey (28 schools targeted))

(Notes：The number of students per classroom in 27 schools (171 classrooms) with available information out of the 28 schools surveyed by the beneficiary survey during the O/D)

(3) Number of Students who learn in the improved environment

At the project planning stage, it was estimated that 12,350 students would gain access to an improved learning environment as an outcome of this Project. According to the interview with the Implementing Agency, the actual number of students who were learning in classrooms constructed by the Project (the improved environment) at the time of project completion was not confirmed. The actual number was also unconfirmed in the beneficiary survey, and none of the schools had grasped the increased number of students who studied in an improved environment at the time of project completion. Therefore, for the purpose of ex-post evaluation, the actual number of students in 2010 was estimated by multiplying 253 classrooms by 50 students per classroom based on the criterion set by MEP/A/PLN/EC. The actual number of students in 2015, meanwhile, was estimated from the results of the beneficiary survey. The results are shown in Table 6.

According to the beneficiary survey, 4,351 students were learning in the 96 classrooms constructed by the Project, or about 90% of the targeted 4,800 students (96 classrooms x 50 students). Given that this result is adapted into 253 classrooms constructed by the Project, an estimated 11,466 students gained access to an improved environment as an outcome of this Project.

The estimated 11,466 students confirmed in the ex-post evaluation were slightly under the targeted value but the Project contributed to an improved learning environment and an increased number of students who were accepted to enter schools. As the result of the beneficiary survey shown in chart 3, about 96% of students were more than 'satisfied' with the improved environment. Moreover, the targeted value of 12,650 indicates that there are now more places to receive new students. As mentioned above, the project effect is evaluated as high.

Table 6 Number of students who study in a comfortable learning environment and rate of increase in the number of toilets per year

	Baseline	Target[18]	Target (Estimate)	Actual
	2006	2009	2010	2015
	Baseline Year	Target Year (Project Completion Year)	Completion Year	5 Years after Completion
Number of students who study in a comfortable learning environment*1 increased	0	12,350 *2	12,650 *3	11,466 *4
Number of toilets increased in target schools	0	233	393	390 *5

(Source : Baseline and Target, estimation based on documents provided by JICA; Actual, beneficiary survey)

(Note*1 : Interviews with the Consultant for the D/D/Supervision during the ex-post evaluation confirmed that the improved environment means concrete structures unaffected by heat, infiltration of sand into the classrooms due to wind or rain. Existing classrooms were made of sun-dried brick and straw-hut so it cannot be said that studying in these kind of classrooms is an improved environment.

Note*2 : Increase of 12,350 students = 247 classrooms (number of classrooms to be constructed at the planning stage) x 50 students (number of students accommodated per classroom defined by MEP/A/PLN/EC)

Note*3 : Increase of 12,650 students = 253 classrooms (actual number of classrooms constructed)x 50 students

Note*4 : Increase of 11,466 students = 4,351 students (in schools visited by the beneficiary survey conducted in 2015) /(96 classrooms in schools where the beneficiary survey was conducted x 50 students)x 12,650 students

Note*5 : 393 toilets newly constructed by the Project x percentage of utilization 99%

(4) Costs for reconstruction of straw-hut classrooms

Given that the number of students per classroom was 50, the share of expenses was expected to be reduced to 120 CFA/student/month at the project planning stage because the re-construction costs for straw-hut classrooms (72,000 CFA/classroom/year) were redundant.

[18] The target value set at the time of project planning stage includes the number of students who study in existing classrooms. Yet nine and a half years have passed since O/D and it cannot be said that the classrooms used since the O/D remained in good condition. The classrooms constructed by the Project are thus determined to be targeted at the ex-post evaluation. The increased target number was set at 12,350 students (247 classrooms x 50 students).

Compared to this estimated share, the amount paid by beneficiaries in two schools[19] which pay expenses of reconstruction during the ex-post evaluation was actually 350 CFA/student/month. This difference might have stemmed from a calculation based on the overestimated average value (50 students per classroom) in the planning stage versus the actual average number of students in those two target schools (less than 50 students). Approximately 64% of respondents (165 out of 257) answered that the collected expenses for re-construction of straw-hut classrooms decreased as a result of this Project, resulting in added funds to cover living expenses such as food costs. 92 respondents left the question unanswered, so the reasons could not be confirmed.

