

The Federal Democratic Republic of Ethiopia

Ex-Post Evaluation of Japanese Grant Aid Project
“The Project for Construction of Primary Schools in Oromia Region”

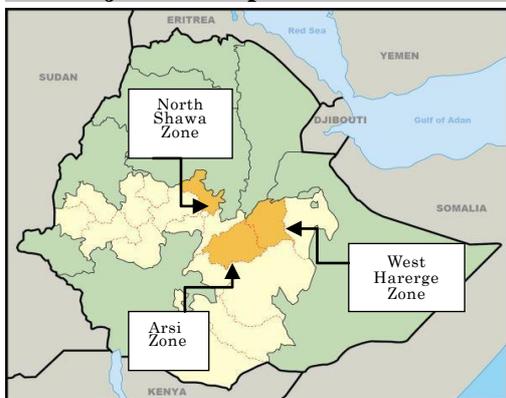
External Evaluator: Yuko Ogino, KRI International Corp.

0. Summary

The Project was implemented to improve access to primary education through expanding and newly constructing primary school facilities in the Oromia Region. As a result of the ex-post evaluation, the Project was relevant to Ethiopia’s development plan and needs in terms of primary school construction as well as Japan’s ODA policy for Ethiopia, but the Project design was not appropriate in terms of target school selection, etc. Therefore, its relevance is fair. In terms of the fundamental indicator to judge the effectiveness (increase in number of registered students), the achievement was substantially lower than the target. The expected impacts are also limited as against the planned impacts, although some effects in association with the improved learning environment are observed to a certain degree. Therefore, the Project has achieved its objectives to a limited extent, and its effectiveness and impact is low. The project costs were as planned but exceeded the plan in view of the reduction in outputs, and the project period significantly exceeded the plan. Therefore, the efficiency of the Project is low. Regarding the operation and maintenance of the Project, problems have been observed particularly in terms of the financial aspect for repair of the facilities and equipment. However, since the sites are operating as primary schools with the necessary institutional arrangements, sustainability is confirmed to a certain degree. In conclusion, the sustainability of the project effectiveness is fair.

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

1. Project Description



Project Locations



School buildings constructed in the Project

1.1 Background

In placing importance on the role of education in poverty reduction, the Government of Ethiopia launched the first and second Education Sector Development Programs (ESDP 1997-2001 & ESDP-II 2002-2004). As a result of the Programs, the Gross Enrollment Ratio (GER) remarkably improved from 34.7% (1997) to 79.2% (2005). However, such a rapid increase of GER surpassed the intake capacity of the school facilities and brought various problems such as a sharp rise in the number of students per section, and a severe shortage of classrooms and textbooks in rural areas, etc. which resulted in deterioration of educational quality. In order to address such issues, the Government of Ethiopia launched the ESDP-III (2005-2009) with a focus on quality improvement, and implemented the Program including construction and expansion of primary schools. In spite of such efforts, it was not possible to meet the targets for school facility construction in a situation where finance was mostly dependent on community support due to a shortage of governmental budget.

In addressing such problems, the Government of Ethiopia prepared “The Project for Construction of Primary Schools in Oromia Region”, and requested the Government of Japan to financially assist in constructing school facilities and procuring educational equipment. In response to the request, the Japan International Cooperation Agency (JICA) conducted a Preliminary Study from July 2006 and subsequent Outline Design Study from April 2007. The Project was implemented based on the results of the Studies.

1.2 Project Outline

The objective of the Project is to improve access to primary education through expanding and newly constructing primary school facilities at 57 existing and new target sites in 3 zones (North Shawa, West Harerge and Arsi) in the Oromia Region.

| | |
|---|---|
| Grant Limit / Actual Grant Amount | 1,041 million yen / 1,041million yen |
| Exchange of Notes Date (/Grant Agreement Date) | December 2007/NA |
| Implementing Agency | Oromia Education Bureau (OEB) |
| Project Completion Date | November 2010 |
| Main Contractor(s) | Procurement Management Agent: Japan International Cooperation System (JICS) |
| Main Consultant(s) | Local consulting firm |
| Outline Design | April – October 2007 |
| Detailed Design | March – June 2008 |
| Related Projects | • Technical Cooperation Project: Community-Based Basic Education Improvement Project (ManaBU) |

| | |
|--|--|
| | Project) (November 2003 – November 2007) <ul style="list-style-type: none"> Development Study: Increasing Access to Quality Basic Education through Developing School Mapping and Strengthening Micro-Planning (SMAPP) (April 2005 – September 2007), and others. |
|--|--|

2. Outline of the Evaluation Study

2.1 External Evaluator

Yuko OGINO, KRI International Corp.

