

Nigeria

Ex-Post Evaluation of Japanese Grant Aid Project
“The Project for Construction of Additional Classrooms for Primary Schools”

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0. Summary

Nigeria is working to provide free basic education, with the aim of improving access to primary education. However, educational facilities were inadequate and unable to cope with the rapid rise in the number of pupils. To address this problem, this project installed and equipped additional primary school facilities, in accordance with the national policies of Nigeria, which has earmarked basic education as a priority area. As for project implementation, the outputs, the cost and the period of the project were in line with the original plan. Some project outcomes, such as alleviating classroom congestion and disseminating maintenance management systems to neighboring schools, did not fulfill the planned values due to an increase in the enrolled population over and above what was expected. However, the project was recognized as having an extensive impact on improving developments in the basic education sector in Nigeria. This included increasing the number of school children, improving the enrollment ratio of and sanitary conditions for girls, and improving pupils’ academic performance; all as a result of strategically implemented collaborative assistance in the form of technical support and grant aid for grassroots projects. With respect to sustainability, while positive changes were seen in awareness relating to maintenance at many of the target schools, conversely, there are still some issues to be tackled in terms of maintenance conditions and the institutional systems for ensuring the project’s outcomes.

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

1. Project Description



Project Locations



Gwangwada Primary School, Kaduna State

1.1 Background

The Obasanjo administration that was established in May 1999 formulated the Universal Basic Education (UBE) Plan with the objectives of providing all pupils with access to basic education and reducing the illiteracy rate. Under this plan, it implemented the necessary measures to make the nine years of basic education (primary and lower secondary education)¹ free and compulsory, improve its quality, improve teacher training, and so on. As a result, the annual rate of increase for the population enrolled in primary education showed a high growth rate of 14.0%.

On the other hand, school facilities in Nigeria have undergone considerable deterioration, with the claim of a deficiency of roughly 540,000 classrooms nationwide. The country has also been beset by problems such as a chronic fiscal deficit caused by an oil-dependent economic structure and lax economic management, as well as the accumulation of huge debts. This has left it in a state where it is incapable of handling the facility improvements accompanying the rapid surge in the population enrolled in basic education. Under these circumstances, the Government of Japan has come to recognize the importance of improving educational facilities in Nigeria. As such, it has come to implement assistance pertaining to constructing classrooms in primary schools and installing facilities including headmasters' offices in three northern states (Niger, Plateau, and Kaduna) where there is a particularly salient lack of classrooms.

1.2 Project Outline

The objective of this project is to improve the educational environment in the schools at Kaduna, Niger and Plateau state by construction of additional classrooms, provision of educational furniture, teacher's office, water supply facility as well as toilet.

Grand limit/Actual Grant Amount	1,647 million yen / 1,636 million yen
Exchange of Notes Date	August, 2004 (1/3 phase)、 July, 2005 (2/3 phase)、 July, 2006 (3/3phase)
Implementing agency	Universal Basic Education (UBEC), Federal Ministry of Education
Project Completion Date	January, 2006 (1/3 phase)、 January, 2007 (2/3 phase)、 February, 2008 (3/3 phase)
Main Contractors	Yuatec Corporation
Main Consultants	Yachiyo Engineering Co., Ltd.
Basic Design Study	"Basic Design for Construction of Additional Classrooms for Primary Schools in the Federal Republic of Nigeria.", Yachiyo Engineering Co., Ltd. November, 2003 - March, 2004
Detailed Design	August, 2004- March, 2005 (1/3 phase), July, 2005- March, 2006(2/3 phase), August, 2006, March 2007 (3/3 phase)
Related Projects	(Technical Cooperation)

¹ The educational system in Nigeria is the same 6-3-3-4 system that Japan has, which consists of six years of primary education, three years of lower secondary education, three years of upper secondary education, and four years of higher education. The nine years from primary education through to lower secondary education is regarded as "basic education" and is treated as compulsory education.

	<p>“Strengthening of Mathematics and Science Education (SMASE) (2006-2009)”: In-service Training in three target states.</p> <p>“SMASE Phase II” (2010-)”: In-service Training in three target states and other 34 states.</p> <p>(Grassroots Grand Aid) “Improvement of Mathematics and Science at primary education at 12 schools in Niger State(2008)” : Procurement of education materials</p>
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2. Outline of the Evaluation Study

2.1 External Evaluator

Hisae Takahashi, Ernst &Young Advisory Co., Ltd.

2.2 Duration of Evaluation Study

Duration of the Study: November, 2010 – December, 2011

Duration of the Field Study: February 2 –February 20, 2011 and June 26 –July 4, 2011

2.3 Constraints during the Evaluation Study

A religious conflict broke out in December 2010 in Plateau State, which is one of the project’s target states. This left more than 80 people dead and destabilized the security situation. For this reason, a site visit could not be carried out. Therefore, in order to perform the evaluation, an interview survey was conducted with official on the State Universal Basic Education Board (SUBEB) for Plateau State in the state capital of Abuja in order to collect and confirm the necessary information required. However, the impact on the 26 target schools in Plateau State was not reflected in some of the qualitative outcomes or impacts because the beneficiaries from this state could not be included within the results of the beneficiary surveys. Furthermore, this project targeted 70 schools in the states of Niger, Plateau, and Kaduna, but due to time constraints, 27² out of the 44 schools in Niger and Kaduna States were selected for the implementation of the onsite surveys and the beneficiary surveys.