3.3.2 Qualitative Effects (Other effects)

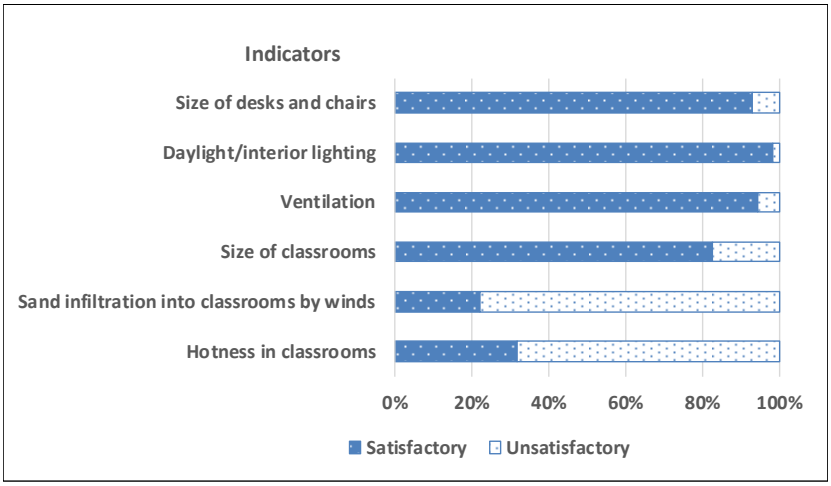
(1) Improved condition of the learning environment for girls due to the development of toilets

One of the interview questions in the beneficiary survey covered "The degree to which the learning environment for girls was improved by the development of toilets." Approximately 98% (254 out of 257 students) answered "This has improved." Most of the respondents offered responses such as, "Girls opined that they wanted to study at a school with clean toilets," or "It is more comfortable using a proper toilet than going outside to find a place in the bushes." Accordingly, the learning environment for girls was improved as the project effects. On the other hand, only three respondents answered "unchanged" to the question above, but these three respondents belonged to schools that had toilet facilities before the Project and are therefore assumed not to have seen any major changes. In five schools where the number of schoolgirls were confirmed in both the project planning stage and ex-post evaluation stage, the number of schoolgirls increased from 1,007 (approximately 44% of total number of students) at the project planning stage to 1,250 (approximately 51% of total) during the ex-post evaluation. During O/D, toilets were supposed to be respectively used for the boys, girls, and teachers, and it is assumed that the environment mentioned above would promote the enrollment of more girls. At the time of the ex-post evaluation, it was confirmed that toilets were used for boys and girls respectively as planned in about 82% of the schools where toilets were constructed (18 out of 22 schools). In the field survey during the ex-post evaluation, there were no schools where toilets were divided for students and teachers. Toilets used for boys and girls separately were assumed to be important for the improvement of the school enrollment and no problems were confirmed during the ex-post evaluation.

[19] Although classrooms were constructed by the project, there is still need for classrooms, and it is confirmed that straw-hut classrooms have been constructed and replaced at the ex-post evaluation.

(2) Evaluation for classrooms and toilets

The evaluation results (size, ventilation and daylight/interior lighting) confirmed by the beneficiary survey are shown in Figure 1.



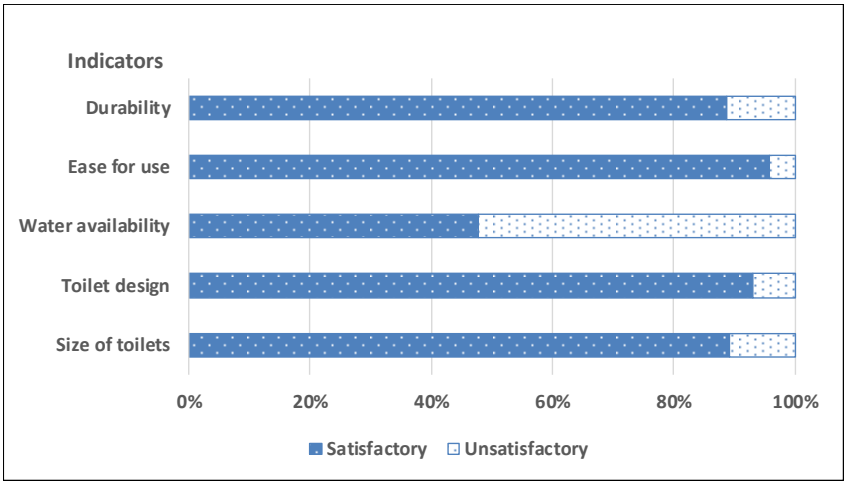
(Source: Beneficiary Survey)