2.2 Duration of Evaluation Study

Duration of the Study: September 2013 – August 2014

Duration of the Field Study: 3 – 18 December 2013 and 16 – 23 March 2014

2.3 Constraints during the Evaluation Study

The Project was actually implemented at a total of 38 school sites in 2 zones. The evaluation team visited 20 schools selected out of 38 schools in 2 zones because the sites are widely distributed in different places without easy access. All 38 schools and 20 Woreda Education Offices (WEO) were covered by questionnaire survey¹. The 20 schools visited were selected based on the criteria of location (by zone) and school type in order to reach more than half of the number in each category so that the evaluation results could be substantiated by a reasonable amount of evidence².

¹ Data/information was collected through 1) a questionnaire survey of all the school sites and WEOs, and 2) interviews and Focus Group Discussions (FGDs) at directly visited sites. The questionnaire survey was conducted to cover all 38 schools and 20 WEOs, and the questionnaire responses were collected from 36 target schools out of 38 (95% collection rate) and from all 20 WEOs (100% collection rate). Interviews and FGDs were conducted in 20 schools (more than half of the total 38 schools) covering a total of 204 persons (23 Director/Vice-Director, 55 teachers, 97 students, 29 Parent-Teacher Association (PTA)/Village Education Management Committee members) by available sampling, and analysis was performed in due consideration of the representation bias of a few opinions.

² The table below shows the distribution of directly visited schools which were selected in consideration of school type (Type 1: 1st cycle schools with Grades 1 to 4 upgraded by increasing classrooms to complete schools with Grades 1 to 8, Type 2: Existing complete schools having shortage of classroom to be expanded, Type 3: New complete schools constructed in non-school areas). Out of 38 schools, a total of 20 schools were visited, shown in ().

Distribution List of Directly Visited Schools: by Zone and by Type

| Zone | Type 1 (Upgraded) | Type 2 (Expanded) | Type 3 (Newly constructed) | Total |
|--------------|----------------------|----------------------|-------------------------------|---------|
| North Shawa | 11 (6) | 8 (4) | 6 (3) | 25 (13) |
| West Harerge | 5 (3) | 6 (3) | 2 (1) | 13 (7) |
| Total | 16 (9) | 14 (7) | 8 (4) | 38 (20) |

3. Results of the Evaluation (Overall Rating: D³)

3.1 Relevance (Rating: ②⁴)

3.1.1 Relevance to the Development Plan of Ethiopia

The Project is highly relevant to the development plan of Ethiopia. At the time of the Outline Design Study, the Plan for Accelerated and Sustained Development to End Poverty (PASDEP: 2005-2009) was then the 5-year national development plan, and it set human resources development as one of the priority sectors and stated the importance of improvement of educational access and quality. Oromia Region's ESDP-III (2005-2011) which was prepared based on the ESDP-III national educational development plan also addressed the strong need for construction and expansion of schools for improved access and quality of primary education. At the time of the ex-post evaluation, the subsequent national and education plans include improvement of educational access and quality as a target. "To expand and ensure the quality of education and achieve the Millennium Development Goals (MDGs) in the social sector" is one of the main objectives of the 5-year national development plan, namely the Growth and Transformation Plan (GTP: 2010-2014), regarding the education sector. The federal ESDP-IV (2010-2014) sets the targets for achieving improvement of educational quality and equity access; Oromia Region's ESDP-IV also promotes school construction activities, such as increasing the number of complete schools, reconstructing severely damaged school facilities made of wood and mud, and so forth, by setting targets to meet the objective of providing access to quality education to all primary school age children by 2015.