3. Results of the Evaluation (Overall Rating: B³)

3.1 Relevance (Rating: ③⁴)

3.1.1 Relevance with the Development Plan of Nigeria

In Nigeria, the National Economic Empowerment and Development Strategy (NEEDS; 2003-2007), which is a medium-term national development plan that is equivalent to a Poverty

² 27 schools were selected based on discussions with the implementing agency and local consultants. Basically, they were selected among the schools where deep wells have been installed. Also, schools located in both urban areas and suburb areas were selected.

³ A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory

⁴ ①: High, ② Fair, ③ Low

Reduction Strategy Paper (PRSP), was formulated in 2004.⁵ This strategy is comprised of four basic strategies for national development.⁶ Under one of these—“implementing a social charter for the people”—it declares that the basic education sector is the most essential sector to promote in order to make progress with eradicating poverty. Education is also stipulated as being an important sector for raising the latent potential of the people within Vision 20: 2020 (2008 – 2020), which is the current development policy. This policy raises the goal of 100% primary education completion by both boys and girls by 2015, and 100% lower secondary education completion by 2020. As noted above, the education sector has importance as a core aspect of eradicating poverty and maximizing the capabilities of the people in Nigeria from planning through to the ex-post evaluation.

Furthermore, at the time of the basic design study, the UBE Plan had already been formulated and nine years of basic education had been made free and compulsory. The UBE lays out the goal of providing all the pupils with educational opportunities, and indicates that both quantitative and qualitative improvements in classrooms and facilities will be required. After this, specific measures and timeframes concerning improving classrooms, toilets, and water supply and sanitary facilities to improve the environment for primary education were indicated within the Education Sector Roadmap that was formulated in 2009. This project provides assistance for constructing classrooms, toilets, and deep wells to contribute to realizing these policies and measures. Therefore, the project is highly consistent with the implementation of the development policy of Nigeria.

3.1.2 Relevance with the Development Needs of Nigeria

At the time of the planning, Nigeria was working to make basic education free and compulsory, but the deterioration of education facilities and lack of classrooms in primary schools were a serious problem and made it difficult to handle the rapid surge in the number of pupils following in the wake of the implementation of UBE. What is more, the proportion of the budget channeled towards the education sector in Nigeria was low at just under 7% as a percentage of gross domestic product (GDP). On top of which the majority of the budget was spent on teachers’ salaries, meaning that a budget that was adequate for constructing the facilities that are crucial for the implementation of UBE had not been allocated. Given such circumstances, the construction of new classrooms, installation of auxiliary facilities, and procurement of educational furniture and fixtures has been recognized as being significant in terms of alleviating the lack of classrooms and improving the environment for basic education. Considering the fact that this project was Japan’s

⁵ PRSPs are three-year economic and social development plans that are formulated with the participation of a wide range of interested parties under the ownership of developing countries which focus on poverty reduction. Since international consent for their formulation was given at the Annual General Meetings of the IMF and World Bank in September 1999, many countries have positioned them as a substantially “new type of national development plan” to replace their former national development plans.

⁶ The four strategies of: 1) Reforming the way government works and its institutions, 2) growing the private sector, 3) implementing a social charter for the people, 4) and value re-orientation.

first assistance for the education sector in Nigeria, three major states in the northern region were selected as the target region due to their proximity to the capital and the ease of monitoring them. Seventy schools in the three states were selected as target schools based on selection criteria such as the urgent need for the construction of classrooms and the number of classrooms needed being more than two.⁷

At present there are approximately 10 million pupils in Nigeria who are unable to attend primary school, with it believed that roughly 250,000 classrooms are needed in order to allow them to go to school.⁸ Therefore, there is an ongoing strong need to construct new classrooms and supply their accompanying furniture and equipment in primary schools, and so the implementation of this project is relevant with the development needs of Nigeria.

3.1.3 Relevance with Japan's ODA Policy

At an economic cooperation policy meeting in August 1999, it was agreed that four areas would be set as priority areas for Japan's official development assistance (ODA) to Nigeria: (1) Health and medical care, (2) water supply, (3) basic education, and (4) rural electrification. In a policy conference in 2005, the agriculture sector was also added as a priority area, and finally, five sectors were designated as continued priority areas in 2007. For the basic education sector in particular, a policy was laid out that would continue to implement assistance focused on the improvement of primary education facilities and the qualitative and quantitative expansion of teaching faculty. In addition, various types of assistance have been deployed in the target region of this project. These include the improvements in the installation of primary education facilities through grant aid (this project), in-service teacher training through technical cooperation via the Strengthening Mathematics and Science Education Project (SMASE) as well as the distribution of teaching materials through grassroots grant aid projects via the Improvement of Mathematics and Science at Primary Education in the state of Niger. The implementation of this comprehensive assistance has been acknowledged as being relevant in terms of initiatives aimed at resolving Nigeria's development challenges⁹ in basic education, and was also consistent with Japan's aid policy at the planning stage.

Therefore, this project has been highly relevant with the Nigeria'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

⁷ The breakdown of these 70 schools is as follows: 12 schools in Niger, 26 schools in Plateau, and 32 schools in Kaduna.

⁸ According to preliminary calculations by UBEC.

