Federal Republic of Nigeria

FY2016 Ex-Post Evaluation of Japanese Grant Aid Project "The Project for Construction of Additional Classrooms for Primary Schools (Phase II)" External Evaluator: Koichiro Ishimori, Value Frontier Co., Ltd.

0. Summary

The objective of the project was to improve educational environment by constructing school facilities such as classrooms at primary schools in Kano State, contributing to expanding access to and improving the quality of primary education. The project has been highly relevant to Nigerian development plan and development needs, as well as Japan's ODA policy in terms of improving environments of and access to primary education. Therefore, its relevance is high. While the project cost was within the plan, the project period exceeded the planned period. Therefore, efficiency of the project is fair. The operation and effect indicators for the quantitative effects of effectiveness (such as the number of appropriate classrooms) have achieved their targets. Moreover, the indicators for the qualitative effects (such as daily class management) have shown improvement to a certain extent. Since impacts have also been observed in stable class management, which is no longer affected by weather throughout the year, and on disabled students, effectiveness and impact of the project are high. Meanwhile, major problems have been observed in terms of the institutional, technical, and financial aspects of operation and maintenance, and the current status of the constructed school facilities does not seem good. Therefore, sustainability of the project effects is low.

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

1. Project Description



Project location



Classroom constructed by the project at Tumfafi Primary School

1.1 Background

Nigeria was one of the greatest agricultural countries in Africa, producing various agricultural products. However, after the discovery of oil in the late 1960s, the country has changed its economic structure to one dependent on oil. It then repeatedly experienced civil wars over oil

and the domestic affairs of the country were unstable for a long time. Consequently, infrastructural development lagged and the development of primary school facilities providing basic education¹ that is basic human needs² significantly lagged in rural areas. Based on a request from the government of Nigeria, the government of Japan implemented a grant aid project called "the Project for Construction of Additional Classrooms for Primary Schools" from 2004 to 2008 in Niger State, Plateau State, and Kaduna State in the west, east, and north of the country, respectively. The project ended up developing 490 school facilities, such as classrooms, at 70 schools in the 3 states. However, there was still a great demand for primary schools in rural areas. Therefore, the government of Nigeria requested from the government of Japan a new grant aid project called "the Project for Construction of Additional Classrooms for Primary Schools (Phase II)" in Kano State, Katsina State, Ebonyi State, Oyo State, Borno State, Adamawa State, and Gombe State, where there was great demand. Based on this request, the government of Japan implemented the outline design from 2009 to 2010, presuming an application of "the Grant Aid Project for Community Empowerment3" which was newly created in 2006. Afterwards, it was decided to implement the project only in Kano State, where the demand was greatest.

1.2 Project Outline

The objective of the project was to improve educational environment by constructing school facilities such as classrooms at primary schools in Kano State, contributing to expanding access to and improving the quality of primary education.

¹ According to the JICA's Thematic Guidelines on Basic Education, there is no universal definition of basic education. Generally, however, "educational activities enabling people to acquire knowledge and skills required to live in a society" are called "basic education." They usually include infant care, preschool education, primary education, junior secondary education, and non-formal education to cover the aforementioned education such as literacy education, adult education, religious education, and community education.

 $^{^2}$ Basic human needs are the minimum things, health, and education required in the basic lives of human beings, such as food, clothing, and shelter.

³ This is an aid scheme that ensures quality in line with local needs and enables further cost reductions by means of introducing local specifications and designs as well as using local contractors and materials. The concerned sub-scheme was abolished together with other grant aid sub-schemes in the fiscal year of 2015, and it is now classified as a "procurement agent method."

G/A Grant Amount		1,132 million yen				
/Actual G	rant Amount	/1,132 million yen				
Exchange of Notes Date		June 2010				
/Grant Agr	eement Date	/June 2010				
Responsi	ble Agency	Universal Basic Education Commission (UBEC) ⁴				
Executin	ng Agency	Kano State Universal Basic Education Board (Kano SUBEB) ⁵				
Project C	Completion	September 2012				
Concerned Main Contractors		Lot1 and Lot 5: Samboo Construction J.V. Company Ltd. Lot 2 and Lot 3: Best & Crompton Engineering Africa Ltd. Lot 4: Ciroco Nig. Ltd.				
Parties to the Project	Main Consultant	Yachiyo Engineering Co., Ltd.				
	Procurement Agent	Japan International Cooperation System (JICS)				
Outlin	e Design	August 2009 - June 2010				
Detaile	d Design	2010				
Related Projects		<u>Grant Aid Project</u> The Project for Construction of Additional Classrooms for Primary Schools in the Federal Republic of Nigeria (Lot 1: August 2004, Lot 2: July 2005, and Lot 3: July 2006) <u>Other Donors' Projects</u> Department for International Development of the United Kingdom (DFID) "Capacity for Universal Basic Education Project (2003 - 2008)" and "Education Sector Support Programme in Nigeria (2008 - 2017)" United States Agency for International Development (USAID) "Community Participation for Action in Social Sector (2004 - 2009)" World Bank (WB) "State Education Sector Project (2007 - 2011)"				

2. Outline of the Evaluation Study

2.1 External Evaluator

Koichiro Ishimori, Value Frontier Co., Ltd.

2.2 Duration of Evaluation Study

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

Duration of the Study: September 2016 - September 2017

Duration of the Field Study: November 27, 2016 - December 21, 2016 and February 19, 2017 - March 3, 2017

2.3 Constraints during the Evaluation Study

During the ex-post evaluation study, the external evaluator could only collect and analyze information in the capital city of Abuja for security reasons. Therefore, he planned for a local

⁴ The UBEC is a central organization under the Federal Ministry of Education working on the provision of

compulsory education consisting of six years of primary education and three years of junior secondary education. ⁵ Kano SUBEB is a government entity in Kano State under the UBEC that works on the provision of compulsory education.

consultant to visit the concerned primary schools in Kano State and 6 selected schools⁶ out of the 33 involved in the project, in consultation with the UBEC. However, again for security reasons, the local consultant's visit to Kano State was cancelled. Consequently, the external evaluator collected information through the UBEC during the first field study in Nigeria. In order to supplement the information needed for the ex-post evaluation, the local consultant was allowed to visit Kano State under certain conditions of safety management for 5 days during the second field study. Therefore, the local consultant visited and collected information at Kano SUBEB and 3 related schools⁷ out of the 6 selected schools due to time limitations. As described above, there were various constraints on the collection of information pertinent to the project. Other specific and concrete constraints on the interviews and as such are described in the relevant parts.