3.1.2 Relevance to the Development Needs of the Oromia Region

The Project is consistent with the development needs of the Oromia Region since the need for school construction has been continuously high from the time of the Outline Design Study to the date of the ex-post evaluation. The trends in school age population, enrollment, number of schools constructed, etc. were examined first. Referring to the data from 2005/06, the Outline Design Study confirmed that the Pupil Section Ratio (PSR) was as high as 73 due to the chronic shortage of classrooms caused by the rapid increase in enrollment in the Oromia Region. The Government of Ethiopia promoted school construction activities based on a low-cost school construction policy⁵, leading to great

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

⁴ ③: High, ② Fair, ① Low

⁵ According to the Preliminary Study Report (JICA, 2006), MOE has two standard designs for primary schools: Standard (wood and mud) and High Standard (reinforced concrete structure and hollow concrete blocks). Since 2003, the Ethiopian government has encouraged school construction following the Standard design in order to meet the huge construction needs with limited government budget. Most of the schools

improvement in the PSR to 58.9 as of 2012/13, but still not achieving the target standard (50 in ESDP-III) (See Table 1). The low-cost schools are usually made of wood and mud, and therefore, the quality of construction and specifications are low and their life-span is short. As a result, many school facilities are deteriorated and dilapidated. Since the poor quality of the school facilities and equipment has a negative impact on enrolment and learning quality, a continuous need for constructing durable and safe school facilities of high-standard design is confirmed at the times of Outline Design Study and the ex-post evaluation. In addition, the system of primary education in Ethiopia is 8 years, comprising the 1st cycle (Grades 1 to 4) and the 2nd cycle (Grades 5 to 8). Accordingly, the 1st cycle schools need to be upgraded to complete schools from Grade 1 to Grade 8. However, due to governmental budget limitations for primary school construction and limited support from donors⁶, most of the school construction activities are still covered by community support. In conclusion, school construction needs in the Region are constantly high.

Table 1 Educational Statistics: Oromia Region

| | School Age Population (7-14) | Enrollment | GER (%) | | No. of schools | PSR |
|---------|---------------------------------|------------|---------------------------------|---------------------------------|----------------|------|
| | | | 1 st Cycle (G1-4) | 2 nd Cycle (G5-8) | | |
| 2005/06 | 5,379,879 | 4,832,554 | 113.3 | 60.3 | 7,488 | 73.0 |
| 2007/08 | 6,063,901 | 5,541,919 | 121.1 | 57.4 | 9,325 | 65.4 |
| 2011/12 | 6,826,211 | 6,281,674 | 120.6 | 59.3 | 11,729 | 57.4 |
| 2012/13 | 7,036,942 | 6,414,327 | 121.4 | 56.5 | 12,060 | 58.9 |

Source: MOE, Education Statistics Annual Abstract (respective years)

Note: School Age Population and Gross Enrollment Ratio (GER) include Regular, Evening and Alternative Basic Education except for 2005/06 (Regular and Evening only). Pupil Section Ratio (PSR) is for Regular only.

3.1.3 Appropriateness of Project Design

In reviewing the design of the Project during the ex-post evaluation, the following 3 points, 1) Finalization of target schools, 2) Project effects and indicators and 3) Project components and size, are identified as factors that have negatively influenced the effectiveness of the Project. (See 3.2 Effectiveness for details)

1) Finalization of target schools

It was revealed that selection of the target schools was not appropriately finalized due to problems in the selection process. First, the request from Ethiopia consisted of 3 types of schools (1. 1st cycle schools to be upgraded to complete schools, 2. Existing complete

were constructed with community participation and support, and not many schools were constructed with the government budget. The High Standard design is also limited to the cases of foreign assistance and NGOs.

⁶ According to OEB, the only donor assistance was currently from Korea in the construction of 4 primary schools in Arsi Zone.

schools having shortage of classrooms to be expanded, and 3. New complete schools to be constructed in non-school areas). During the Preliminary Study (July to August 2006), it was agreed to provide assistance for the 3 types as they were in line with the school construction needs of the Region. Next, the selection criteria were agreed during the Outline Design Study, and a provisional list of 57 priority target schools (hereinafter referred to as the “provisional list”) was prepared based on the list of 151 requested schools in consideration of safety, construction management efficiency, budget, etc. The list of 57 schools only had provisional status and was to be finalized based on the results of the site survey to be conducted at the Detailed Design stage by studying the number of students and classrooms, status of continuous usability of existing classrooms, etc. However, by examining the data collected through the questionnaire survey from the 38 schools which were the actual construction sites of the Project together with the best available information and data from the relevant stakeholders, consistency between the plan and the actuality in terms of school type was found at only 12 schools in 2007 which is the planning year of the Project as explained in Table 2.