⁹ (1) Improving access to educational services and (2) raising the quality of education, primarily for that of primary math and science education, have been specified as development challenges for the basic education sector in Nigeria. See the following site for details. <http://www.mofa.go.jp/mofaj/gaiko/oda/seisaku/jigyuu/pdfs/nigeria.pdf>

This project conducted the development of school facilities, procurement of furniture and teaching tools, and a soft component for those involved in the maintenance and operation of facilities (on the job training by consultants).¹⁰ The planned and actual outputs are shown in Table 1 and Table 2 below.

Table 1 Planned and Actual Output (Facilities and Major Equipments)

Sates (Number of target schools)	Items		Planned	Actual	Difference
Niger (12 schools)	Facilities	Classroom	78	78	None
		Headmaster's Office & store Room	5	5	
		Toilet Booths	68	68	
	Furniture/ Fixtures	Integral Desk-Bench	1,794	1,794	
		Blackboard	78	78	
	Deep Well	Deep Well	4	4	
Plateau (26 schools)	Facilities	Classroom	147	147	None
		Headmaster's Office & store Room	4	4	
		Toilet Booths	144	144	
	Furniture/ Fixtures	Integral Desk-Bench	3,381	3,381	
		Blackboard	147	147	
	Deep Well	Deep Well	10	10	
Kaduna (32 schools)	Facilities	Classroom	265	265	None
		Headmaster's Office & store Room	4	4	
		Toilet Booths	170	170	
	Furniture/ Fixtures	Integral Desk-Bench	6,095	6,095	
		Blackboard	265	265	
	Deep Well	Deep Well	5	5	

Source: Basic Design Report and Completion Report

Table 2 Planned and Actual Output (Soft Component)

	Contents		Difference
	Planned	Actual	
Period	7 M/M	7 M/M	None
Contents	Training conducted by Consultants Contents: 1. Preparation of the guideline 2. Explanation of the guideline to local C/Ps. 3. Establishment of Task Force	Training conducted by Consultants Contents: 1. Preparation of the guideline 2. Explanation of the guideline to local C/Ps 3. Establishment of Task Force	None

¹⁰ A custom of valuing public property and performing maintenance on it was lacking in Nigeria. It was pointed out that there was an extremely high risk of the facilities constructed and procured through this project being damaged and deteriorating if facilities alone were newly constructed without promoting awareness of the importance of routine cleaning and maintenance activities. Therefore, a soft component was also included, with the goals of instilling a sense of ownership in those involved in the maintenance of school facilities and laying the foundations for continued maintenance.

	<p>4. Selection of Model schools and grouping of the project school</p> <p>5. Orientations to project schools and model schools</p> <p>6. Preparation of the Manual for facility maintenance and instruction posters</p> <p>7. Practice of daily maintenance activities at model schools</p> <p>8. Organization of zonal training workshops</p> <p>9. Preparation of monitoring manual</p>	<p>4. Selection of Model schools and grouping of the project school</p> <p>5. Orientations to project schools and model schools</p> <p>6. Preparation of the Manual for facility maintenance and instruction posters</p> <p>7. Practice of daily maintenance activities at model schools</p> <p>8. Organization of zonal training workshops</p> <p>9. Preparation of monitoring manual</p>	
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Source: Basic Design Report and Completion Report

The construction of school facilities and the procurement of furniture and fixtures were carried out as planned, and it was confirmed through field observations and interview surveys with SUBEB official that at present they are being adequately utilized. Some of the reinforcing rods used to construct the classrooms were changed following the strengthening of standards within the country, but these were consistent with Nigeria’s standards, the modifications were minor, and this had no impact in terms of consequences arising or ensuring safety. Therefore, the content of the changes are considered to be valid.

The aim of the soft component was to have head teachers, teachers, community leaders, and others who constitute the principle undertakers of school maintenance activities take ownership and to create a foundation for them to carry out maintenance activities by themselves in a continuous manner. This was implemented as shown in Table 2.

More specifically, the SUBEB official from each state joined the consultants in holding orientation classes and workshops on: (1) hygiene management, (2) facility maintenance, (3) school management methods, and other issues, for members of task forces (TF) for each target school. In actuality, cleaning and sanitary activities were carried out together with the pupils. The workshops were held at model schools¹¹ to raise awareness at all of the target schools through the participation of the TF members situated at every target school. This scheme was designed to allow them to disseminate the content they learned within their schools and communities. What is more, maintenance manuals for facilities and materials for awareness-raising were created and a number of schemes were employed to strengthen the sense of ownership of the participants and their use of manuals and materials. These include creating posters that interweave pictures and photographs that are easily for pupils to understand, and creating posters in the Hausa language that is more commonly used by the communities in Kaduna State.



Photo: A poster to raise awareness of maintenance for school facilities that was created in the local language (Hausa)

¹¹ Schools that are relatively easy to access from the other target schools in consideration of the location of the target schools in each state and schools with deep wells installed by this project were primarily chosen as model schools.