3. Results of the Evaluation (Overall Rating: C⁸)

3.1 Relevance (Rating: ⁽³⁾)

3.1.1 Consistency with the Development Plan of Nigeria

The National Economic Empowerment Development Strategy of 2003, the national development plan of the government of Nigeria at the time of project planning, highlighted the "empowerment of the people," including the "enhancement of education" under one of four priorities, "improvement of social charters." The Nigeria Vision 20: 2020 of 2009, the subsequent national development plan with a long-term vision until 2020, highlighted "human development" and mentioned "improving the quality of educational facilities" as a means to achieve the goal under one of three priorities, "guaranteeing the productivity and health of the people." The Ten Year Strategic Plan of 2007, an education sector plan, also mentioned the "construction of appropriate classrooms at primary and junior secondary schools" under one of four priorities, "standards."

The Nigeria Vision 20: 2020 of 2009 was unchanged at the time of the ex-post evaluation; therefore, the project is still aligned with the national development plan. Meanwhile, the

⁶ When selecting schools, the external evaluator selected 3 schools, in addition to 3 model schools, among the 33 concerned schools. Model schools were schools where a maintenance activity of school facilities and a workshop for promoting maintenance activities etc. were implemented by the soft components of the project. They were Rano Dawaki Primary School of Lot 2 and Bichi Kanti Primary School and Tumfafi Primary School of Lot 3. Meanwhile, the external evaluator selected 3 other schools by considering their security and accessibility as well as the operation and maintenance situation of the school facilities at the time of the inspection of defects. At the time of the inspection of defects, 12 out of 33 schools were rated as A (very good), another 12 were B (good), 4 were C (a few damages), and 5 were D (many damages). Therefore, when selecting schools at the time of the ex-post evaluation, the external evaluator selected 2 rated A, another 2 rated B, 1 rated C, and 1 rated D, by paying attention to the total balance. Since Rano Dawaki Primary School of Lot 2 was rated B and Bichi Kanti Primary School and Tumfafi Primary School of Lot 3 were both rated A, the external evaluator decided to select 1 school each rated B, C, and D from Lots 1, 4, and 5. After considering the aforementioned conditions, the external evaluator selected Balan Primary School of Lot 4, and Tudun Yola Primary School of Lot 5.

⁷ In consideration of security and accessibility, the external evaluator selected 2 model schools, namely Bichi Kanti Primary School and Tumfafi Primary School of Lot 3 and Tudun Yola Primary School of Lot 5.

⁸ A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory

⁹ ③: High, ②: Fair, ①: Low

subsequent education sector plan, the 4-Year Strategic Plan for the Development of the Education Sector 2011-2015 of 2012, highlighted the "provision of appropriate classrooms and school furniture at primary and junior secondary schools" under one of six priorities, "access and equity." Also, Education for Change: A Ministerial Strategic Plan 2016-2019, the new education sector plan that the federal ministry of education was making at the time of the ex-post evaluation, highlighted the "construction of 287,500 classrooms at the existing primary and junior secondary schools from 2017 to 2019."

The project was expected to improve the educational environment by constructing school facilities such as classrooms at primary schools in Kano State, contributing to expanding access to and improving the quality of education; therefore, the project is judged to have been aligned with the development plan of Nigeria at the time of both the project planning and ex-post evaluation.

3.1.2 Consistency with the Development Needs of Nigeria

The net enrollment rate of primary schools in Nigeria at the time of project planning was on the rise, from 63% in 1999 to 66% in 2010.¹⁰ However, the quality of education had much room to improve. In particular, the number of students per classroom in primary schools in Kano State was 92 in 2007/2008, significantly exceeding the national standard of 40 that the UBEC had set in the *Universal Basic Education Plan* of 1999.¹¹ Even worse, the number of students per classroom at the concerned primary schools in Kano State was 96 in 2009 due to a lack of classrooms. Besides, as many desks and chairs were broken, students were forced to sit either directly on the floor or a chair designed for two students with more than two students, resulting in a situation where students had to take classes in a cramped environment.¹²

Partly because of the effects of the project, the number of students per classroom at primary schools in Kano State in 2016 (at the time of the ex-post evaluation) had decreased to 88¹³, compared to the number at the time of project planning. However, it still significantly exceeds the national standard of 40. Moreover, as many desks and chairs are still broken, students are still forced to sit either directly on the floor or a chair designed for two students with more than two students, resulting in the same situation where students have to take classes in a cramped environment.

Since many classrooms were and still are under a poor learning environment, it has been an urgent matter to develop and enhance the learning environments, such as classrooms. Therefore, the project is judged to have been aligned with the development needs of Nigeria and Kano State at the time of both the project planning and ex-post evaluation.

¹⁰ Statistical data from the World Development Indicators.

¹¹ Document provided by the JICA.

¹² Document provided by the JICA.

¹³ Annual School Census Report 2016 of Kano State.

3.1.3 Consistency with Japan's ODA Policy

The *ODA Charter* of 2003, the aid policy of the government of Japan at the time of project planning, raised "poverty alleviation" as one of its four pillars, and prioritized "education" in the pillar as a cooperation sector for assisting human and social development in developing countries. The *Mid-term Policy of ODA* of 2005 also raised "poverty alleviation" as one of its four pillars, and prioritized the "expansion of basic social services such as education" in the pillar. Moreover, the JICA's *Project Implementation Plan* of 2006 raised "infrastructural development in rural areas" as one of its two pillars and prioritized "assistance contributing to qualitative and quantitative enhancement of primary education, such as construction of primary schools by grant aid projects." Furthermore, the *Yokohama Action Plan* of 2008, which the fourth Tokyo International Conference on African Development (TICAD IV) set as its road map afterwards, raised "improving access to and the quality of primary education including the construction of approximately 5,500 classrooms at 1,000 primary and junior secondary schools."

