Ex-Post Evaluation of Japanese Grant Aid Project

"The Third Project for Construction of Primary Schools"

External Evaluator: Jun TOTSUKAWA, Sano Planning Co., Ltd.

0. Summary

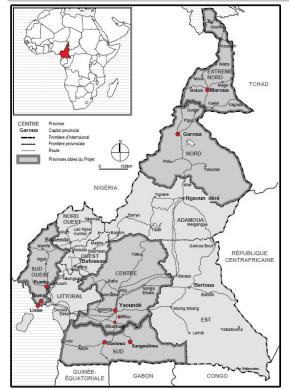
In Cameroon, lacks of classrooms in primary schools and overcrowded conditions per classroom have been a growing concern. The construction of new classrooms by this grant aid project was expected to fulfill this urgent need, and thereby it is considered to be highly relevant. As a result of its implementation, the average number of students per classroom in the target schools has fallen from 62 to 44, which are fewer than 50 as the government of Cameroon has so far striven to achieve.

In addition, newly constructed schools have improved the school environment, which in turn has contributed to make students more willing to learn. At the same time, their teachers think that they are more motivated than before in pursuing their work. Compared to before the construction, a positive impact has been found over several schools where the pass rate of graduation examination has improved.

In terms of the project sustainability, it can be generally said that the target schools manage to ensure maintenance system and financial resources. This is primarily attributed to efforts of a Japan unit for project implementation established within the Ministry of Primary Education.

Overall, this project is evaluated to be highly satisfactory.

1. Project Description



Project Location



External appearance of a constructed school building (Primary School of Ebolowa in South region)

^{*} Cities with red dots are project sites for primary school construction.

1.1 Background

In 1980s, the economic stagnation of Cameroon had worsened poverty across the country, and as a result, the enrolment rate of primary schools fell down from above 90% to 74.7% in FY1995. In addition, the educational environment had rapidly deteriorated as the austere financial policy by the government at that time had cut down investment in educational facilities and recruitment of teachers. Although, the school enrolment rate had steadily improved along with the economic recovery since 1995, a negative effect of suspending educational provisions for past years was so significant that lack of classrooms became a serious problem, unable to catch up an increasing number of students. Moreover, existing school buildings had further deteriorated. As of 2003, it was estimated that the number of classrooms was insufficient as many as 14,600 over the country, and temporary classrooms rose up to 18% as a proportion of the total number of the existing classrooms.

To address these problems, the government of Cameroon has developed policies to realize equal access to education and improvement of qualities of the education. Those objectives are underpinned in the "Education Sector Strategy" announced in 2001 that is a basic policy in education, and also in the "Poverty Reduction Strategy Paper" prepared in 2003 as a basis of the mid-term national development plan. In primary education, the government has aimed at realizing a class size of no more than 50 by constructing about 2,500 classrooms every year, while also recruiting teachers as required. Although the costs of these provisions have been covered by way of external funding as debt reduction, the financial resources of the government are far from sufficient to achieve the plan. This has resulted in the construction of classrooms as few as about 1,000 per year.

The lack of classrooms is serious in populated large cities as well as in North and Far North regions where educational development is particularly lagged behind. The number of students per classroom reaches 112 in Garoua in North region, 91 in Maroua in Far North region, and 73 in Yaounde in Central region respectively. As a result, classes have been often constrained in overcrowded situations with over 100 students per classroom, or many schools had to manage two shift schooling in order to secure the room capacity. This project has thus targeted those areas where such urgent need for classrooms had to be fulfilled.

1.2 Project Outline

The objective of this project is to contribute to improve the learning environment for students at primary schools, by providing school facilities, equipment and basic teaching materials at 33 primary schools in five regions.

Grant Limit / Actual Grant Amount	2,617 million yen /2,596 million yen
Exchange of Notes Date	August, 2004 (Phase 1), June, 2005 (Phase 2), June, 2006 (Phase 3)
Implementing Agency	Ministry of Primary Education

Project Completion Date	November, 2007			
Main Contractor(s)	Shimizu Corporation			
Main Consultant(s) Matsuda Consultants International and AAU Co., Ltd. (joint venture)				
Basic Design	February, 2004			
Related Projects (if any)	"The First Project for Construction of Primary Schools" (Grant Aid: 1997-1999) "The Second Project for Construction of Primary Schools" (Grant Aid: 2001-2003)			

2. Outline of the Evaluation Study

2.1 External Evaluator

Jun TOTSUKAWA, Sano Planning Co., Ltd.