When confirmation was performed on the contracted consultant and the executing agency to see whether the input quantity of the activities and their content were appropriate, they responded that the content and input quantity implemented over the implementation period were appropriate. But conversely, the status regarding the soft component could not be confirmed through the defect survey or the like following project implementation. For this reason, the opinion was raised that a scheme is desired that would address monitoring for items related to the soft component at the time of the defect survey.¹²

3.2.2 Project Inputs

3.2.2.1 Project Cost

The actual project cost was lower than planned, at 16.36 million yen compared to the 16.47 million yen, from the exchange of notes (E/N) (99% of the plan). This was due to the difference between the planned cost and the amounts tendered by the contracted companies (consultant and builders). According to interview survey to the UBEC and SUBEB officials, while the construction costs from Japan were higher than those in their own country, the fact that this project used exceptional, high quality specifications would make it possible to keep maintenance and repair costs in check. For this reason it was evaluated extremely highly by those involved.

3.2.2.2 Project Period

The project came in under the planned length at 42 months from August 2004 to February 2008, compared to the 44 months planned (95% of the plan).

As above, both project cost and project period were mostly as planned, therefore efficiency of the project is high.

3.3 Effectiveness¹³ (Rating: ②)

3.3.1 Quantitative Effects

3.3.1.1 Results from Operation and Effect Indicators

1) Average Number of Pupils per Classroom

It was expected that newly constructing classrooms through this project would reduce the average number of pupils per classroom from 121 at the time of the plan to 45. Yet the results of the ex-post evaluation survey show 69 pupils on average and this figure came in above the planned figure of 45 pupils at the target schools (see Table 3). The main reason being that there was a greater increase in the number of school children than expected throughout the entire country including the target region¹⁴ and Nigerian side could not construct classrooms in responses to this

¹² From the interview survey to the contracted consultant.

¹³ Rating of Impact will be included in the rating of effectiveness.

¹⁴ The net number of pupils enrolled in primary schools in the three target states rose to 2.79 million in 2009 from 2.36 million in 2004, an increase of roughly 430,000 over five years.

great increase in number of pupils¹⁵. Furthermore, there were also confirmed cases where the number of pupils increased due to calls for them to attend school by their communities on account of the construction of new classrooms. Yet even though the project did not reach its target value, in contrast with the greater-than-expected increase in the enrollment number for school, the number of pupils per classroom dropped from an average of 121 to 69. In this sense, this project could be judged as having contributed to alleviating the congestion within classrooms in the target schools to a certain degree. However, basic design survey concluded that 45 pupil per classroom (56m²) was appropriate. Therefore, the current condition, where the number of pupils per classroom exceeds 45 pupils, has a room for improvement to achieve the better education environment and it is a challenge for Nigerian side to improve this current situation.

Table 3 Average Number of Pupils per Classroom at Target 70 Schools

	Original(2004)	Planned	Actual (2010)
Average of target states	121	45	69
Niger state	109		80
Plateau state	117		60
Kaduna state	128		68

Source: Documents provided by UBEC and SUBEBs

2) Number of Schools without Head Master’s Room or Stockroom

At the time of the planning, 13 of the 70 target schools lacked working space for their teachers and storage areas for teaching tool and textbooks, which was impairing the operation of the schools. Therefore, it was expected that this project would eliminate target schools that lacked head master’s rooms and stockrooms, thereby contributing to improving the operation of the schools and their educational environments. As it indicates in Table 4, all of the target schools were outfitted with the necessary facilities (head master’s rooms, stockrooms, etc.). From the results of the field survey and interview survey with SUBEB official, it was also confirmed that all of the head master’s rooms and stockrooms constructed through the project are being effectively used for storing teaching materials and as venues for class preparation by teachers, PTA assemblies, and community meetings. It was also confirmed that this has contributed to improving the teaching environment for teachers in particular.

Table 4 Number of Schools without Head Master’s Room or Stockroom

	Original (2004)	Planned	Actual (2010)
Total	13	None	None
Niger state	5		
Plateau state	4		

¹⁵ From the interview survey to UBEC. Officials in UBEC explained that it is a challenges as well as responsibility of Nigerian side to understand and respond to these changes since it is not realistic to design the scope (the number of classroom) which exceeds the capacity of expected increase in the number of students at the time of planning stage.

Kaduna state	4		
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Source: Documents provided by UBEC and SUBEBs

3) Number of Schools without Toilet Facilities

At the time of the planning for this project, almost all of the target schools either lacked toilets or had ones that were damaged to the point that they were not fit for use. For this reason, female teachers and others had to borrow the toilets of nearby private residences, while the children were forced to relieve themselves in the bushes. This resulted in poor hygiene conditions on the school grounds and in the surrounding areas.

This project constructed a total of 382 toilet booths to achieve the goal of installing separate boy and girl toilets in all the target schools. As it is claimed that the lack of toilets is one of the causes for the decline in enrollment rates in the higher grades, installing toilets in all of the target schools can be judged as having contributed to improving the school environments.

Table 5 Number of Schools with No Toilet Facilities

	Original (2004)	Planned	Actual (2010)
Total	51	None	None
Niger state	9		None
Plateau state	25		None
Kaduna state	17		None

Source: Documents provided by UBEC and SUBEBs

4) Number of Schools which Have Difficulties in Getting Water

Prior to the implementation of this project, it was confirmed that there were 19 target schools that had difficulties obtaining water from their surrounding areas. These schools depended on facilities supplying water from far away or river water to obtain the water they needed for cleaning, hand washing, and toilets. Therefore, this project installed deep wells at these 19 schools and aided in supplying schools that had had trouble getting water with safe water. It was expected that all of the target schools would obtain water from inside the school or nearby, but over the past several years a number of problems have arisen with this, such as several formerly usable wells breaking down and water running dry. This has made it difficult to obtain water at 19 of the 70 target schools which was not installed deep wells by this project, particularly during the dry season.