Table 2 Consistency with Type of Target Schools

| Planned in the provisional list (2007) | | | Actual (2007) |
|--|--|------------|--|
| Type 1: | 1 st cycle schools (Grades 1 to 4) to be upgraded to complete schools (Grades 1 to 8) | 16 schools | Out of 16 schools, none was a 1 st cycle school and 8 were already complete schools |
| Type 2: | Existing complete schools having shortage of classrooms to be expanded | 14 schools | Out of 14 schools, only 8 were complete schools |
| Type 3: | New complete schools to be constructed in non-school areas | 8 schools | Out of 8 schools, only 4 were new and the other 4 were the sites of existing schools |
| Total: 38 schools | | | Out of 38 schools, only 12 schools were consistent with the type of target school. |

Source: Beneficiary Survey

The first factor that allowed construction at the sites where the school type was different between the plan and the actuality is that the provisional list was not appropriately finalized at the Detailed Design stage. According to the site survey report (June 2008) in the Detailed Design, the grade-related information was obtained and recorded in the report. It was, therefore, already found that there were inconsistencies in terms of school type between the provisional list and the actuality, but construction was implemented mostly as per the provisional list⁷. Moreover, the site survey report did not

⁷ According to the site survey report at the Detailed Design stage, 1 site was excluded due to the problem of road access, and two other sites were proposed for substitution to avoid duplication of support from other sources. Of the two sites, in the end one site was not changed and the Project constructed the school

have any information on numbers of students and classrooms, and there was no evidence that any revision was done in consideration of the usability of existing classrooms and estimation of the number of necessary classrooms. In summary, it is understood that the important process of finalizing the target schools was not done appropriately although the detailed reasons for such conduct were not verified in the ex-post evaluation.

In addition, the information contained in the priority target school list prepared during the Outline Design Study was largely different from the actual situation of the schools in terms of school type. This means that the provisional list itself was not accurate. Since the list of 151 requested schools, the basis for planning, was estimated to have been prepared 2 years before the Outline Design Study, perhaps in 2005/06 or even earlier, the information might have been obsolete to use for 2007/08⁸ or incorrect⁹. Considering the large gaps between the provisional list and the actuality, even if the provisional list was reviewed at the Detailed Design stage, it was not possible to just replace a few sites but the Project should have been revised more fundamentally. From the above, it is recommended that planning during the Outline Design stage in 2007 should have been more accurately based on the latest information of the school sites obtained through such as site surveys and/or questionnaire surveys utilizing local consultants¹⁰.

2) Project Effects and Indicators

The need for an increase in student numbers, which was set as the effective indicator of the Project, was not sufficiently confirmed during the Outline Design Study. The planned effect was to improve access to primary education, which was translated more concretely into the logic that the number of registered students would be increased through increasing the capacity for enrolling additional children (capacity expansion). However,

facilities as planned although the reasons were not confirmed in the ex-post evaluation. The other site was substituted but was not the same expansion site (Type 2) and actually a school with Grades 1 & 2 only. At the time of the ex-post evaluation, the school is still a 1st cycle school with Grades 1 to 4. The site survey report at the Detailed Design stage contains information on the grades at each site but not on the number of students.

⁸ Some schools which were listed as 1st cycle school were actually complete schools in 2007/08. This shows a rapid improvement of school facilities in the sites, which should be acknowledged as a positive achievement in respect of educational development in the Oromia Region.

⁹ The provisional list was prepared during the Outline Design Study based on the requested school list from Ethiopia but not on direct data information collected from the candidate target schools. This was in view of utilizing the outputs of SMAPP. The latest EMIS data (2005/06) was also available but was used just for reference and the Outline Design Study decided that the provisional list was to be finalized based on the site survey results at the Detailed Design stage.