Since the project was intended to construct classrooms at primary schools by the grant aid project, it is judged to have been aligned with Japan's ODA Policy at the time of project planning.

In conclusion, the project has been highly relevant to Nigerian development plan and development needs, as well as Japan's ODA policy. Therefore, its relevance is high.

3.2 Efficiency (Rating:2)

3.2.1 Project Outputs

The project consisted of constructing school facilities as hard components and providing technical assistance on their operation and maintenance as soft components. The hard components were increased because the residual fund allowed for more outputs than planned, while the soft components were implemented mostly as planned.

[Hard Components]

As described below, the project achieved all hard components from Lots 1 to 4 as planned. Besides, bidding prices were lower than the estimated prices due to competition, so the residual fund allowed for the addition of Lot 5. Consequently, the project added 3 extra schools to its scope for a total of 30 classrooms in 6 school buildings, as well as 6 toilet buildings. Accordingly, school furniture was also distributed. The planned and actual outputs for each lot of hard components are described below.

		Classi	rooms	T-11-4	School furniture				
Area	Schools	Build	Class	huildinga	Desks/chairs	Desks/chairs	Black	Notice	
		ings	rooms	buildings	for students14	for teachers	boards	boards	
Lot 1:	0	12	52	11	1.060	52	52	52	
Western Kano	0	15	55	11	1,000	55	55	55	
Lot 2:	6	15	62	12	1 240	(2)	62	62	
Southern Kano	0	15	02	12	1,240	02	02	02	
Lot 3:	0	20	76	1.4	1 520	76	76	76	
Northern Kano	0	20	/0	14	1,520	/0	/0	/0	
Lot 4:	0	22	06	10	1.020	06	06	06	
Eastern Kano	8	23	90	18	1,920	96	90	90	
Total	30	71	287	55	5,740	287	287	287	

Table 1: Planned Hard Components

Source: Documents provided by the JICA and the executing agency

 Table 2: Actual Hard Components

	Class		room	T- :1-4	School furniture				
Area	Schools	Build	Class	huildings	Desks/chairs	Desks/chairs	Black	Notice	
		ings	rooms	buildings	for students	for teachers	boards	boards	
Lot 1:									
Western Kano									
Lot 2:									
Southern Kano									
Lot 3:		Same as planned							
Northern Kano									
Lot 4:									
Eastern Kano									
Lot 5:	2	6	20	6	600	20	20	20	
Central Kano	3	0		0	600	30	30	30	
Total	3315	77	317	61	6,340	317	317	317	

Source: Documents provided by the JICA and the executing agency

¹⁴ In each classroom, 20 sets were deployed.

¹⁵ The 33 schools are as follows: From Lot 1, 8 schools (Kimbugawa Primary School, T/Kaya Primary School, Yola Z/Gari Primary School, Chinkoso Primary School, Kadana Primary School, Balan Primary School, T/Garu Primary School, and Buremawa Primary School); From Lot 2, 6 schools (Rano Dawaki Primary School, Rurum Science Primary School, Ruwan Kanya Primary School, Tagwaye Primary School, Doguwa Primary School, and Fassi A Primary School); From Lot 3, 8 schools (Natsugunne Primary School, Bichi Kanti Primary School, Badume Primary School, Jalli Primary School, Tumfafi Primary School, Kwa Primary School, Danbatta Kanti Primary School, and Lambu Science Primary School); From Lot 4, 8 schools (Amaryawa Primary School, Kumbotso Primary School, Zakirai Yamma Primary School, Kwankwaso Primary School, Indabo Central Primary School, Zango Primary School, Danmadanho Primary School, and Fajewa Central Primary School).

[Soft Components]

The project plan included the following soft components and they were implemented almost as planned.

Planned	Actual
a) Development of a manual on school facility maintenance	The JICA took a participatory approach when preparing a draft manual, so that the Nigerian side could take ownership of spontaneously maintaining the school facilities. Then, task force members of Kano SUBEB (the director of planning, research, and statistics; officers in charge of maintaining the school facilities; experts in education statistics; and others) examined the draft manual and completed it.
b) Implementation of maintenance activities ¹⁶ at 3 model schools	Practical maintenance activities of school facilities for 73 head masters and teachers of each model school and concerned school nearby were implemented at Bichi Kanti Primary School on May 28, 2012, Tumfafi Primary School on May 30, 2012, and Rano Dawaki Primary School on May 31, 2012. A total of 27 head masters and teachers in 4 districts participated in the activity at Bichi Kanti Primary School; 22 head masters and teachers in 6 districts participated in the activity at Tumfafi Primary School; and 24 head masters and teachers in 7 districts participated in the activity at Rano Dawaki Primary School.
c) Implementation of promotion workshop ¹⁷ at three model schools	Apart from b) above, the project intended to implement workshops at the model schools. They were to promote maintenance activities for the concerned schools around the model schools. However, because of security issues in Kano State, they were cancelled. It was thought that the project should minimize any activities in the suburbs and ones involving many people. However, the activities originally planned at the workshops, namely observation and practice of maintenance activities and the subsequent question and answer session, were implemented on the occasion of b) above.
d) Development of a monitoring manual on school facility maintenance	Similar to a) above, the JICA took a participatory approach when preparing the draft monitoring manual, so that the Nigerian side could take ownership of spontaneously maintaining the school facilities. Then, task force members of Kano SUBEB examined the draft monitoring manual and completed it. The monitoring manual was explained to 32 head masters and other personnel of 33 concerned schools, in addition to 17 staff of the UBEC and Kano SUBEB, at a workshop on May 24, 2012.

Table 3: Planned and Actua	l Soft	Components
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Source: Documents provided by the JICA and the executing agency

3.2.2 Project Inputs

3.2.2.1 Project Cost

The project was implemented using the procurement agent method. The G/A grant amount (1,132 million yen) was provided to the Nigerian side in full.¹⁸ Therefore, both the planned and actual project costs on the Japanese side were 1,132 million yen, respectively, and same as planned.¹⁹

Meanwhile, the planned project cost on the Nigerian side for construction of land, rehabilitation of roads around the concerned schools, establishment and construction of gateways, and a banking fee for opening an account was NGN 4.4 million, the equivalent to

¹⁶ Maintenance activity means daily cleaning of school buildings, classrooms, toilets, and others.