Table 6 Number of Schools which Have Difficulties in Getting Water

	Baseline (2004)	Planned	Actual (2010)
Total	19	None	19
Niger state	4		6
Plateau state	10		13
Kaduna state	5		None

Source: Documents provided by UBEC and SUBEBs

3.3.2 Qualitative Effects

(1) Improving Sanitary Conditions at the Target Schools (Results of the Beneficiary Survey)

Because only a small number of the target schools from this project had toilets installed before the implementation of this project, pupils needed to relieve themselves in vacant lots and in the bushes around the schools. This contributed to the problem of poor hygiene conditions on the school grounds

BOX 1:

Prior to the installation of toilets, the pupils would relieve themselves in the bushes or on the school grounds. Because of this, hygiene conditions in Schools could not be maintained, which caused serious problems.

Many girls were observed who would not (or could not) attend school due to the lack of toilets. Now cleanliness is maintained within the school grounds, and the installation of toilets through the project has led to improving the sanitary conditions of the target schools.



and in the surrounding areas. In the results of the beneficiary survey,¹⁶ a little more than 40% of the respondents indicated “poor sanitary conditions due to the lack of toilets” as a challenge facing the schools before the implementation of the project. This project installed toilets in all of the target schools that had been lacking them, and also carried out the construction of deep wells at schools that had difficulty obtaining the water necessary for their cleaning. As a result, roughly 90% of the respondents responded that the aforementioned problem had improved following the project. Many opinions regarding the improvement in the sanitary conditions like those shown in the Box were also heard during the interview surveys, owing to which it is believed that the installation of toilets and deep wells by the project contributed to improving the sanitary conditions at the target schools.

(2) Improving the Learning and Teaching Environments at the Target Schools (Results of the Beneficiary Survey)

In the basic design study, it was envisioned that constructing new education facilities and procuring desks, chairs, and other furniture would improve the learning and teaching environments. According to the beneficiary surveys, 116 of the 150 responses said that the learning environment had improved, while 108 of the 150 responses said that the teaching environment had improved. Roughly 70 – 80% of the respondents for both of these responded that the learning environment and the teaching environment had improved.

In the interview surveys as well, it was reported at almost all of the target schools visited that learning and teaching were carried out in a more agreeable environment than before. For example, there were concerns regarding the learning environment such as: “The number of classrooms prior to the implementation of the project was insufficient, so many of the pupils had class under a tree.” “There are no desks and chairs, so the pupils had class sitting on the ground.” “Classes can’t be held on days where the temperature is high or days when it rains, so that the holding of classes had

¹⁶ Beneficiary surveys were conducted at 16 target schools in the states of Niger and Kaduna and received responses from a total of 158 concerned parties. The breakdown of the respondents is 33 head masters and assistant head masters total, 45 teachers, 39 PTA members, 35 community members, and 6 security officers.

been determined by the weather.” But following the implementation of the project, chairs and desks were distributed and classes could be held even on rainy days, which are among the testaments to the substantial improvements in the learning and teaching environments.



Photo (left): A classroom where chairs and desks have not been installed (classrooms in such circumstances are still common in Nigeria today)

Photo (right): A classroom for which furniture was procured through the project

(3) Dissemination of Maintenance Systems

With this project, it was expected that the maintenance skills and systems for the school facilities at the schools targeted for cooperation would be improved and that the effects from this would be spread to other schools in the three states through the implementation of a soft component. A scheme was devised for the target schools that aimed to raise the awareness of the TF members at all of the schools by having them participate in workshops. By doing so, it was confirmed during the field survey that the head masters from the various schools and community members that had participated in the workshops would collaborate with the Local Government Education Authority (LGEA) and SUBEB in working towards better maintenance. In the results of the beneficiary surveys as well, roughly 70% of the respondents had participated in workshops held through the project. Of these, 98% responded that the knowledge they learned there had contributed to better maintenance of the school facilities and improving their maintenance systems.

As mentioned above, the implementation of this soft component that provided instruction on the importance of and methods for maintenance is believed to have led to improving the maintenance systems of the target schools. Conversely, while there were expectations that LGEAs would take initiatives to spread this through workshops to schools other than the target schools, these have only been carried out in a few areas. At the moment, the spillover effects that have been observed have been quite limited.

As noted above, some project outcomes which indicate the improvement of education environment did not fulfill the planned values due to an increase in the enrolled population and external factors. However, the project was recognized as having an impact on improving developments in the basic education sector in Nigeria. Therefore, this project has somewhat achieved its objectives, therefore its effectiveness is fair.

3.4 Impact

3.4.1 Intended Impacts

(1) Improvement of Gross Enrolment Rate

This project was expected to increase the gross enrollment rate as an impact by alleviating the shortage of classrooms and improving the attendance environment through the development of classroom facilities in 70 primary schools in three states in the northern part of the country.

As indicated in Table 7, it was confirmed that the current gross enrollment rate in the target region has increased by around 10% on average compared to what it was before the implementation of the project. In addition, the percentage of girls among the number of school children has also risen by around 5% on average. During the planning, it was a problem that girls would frequently not attend school for the reason that toilets had not been installed. But installing toilet booths through this project alleviated this factor inhibiting the girls' desire to attend school, and thereby is believed to have contributed to boosting the girls' enrollment rate.