Figure 1 Evaluation of Classrooms

Approximately 78% (200 out of 257 respondents) of the total number of respondents answered 'Dissatisfied' to the question regarding "Sand infiltration into the classrooms." According to the interviews with school principals, the beneficiary survey was conducted concurrently with the season of the Harmattan[20], a trade wind that causes profuse entry of sand and dust into the classrooms. This was assumed to be a major factor behind the many "Dissatisfied" responses. Some principals, however, responded that they expected less sand and dust to infiltrate the classrooms after the Harmattan period. Some respondents also believed that the structures used to completely prevent sand and dust from entering the schools would reduce the ventilation in the classrooms, increase the temperatures, and ultimately hinder the classes held inside.

Figure 2 shows the results of the evaluation of toilets (usability, durability, etc.) confirmed by the beneficiary survey. As for water access in schools, the water supply situation has not been improved in the areas where the availability was originally poor and the situation has remained unchanged regardless of whether a school was constructed or not. As a result, half of the respondents indicated that they were "Dissatisfied" with the water access.

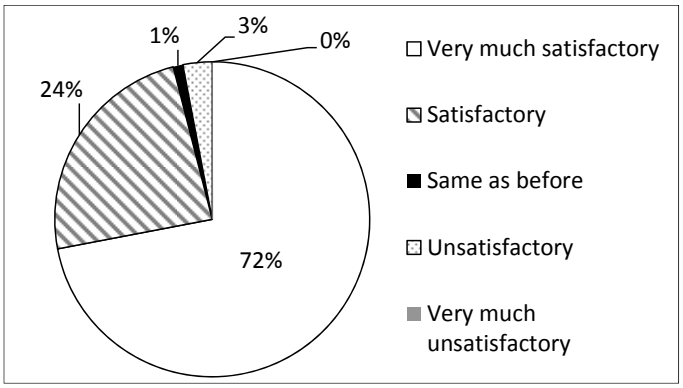
[20] Harmattan is a trade wind that stirs up huge amounts of dust during dry season from November to March, often causing the phenomenon of dust rain.



(Source: Beneficiary Survey)

Figure 2 Evaluation of Toilets

Turning to the overall evaluation, Figure 3 shows the result of the beneficiary survey on the level of satisfaction with "the current learning environment."



(Source: Beneficiary Survey, 257respondents)

Figure 3 Satisfaction level to learning environment

Approximately 96% of respondents answered that the learning environment was improved by the Project, and these respondents were confirmed to be satisfied with the current learning environment. Parents mentioned that the construction of high-quality classrooms helped to improve the learning environment so that children were keen to go to the schools. Teachers mentioned that both students and teachers were more able to concentrate on their class lessons. From the interviews with parents, it was clarified that approximately 97% (74 out of 76) of the students had an increased motivation to learn at home. The improved school learning environment imbued the students with the joy of studying, which contributed to their studies at home.

Many of the respondents who rated the learning environment as "Unsatisfactory" were from areas where many students lived. Students in these areas were unable to concentrate on class lessons because classes were conducted with more than 50 students even in the newly constructed classrooms. Regarding motivation for learning, some of the students became less motivated to learn at home because they were able to concentrate on studying more at school, which provided a better learning environment (no household chores at school, no desks at home, etc.).

Under the above circumstances, the Project improved the learning environment of primary education in the target areas as a whole.

(3) Soft Component

Table 7 shows the achievement of outputs 1-5 as the soft component activities planned. According to the Implementing Agency and the consultant in charge of the soft component management, outputs 1-5 were all achieved.

Table 7 Activity details of outputs 1 -5

Output	Activity details
1	Clarification of roles and responsibilities of maintenance for school facilities and establishment of a communication system among persons concerned with schools
2	Installation of school maintenance activities in all target schools and implementation of those activities
3	Implementation and practice of educational activities for the use and maintenance of toilets in all of the target schools
4	Implementation and practice of educational activities related to water hygiene control on the initiative of local people
5	Evaluation for school activities and formulation of the Guideline for activities

(Source: Documents provided by JICA)

3.4 Impacts

3.4.1 Intended Impacts

The following impacts were expected during the project planning stage as indirect effects of the project implementation:

- The Guideline[21] prepared by the Project 1) becomes a guideline for school management and O&M by parents and 2) promotes MEP/A/PLN/EC's awareness of school O&M and contributes to improved school management as a whole.

The following situation was confirmed during the ex-post evaluation.