¹⁰ The school calendar in Ethiopia starts in September, and therefore, the Outline Design Study (April to August 2007) was not able to collect 2007/08 school data. However, if a site survey had been conducted at that time to collect data from each site, it would have been possible to prepare the provisional list with more accuracy. As for the site survey at the Detailed Design stage, it was possible to collect accurate 2007/08 school data because the site survey was conducted in June 2008. The site survey report actually contains information on the grades at each site, but no information on the number of students.

as explained later in 3.2 Effectiveness, the number of registered students did not increase as estimated in most of the 38 actual target schools either at the time of project completion or at the time of the ex-post evaluation, including even the newly constructed schools where the team observed that some of the classrooms constructed in the Project were not used for regular classes. According to the Beneficiary Survey, the major reason for this situation was that there had been lots of facility improvement in neighboring schools (new construction, expansion of grades and classrooms)¹¹. It can be concluded that the need for an increased number of students at the target sites was lower than planned.

The need for an increased number of students at the existing Type 1 and 2 school sites was not confirmed during the Outline Design Study¹². It was planned to be done in the site survey at the Detailed Design stage, but in fact no evidence has been found that it was done. As for the new Type 3 school sites, the number of necessary classrooms was confirmed based on the school-age population in the villages during the Outline Design Study, but there were other schools nearby, and construction and expansion of the school facilities was also implemented at such neighboring schools and, therefore, the number of registered students at the project sites did not increase as expected.

In summary, if the Project aimed to increase the number of students, it is recommended that the situation in the neighboring schools should have been studied because rapid school construction and expansion was underway in the Oromia Region at that time. It may have been difficult to obtain timely and accurate information in all cases because construction and expansion was implemented in some schools after the planning of the Project, and in a situation where construction was mostly done through community support. However, it might still have been possible to a certain degree through hearings at WEOs and school sites, and if it had been done, such difficulty would have been well recognized. In cases where the need was not fully confirmed, the Project contents should have been reviewed including whether the Project was required or not.

3) Project components and size

The items and size (number) of the Project components of both the facilities and equipment had to be planned by confirming the needs of the respective sites. In the Project, either 4 or 8 classrooms were constructed by type as shown in Table 3. Other standard facilities and furniture items were also uniformly constructed by type and

¹¹ Rapid facility improvement in neighboring schools should be acknowledged as a positive achievement in respect of educational development in the Oromia Region.

¹² The formula which was proposed by the Outline Design Study to estimate the necessary number of classrooms for the existing school sites (Types 1 and 2) is, however, not consistent with the concept of the increase in the number of students which can be calculated based on the number of constructed classrooms.

provided without confirming the different school needs at each site¹³. (See 3.4.1 Output for details)

Table 3 Planned Project Components for Each Type

| School Type | Classrooms | Other facilities | | Furniture |
|--|---|---|--|--|
| Type 1: 1 st cycle schools to be upgraded to complete schools | 4 classrooms (to provide for additional 4 Grades from 5 to 8) | (common) Pedagogical Center, Library, Latrines | Staffroom, Storeroom | To be provided according to the facility component |
| Type 2: Existing complete schools having shortage of classrooms to be expanded | 8 classrooms (to provide an additional classroom for each Grade in the complete school) | | | |
| Type 3: New complete schools to be constructed in non-school areas | 8 classrooms (to provide one classroom for each of 8 Grades in the new complete school) | | Director's room, Secretary's Room, Staffroom, Storeroom | |

Source: JICA Internal Documents

However, the Project components and their size did not meet the actual situation (needs) of each site for the following reasons: There are many discrepancies in the prerequisite school types between the plan and the actuality as explained earlier; the target sites were not selected based on the need for classroom construction that should have been estimated by the number of students and usability of existing classrooms; at sites where there were usable, existing facilities (library, storeroom, pedagogical center), the same facilities were constructed in the Project; at most of the target school sites, the number of students did not increase as expected, etc. (See Table 5 in 3.2.1.2 Operation Indicators for the operation status of the facilities at the 20 directly visited sites.) In addition, the Project was designed based on the assumption that the Full Day School system would be introduced, but it was not realized in any of the valid 36 responses from the target schools at the time of the ex-post evaluation according to the Beneficiary Survey. It could also be understood that the feasibility of introducing the Full Day School system was not as high as expected in the actual local situation where children usually had to assist their families in household matters and work. Considering the low feasibility of such policy implementation, it is pointed out that the project components such as the

¹³ During the Outline Design Study, because it was already known that existing facilities such as pedagogical centers, libraries and storerooms were mostly found in the schools, it was planned to decide whether to construct them by examining the site survey results regarding the usability of the pedagogical centers and libraries at the Detailed Design stage, but they were constructed at all the sites without review. Regarding the storerooms, it was reported during the Outline Design Study that they were fully packed, and therefore, the storerooms were included in the initial design.

number of necessary classrooms could have been calculated based on the double-shift system.