2.2 Duration of Evaluation Study

This ex-post evaluation was undertaken on the following schedule.

Duration of the Study: October, 2010 - October, 2011

Duration of the Field Study: February 19, 2011 – March 9, and 2011, June 12, 2011 – June 27, 2011

2.3 Constraints during the Evaluation Study

Not found.

3. Results of the Evaluation (Overall Rating: A¹)

3.1 Relevance (Rating: 3²)

3.1.1 Relevance with the Development Policy of Cameroon

The government of Cameroon developed the "Education Sector Strategy" in 2001 which is a basic policy in education, and subsequently the "Poverty Reduction Strategy Paper" in 2003 as a basis of the mid-term national development plan, both that stresses education as one of the major issues to work through. These strategies aim at universalizing primary education and redressing educational disparities through ensuring equal opportunity in education as well as improving the quality of education. Given this policy background, this project is to contribute to expanding "equal opportunity in education," and thereby is highly relevant with the country's development strategies and policies that endorse such objective.

The revised "Education Sector Strategies" in 2006 essentially take over the principles and objectives of the preceding strategy. Namely, the priorities are to 1) redress educational disparities and achieve full rates of enrollment and graduation, 2) improve efficiencies and qualities of educational services, 3) develop an effective partnership between schools and communities, and 4) manage better education system and improve school governance. Accordingly, this project is designed to promote 1) redressing educational

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

² ① : High, ②: Fair, ③: Low

disparities and 2) improving efficiencies and qualities of education. Therefore, it remains consistent with policies of the government of Cameroon from at the time of the project planning through its completion.

3.1.2 Relevance with the Development Needs of Cameroon

(1) The development needs at the time of project planning

In Cameroon, along with the economic recovery since 1995, the school enrollment rate had steadily increased. In the 2002-03 academic year, the gross enrollment rate reached as high as 99.6%. However, since investment in educational facilities had been severely cut during an economic recession in the 1980s and 1990s, insufficient classrooms as well as overcrowded conditions have become a serious problem since the late 1990s. At the time of planning this project, it was estimated that the number of classrooms was insufficient as many as 14,600 over the country, and temporary classrooms reached up to 18% as a proportion of the total number of the existing classrooms.

In addition, while the government of Cameroon had attempted to provide better learning environment by constructing about 2,500 classrooms every year, the actual output remained as few as about 1,000 per year due to its financial difficulties.

In the light of these, this project supporting classroom provisions is considered to be consistent with the development needs of Cameroon.

Moreover, as indicated in the Table 1, while the number of student per classroom is 48.8 at the national average as of 2002, that of the target schools of this project is as many as 96.3, which illustrates excessively overcrowded conditions. This fact also underpins the pressing needs which this project expected to meet.

(2) The development needs at the time of the ex-post evaluation

Over the past 10 years until the ex-post evaluation of this project was undertaken, the government of Cameroon had made its own efforts to improve educational facilities. And yet, students are still forced to learn under severe circumstances of overcrowded classrooms in deteriorated facilities, besides two shift schooling.

So far, the government of Cameroon, that of Japan, African Development Bank, Islamic Development Bank, and other donors have respectively constructed new classrooms to achieve the above-mentioned objectives defined in the Education Sector Strategies (including its revision). Nonetheless, the number of classrooms has not yet been satisfied compared to that of students enrolled.

For this reason, it can be said that the construction project of new classrooms continues to be relevant at the time of the ex-post evaluation, as it is still consistent with the important development needs in the education sector of the country today.

Table 1 Change of the total number of students in primary education, the gross enrollment rate and the net enrollment rate (%)³

	1995	2000	2002	2007	2008	2009
Number of students	1,786,340	2,689,052	2,798,523	3,201,477	3,350,662	3,502,636
Gross enrollment rate (%)	74.7	99.3	99.6	104.5	103.2	104.9
Net enrollment rate (%)	NA	NA	NA	82.9	83.1	85.8
Number of student per classroom	NA	NA	48.8	49.5	51.5	50.2

Source: The Annual Statistics of Ministry of Education

Table 2 Change of the number of constructed classrooms across the country

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			2004	2005	2006	2007	2008	2009	2010
Number of classrooms		Public and private schools	-	-	-	64,550	64,941	69,804	72,485
		Public schools	-	-	-	44,865	44,512	47,107	48,802
		PPTE(HIPC)	646	0	429	874	586	456	1,061
Number of Compression	BIP	300	422	546	880	870	549	ı	
newly	Cameroon	MDRI	-	-	-	293	ı	ı	ı
constructed		Japan	163	138	150	138	ı	ı	132
classrooms	Donors	BAD	114	-	-	-	ı	ı	-
		BID	72	-	-	-	ı	ı	-
Total number	er of newly construc	cted classrooms	1,295	560	1,125	2,185	1,456	1,005	1,193

Note 1: MDRI: Multilateral Debt Relief Initiative, BIP: Budget Investment Public, PTTE: Fond Pays Pauvre Tres Endette

Note 2: The number of newly constructed classrooms by this project is a sum of the columns between 2005 and 2007 in a row of Japanese fund.