¹⁷ The promotion workshop means observation and practice of maintenance activities and a subsequent question and answer session for the purpose of promoting maintenance activities.

¹⁸ As mentioned above, the accrued residual funds allowed for the addition of Lot 5. Since they were completely spent on constructing school facilities at the newly added schools, no money was returned to the Japanese account.
¹⁹ The addition of Lot 5 caused additional work for the executing agency, consultant, and procurement agent.

However, they achieved more outputs than planned at the planned Japanese cost. Therefore, it is considered that the project cost has been used more efficiently.

approximately 2.8 million yen.²⁰ The actual cost was the same as planned.

3.2.2.2 Project Period

The planned project period was 20 months, from June 2010 (date of G/A) to January 2012 (date of the handover). However, the actual period was 26 months, from June 2010 (date of G/A) to July 2012 (date of the handover), and longer than planned, 130% of the planned priod. Major reasons for the delay were a construction delay due to the belated procurement of construction material (cement) and the effects of general strikes and other issues. Nevertheless, the external evaluator considers that 61 days, approximately 2 months, should be deducted because the delay was due to external factors.²¹ Therefore, the actual period considering that factors was 24 months, or 120% of the planned period.²² The external evaluator did not analyze the project period of Lot 5 because it was an addition which the original plan did not have.

According to the executing agency, the inputs, such as the project cost and period, were appropriate for achieving the outputs. There were slight changes in the volume of reinforcing bars and others between the outline design and the detailed design study. Otherwise, there were no particular changes.

In conclusion, although the project cost was within the plan, the project period exceeded the plan. Therefore, efficiency of the project is fair.

3.3 Effectiveness²³ (Rating:③)

The objective of the project was to improve educational environment by constructing school facilities such as classrooms at primary schools in Kano State.

 $^{^{20}}$ The exchange rate at the time of the ex-ante evaluation in 2010 was JPY 96.53/USD.

²¹ The events that the external evaluator considered as external factors and the breakdown of the 61 days are as follows: 1) Curfew orders were issued before and after the elections of the president, governors, and congressmen, all of which took place in April 2011. Consequently, the project members were virtually forced to be temporarily evacuated and could not continue their work for 21 days. 2) As a result of the Boko Haram associated terrorism that occurred in Kano State on January 20, 2012, the embassy of Japan requested that the consultant be temporarily evacuated from Kano State to the capital city of Abuja for 40 days.

²² Documents provided by the JICA.

²³ Sub-rating for Effectiveness is to be put with consideration of Impact.

3.3.1 Quantitative Effects (Operation and Effect Indicators)

Operation and Effect Indicator ① The number of appropriate classrooms²⁴ at the concerned schools.

	Baseline ²⁵	Target ²⁶	Actual achievement					
	2009	2012	2012	2013	2014	2015	2016	
	Planned year	Completion year	Completion year	1 year after completion	2 years after completion	3 years after completion	4 years after completion	
Lot 1:		53 New	53 New	-	-	-	-	
Western Kano		52 Exis	52 Exis	105 Exis	105 Exis	105 Exis	105 Exis	
Lot 2:		62 New	62 New	-	-	-	-	
Southern Kano		39 Exis	39 Exis	101 Exis	101 Exis	101 Exis	101 Exis	
Lot 3:	245 Exic	76 New	76 New	-	-	-	-	
Northern Kano	245 LAIS	74 Exis	74 Exis	150 Exis	150 Exis	150 Exis	150 Exis	
Lot 4:		96 New	96 New	-	-	-	-	
Eastern Kano		60 Exis	60 Exis	156 Exis	156 Exis	156 Exis	156 Exis	
Lot 5:		30 New	30 New	-	-	4 New	-	
Central Kano		20 Exis	20 Exis	50 Exis	50 Exis	50 Exis	54 Exis	
Total	245 Exis	317 New	317 New		—	4 New	—	
Total	245 EAIS	245 Exis	245 Exis	562 Exis	562 Exis	562 Exis	566 Exis	
		562 in total	562 in total	562 in total	562 in total	566 in total	566 in total	

Table 4: The number of appropriate classrooms at the concerned schools (Unit: room)

Source: Documents provided by the JICA and the executing agency Note: "Exis" = existing classrooms, "New" = new classrooms.

Achievement rate of the planned target in 2012

317 classrooms were newly constructed at 33 schools as planned (100% of the plan).

Actual achievement from 2013 to 2014

There was no new construction of classrooms. The number remained unchanged after 2012. Since there was no plan after 2013, the achievement rate could not be calculated.

Actual achievement in 2015

Since the number of students at Shagogo Central Primary School of Lot 5 in 2014 was 2.5 times higher than that in 2009, 4 classrooms were newly constructed by the government of Nigeria, resulting in 566 classrooms in total.

Actual achievement in 2016

There was no new construction of classrooms. The number remained unchanged after 2015.

The number of appropriate classrooms in 2012 is assumed to have been 562. However, the number after 2013 is assumed to be lower than that given in the table above, because it is assumed that the current maintenance status of classrooms does not seem good, when one looks at pictures of the classrooms taken at the time of the ex-post evaluation, as explained later.

²⁴ "Appropriate classrooms" were not defined in any project document. Therefore, the external evaluator defined them as both classrooms where students can study subjects using a desk and a chair designed for 2 students with 2 students and teachers can teach subjects using a desk, a chair, a notice board, and a blackboard if required, and as classrooms that are actually used in this way.

²⁵ Originally, the baseline was 225 existing classrooms from Lots 1 to 4. However, since Lot 5 was added using the residual fund, the ex-post evaluation used as the baseline 245 classrooms, including the existing classrooms of Lot 5. ²⁶ The original target was 287 new classrooms and 225 existing classrooms from Lots 1 to 4. Since Lot 5 was added using the residual fund, the ex-post evaluation used as the target 317 new classrooms and 245 existing classrooms, including the plan of Lot 5, i.e., 30 new classrooms and 20 existing classrooms.