- According to the beneficiary survey, persons related to school management and CGDES played a central role in conducting hygiene education activities continuously in 7 schools (approximately 25%) where the Guideline was utilized out of the 28 target schools. Most of the principals in schools not utilizing the Guideline were dispatched to schools after the completion of the Project. When the incoming principles arrived at schools that used the Guideline, the outgoing principals failed to appropriately hand

[21] Regarding the Guidelines, the "Guideline for school management" identified at the planning stage was replaced by the "Guideline for activities" at the project completion. The two guidelines have different names but share the same content, so in this report we use the "Guideline for activities." The "Guideline for activities" describes how to formulate an activity plan, steps for activities such as maintenance and hygiene, educational materials for school activities, training modules, and manuals. Concerning manuals, manuals for CGDES organization, school O&M, school health were prepared in order for CGDES to take an initiative for an appropriate school management and O&M. These manuals were distributed to Departmental Directorate of Education and schools.

over the guidelines. Information related to the Guideline for activities was therefore not shared with parents. There is a strong possibility that the Guideline is not recognized as a guideline for school management and O&M.

- The interviews with the Implementing Agency revealed that the schools recognized the Guideline but did not conduct activities to promote the use of the Guideline. It would therefore be difficult to conclude that the Guideline contributed to the improved awareness of MEP/A/PLN/EC on school management and O&M.
- As for the manuals related to school O&M, approximately one-third of the schools implemented school O&M with the use of manuals. On the other hand, schools that implemented school O&M without manuals representing their own points of view were confirmed.

As mentioned above, the indirect effect expected from the project implementation was not adequately generated.

3.4.2 Other Impacts, Unintended Positive/Negative Impact

3.4.2.1 Impacts on the Natural Environment

There was confirmed to have been no negative natural environmental impact from the project implementation, according to the results of the interviews with the Implementing Agency and persons related to target schools. Moreover, no generation of noise or vibration that might have influenced daily living in the neighborhoods surrounding the schools was confirmed during the construction phase.

3.4.2.2 Land Acquisition and Resettlement

According to the interviews with the Implementing Agency and persons concerned with the schools, no land acquisitions or resettlement took place as a result of the project implementation.

At the time of the ex-post evaluation, it was confirmed that classrooms, toilets and school furniture procured by the Project were largely utilized as planned. The number of students who study in an improved environment was presumed to have reached approximately 91%[22] of the target value. The target value, therefore, was nearly achieved. In addition, in all of the schools where the beneficiary survey was conducted, the expenses to be paid by the parents for the construction of the straw-hut schools was either waived or decreased, and the learning environment for most of the girl students was improved. Regarding the project impact, the handover of the Guideline by outgoing principals to incoming principals was poorly executed.

[22] Actual increment of students (11,466) / Target increment of students (12,650)

And while the Implementing Agency clearly recognized the Guideline, activities to promote the use of the Guideline in schools were also insufficient. Nevertheless, the improvements in the learning environment helped enhance almost all of the students' motivation for learning.

The schools newly constructed by the Project helped greater numbers of students study in an improved environment, which is a significant direct effect in terms of effectiveness. The motivation for learning was improved, although the utilization of the Guideline was limited. It can be said that indirect effects were generated. The substantial direct effects from the school construction and the indirect effects were confirmed, so the effectiveness and impact of the Project are rated as high.

3.5 Sustainability (Rating：②)

3.5.1 Institutional Aspects of Operation and Maintenance

Interviews with the Implementing Agency revealed that the roles and responsibilities of the respective agencies remained unchanged from the planning stage. It was also confirmed that the CGDES's role remained unchanged from the time of its initial establishment in the Ministry of Education ordinance (2003). The roles of the respective agencies are listed in Table 8.

Table 8 Roles and responsibilities of the agencies concerned

Name of agency	Roles and responsibilities
MEP/A/PLN/EC	・ Formulation and implementation of educational plan and policy ・ Financial management ・ Construction of educational facilities; Evaluation of the educational system ・ Research and establishment of lesson content and teaching methods ・ Securing and executing budgets for principals' and teachers' salaries
Regional Directorate of Education	・ Management of the Departmental Directorate of Education ・ Implementation of educational policy
Departmental Directorate of Education and Commune office	・ Management of schools in charge ・ Formulation of an allocation plan for teachers ・ Request for the construction of educational facilities ・ Implementation of entrance examinations and promotion examinations for students
School (principal and teacher)	・ Management and maintenance of schools ・ Educating students ・ Supports for CGDES
CGDES General Assembly	・ Conducting the CGDES general Assembly (3 times/year) ・ Supports for CGDES when necessary
CGDES	・ Authority of participation in the assessment of land values where schools are constructed ・ Supervision and authority of school construction ・ Responsibility of repair and maintenance of school facilities
Parents	・ Payment for the re-construction of straw-hut classrooms ・ Savings for the repair of school facilities