3.1.4 Relevance to Japan's ODA Policy

The Project is highly relevant to Japan's ODA Policy. Education has been placed as a priority issue and has been assisted constantly as an integral part of Japan's assistance to Ethiopia. In the 2007 ODA Data by Country for Ethiopia, education is clearly mentioned as a priority sector. It also states that Japan was assisting particularly improvement of access in rural, remote areas as well as improvement of quality through capacity development in local educational administration and school construction by way of community participation in the Oromia Region. It mentions that such outcomes of Japan's assistance in the education sector were expected to expand throughout the Oromia Region.

As described above, the Project was relevant to Ethiopia's development plan and needs in terms of primary school construction as well as Japan's ODA policy for Ethiopia, but the Project design was not appropriate in terms of target school selection, etc. Therefore, its relevance is fair.

3.2 Effectiveness¹⁴ (Rating: ①)

3.2.1 Quantitative Effects

3.2.1.1 Effect Indicators

The achievement of effectiveness in light of the effect indicators is largely lower than the target. The indicator set by the Outline Design Study is "increased capacity for enrolling additional children", which is calculated by the number of classrooms to be constructed multiplied by 50 students (per classroom target of ESDP-III). Taking the genuine purpose of the Project into consideration, the ex-post evaluation adopted the "number of increased registered students" as a primary indicator to assess the effectiveness¹⁵. The results show in Table 4 that the achievement was considerably lower than the planned target. As against the initial target of an increase of 17,400 students, the achievement is 2,673 in 2011 (15.4% of the target). Likewise, as against the adjusted target of an increase of 12,000 students for the 38 schools actually constructed, the achievement is only 22.3% of the target for 2011. The 2013 data even show that the

¹⁴ Sub-rating for Effectiveness is given in consideration of Impact.

¹⁵ Detailed information on the "increased capacity for enrolling additional children" was not available due to inconsistencies in the questionnaire responses in the ex-post evaluation. However, it is obvious that the targets were not achieved because the number of sites decreased from the initial plan and the number of classrooms also decreased from 348 to 240.

number of students decreased. As for school-specific achievement, only 4 schools in 2011 and 3 schools in 2013¹⁶ achieved the individual school targets. The number of schools which are targeted to be complete schools as of 2013 is only 29 schools.

Table 4 Target and Actual Achievement of Effect Indicators:
Increase in Number of Registered Students

| Effect Indicators | Target (2011) | Actual 2011 | Actual 2013 |
|---|-----------------|----------------|--------------|
| Original Plan: 57 sites, 348 classrooms | 17,400 increase | 2,673 increase | 830 decrease |
| Actual: 38 sites, 240 Classrooms | 12,000 increase | | |

Source: Beneficiary Survey (Questionnaire Survey to Schools and WEOs)

Note: In comparison to 2007 (baseline), as the school calendar in Ethiopia starts from September, the target year was set at 2011, the year after the completion of the Project in November 2010. The validity of the above data obtained from the Beneficiary Survey is endorsed by the Education Management Information System (EMIS) section of OEB. The numbers of registered students based on the questionnaire survey are 32,366 (2007/08), 35,039 (2011/12) and 31,536 (2013/14).