Source: The Annual Statistics of Ministry of Education, and the reference by the Department of Statistic in Ministry of Education

3.1.3 Relevance with Japan's ODA Policy

This project provides support for education sector which "Japan Official Development Assistance (ODA) Charter" (August, 2003) defines as one of the high priorities to work for.

Furthermore, at the time of the project planning, the government of Japan stated regarding its development assistance for Cameroon that it would engage particularly in meeting basic human needs of the country, developing infrastructure of such sectors as education (construction of primary schools and training institutions for teachers), water supply (especially in rural areas), heath care, and fisheries (small-scale fishery promotion).⁴

Given these backgrounds, the development assistance in education sector in Cameroon is considered to be one of Japan's principal concerns. Therefore, this project is considered to be relevant with Japan's ODA policy.

³ The net enrollment rate is the number of children who are enrolled in primary education as a percentage of the total children of the official school age population (thereby it only includes children of the official school age). The gross enrollment rate, on the other hand, is the number of children of any age who are enrolled in primary education as a percentage of the total children of the official school age population. Therefore, the latter includes children with grade repetition or delayed enrollment, which is likely to exceed 100% in some cases.

⁴ Source: ODA Country Data Book 2004. The government of Japan generally formulates Country Assistance Programs for selected countries, and Cameroon is not yet included.

In the light of all these policy directions, this project has been highly relevant with Cameroon's development plan, development needs, as well as Japan's ODA policy, therefore its relevance is high.

3.2 Efficiency (Rating: ③)

3.2.1 Project Outputs

This construction project has been implemented in the 33 school sites in five regions including Central region, South region, Southwest region, Far North region and North region.

Table 3 Project outputs

	Number of schools	Number of classrooms	Number of principal's offices*	Other
Central region	8	140	30	 Toilet facilities
South region	5	38	10	45
Southwest region	10	110	22	 Multipurpose
Far North region	7	74	14	rooms 14
North region	4	64	8	
Total	33	426	84	_

Note: The schools at the project sites employ two shit schooling in the morning and afternoon and teaching by groups, and accordingly more than one principal work at school. Thus, the number of principal's offices does not necessarily correspond to that of schools.

In addition to outputs indicated in the Table 3, the project has provided for each target school with such equipment as chairs, desks and notice boards as well as basic tools including scales, compasses, maps, and flip charts.

Difference between actual outputs and planned outputs

While minor revisions to design were made over a location of toilet facilities and classroom buildings, the number of classrooms and other facilities were completed as planned.

3.2.2 Project Inputs

3.2.2.1 Project Cost

The planned cost and actual cost of the project are indicated in the Table 4 as below, and the project cost was lower than planned.

Table 4 The planned and the actual cost of the project

	Planned cost	Actual cost
Phase 1	796 million yen	790 million yen
Phase 2	889 million yen	886 million yen
Phase 3	932 million yen	920 million yen
Total cost	2,617 million yen	2,536 million yen (96.0% compared to the planned cost)

[Difference between the planned and actual cost of the project]

The project cost was almost as planned, but it was slightly lower than estimated. This was primarily due to changes of airfare and bid price of local construction contractors, both occurred during the project period.

[Reference : Comparison between the preceding projects and similar projects of other donors]

 Comparison between this project and the preceding projects (The First Project and the Second Project)

Compared with the preceding projects implemented as the First Construction Project of Primary Schools (1997-1999) and the Second Construction Project (2001-2003), this Third Project attempted to change building frames, modify finishing process as well as facility components (including scaling down a classroom size and corridors, reducing the number of multipurpose rooms). As a result, the overall construction cost was lowered.

Moreover, local contractors working since the First Construction Project have steadily developed their technical capabilities. This has enabled to make more efficient plan of construction works, allocation of supervisors and their staffs engaged in the construction works. These factors contributed to reducing cost for labour and construction.