(Source：Interviews with the Implementing Agency based on O/D report)

A CGDES officer in Departmental Directorate of Education has been responsible for monitoring the management of all schools in each Department. According to the interviews with the Implementing Agency and Departmental CGDES officers, the Government of Niger mandated that every school should establish a CGDES in 2005. Since then, the number of schools which the Departmental CGDES officer visited for monitoring has increased, making it difficult for just one officer to regularly monitor all of the school activities within a given region[23]. Yet according to the beneficiary survey, about 95% of respondents (244 out of 256[24]) answered that "The CGDES have engaged voluntarily in school management and O&M." The CGDES is said to have implemented a relevant role in consideration of the difficulty of regularly monitoring the school O&M activities. The monitoring structures slightly differ from department to department, but they basically work as outlined below.

1) A Departmental CGDES officer visits schools and also conducts telephone interviews to monitor the situation of the school O&M
2) CGDES representatives from each school attend a CGDES General Assembly[25] held three times every year to share information about school management, O&M, and school health and hygiene.

There are also commune CGDES officers (hereafter referred to as "Fédération") positioned underneath the Departmental CGDES officers to reduce the work volume of the latter, and each Fédération monitors subdivisions of its region. The CGDES, however, raised concerns that the monitoring skills of the Fédération may be lacking. The ex-post evaluation also looked into the allocation of the teachers in each school. The same principals stayed on from the planning stage to ex-post evaluation without switching at only 2 of the 28 schools. Teachers were allocated appropriately in these two schools, but no specific reasons were confirmed.

The school principals were changed at 26 out of 28 schools during the project period, so the appropriateness of the teacher allocation in each school could not be simply evaluated or compared between the planning stage and the ex-post evaluation. It was confirmed through the beneficiary survey, however, that the teachers in 10 out of these 26 schools were inappropriately allocated (e.g., a lack of teachers was allocated at the ex-post evaluation). The survey also clarified a view that the present number of teachers was insufficient to handle all the duties assigned to them because even now they needed to conduct classes and regular O&M of classrooms[26]." One reason for the inappropriate allocation of teachers is the system

[23] According to the Implementing Agency and Departmental Directorate of Education, the increase of number of Departmental CGDES officers is not planned.
[24] One respondent was unanswered.
[25] CGDES General Assembly is CGDES Assemblée Générale de la FCC in French.
[26] Departmental CGDES officers recognized the importance of the new allocation of teachers with increased number of classrooms. The budgets for the newly recruited teachers, however, were insufficient, so the new recruits were not allocated to the schools suitably according to the situation. The number of teachers newly recruited in each school was not confirmed.

of teachers' employment and allocation in Niger. There are two types of contracts for teachers in Niger. First are teachers employed by the Ministry of Education as civil servants who are dispatched to every region of Niger after their employment. Second are teachers employed by the regions on a contract basis. The first group, the teachers as civil servants, are employed and deployed according to planning of the Ministry. There are always some, however, who leave their positions after being appointed to new positions in the countryside. The number of teachers contracted by the regions, meanwhile, is insufficient. It is presumed that many teachers do not wish to work in the rural areas of the country[27].

Under the circumstances, issues to do with teacher allocation need to be sorted out. It is confirmed, however, that the roles and responsibilities of each agency are clear and a monitoring system is established. Thus, it can be said that the school management and O&M are largely functional.

3.5.2 Technical Aspects of Operation and Maintenance

According to the beneficiary survey, repairing school furniture and simple parts of school facilities were confirmed in 10 out of 28 schools (approximately 36%) based on the Manual for school O&M. Approximately 98% of the respondents (252 out of 257) answered "Yes" when asked whether CGDES was positively involved in the school O&M. When asked whether the school properly carried out O&M procedures, approximately 95% (244 out of 256 respondents[28]) answered "Yes." A majority replied in the beneficiary survey that the CGDES appropriately conducted school O&M, but because it failed to conduct termite treatment and demolition of straw-hut classrooms, it is highly likely that the CGDES is not fully aware of the necessity of O&M and does not even have enough skills. In this sense, the CGDES hardly conduct "appropriate" school O&M. Therefore, there is a need to review and disseminate the Guideline and the manuals for school O&M in order to better understand and impart the correct knowledge amongst the CGDES.