Operation and Effect Indicator⁽²⁾ The number of students per classroom²⁷ at the concerned schools

						(Unit.	person)	
	Baseline ²⁸	Target ²⁹	Actual achievement					
	2009	2012	2012	2013	2014	2015	2016	
	Planned year	Completion year	Completion Year	1 year after completion	2 years after completion	3 years after completion	4 years after completion	
Lot 1: Western state	-	-	52.9	67.7	61.6	74.8	82.0	
Lot 2: Southern state	-	-	41.3	62.8	69.1	76.4	77.8	
Lot 3: Northern state	-	-	54.9	69.0	77.1	74.0	74.2	
Lot 4: Eastern state	-	-	49.8	54.4	60.9	65.8	66.2	
Lot 5: Central state	-	-	39.9	57.7	82.2	78.1	52.5	
Average	95.5	41.6	49.3	62.6	68.7	72.7	72.0	
Number of students Number of classrooms	23,388 245	23,388 562	27,727 562	35,168 562	38,629 562	41,165 566	40,756 566	
a b 111	1 1 1001 1							

Table 5: The number of students per classroom at the concerned schools

Source: Documents provided by the JICA and the executing agency

Achievement rate of the planned target in 2012

The average number of students per classroom at the concerned schools in 2012 was 49.3, which was higher than the planned target of 41.6. However, the actual number of students increased by approximately 4,300 in 2012, compared to 2009. Therefore, it is considered as rational that the planned target was mostly achieved. The planned number in the state of Kano in 2012/2013 was 60.

Actual achievements in 2013, 2014, 2015, and 2016

The average of the 33 schools was 62.6 in 2013, 68.7 in 2014, 72.7 in 2015, and 72.0 in 2016. Since there was no plan after 2012, the achievement rate could not be calculated.

The average number of students per classroom has been increasing each year since 2012. Considering the increased student growth $ratio^{30}$ at 33 schools, this cannot be helped.

3.3.2 Qualitative Effects (Other Effects)

The project was expected to have some qualitative effects. Therefore, the ex-post evaluation study conducted interviews³¹ with 5 teachers at each of the 6 selected schools (see footnote 6) for a total of 30 regarding sections 3.3.2.1 and 3.3.2.2. and got responses through a questionnaire regarding 3.3.2.3. during the first field study.

²⁷ "The number of students per classroom" was not defined in any project document. Therefore, the external evaluator defined it as the average number of students studying in a classroom.

²⁸ Originally, the number of classrooms was 225 from Lots 1 to 4. Therefore, the original baseline was 96.0, calculated as 21,609 students at 225 classrooms divided by 225 classrooms. However, since the ex-post evaluation used 245 classrooms, including the existing classrooms of Lot 5, the baseline was changed to 95.5 and calculated as 23,388 students at 245 classrooms divided by 245 classrooms.

²⁹ Due to the lack of a population census since 2006 and official data on population growth, the number of students in 2012 was assumed to be the same as that in 2009—namely 23,388 students, calculated as 21,609 at the original 30 schools plus 1,779 students at the additional 3 schools. Therefore, the target was set as 41.6, calculated as 23,388 divided by 562 classrooms.

 $^{^{30}}$ According to the executing agency, the student growth ratio was 26.8% from 2012 to 2013, 9.8% from 2013 to 2014, 6.6% from 2014 to 2015, and -1% from 2015 to 2016.

³¹ As described in "constraints during the evaluation study", the local consultant's visit to Kano State during the first field study was cancelled for security reasons. With the help of Kano SUBEB and the head masters of the 6 selected schools, the ex-post evaluator obtained the phone number of some teachers (5 teachers at each school) who knew about the situation before the project and consented to being interviewed, and the local consultant conducted interviews by calling them from Abuja afterwards.

3.3.2.1 Improvement in daily class management by means of constructing appropriate classrooms (daily teaching in classrooms)

All of the 30 teachers responded that their daily class management had gotten easier and improved (see Chart 1) because of the fact that the construction of the new classrooms made possible a decrease in the number of students per classroom, compared before the project, and that the installation of the desks, chairs, blackboards, and others helped them to teach classes. Therefore, it is judged that daily class management has improved at the 6 selected schools, and it is assumed that it has also improved at the other 27 schools.



Class scene in a new classroom at Bichi Kanti Primary School



Class scene in a new classroom at Tumfafi Primary School

3.3.2.2 Improvement in hygiene by means of installing the toilets

25 of 30 teachers responded that hygiene at school had improved (see Chart 2) because the installation of the toilets has decreased excretions at locations other than toilets, compared before the project. Meanwhile, students at Tumfafi Primary School, where there were no water facilities from the project planning phase until the ex-post evaluation phases, were expected to go and fetch water with a bucket from a water facility outside of the school and bring it to the toilet before using it, and then to flush the toilet with the water. However, excretions in the toilets remain unflushed in practice because it seems unrealistic to expect students to take this series of action ahead of time, while assuming work required before using the toilets.³² Consequently, only 2 out of 5 teachers at the school responded that hygiene at school has improved. Therefore, it is judged that hygiene at school has improved to some extent at the 6 selected schools, and it is assumed that it has also improved to some extent at the other 27 schools.

³² It is assumed to have been necessary to construct a water facility in or near the toilets.



Chart 1: Improvement in daily class management by means of constructing appropriate classrooms (daily teaching in classrooms)



Chart 2: Improvement in hygiene by means of installing toilets

3.3.2.3 Building capabilities of operation and maintenance of school facilities by means of developing a manual on school facility maintenance

A manual on school facility maintenance was developed as a soft component of the project and provided to 122 participants at a lecture-style workshop held on May 24, 2012, followed by practical maintenance activities at the 3 model schools held on May 28, 30, and 31, 2012. According to a questionnaire presented upon completion of the lecture-style workshop and practical maintenance activities, almost all of the participants responded that they would spread what they had learned at their own schools.³³ However, as described later, it is assumed that the current status of operation and maintenance of the school facilities constructed by the project does not seem good. Therefore, it is difficult to say that the project has strengthened capabilities of operation and maintenance of school facilities. Nevertheless, it is considered that improvement of the educational environments, the objective of the project, has been achieved, as described in sections 3.3.2.1. and 3.3.2.2.

3.4 Impacts

The project was intended as impacts to contribute to improving access to and the quality of primary education.