Table 5 Comparison of the project cost (the First through Third Construction Project funded by Japan)

(the first through Third Construction Froject funded by Japan)						
	per floor area	per classroom	Floor area per classroom			
	Direct construction cost 1,000 yen/m ²	Direct construction cost 1,000 yen/classroom	(m ²)			
The First Construction Project	45.5	6,135	134.8			
The Second Construction Project	43.5	5,247	120.5			
The Third Construction Project (the target of this ex-post evaluation)	38.0	4,021	105.8			

Source: The Basic Design Study Report of the Third Construction Project of Primary Schools in Cameroon

2) Comparison between this project and similar projects by other donors

Compared with other donors' projects for school construction, the cost of this project is slightly higher, as it has employed aseismic structure (which is the Rahmen structure with reinforced concrete).

While other donors generally apply confined masonry structure, the duration period of the school buildings constructed by this project is 60 years, which is half as long again as those constructed by other donors. In the long run, therefore, the unit cost of a Japan-funded school is within a reasonable expense.

In Cameroon, furthermore, volcanic earthquakes have been often recorded. Applying earthquake-resistant design is considered to be a practical decision.⁵

⁵ So far in Cameroon, effects of earthquake have not been considered in structural design. In recent years, however, the

Table 6 Comparison of the project costs (this project and similar projects of other donors)

	Project	Year of	per floor area	per classroom	Number of
	resources	estimation	Direct construction cost 1,000 yen/ m ²	Direct construction cost 1,000 yen/classroom	classrooms
Construction Project of 48 Primary Schools	Loan (Islamic Development Bank)	1998	30.3	3,161	294
Construction Project of 1241 Classrooms	Government of Cameroon/ HIPC Fund	2003	26.9	2,328	1,241
Third Construction Project of Primary Schools	Grant aid (Japan)	2004	38.0	4,021	426

Source: The Basic Design Study Report of the Third Construction Project of Primary Schools in Cameroon

3.2.2.2 Project Period

The planned project period and the actual period are indicated in the Table 7 as below, and the entire project period was shorter than planned.

Table 7 Planned and actual project periods

Project phase	Planned	Actual
Phase 1	August, 2004-Feburary, 2006 (19 months)	August, 2004-October, 2005 (15 months)
Phase 2	June, 2005-Feburary, 2007 (21 months)	June, 2005-October, 2006 (17 months)
Phase 3	June, 2006-Feburary, 2008 (21 months)	June, 2006-November, 2007 (18 months)
Total project period	August, 2004-Feburary, 2008 (Net duration: 43 months) (Total months added all phases: 61 months)	August, 2004-November, 2007 (Net duration: 40 months) (Total months added all phases: 50 months (93% and 81% respectively compared to the planned period

Source: Document by JICA

[Difference between the planned and actual project period]

As mentioned above, the project period was shortened primarily due to the experienced local contractors who had engaged in the First and Second Construction Projects. Within a shorter time frame, they efficiently managed a preparation period from transporting and allocating materials to stating construction work.

In the light of these factors above, both the project cost and project period were within the plan, therefore efficiency of the project is high.

importance of earthquake resistance and structural durability has been increasingly recognized (Currently, certain criteria for material components are defined by the French norm, ANFOR, an industrial standard adopted in Cameroon). The Department of International Affairs at Ministry of Education mentioned that by consulting with the projects implemented by Japan it would be desirable to develop design standards or a guideline for construction applicable in Cameroon.

3.3 Effectiveness (Rating: ③)6

3.3.1 Quantitative Effects

The quantitative effects of this project have been achieved as indicated in the Table 8.

Table 8 Degree of achievement of the quantitative effects

Indicator	Baseline	End target	Output
(measure of unit)	(2003/04)	(2008/09)	(2009/10)*
Number of students per	96.3	62.0	44.8
classroom (person)*	90.3	02.0	44.0
Number of temporary and			
deteriorated classrooms on	280/537	0/683	_
the project sites/Total	(52.1%)	(0%)	
number of classrooms			

Note 1: The number of students per classroom at the target schools

Note 2: The output indicator of 2008/09 was unable to obtain, therefore it is substituted with the indicator achieved in 2009/10.

Source: The Basic Design Study Report of the Third Construction Project of Primary Schools in Cameroon, and document by Ministry of Primary Education

While the number of students per classroom targeted by this project was 62, the actual output achieved is successfully surpassed a government target, 50.

Furthermore, it was observed on this ex-post evaluation study that the constructed school facilities have been mostly used in a good condition.