Table 7. Gross Enrollment Rate and the Percentage of Girls in the Target Region

State	Gross enrollment rate		Percentage of girls	
	2002/03	2009/10	2002/03	2009/10
Average	71%	81%	42%	47%
Niger state	71%	68%	38%	45%
Plateau state	74%	94%	47%	48%
Kaduna state	69%	80%	40%	48%

Source: From data provided by UBEC and the SUBEBs in each state.

From the results of the beneficiary surveys as well, all of the respondents answered that the enrollment rate had risen following the implementation of the project. According to school officials, the most significant factor in this was the fact that the new installation of classrooms improved the learning environment and, upon ascertaining the situation, parents would proactively send their children off to attend school. With regards to attendance by girls, 98% of the respondents responded that this had increased compared with before the project implementation. Ensuring the privacy of girls is considered to be extremely important, particularly in areas where Muslims account for the majority, and so the installation of toilets is thought to have been beneficial in encouraging the attendance of many girls. It was also confirmed that the awareness-raising activities carried out independently by the LGEAs and communities have contributed to improving the attendance status of girls.

(2) Innovations in Classroom Design and Reduction of the Maintenance Costs

According to information in the basic design study, the existing classrooms in Nigeria were low in durability and the facilities tended to be treated poorly, and repair and maintenance costs were frequently incurred. For this reason, a variety of different innovative schemes were devised under the project from the design stage onward in order to handle this problem. For example, the

classroom wall material has been changed from concrete blocks to bricks¹⁷ that do not need to be painted led to a reduction in the painting costs. It was also confirmed in the interview surveys with the SUBEB official from Kaduna State that this actually made it possible to save roughly 200,000 to 250,000 naira¹⁸ (per school per year) in painting costs.

When considering the project design and specifications, the design and specifications were adopted by factoring in the ease and durability of maintenance. Examples of this include selecting inexpensive, high quality materials due to the ease of local procurement, improving areas that should be improved when it comes to criteria while conforming to Nigeria's standards (for example, installing skylights because it is dark when the doors and windows are shut), and not setting in place ceilings in order to fully utilize space. The cost reduction effects from these schemes have been highly appraised, and the Kaduna SUBEB has currently adopted the design from this project for all primary school construction (see photo at right). Due consideration was given to the fact that materials could be procured locally and that local contractors could shoulder the design and construction by themselves, and the specifications allowed for the mitigation of maintenance costs. This has made it possible for Kaduna State itself to procure materials from the neighboring Niger State and have local contractors build facilities that are of the same quality.



Photo: Classroom constructed by a SUBEB (Kaduna) by adopting JICA's design

Moreover, according to UBEC, other donors that are currently considering providing assistance with constructing classrooms in other regions are using the design of the primary schools built by Japan as reference, indicating the high praise they are garnering for their design and durability.

3.4.2 Other Impacts

School facilities were newly constructed at the location of existing schools, and so no resident relocation or land acquisitions occurred as a result of implementing the project. Moreover, it was confirmed that no negative environmental impact arose before or after project implementation according to the results of the interview surveys with the executing agency and site visits to the target schools.

The synergistic effects with other technical cooperation and grant assistance for grassroots projects could be brought up as another indirect impact. In the project's target area in all three states, the SMASE technical cooperation project worked to raise the quality of teachers through in-service

¹⁷When concrete blocks are used for the walls they need to be painted periodically. But as can be ascertained from the photo above (of a classroom constructed by a SUBEB (Kaduna) by adopting JICA's design), the fired bricks used through this project are a reddish brown due to the iron content found in the soil, and so they do not need to be painted.

¹⁸ Approximately 100,000 – 135,000 Japanese yen.

teacher training. According to official from the Federal Ministry of Education, a reason behind the fact that SMASE was implemented in the target states for this project is that they have laid out a strategy that aims to improve access to and the quality of education by improving the quality of teachers for the three states in which an increase in the number of accepted pupils is anticipated due to the implementation of this project. The Improvement of Mathematics and Science at Primary Education at 12 Schools in Niger State, a grassroots grant aid human security project, was also implemented in Niger. This project provided assistance for distributing mathematics and science teaching materials in conjunction with training for mathematics and science teachers. The number of pupils advancing to secondary school in the target region (the pass rate for the nationwide standardized test held prior to graduating from primary school), or namely the pupils' academic performance, has risen. As shown in table 8, by comparing the original number with actual at the time of the ex-post evaluation, the number of pupils advancing to secondary schools increased 60% on average in target region and 35% on average in Nigeria. Therefore the increase rate in the number of pupils in target region is relatively high compared to the average in Nigeria. It is believed that this is the outcome contributed to the improvement of education quality from the organic linkage of different cooperation schemes—including the installation of primary school facilities through grant aid, in-service teacher training through technical cooperation, and the provision of mathematics and science teaching materials through grassroots grant aid projects—or hard aspects (construction of educational facilities) and soft aspects (teacher training).