3.5.3 Financial Aspects of Operation and Maintenance

At the time of project planning, it was estimated that the school O&M cost per new classroom with a toilet would be 56,000 CFA/year (approximately JPY 12,523, 1 CFA=JPY 0.22363 and 1,120CFA/student/year as of O/D). Since the schools will no longer need to raise money for replacing straw-hut classrooms (which would cost 72,000 CFA/classroom/year), it was estimated that this Project would reduce the money spent by local residents for school O&M. Table 9 shows the actual school O&M cost annually per school and the cost for the

[27] The education policy, "Programme Sectoriel de l'Education et de la Formation," however, calls for an increase of the number of teachers (e.g., 2,500 contract-based teachers to be newly recruited). Concurrently, 3,900 contract-based teachers per year are planned to be official civil servants.

[28] One respondent was unanswered.

replacement of straw-hut classrooms (in 2 out of 28 schools) at the ex-post evaluation, as revealed at the beneficiary survey. There was no confirmation as to whether the actual annual cost for school O&M was sufficient.

Table 9 Expenses per classroom re-constructed

Item	Amount (CFA/year)
Maintenance costs for a classroom with a toilet	58,700
(Expenses per student)	(1,330)
Expenses per classroom re-constructed (in the 2 schools)	87,000

(Source: Beneficiary Survey)

The amount of money actually collected for the school O&M for a year was 58,700CFA (approximately JPY 11,340, 1CFA=JPY0.19317 as of the time of the ex-post evaluation, in February 2016), more or less the same as the amount estimated during the project planning. On the other hand, the amount of money collected per student was 1,330 CFA/year, slightly more than expected during the project planning. Still, the amount expensed by students in most schools was less, as repair costs for straw-hut classrooms were no longer necessary. The amount of money collected for school O&M for each school is more or less the same as expected. It is difficult to say, however, that the school O&M is carried out properly as expected, because some schools were unable to tackle problems with termites or repair cracks or damaged floors of the school facilities. Regarding the school O&M, it has been pointed out that the cost for each task has increased and that school O&M costs more than had been estimated. While they claimed that they saved the money left over from school O&M expenses collected, there were no records and the ex-post evaluation could not confirm the actual balance expensed and left. The cost for replacing straw-hut classrooms was slightly more expensive than estimated during the project planning, but the cost is considered reasonable in light of the inflation rate.

According to the beneficiary survey, the school O&M is left entirely to CGDES and the Regional Directorate of Education does not have roles or responsibilities to secure the budgets for the O&M of schools. It was confirmed that each school receives no financial support for O&M from its department or commune.

3.5.4 Current Status of Operation and Maintenance

The beneficiary survey confirmed the continuous O&M of school facilities and the hygienic status of the utilization of toilets as stated below.

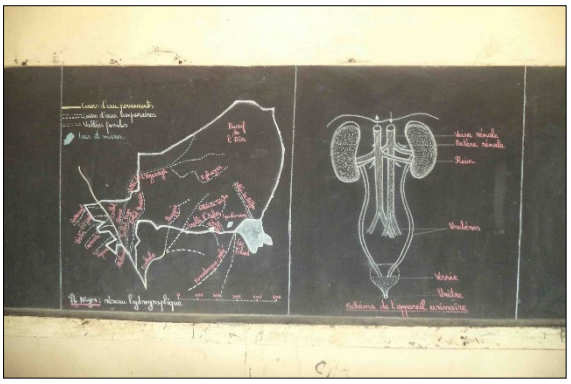
＜O&M of facilities＞

- According to the person related to schools, blackboards were repainted yearly in 27 out of the 28 target schools and savings for repainting blackboards were confirmed. Fittings, however, were not repainted, and savings for fittings were not pooled. The O/D report

recommends repainting for interior walls once every 10 years, for fittings once every 5 years, and for blackboards every year, for the sustainable and appropriate use of school facilities constructed by the Project. It would be difficult to say that the maintenance work was duly implemented on components other than the blackboards. Cracks on blackboards used every day were easy to find, but CGDES members failed to recognize the importance of school O&M maintenance because of the extended repainting interval for fittings and interior walls.

- Cracks were confirmed both inside and outside of the school buildings, especially inside.