Besides these project effects, several other factors contributed to significantly improving overcrowded conditions in classrooms. In 2007, seven years of primary schooling in Cameroon was changed to six years. Also, the grade repetition rate has been lowered over the country due to policy direction. (The grade repetition rate in Francophone schools was 14.9% in the 2009/2010 academic year down from 28.1% in the 2002/2003 academic year. Accordingly, in Anglophone schools, it was 12.2% down from 17.4% in the same period⁷.)

It should be noted that the Ministry of Primary Education does not keep a precise record on how many temporary and deteriorated classrooms are still in use on the project sites because some schools still need these facilities besides newly completed classrooms for some special events. In the survey on the project sites, it was often observed that those temporary or deteriorated classrooms are somehow still in use. For this reason, the indicator mentioned above is not perfectly valid for evaluating the quantitative effects in this context.

3.3.2 Qualitative Effects

The qualitative effects to be achieved by this project are the following four aspects. Each outcome has been positively observed.

(1) School facility environment is improved by reconstructing deteriorated classrooms.

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⁶ Effectiveness is evaluated taking impacts into consideration.

⁷ Source: Document by Ministry of Primary Education

- (2) Overcrowded conditions are improved by increasing the number of classrooms.
- (3) Learning effects are enhanced by providing educational tools.
- (4) Hygienic environment is improved by installing toilet facilities.

Regarding (1) and (2) above, the numerical evidence on the quantitative effects clearly indicates positive outcomes. Moreover, in a beneficiary survey⁸ conducted at this ex-post evaluation, a majority of the respondents said that overcrowded conditions of classrooms were improved compared to before the project implementation.

Table 9 Recognition on the improvement of overcrowded conditions (responses by teachers and PTA)

	Significantly improved	Generally improved	Not changed	Worsened	Total
Quantity of responses	43	41	10	2	96
%	44.8	42.7	10.4	2.1	100

Note: Responses by 78 teachers and 18 members of PTA

Source: The beneficiary survey

Regarding (3) on learning effects, new educational tools, which were previously unavailable, are utilized in each classroom, including large scales, maps and flip charts with various illustrations, contributing to enhancing the understanding of students. In particular, because visual aids such as flip charts are rarely used in Cameroon, they work well to attract attentions of students and to help their better comprehension of subjects.

Table 10 Recognition on the degree of understanding with the use of educational tools (response by teachers)

	Significantly increased	Somewhat increased	Not changed	Worsened	Total
Quantity of responses	42	29	6	1	78
%	53.8	37.2	7.7	1.3	100

Source: The beneficiary survey

Regarding (4) on the hygienic environment among the expected qualitative effects, it has been obviously improved compared to prior inadequate and unsanitary facilities. Along with improved toilet facilities, a positive secondary effect was found in that education on hygiene has been promoted at school.

⁸ The beneficiary survey was conducted at 13 schools equivalent to a half of the targeted schools. They include 5 (out of 13) schools in Central and South regions, 4 (out of 10) schools in Southwest region, 4 (out of 10) schools in Far North and North regions. The total number of the respondents is 704, including the following 104 persons from those 13 schools: 1) principal, 2) representatives of PTA (2 respondents), 3) teachers (5 respondents), 4) students (the entire class).

Table 11 Recognition on improvement of the hygienic environment by toilet installation (responses by teachers and PTA)

	Significantly increased	Somewhat increased	Not changed	Worsened	Total
Quantity of responses	71	25	0	0	96
%	74.0	26.0	0	0	100

Note: Responses by 78 teachers and 18 members of PTA

Source: The beneficiary survey

In the light of these effects found, this project has achieved its objectives, therefore its effectiveness is high.

3.4 Impact

3.4.1 Intended Impacts

The impacts of this project have been observed as follows.

(1) The impact on the quality of education and motivation to learn

It has been observed that as a result of this project implementation the quality of education has been improved and that students' motivation to learn has been fostered. The impacts of the project on these two aspects are described in detail as below, focusing on "enhancement of students' learning motivation," "increase of the pass rate of graduation examination," and "enhancement of teachers' motivation."

(1)-1 Enhancement of students' learning motivation

The improvement of the school environment has led to fostering students' motivation to learn. More than 90% of the students responded that they have become more willing to learn as a result of improved school facilities.