Table 8 Increase in the Number of Pupils Advancing to Secondary School in the Target Area

	Before project implementation (2005/06)	Results (2009/10)	Increase Rate(%) ^{Note 1}
Number of pupils advancing to secondary school in target area	85,717	137,120	60%
Niger state	37,684	66,555	77%
Kaduna state	48,033	70,565	47%
Number of pupils advancing to secondary school in Nigeria	1,002,691	1,351,083	35%

Note: Figures from the ex-post evaluation for Plateau state could not be obtained so it was not included.

Note ¹: Figures show the change (%) from 2005/6 to 2009/10.

Source: "Nigeria, Digest of Education Statistics (2006-2010)," Federal Ministry of Education

As indicated above, the implementation of the project was acknowledged to have a wide-ranging impact, including improvements in the enrollment rate in the target area through the development of school facilities, design innovations and the reduction of repair and maintenance costs as a result of these, and the manifestation of synergistic effects through the strategic use of multiple schemes.

3.5 Sustainability (Rating: ②)

3.5.1 Structural Aspects of Operation and Maintenance

The basic design study planned the roles for the operation and maintenance of the primary schools constructed through the project in the following manner.

- The SUBEBs in each target state would have jurisdiction under the guidance of UBEC. The SUBEBs would coordinate with the LGEAs in which the target schools are located to perform supervision and monitoring of the schools.
- Actual maintenance would be handled by the communities in which the schools were located and their PTAs, rather than the government.

It was confirmed by the ex-post evaluation survey that in Kaduna there is a clear sharing of roles whereby tasks like routine cleaning and repairs to minor damage are being handled by the School Based Management Committees (SBMCs) situated within each school, while relatively large-scale restoration that cannot be handled by the schools are under the jurisdiction of the LGEAs or SUBEBs.

On the other hand, in Niger some of the head masters and SUBEB staff left their posts before an appropriate handover. Because of this, it was observed that the importance of facility maintenance has not been properly communicated in some schools. Other schools have issues like how to handle restoration work on a scale that the schools cannot handle and ambiguity regarding reporting procedures in terms of where reports should be made. UBEC understands the situation and is considering providing instruction to the newly appointed head masters. Furthermore, Plateau SUBEB officials also acknowledged similar problems at some of the schools, based on the interview survey.

3.5.2 Technical Aspects of Operation and Maintenance

The content of the maintenance on the school facilities and furniture and so on does not require advanced techniques, but rather it consists of keeping things orderly and voluntary cleaning as part of a daily routine, as well as moral education to foster a sense of values towards public facilities. This education must become customary. Since it was assumed that a long period of time would be needed for instruction on maintenance due to the state of the schools from the time of the planning, a soft component was implemented to provide instruction on the importance of and methods for facility maintenance as was described in “3.2.1 Project Outputs.” The manuals for facility maintenance and posters for awareness-raising that were developed through the activities of this soft component are still being effectively utilized at the target schools today. In the interview surveys with those involved, areas that required advanced techniques or which are considered to be problematic in a technical sense were not observed. Moreover, from the results of the beneficiary survey it was confirmed that 95% of the respondents who participated in the soft component workshops (85 people) gained new knowledge related to the maintenance of school facilities, with their newly-acquired capabilities and knowledge conducive for actual maintenance activities.

3.5.3 Financial Aspects of Operation and Maintenance

As for the facility maintenance costs at the target schools, relatively minor repair costs such as for damaged windows are covered through the assistance of the PTAs for each school. If assistance cannot be collected from the PTA, then repairs of things like damage to windows is postponed, with such conditions having been seen here and there in Niger. Conversely, relatively large damage such as roof damage or the replacement of doors is paid for out of the budgets of the SUBEBs or UBEC in each state. It has been decided that 2% of the UBEC’ budgets are to come from a Consolidated Revenue Fund (CRF),¹⁹ with the trend in this amount on a gradually rising as indicated in Table 9.

Table 9 Budget of UBEC

	2005	2006	2007	2008	2009
Budget of UBEC	24.3	30.5	35.3	44.0	42.6

Unit: Billion Naira

Source: UBEC, “40 Frequently Asked Questions on Universal Basic Education Programme”, Central Bank of Nigeria, “Statistical Bulletin.”

Roughly 70 – 80% of this budget is allocated to the SUBEBs in each state in the form of a matching fund program. A uniform 530 million naira was allocated to each state in 2009, with the obligation that 70% of this be allotted to expenses for classroom construction and furniture procurement. According to the officials at Kaduna and Niger SUBEBs, the majority of these expenses were channeled towards the construction of facilities, which only left a very tiny amount of money over for maintenance costs. Originally, there have been cases in Nigeria where repairs were not carried out and things were left as they were where large-scale repairs of school buildings were needed. Currently, there is little recognition of the importance of facility maintenance. At present, no serious financial problems have arisen with the facilities constructed through the project. This is due to the fact that not that much time has elapsed since facilities were constructed, and because they were designed with forethought given to the national circumstances and the burden of maintenance costs. However, sufficient budgets for maintenance could not be secured across the target states as a whole, and so securing proper maintenance costs for school facilities have been deemed a challenge for the future.