The factors that have impacted on the low achievement are as follows:

- 1) Decrease in output from the originally planned 348 classrooms at 57 sites to the actual 240 classrooms at 38 sites. (This is, however, not the most influencing factor as the achievement against the actual output at 38 sites is also considerably lower than the adjusted target.)¹⁷
- 2) During the Outline Design Study, there were some defects in project designs such as selecting the priority target schools and needs assessment in line with the Project objectives. (See 3.1 Relevance for details).
- 3) The final site selection was not appropriately done at the Detailed Design stage. (See 3.1 Relevance for details)
- 4) Since the site selection was not appropriately done because of 2) and 3) above, many of sites as planned for the Type 1 schools (1st cycle schools by definition) were already complete primary schools¹⁸, and half of the Type 3 schools (new

¹⁶ While there were 4 schools in 2011, one school was dropped in 2013 because the school site became a “complete school” and achieved the target for student increase; however, due to budget system changes, the community had to bear the teachers’ salaries but was not able to recruit teachers due to budget shortages, and the school had to return to being a 1st cycle school. (WH1-7: Ifaa Islaamaa)

¹⁷ The Grant Aid for Community Empowerment scheme aims to provide the amount in the Exchange of Notes (E/N) to the counterpart government, and therefore, it is anticipated that the outputs may be changed after the Detailed Design and actual procurement. However, the ex-post evaluation is conducted based on the initial plan, and therefore, 17,400 increase (50 students x 348 classrooms) in the E/N is used as a fundamental target. For your information, the achievements of the Project are still considerably lower than the targets which are adjusted to the changed number of classrooms.

¹⁸ This shows a rapid improvement of school facilities in the sites, which should be acknowledged as positive achievement in respect of educational development in the Oromia Region.

schools by definition) were not new but existing schools, which all negatively influenced the need to increase the enrolment which was expected if the grades were increased as planned. (There are, however, cases where the achievement was lower than planned even at sites where the grades were increased and new school sites.)

- 5) The demand to enroll more students at the target schools was not as high as expected because of the construction and expansion of neighboring schools. (Out of 20 directly visited schools, 16 schools answered by providing detailed information that non-achievement was due to construction and expansion of classrooms and grades in their proximity.)
- 6) One new school has been diverted to the College of Teacher Education (Chiro College of Teacher Education)¹⁹
- 7) A school was upgraded once to a complete school after the Project, but later downgraded to a 1st cycle school due to a budget shortage for teacher employment. (There was, however, less than the target increase even during the time of operation as a complete school.)

In all the above, the most serious influencing factor is considered to be number 5²⁰. It can be concluded that whether there was a need to increase the enrollment was influenced by not only the situation of the target schools alone, but by the situation of neighboring schools to a large extent.

3.2.1.2 Operation Indicators

The operational status of the facilities constructed by the Project varies by item. As shown in Table 5 on the status of the 20 directly visited schools, classrooms, director's rooms, libraries and latrines are found to be mostly used for the planned purposes. On the other hand, secretary's rooms, staffrooms, storerooms and pedagogical centers are not used as originally planned in many cases and are diverted to use for other purposes than the planned ones.

¹⁹ This site is a new school site. The school was operating as a primary school after construction for some time, but has been converted to a Teacher Training College since 2010. Students attending the school were moved to a guesthouse nearby and studied where there were no basic educational facilities. The number of registered students as of 2013 is 282 for Grades 1 to 4 only. (WH3-1: Humde Gudina) According to OEB, this was to meet an acute need to produce primary school teachers and a temporary arrangement until the construction of the Teacher Training College at a different site was completed, and the students would be able to move back to the original school within this year at the earliest estimate.

²⁰ Rapid facility improvement in neighboring schools itself should be acknowledged as positive achievement in respect of educational development in the Oromia Region.

Table 5 Operation Indicators: Operational Status of Facility Components

| Item | Status of 20 directly visited schools | | | |
|---------------------|---------------------------------------|-----------------|-------|---|
| | No. constructed | Used as planned | | Status of different use from originally planned purposes: The numbers in () indicate the number of cases applicable |
| | | No. | % | |
| Classroom | 124 | 108 | 87.1 | Other than the 108 classrooms used for regular classes as in the left column, diversion to Teacher Training College (8), diversion to library, tutorials, adult education, pre-primary education, etc. (8) |
| Director's Room | 4 | 3 | 75.0 | Teacher Training College (1), |
| Secretary's Room | 4 | 0 | 0.0 | Vice director's room (2), Teacher Training College (1), Storeroom (1) No secretary was appointed at any of the sites where a Secretary's Room was constructed |
| Staffroom | 13 | 7 | 53.8 | Director's Room (3), Teacher Training College (1), Classroom (1), others (1) |
| Storeroom | 13 | 5 | 38.5 | Director's Room (5), Teacher Training College (1), Classroom (1), Staffroom (1) |
| Library | 20 | 16 | 80.0 | Director/Vice Director's room (3), Teacher Training College (1) Out of 20 schools, a high standard library already existed at 3 sites |
| Pedagogical Center | 20 | 10 | 50.0 | Director's room (1), Teacher Training College (1), Classroom (1), Staffroom (4), Storeroom (1), Vacant (2) Many schools use the existing facilities as a pedagogical center |
| Latrine (buildings) | 44 | 44 | 100.0 | Diversions observed from student latrines to staff use, the students using old latrines, and student latrines divided into two with half allocated for staff use. Most of the rainwater tanks were damaged and not in a usable condition. |