Table 12 Recognition of students on their learning motivation

	2				
	Highly motivated	Somewhat motivated	Not changed	Worsened	Total
Degree of learning motivation fostered by school facilities improvement	675 (90.1%)	43 (5.7%)	14 (1.9%)	8 (1.1%)	740
Degree of learning motivation fostered by educational tools	547 (73.0%)	160 (21.4%)	31 (4.1%)	2 (0.3%)	740

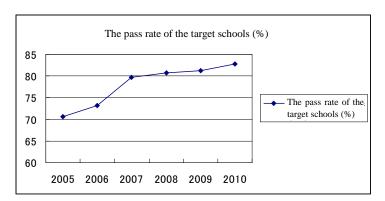
Note: The respondents are selected from highest graders in order to make values comparable before and after the project implementation.

Source: The beneficiary survey

(1)-2 Increase of the pass rate of graduation examination in primary education

In the 13 target primary schools of the beneficiary survey, the pass rate of graduation examination has been steadily improved. Since around 2006, when the project was just about complete, the pass rate started to show an increase, and it is slightly higher than the national average (The pass rate of the target

schools in 2009 was 81.3% as compared to 80.9% of the national average).



Graph 1 Change in the pass rate of graduation examination in primary education (an average of the 13 target schools of the beneficiary survey)

(1)-3 Enhancement of teachers' motivation

Newly constructed school facilities have supposedly contributed to enhance motivation of teachers as well.

In the beneficiary survey for teachers, about 62% of them said that they are more motivated than before the project implementation. For many of the respondents, as found in the survey, working as a teacher at "Japan school" noted in local communities has nurtured their self-respect, leading to higher sense of commitment in education.

(2) Impact on improvement on management capacities of document and teaching materials

Installing a storehouse has enabled organized storage and appropriate utilization of document and teaching materials, contributing in part to enhancing capacities to manage materials. More than 80% of the teachers responded that conditions storing documents and materials have been improved. On the project sites, it was observed that materials are used in an organized manner at many of the schools.

3.4.2 Other Impacts

(1) Impacts on the Natural Environment

Positive or negative impact on the natural environment has not been found.

(2) Land Acquisition and Resettlement

No land acquisition or resettlement has been undertaken.

(3) Other impact

In some cases, more students than estimated have been enrolled since the target schools of the projects had gained an increasing popularity. One of such examples is that EPF Buea School has more than 30

⁹ A graduation examination in primary education is offered for those students who wish to go on to the secondary school. About 50 to 60% of the highest graders take this examination.

students who commute by their parents' car driven over approximately 20 kilometres.

However, the popularity has not caused overcrowded conditions of classrooms at the same level as before the project. This is primarily due to an increasing private and public schools constructed around neighboring areas of the project sites.

In the light of these mentioned above, the project has given positive impacts on the quality of education and learning motivation.

3.5 Sustainability (Rating: ③)

3.5.1 Structural Aspects of Operation and Maintenance

In 2007, a "Japan unit for project implementation" was set up within the Ministry of Primary Education, ¹⁰ which undertakes maintenance of the facilities built by the Japanese ODA as well as educational activities to foster their sustainable operations (The Japan unit currently employs 10 staffs including engineers).

By installing the Japan unit, the sustainability of operation and maintenance has been increased more than expected at the time of the project planning. The Ministry of Primary Education plans to carry through this Japan unit, and thereby a probability is that the sustainability of the project will be ensured at the central government level.

The Japan unit, for instance, undertook in 2008 and 2009 such an educational activity as picture drawing contests with a subject of how one can keep his or her school clean. Also in 2010 and 2011, it carried out a "KIREI NA GAKKO Competition" (meaning a clean school), which awards distinguished schools working for cleanliness and maintenance of the facilities. As observed in several project sites, these activities with educational purpose have led some schools to start unique efforts such as growing trees and plants over the schoolyard.

Thus as long as the Japan unit ensures operation and maintenance of the school facilities, the sustainability is considered to be high.

Besides the ministry involvement, general operation and maintenance of the facilities is entrusted with shared responsibilities among a school, PTA and the school council. However, because most of the school councils are not practically functioning, the schools and PTAs assume a role of managing their school facilities.¹¹

Although there are some differences in organizational capabilities depending on PTAs, most of them occasionally have meetings with their schools or the parents. It is presumably considered that a certain

¹⁰ Given that the construction projects by Japanese grant aid have been carried out for extended period, the unit was established in 2007 for the purpose of specifically engaging in such operation as planning, allocating budget, supervising bid and maintaining constructed facilities.