³³ Documents provided by the JICA.

3.4.1 Intended Impacts

3.4.1.1 Quantitative effects (Improving access to primary education)

					((JIIII. /0)		
	Baseline		Actual achievement					
	2009	2012	2013	2014	2015	2016		
	Planned	Completion	1 year	2 years	3 years	4 years		
	year	year	after	after	after	after		
			completion	completion	completion	completion		
Gross enrollment rate	104	122	131	128	130	130		
Gross enrollment rate (male)	102	117	126	123	126	128		
Gross enrollment rate (female)	106	127	137	134	133	132		

Table 6: Gross enrollment rate of primary schools³⁴ in Kano State

(Unit: %)

Source: Documents provided by the executing agency

The gross enrollment rates for males and females have both been increasing since 2012 and are higher than the baseline values from 2009.³⁵

3.4.1.2 Qualitative Effects (Improving the quality of primary education)

The project was intended to have some qualitative effects related to a) and b) below. Regarding a), the ex-post evaluation study conducted telephone interviews with 30 teachers from the 6 selected schools. Regarding b), it conducted face-to-face interviews with 15 female students from the 3 schools³⁶. The interview results are as follows:

a) Improvement in class management by means of constructing appropriate classrooms

(stable teaching in classrooms throughout the year)

All 30 teachers responded that their class management had improved because the construction of appropriate classrooms allowed for stable teaching in classrooms throughout the year as they are no longer affected by weather, such as sunlight during the dry season and storms during the rainy season. Therefore, it is judged that the 6 selected schools are able to provide stable teaching in classrooms throughout the year, and it is assumed that the other 27 schools are similar.

b) Increase in female students' motivation to go to school through the construction of gender-segregated toilets

All 15 female students who used and use the toilets responded that they had never lost motivation to go to school because of the toilets, and that was still the case after

³⁴ "Gross enrollment rate" means the ratio divided the number of people receiving primary education regardless of age by the total school age population for the primary school. The ex-post evaluation study obtained data on the "net enrollment rate" but did not find them credible. Therefore, it did not use them as an indicator.

³⁵ While the number of classrooms at primary schools in Kano State was 31,091, the number of classrooms at the concerned schools was 562, which was equivalent to approximately 1.8% of the total. Furthermore, the number of classrooms newly constructed by the project at the concerned schools was 317, which was equivalent to only approximately 1.0%. Therefore, it is judged that the impact of the project is limited.

³⁶ Since the local consultant's visit to Kano State was approved at the time of the second field visit, the external evaluator sent him to the 3 schools (see footnote 7). He then had face-to-face interviews with female students (5 from each school) who were at school by chance and consented to being interviewed, after getting approval for the interviews from the head masters of the 3 schools. The topic was so sensitive that he paid attention to their privacy and interviewed them one by one without any other person involved.

gender-segregated toilets were installed as part of the project. All of them went to school in the past and go to school at present simply because they like doing so. The interviews, therefore, did not observe any increase in female students' motivation to go to school as a result of the construction of gender-segregated toilets.

3.4.2 Other Positive and Negative Impacts

3.4.2.1 Impacts on the Natural Environment

The project was intended to avoid the use of any materials that contain substances such as asbestos and formaldehyde at school facilities constructed by the project, as they could affect human beings. Besides, it was intended to pay due attention to avoiding negative impacts such as air and water pollution and noise during and after the construction of school facilities. According to the executing agency, such materials were not used and such negative impacts were not caused during and after construction of the school facilities. An environmental impact assessment was not required.

3.4.2.2 Land Acquisition and Resettlement

According to the executing agency, there was neither land acquisition nor resettlement at the time of project implementation.

3.4.2.3 Unintended Positive/Negative Impact

 4^{37} of the 30 teachers responded that disabled students were now able to easily move around the classroom because the construction of new classrooms led to the number of students per classroom decreasing, compared before the project. It is therefore considered that the project has had impacts on disabled students to some extent at the 6 selected schools, and it is assumed that it has also done so at the other 27 schools.

In short, the operation and effect indicator ① (that is, the quantitative effect of effectiveness) has achieved the planned target and indicator ② has mostly achieved the planned target. There has also been an improvement in qualitative effects, as seen in sections 3.3.2.1. and 3.3.2.2. Therefore, it is considered that the "improvement of the educational environment," the objective of the project, has been achieved. As described later, it is assumed that the current status of operation and maintenance of the school facilities constructed by the project does not seem good at the time of the ex-post evaluation. Therefore, it is considered that the qualitative effects mentioned in section 3.3.2.3 have not been achieved. However, the "improvement of the educational environment," which was not only the objective of the project but also the criterion to judge its effectiveness, has been achieved, as explained in sections 3.3.2.1. and 3.3.2.2.

³⁷ 2 teachers at Bichi Kanti Primary School and 2 at Tumfafi Primary School.

Meanwhile, there has been an improvement in the qualitative effects of the impacts of a) but not b). Besides, there has been an unintended positive impact on disabled students to some extent as unintended positive impacts.

In conclusion, this project has largely achieved its objectives. Therefore effectiveness and impact of the project are high.

3.5 Sustainability (Rating:①)

3.5.1 Institutional Aspects of Operation and Maintenance

The project was expected in the project planning that 65 staff members from the department of planning, research, and statistics of Kano SUBEB would maintain the school facilities after their construction. It was also expected that the department of planning, research, and statistics of the Local Government Educational Authority (LGEA) in each district would monitor the maintenance situation of the school facilities and provide direction.

At the time of the ex-post evaluation, it is the newly created department of physical planning, (which used to be the physical planning unit under the department of planning, research, and statistics) that maintains the school facilities after their construction at Kano SUBEB. Maintenance is also the role of the office of officers and assistant officers for zonal physical planning that receives reports from LGEAs in 44 districts of the state and then inspects the maintenance situation of the reported schools as well as the unit of maintenance that receives reports from the aforementioned office and then plans and carries out maintenance under the guidance of the director general of the department of physical planning. Although there are 44 staff members in charge of LGEAs under the aforementioned office at the time of the ex-post evaluation, each staff member monitors on average 141 primary schools and 22 junior secondary schools.³⁸ Therefore, it is difficult to judge that they are surely sufficient. Similarly, there is only 1 staff member, the director, at the department of maintenance, and therefore it is again difficult to judge that they are surely sufficient.