Cracks found largely in the interior walls of schools (Kanembakache school, Department of Mayahi, Maradi Region)



Blackboard maintained appropriately (Djirataqua center school, Department of Madarounf, Maradi Region)

< Hygiene Environment >

- Toilets in 21 out of 22 schools where toilets were provided were utilized. The toilets in the remaining 1 school were not utilized due to a lack of water. The sustainable use of toilets requires the removal of waste materials and cleaning of the toilet water tank once every 3 years, as well as repainting of the interior walls and fittings. As it turns out, the removal of waste materials and cleaning of the toilet water tank had not been implemented even after the passage of approximately 6 years from the project completion. Furthermore, the interviews with persons related to school management reported that the CGDES did not secure budgets for these activities. The CGDES needs to recognize the importance of “securing maintenance costs for toilets” and should develop a routine to ensure that the expenses for toilets are understood, expenses are collected in a planned way, and payments are made. Table 10 shows the school management and O&M status confirmed by the interviews with the departmental CGDES officers and the beneficiary survey. No issues or problems beyond those described in the table were identified.

Table 10 Status of O&M for school facilities

Item	Status confirmed at the ex-post evaluation
Plan for school activity prepared by CGDES and the status of its implementation	・ Plans for school activities were prepared in all 28 schools targeted by the beneficiary survey ・ Activities such as lessons on hygiene were implemented based on the plan in 27 out of 28 schools, but the types of activities implemented varied from school to school.
Status of monitoring by Departmental CGDES officers (implementation of periodic information exchange) and of support for the CGDES by Departmental CGDES officers	・ When problems the Fédération is unable to resolve are confirmed, the information is shared with the department CGDES officers during CGDES General Assembly. After the departmental CGDES officers interview the representatives of each CGDES by phone, they visit the schools to resolve the problems. The Department of CGDES officers recognize that the current monitoring system functions well. ・ On the other hand, each CGDES pointed out that the Fédération's periodic monitoring during the CGDES General Assembly was not conducted with sufficient timeliness to share issues or resolve problems. The Fédération was also noted to have lacked sufficient practical knowledge and skills and the monitoring system still has issues.

(Source: Interview with the Implementing Agency and Beneficiary Survey)

CGDES members in 28 schools were interviewed about the personnel in charge of the school facility inspection and the frequency of the inspection. Table 11 shows the results of the interviews. The results of the inspection are confirmed to have been reported to the school principals, teachers, and CGDES members after the inspection.

Table 11 Person in charge of inspection and frequency of inspection

Person in charge of inspection (28 target schools)	Principals and teachers	26 schools (Approximately 93%)
	CGDES member	2 schools (Approximately 7%)
Frequency of inspection (28 target schools)	Once in a week	2 schools (Approximately 7%)
	Once in a month	3 schools (Approximately 11%)
	Once in 3 months	2 schools (Approximately 7%)
	Once in a year	3 schools (Approximately 11%)
	As necessary	18 schools (Approximately 64%)

(Source: Beneficiary Survey)

The table below confirms issues regarding the current O&M status of the school facilities and toilets pointed out during warranty inspection in the 28 schools targeted by the beneficiary survey.

Table 12 O&M status of the school facilities and toilets

Items confirmed	Status confirmed at the ex-post evaluation
Cracks in classrooms	Minor cracks due to age deterioration were confirmed
Fitting (e.g., classroom doors and windows) and clasps	No problem was confirmed.
Blackboards in classrooms	Implementation of periodic O&M was confirmed.
Cracks in roof beams	No problems were confirmed.
Toilets and furniture for classrooms	As mentioned in "3.3 Effectiveness."

(Source: Field Survey)

School principals correspond to results of O&M for school facilities informed by teachers and CGDES members. The frequency of O&M for school facilities differs in each school. Some schools implement O&M every week, while others implement it over wide-ranging time frames such as once a year. The minor items are confirmed to have been repaired by CGDES, but items such as cracks, floor repair, termite treatment, and abolishment of schools built with straw, items CGDES cannot solve itself, remain unsolved. To respond to hygienic conditions in the learning environment, the school health committees and health clubs established by the Project successfully inculcated the daily habit of hand-washing after the use of toilets by the students. As mentioned above, however, toilets were not cleaned as planned and there were differences in the implementation status for activities. Under this circumstance, more extensive activation of school health committees and health clubs is recommended.

As indicated above, minor problems with institutional, technical, and financial aspects of O&M system were observed. The sustainability of the project effects is therefore rated as fair.