¹¹ A school council generally constitutes of about 10 members with a principal, PTA members and a community representative such as a village chief. According to the hearing at the ex-post evaluation, however, it is not functioning primarily for the following reasons; 1) there is no control tower to direct council activities (and while the Ministry of Primary Education is essentially to assume this role, it offers virtually no support), 2) neither the Ministry of Primary Education or the local government provide financial resources for activities, and 3) since roles of a school council somewhat overlap those of PTA, objectives of its activities tend to remain undefined.

framework is somehow retained for sustainable operation and maintenance.

3.5.2 Technical Aspects of Operation and Maintenance

The facilities of this project employed specifications that require no specialized techniques in their maintenance. Thus, the structural sustainability seems to be mostly ensured.

A primary example of design specifications enabled maintenance-free facilities is a use of hollow blocks. In this project, windows have applied those blocks instead of roll-up shutters which normally require regular maintenance. As a result, little damage has been observed with minimum maintenance work. In addition, classrooms with hollow blocks need no lighting. (Until recently similar projects of other donors installed lighting, but, using hollow blocks has become increasingly popularity.)

As for repairs, quite minor adjustments have been so far made such as door lock. Whenever necessary, teachers, PTA or a local repairer in a village or town have fixed problems at their own cost. Technical aspects of sustainability are therefore considered to be high.

3.5.3 Financial Aspects of Operation and Maintenance

For regular repairs and repairs on extensive damage, they are expected to be financed by the Japan unit from the budget allocated for operation and maintenance. Minor repairs, as mentioned above, will continue to be covered by a financial contribution by PTA.

In 2009 and 2010, the Japan unit undertook rehabilitations including recoating of the schools of the First and Second Construction Projects. It also plans to rehabilitate the schools constructed by this project approximately 10 years after their completion. These indicate a possibility of a sustainable, long-term use of the facilities.

Table 13 Budget of the Project Implementation Unit (FY 2011)

E	J 1	, ,	
Items of expense	Number of the	Amount of budget	Percentage of
items of expense	project unit	(1,000 Fcfa)	the total budget
Construction and rehabilitation*	51.1%		
Rehabilitation of the primary schools constructed by	7	119,000	32.6%
Japan including repairs and recoating (West region and			
Central region)			
Rehabilitation of the primary schools constructed by	3	67,500	18.5%
Japan including drainage facilities (Coast region and			
Central region)			
Maintenance*	48.9%		
Salaries	12	45,600	12.5%
Monitoring and evaluation	_	41,507	11.3%
Overseas training for employees	4	10,296	2.8%
Rent for Japan Overseas Cooperation Volunteer	10	10,000	2.7%
(JOCV)			
Other	_	70,661	19.3%
(Utilities, office rent, fuel cost)			
Total	_	364,564	100%

Note: The budget (FY2011) indicated above is allocated for the schools completed by the Second Construction Project. The rehabilitation of those schools will be finished in 2011.

Source: Document by Ministry of Primary Education

Minor repairs, on the other hand, will be presumably covered by PTA membership fees, as the amount

is expected to be relatively small.

Although only about a half of the PTA members pay membership fees, they will be sufficient to meet the expenses of minor repairs because many of the schools register a large number of students due to two shift schooling. Therefore, few concerns are seen over financial sustainability regarding payment for minor repairs.

[Examples of financial contributions by PTA]

(Case 1) In the project site of GBS Essos School in Yaounde, the number of students is as many as 4,246, taking two shift schooling by four groups. Even if only a half of their parents pay their PTA membership fees of 2,000Fcfa annually, the sum of those collected fees would be as much as 4.25 million Fcfa. Estimated that an exchange of a broken door lock costs approximately 5,000Fcfa, minor repairs of similar cases are likely to be covered by part of the PTA membership fees.

(Case 2) Many of the PTAs contribute to school operations by employing security guards, cleaning workers and teachers. Of the 13 target schools of the beneficiary survey, 9 schools employ security guards, 2 schools having cleaning works, 5 schools hiring up to 8 teachers. School operations carried on cost sharing indicate a positive prospect for financial sustainability.

3.5.4 Current Status of Operation and Maintenance

Minor damages were repaired over door lock and other parts so far at many of the schools. In some of cases, those broken locks have been fixed with simple box nails, instead of replacing by purchase. However, there seems to be no case that severe damages on roofs or walls remain overlooked. In other cases, a principal's office was once burglarized, and then the school has installed with metallic double doors and pillars blocking the roof-spaces to prevent intrusion.

As a whole, the sustainability of the project is considered to be high, given that it is generally possible to maintain these facilities with locally available materials and techniques.