3.5.4 Current Status of Maintenance

In Kaduna State, efforts are being made by each school to maintain a favorable environment under the management of the SUBEBs and LGEAs through the implementation of the soft component. It was confirmed through the site visits that most of the school facilities and furniture such as desks and chairs are being maintained in good condition. In Niger State, the LGEAs and SUBEBs monitor the state of facility maintenance and the school environments and hygiene

¹⁹ UBEC budgetary allocations (2% of the CRF) were formally decided upon as an ordinance by the National Assembly in 2004.

conditions. But there are examples of schools that are not so scrupulous about maintenance, particularly broken windowpanes, damaged hinges, broken chairs, and graffiti. One of the reasons for why maintenance is not meticulously carried out at some of the schools in the state is because officials at SUBEB and officials at some of the schools left their posts without performing an appropriate handover, and so the importance of maintenance was not communicated. As was mentioned in “3.5.1 Structural Aspects of Operation and Maintenance,” UBEC and the SUBEB in Niger State have recognized the problem and are considering future improvement measures, such as explaining this to newly appointed head masters in the future and offering training.

As indicated above, in terms of project maintenance there are some minor problems with structural aspects and the financial conditions, and so the sustainability of the impacts realized through the project are moderate.

4. Conclusion, Lessons Learned and Recommendations

4.1 Conclusion

Nigeria is working to provide free basic education, with the aim of improving access to primary education. However, educational facilities were inadequate and unable to cope with the rapid rise in the number of pupils. To address this problem, this project installed and equipped additional primary school facilities, in accordance with the national policies of Nigeria, which has earmarked basic education as a priority area. As for project implementation, the outputs, the cost and the period of the project were in line with the original plan. Some project outcomes, such as alleviating classroom congestion and disseminating maintenance management systems to neighboring schools, did not fulfill the planned values due to an increase in the enrolled population over and above what was expected. However, the project was recognized as having an extensive impact on improving developments in the basic education sector in Nigeria. This included increasing the number of school children, improving the enrollment ratio of and sanitary conditions for girls, and improving pupils’ academic performance; all as a result of strategically implemented collaborative assistance in the form of technical support and grant aid for grassroots projects. With respect to sustainability, while positive changes were seen in awareness relating to maintenance at many of the target schools, conversely, there are still some issues to be tackled in terms of maintenance conditions and the institutional systems for ensuring the project’s outcomes.

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

4.2 Recommendations

4.2.1 Recommendations to the Executing Agency

(1) Notifying and Strengthening Maintenance Activities through Adequate Handovers

Some problems have been confirmed at some of the primary schools in Niger. These include cleaning not being scrupulously carried out, damage to some of the facilities and fixtures, and the

reporting line from the school sites to the SUBEBs not being clearly specified. The major reason for this is that no handover was carried out when head masters at the target schools and SUBEB officials left their jobs, so that the people currently in charge are not fully aware of how to properly handle the facilities and the importance of maintenance. For this reason, a number of measures are thought to be necessary for the sake of continuing on with proper maintenance activities. Such measures include providing instruction to the newly appointed head masters and staff, as well as offering training to the head masters and SUBEB officials who have currently taken up their posts without undergoing any sort of handover. It is also thought that setting up a forum that would periodically invite school officials from each state; thoroughly inform them regarding maintenance activities; share roles between the schools, LGEAs, SUBEBs, and UBEC; and clarify the reporting lines would lead to ensuring sustainability.

(2) Determining the Learning Environment and Performing Follow-Ups

In keeping with the substantial rise in the population in Nigeria, the enrolment number in schools in the target region is on track to increase substantially. As a result, the number of pupils per classroom of 45 that was planned during the basic design study has been exceeded, and the situation will gradually continue to deteriorate in the future if the status quo persists. It is not realistic to design facilities that would make it possible to accommodate a number of enrolled pupils that is greater than what was anticipated during the planning. As such, it will be essential to perform follow-ups on the SUBEBs in each state after the end of the project in order to maintain a suitable learning environment. Hereafter, efforts will be required to determine the rise in the number of enrolled pupils and the number of classrooms needed, as will responses for newly building appropriate classrooms, under the responsibility of UBEC and the SUBEBs.

4.3 Lessons Learned

(1) Comprehensive Assistance to Resolve Development Challenges

This project developed educational facilities with three states in the northern part of Nigeria as its target region. Following this, in-service teacher training targeting the same region (technical cooperation; currently underway), the distribution of mathematics and science teaching materials in the state of Niger, which is part of the target region (a grant assistance for grassroots project), and other types of assistance were strategically developed. These comprehensive initiatives were considered to have had indirect positive impacts that were not foreseen during the planning, such as improving the number of advancement to secondary schools. It is expected that providing assistance in a strategic manner like this from both hard and soft aspects will lead to the improvement of the quality of education and resolving development challenges in the target sector.

(2) Ensure Sustainability through Innovations in Facility Design

At the time of the planning, a lack of awareness concerning maintenance in Nigeria and the difficulty of continuing with maintenance activities were pointed out. As such, technical assistance for maintenance activities were incorporated into the project, and innovations related to the facility design were worked out in order to keep maintenance costs in check and allow the facilities to be used over an extended period of time. For example, using blocks that do not need to be painted for the classroom walls and adopting vaulted ceilings to ensure that the roofs do not collapse serve to mitigate maintenance costs. On top of this, only materials that could be acquired within the target region were used, and so currently the Kaduna SUBEB is constructing school buildings by adopting the facility design from the project. It is believed that incorporating design that gives thought to maintenance that imposes a minimal burden and high versatility in this manner is effective from the standpoints of ensuring sustainability and diffusion.