4. Conclusion, Lessons Learned and Recommendations

4.1 Conclusion

The objective of this Project was to enable appropriate school management and improve the hygienic learning environment by constructing permanent classrooms to replace straw-hut classrooms and toilets at primary schools in the regions of Maradi and Zinder, thereby contributing to an improved educational environment in primary education in the target areas. This Project was highly relevant to the Niger's development plan that focused on improving the accessibility of primary education and its development needs as the educational environment in the two target regions needed to be improved urgently. The Project was also in accordance with measures taken under Japan's ODA policy toward Niger. Therefore, the relevance of the Project is high. Although the project cost was as planned, the project period exceeded the plan. The efficiency of the plan is therefore rated as fair. The construction of school facilities and toilets and the procurement of desks and chairs contributed to increase the number of students who study in an improved environment and decrease the number of students per classroom. The

school environment was therefore remarkably improved. The provision of toilets helped to improve the school attendance by girls, and the financial burdens required for reconstruction of straw-hut classrooms were decreased in most of the target schools. The Guideline for activities formulated under the project soft-component (hereafter referred to as the "Guideline") and the manuals for guiding school management and O&M were confirmed to have been used on only a very limited basis, and school O&M was not implemented as expected under the Project. On the other hand, an increase of the students' motivation to study was confirmed as a project impact, so the effectiveness and impact of the Project are rated as high. Concerning the institutional aspect on O&M, a lack of teachers caused some undermanned schools teacher allocation, but the roles and responsibilities of each agency including schools related to the Project became clear. School management and O&M for schools on technical aspects were, however, not appropriately implemented based on the Guideline and manuals. Persons related to school management recognized the necessity of securing funds for school management and O&M and secured them accordingly. However, as the revenue and expenditure for school facilities was inaccurately recorded, appropriate fund management such as keeping records of revenue and expenditure is hoped to take place in the future. Under these circumstances, the sustainability of the project effect is rated as fair.

In light of the above, this Project is evaluated to be satisfactory as a whole.

4.2 Recommendations

4.2.1 Recommendations to the Implementing Agency

- Review of monitoring framework

  Officers known as "Fédérations" in the commune offices generally monitor the CGDES activities in each school. During the ex-post evaluation, however, the monitoring skills of the Fédérations were confirmed to be insufficient and school facilities in need of repairs were left unrepaired. The situation compelled the CGDES to demand the Departmental CGDES officers to monitor the schools. The means by which the Fédérations secure a monitoring framework and the means by which the departments of CGDES officers engage more actively in monitoring need to be considered from this time forward. Only one Departmental CGDES officer is allocated in each department, and it seems difficult for the department to monitor all of the schools under its purview periodically. Considering that facilities in need of repairs are left unrepaired, the departments of CGDES officers need to be further involved in monitoring and the monitoring skills of the Fédérations who monitor the schools on a routine basis need to be improved.

・Use of the Guideline and Manuals

It was expected that effects generated by the Project remained and activities implemented by the Project were to disseminate to other schools after the project completion through the use of manuals and the Guideline for activities formulated by the Project for the improvement of school management and O&M. According to the beneficiary survey, the Guideline and manuals were not well known even among the target schools personnel and therefore were not utilized as planned. Some schools were confirmed to have implemented O&M for school facilities without the use of the Guideline or manuals. The Guidelines and manuals feature the basic matters of school management and O&M. These materials, together with additional provisions which can be designed to meet the specific needs of each school, will help the schools to conduct management and O&M in an appropriate manner from a long-term perspective. Thus, it is recommended that the CGDES and target schools should review, if necessary, and make the most of these Guidelines and manuals.

4.2.2 Recommendations to JICA

None

4.3 Lessons Learned

・Securing the handover of the Guideline and manuals

The ex-post evaluation revealed that the rate of Guideline and manual utilization was approximately 40%. One explanation for the low utilization rate may be a failure to hand over the Guideline and manuals when CGDES members including school principals are replaced. Some school principals and teachers were unable to identify the Guideline and manuals, and some parents likewise lacked knowledge of their existence.

In order to ensure the use of the Guideline and manuals, awareness and recognition of the Guideline and manuals should be heightened and a protocol should be clearly defined for handing over the Guideline and manuals during the replacement of personnel such as CGDES members who implement O&M for school facilities. CGDES members and parents also need to recognize the importance of handing over the Guideline. If the handovers are not appropriately done, it will be necessary to develop an environment which allows the CGDES officers in local administrative organizations (the Regional/Departmental Directorates of Education and communes) to point out any problems that they find out.