Meanwhile, the LGEAs in each district, which report on the maintenance situation of the school facilities to the officers and assistant officers for regional facility planning of Kano

³⁸ According to p. 1 and p. 69 of the Kano State Annual School Census Report 2015/2016, there are 6,208 primary schools and 947 junior secondary schools in the 44 districts of Kano State.

SUBEB, generally have more than 1 inspector under the unit of planning, research, and statistics. However, the LGEA inspector from Gwale District that the local consultant visited was not aware of his duties to monitor the maintenance of the concerned schools in the district based on the monitoring manual on school facility maintenance and report the results to Kano SUBEB once a year. Furthermore, when the local consultant visited the 3 schools, he questions their head masters about how the LGEA inspectors of the 3 districts in charge of the schools monitored the maintenance situation of the school facilities and provided direction. They responded that the inspectors irregularly monitored the maintenance situation of the school facilities without using the manual that the soft components of the project had developed and did not provide any direction.

At the concerned schools, all teachers from the 6 schools (namely 30 teachers) with whom the local consultant interviewed responded that the School Based Management Committee (SBMC) carrying out maintenance activities was established at the school. However, it did not secure personnel for maintenance due to a lack of funds. Besides, all 6 head masters and 27 out of 30 teachers from the 6 schools were not aware of the manual on school facility maintenance that the soft components of the project had developed and reported that they did not use it for daily maintenance activities. This state of affairs was only revealed at the 6 schools, but it is assumed that it is generally the same at the other 27 schools.

The project was expected in the project planning that each school would carry out the maintenance activities of its school facilities based on the manual on school facility maintenance, and that LGEA inspectors would monitor the maintenance situation of each school based on the monitoring manual on school facility maintenance and then report the results to Kano SUBEB once a year. Furthermore, Kano SUBEB would compile information on the concerned 33 schools and then report the results to the JICA Nigeria Office once a year. However, such a monitoring system was never established among the stakeholders during and after the project. Partly because of this, the ex-post evaluation study revealed that none of the stakeholders at the selected schools, LGEAs, Kano SUBEB, and the JICA Nigeria Office was aware of such a plan. Consequently, it was not possible to confirm any monitoring activities. In short, it is judged that the system for monitoring school facilities has not fully worked, though the manuals on school facility maintenance were developed by the project.

3.5.2 Technical Aspects of Operation and Maintenance

The project was expected in the project planning that the department of planning, research, and statistics of Kano SUBEB would be in charge of technical maintenance, and that it would have no problem with experience and abilities. It was also expected that the unit of planning,

research, and statistics of each LGEA would direct the daily maintenance of school facilities after the project.

As described above, the department of physical planning of Kano SUBEB is in charge of technical maintenance at the time of the ex-post evaluation. However, as described later, it is assumed that the current status of operation and maintenance of the school facilities developed by the project does not seem good on the whole, and therefore it is difficult to judge that it has sufficient technical skills in maintenance. Besides, it does not provide the LGEAs and schools with any training to improve their maintenance skills.

Considering that Kano SUBEB itself was not aware of the monitoring manual on school facility maintenance, it is assumed that the LGEAs that are supposed to report the monitoring results to Kano SUBEB are not aware of it either, and therefore are not carrying out the monitoring activities or providing direction based on the manual. Similarly, considering that 6 head masters and 27 out of 30 teachers from the 6 selected schools with whom the local consultant interviewed were not aware of the manual on school facility maintenance, it is assumed that the head masters and teachers at the other schools are not aware of it either, and therefore are not carrying out maintenance activities based on the manual.

3.5.3 Financial Aspects of Operation and Maintenance

The project was expected in the project planning that Kano SUBEB would mainly bear the cost of maintenance of school facilities constructed by the project. The annual cost was estimated at NGN 1,911,250, equivalent to approximately JPY 2.97 million,³⁹ for the maintenance of 317 classrooms in 33 schools.

Financial statements for Kano SUBEB for the past three years, which were obtained at the time of the ex-post evaluation, indicate that it has not allocated any budget on the maintenance of the 33 schools. Although SBMCs were established at the 33 schools, they cannot secure sufficient funds for maintenance because the incumbent governor of Kano State set the goal of free primary education which did not require any contributions from parents. Moreover, the state government prohibits SBMCs from collecting fees to maintain school facilities from students' parents.

Considering these circumstances, the department of physical planning of UBEC now has a plan to secure NGN 1 billion annually for the maintenance of school facilities at primary and junior secondary schools in all 36 states and allocate a budget through the SUBEB in each state to the SBMC at each school. According to the director of the department of physical planning of the UBEC, he will try to respond to the concerned 33 schools once a budget is allocated.

³⁹ The exchange rate at the time of the ex-ante evaluation (2010) was JPY 1.555/NGN.

However, it was unclear at the time of the ex-post evaluation if the plan would be approved because it requires the signature of (or approval from) the president of Nigeria.

	Actual figures						
	2014	2015	2016				
	2 years	3 years	4 years				
	after	after	after				
	completion	completion	completion				
(1) Total revenue	4,928,096	1,820,513	2,173,054				
(2) Total expenses ((3)~(4))	4,904,594	1,753,513	2,084,054				
(3) Primary education (a+c)	4,200,000	1,100,000	2,000,000				
a. School facility maintenance	3,000,000	0	0				
b. of the 33 schools	0	0	0				
c. Others	1,200,000	1,100,000	2,000,000				
(4) Junior secondary education	704,594	653,513	84,054				
(5) Balance ((1)-(2))	23,502	67,000	89,000				

Table 7: Financial Statements of Kano SUBEB

(Unit: NGN thousand)

Source: Documents provided by the executing agency

3.5.4 Current Status of Operation and Maintenance

When one looks at the pictures of the maintenance situation of the school facilities (see some examples below) that the UBEC took at the 6 schools and the local consultant additionally took at the 3 schools at the time of the ex-post evaluation, there are many damages to classrooms, school furniture, and toilets. For example, classroom doors are ripped, windows' glass is broken and left neglected, and many cracks are observed in the walls and floors. There are also damages to the walls caused by termites and lyctidaes. Many desks and chairs are broken because students use them in inappropriate ways, and many of the blackboards cannot be properly used because they have damage to the surface of the plyboard. In general, there are more than 3 cases of damage per classroom. Toilet doors are also ripped off and left neglected, and excretions are left unflushed, creating an unhygienic environment. Due to the aforementioned constraints, the ex-post evaluation study has not been able to cover the current status of the other 27 schools. However, it is assumed that their status does not differ much from the 6 selected schools that were examined.