In the light of these mentioned above, no major problems have been observed in the operation and maintenance system, therefore the sustainability of the project is high.

4. Conclusion, Lessons Learned and Recommendations

4.1 Conclusion

In Cameroon, lacks of classrooms in primary schools and overcrowded conditions per classroom have been a growing concern. The construction of new classrooms by this grant aid project was expected to fulfill this urgent need, and thereby it is considered to be highly relevant. As a result of its implementation, the average number of students per classroom in the target schools has fallen from 62 to 44, which are fewer than 50 as the government of Cameroon has so far striven to achieve.

In addition, newly constructed schools have improved the school environment, which in turn has contributed to make students more willing to learn. At the same time, their teachers think that they are more motivated than before in pursuing their work. Compared to before the construction, a positive impact has been found over several schools where the pass rate of graduation examination has improved.

In terms of the project sustainability, it can be generally said that the target schools manage to ensure maintenance system and financial resources. This is primarily attributed to efforts of a Japan unit for project implementation established within the Ministry of Primary Education.

Overall, this project is evaluated to be highly satisfactory.

4.2 Recommendations

4.2.1 Recommendations to the Implementing Agency

In this project, the Ministry of Primary Education has established the Japan unit for its implementation, and continued its efforts to strengthen facility maintenance, as observed in such educational activities as picture drawing contests and "KIRE NA GAKKO Competitions."

While "KIRE NA GAKKO Competitions" in 2011 have been undertaken only around Yaounde in Central region, it is desirable to expand such opportunity over the country.

Furthermore, it is suggested that the Japan unit pursues more diverse educational activities for better facility maintenance. For instance, a KIREI NA GAKKO Competition can be more than just an event, and it is expected that the Competition will develop the winner as a model school for other lower ranking schools. A study tour to the model school may be a chance to learn its good practice.

4.2.2 Recommendations to JICA

Not found.

4.3 Lessons Learned

The Japan unit for project implementation established by the Ministry of Primary Education is an effective organization in enhancing the project sustainability. By taking overall control over the project implementation, the unit has gained assignment to play specific responsibilities, avoiding overlapping or scattering operations with other sections/staffs.

Furthermore, as in the case of this project, a long-term project with several subsequent phases is more likely to foster experienced staffs, know-how and networks obtained from the preceding projects. The experience indicates that a project implementation unit has played a central role in that process, therefore can be an effective means to increase overall efficiency including administrative cost reduction for the government.

Column

This Construction Project of Primary Schools is known as one of the longest and the most distinguished Japanese development assistance in Cameroon.

Since 1997 when the First Construction Project of Primary Schools started, Japan has continued its assistance expanding all over the 10 regions in Cameroon, implementing the Second Construction Project from 2001 to 2003, this Third Construction Project from 2004 to 2007, and the Forth Project from 2009 to 2011. Most recently, the Fifth Construction Project was officially agreed in July, 2011, having the Exchange of Notes signed. The number of the schools constructed by these projects is 1,333 classrooms in total (which is estimated to be 1,521 classrooms including the plan of the Fifth Construction Project). In the communities, they have gained popularity by name of "Japan schools," regarded as clean and refined schools.

The schools constructed by these projects have distinctive features in not only their refined designs, but also antiseismic structures with specifications requiring little maintenance. At first, however, some of the unique specifications were regarded unfamiliar with the local experiences. Today, using hollow blocks over the windows instead of lighting has become a common method, increasingly applied by the government of Cameroon and other donors.

It is noteworthy that this project, fully utilizing the experiences obtained since the First Construction Project, has successfully managed cost reduction and modification of specifications. For instance, a teachers' room requested by the government of Cameroon was used less frequently than expected, and therefore has been changed to a multipurpose room after the Third Construction Project. Also, careful considerations over local practices are reflected in changing components. Toilet facilities been substituted with a retention system that is more familiar and practical for users. It also saves costs for laying water pipe the implementing agency had to bear.

Also noteworthy is that the government of Cameroon has made significant efforts in implementing this project. As represented in establishing the Japan unit for project implantation in 2007, the Ministry of Primary Education has committed to ensure the sustainability of the completed and ongoing construction projects. Those efforts include rehabilitation of the constructed facilities and promotion of educational activities, both that were unexpected outcomes on the Japanese side. They have certainly contributed to the project achievement.

The Ministry of Primary Education states that having learned from the experiences they are now at a new stage to work toward expanding all over the country a good model of "Japan schools."