The major assumed reasons for this situation are as follows: 1) schools and LGEAs do not use the manuals on school facility maintenance, though the soft components of the project made them, 2) monitoring reports are not made because of the absence of a monitoring system for maintenance between each LGEA and Kano SUBEB, and 3) Nigeria is lack of culture or custom that public goods should be cherished and maintained.



Missing door at Danmadanho Primary School



Completely broken desks and chairs at Tudun Yola Primary School



Broken window glass at Tumfafi Primary School



Damaged blackboard at Bichi Kanti Primary School

In conclusion, major problems have been observed in terms of the institutional, technical, and financial aspects and the current status. Therefore sustainability of the project effects is low.

4. Conclusion, Lessons Learned and Recommendations

4.1 Conclusion

The objective of the project was to improve educational environment by constructing school facilities such as classrooms at primary schools in Kano State, contributing to expanding access to and improving the quality of primary education. The project has been highly relevant to Nigerian development plan and development needs, as well as Japan's ODA policy in terms of improving environments of and access to primary education. Therefore, its relevance is high. While the project cost was within the plan, the project period exceeded the planned period. Therefore, efficiency of the project is fair. The operation and effect indicators for the quantitative effects of effectiveness (such as the number of appropriate classrooms) show that the goals have been achieved. Moreover, the indicators for the qualitative effects (such as daily class management) have shown improvement to a certain extent. Since impacts have also been observed in stable class management, which is no longer affected by weather throughout the year, and on disabled students, effectiveness and impact of the project are high. Meanwhile, major problems have been observed in terms of the institutional, technical, and financial aspects of operation and maintenance, and the current status of the constructed school facilities does not

seem good. Therefore, sustainability of the project effects is low.

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

- 4.2 Recommendations
- 4.2.1 Recommendations to the Executing Agency
- 4.2.1.1 Kano SUBEB
- ① It is expected that Kano SUBEB should encourage the concerned LGEAs and schools to maintain school facilities based on the manuals that the soft components of the project developed.
- ⁽²⁾ It is expected that Kano SUBEB should establish a monitoring system for the maintenance of school facilities with the concerned LGEAs and schools and then share the monitoring results with the JICA Nigeria Office through UBEC once a year. This should encourage the proper maintenance of school facilities.

4.2.1.2 UBEC and Kano SUBEB

It is expected that the UBEC and Kano SUBEB should launch a long-term awareness campaign for embedding a culture or custom of cherishing and maintaining public goods in Nigeria. In particular, considering the big roles that teachers play in terms of not only daily teaching but also maintenance of school facilities, it is desired to firstly change the awareness of teachers by training them at institutes such as the National Teachers' Institute, which trains incumbent teachers.

4.2.2 Recommendations to JICA

Recommendations to the JICA Nigeria Office

- ① It is expected that the JICA should monitor how Kano SUBEB's encourages the concerned LGEAs and schools to use the manuals.
- ⁽²⁾ It is expected that the JICA should make a request for proper maintenance of the school facilities to Kano SUBEB in cases where it finds problems in the monitoring results that Kano SUBEB shares through the UBEC with the JICA Nigeria Office once a year.
- ⁽³⁾ It is expected that the JICA should encourage teachers at the concerned schools to undertake training in the maintenance of school facilities in Japan using the JICA's thematic training and the Japanese Government (MONBUKAGAKUSHO: MEXT) Scholarship (Teacher Training Students)⁴⁰ that the embassy of Japan in Nigeria stated calling for applications for in 2016, and to promote training outputs at the concerned schools after returning home.

⁴⁰ For this scholarship, applicants must be graduates of universities or teacher training schools and have worked as teachers at primary or secondary educational institutions or teacher training schools (excluding universities) in their home countries for five years in total. Scholars are to receive teacher training at universities and other institutions in Japan for maximum of a year and a half.

4.3 Lessons Learned

[Setting realistic target values based on population forecast]

Regarding operation and effect indicator ②, the number of students per classroom at the concerned schools (that is, the quantitative effect of effectiveness), was determined that the number of students in the target year of 2012 should be set as the same as that in 2009 due to the lack of a population census since 2006 and official data on population growth. However, a population increases and decreases by nature. Therefore, it is important that the project sets realistic target values based on even a rough, albeit precise, estimate of population changes at the time of project planning.

[Agreement among stakeholders regarding post-project monitoring system at the time of project planning]

When the JICA mission visited schools where assistance was requested at the time of project planning, it found that Nigeria lacked a culture or custom that public goods should be cherished and maintained and got strongly aware that there might be a high risk that the school facilities to be constructed under the project would be damaged over the years and quickly deteriorate if the importance of daily maintenance activities was not nurtured as a part of the project. Therefore, the project took a participatory approach when preparing the drafts of the manual on and the monitoring manual on school facility maintenance, so that the Nigerian side could take ownership of spontaneously maintaining school facilities. Besides, the project was expected in the project planning that the LGEA inspectors would monitor the maintenance situation at each school based on the monitoring manual on school facility maintenance and then report the results to Kano SUBEB once a year. Furthermore, Kano SUBEB would report the results to the JICA Nigeria Office once a year. However, such a monitoring system was never established among the stakeholders during and after the project. Partly because of this, the ex-post evaluation study was not able to confirm any use of the manuals or annual monitoring activities by the 3 stakeholders once a year. As a result, the anxiety at the time of project planning was actualized. When implementing a similar project in the future, it is important to obtain an agreement among the stakeholders regarding the post-project monitoring system at the time of project planning and then to regularly monitor school facilities under the system after implementation of the project, so that a monitoring manual on school facility maintenance and a monitoring using the manual will properly function.