Source: Beneficiary Survey

Similar to the facility components, the operational status of the equipment (furniture) also varies by item. Some items are not used to their full potential. In the schools visited, it was confirmed that while the desks and chairs for the students, as well as the shelves in the Library and Pedagogical Center, were overall in good use, many cases of damage were found. There were schools where desks and chairs allocated for rooms other than classrooms were untidily piled up in the storerooms. In particular, the noticeboards installed in the classrooms and other rooms were found to be not used in most of the schools. The shelves were also not fully used

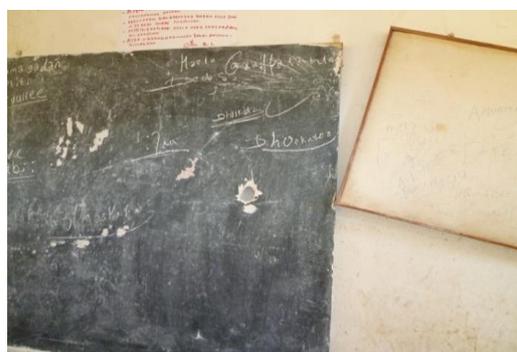


Figure 1 Blackboard with holes and noticeboard (right) not in use

and were mostly vacant except for a few cases. In many schools, there were problems with the surface of the blackboards. In addition, there was one site where many materials for furniture items were left unassembled²¹.

As described above, some facility and furniture items provided are not used to their full potential. The reason behind this is as mentioned in 3.1 Relevance that almost all the facilities and furniture were provided uniformly by school type according to the Ethiopian standard design, irrespective of individual school situation in terms of size, status of existing facilities and usability. As a result, there are sites where facilities and furniture were provided that do not meet their respective needs.

3.2.2 Qualitative Effects

The qualitative effects intended at the time of the Outline Design Study are not clearly demonstrated. The two intended qualitative effects are: 1) the facilities provided in the Project are used and maintained properly through raising awareness of facility maintenance by the Soft Component²² and preventative-maintenance workshops, and 2) the latrines are used properly and basic hygiene knowledge is acquired in the Soft Component through workshops that teach the use of latrines and basic hygiene knowledge. According to the Beneficiary Survey (36 valid responses), the majority of schools answered that awareness was raised, but only 5 gave affirmative answers (13.9%) in terms of having a maintenance plan which was taught to be prepared by the Soft Component. A total of 29 schools (80.6%) answered in the negative to the question regarding washing hands after using the latrines, which is assumed to be because of no access to water. At the visited schools, most of them answered negatively regarding regular maintenance of the facilities and equipment including the existing items. The actual situation of the school compounds and latrines confirmed that it did not look like regular maintenance and cleaning were carried out except in a few cases.

3.3 Impact

3.3.1 Intended Impacts

The impacts (indirect effects) intended by the Outline Design Study were also found to be limited. The three intended impacts are as follows:

- 1) Repair and maintenance costs for the existing facilities, other than the facilities that are constructed in the Project, are kept low by preventing major defects and damage through raising awareness of school facility maintenance and the

²¹ Blackboards were not installed and shelves were not assembled in the school visited (WH1-2: Luugoo Baccessaa)

²² Soft Component of the Project refers to technical assistance by means of workshops to facilitate proper use and maintenance of the school facilities including latrines as well as to provide knowledge on hygiene.

importance of daily maintenance (cleaning, preventative maintenance, etc.) by the Soft Component.

- 2) Sickness among the students decreases through raising basic hygiene awareness by the Soft Component.
- 3) Community activities gain vigor and income generating activities and donations increase, resulting in an increase in operation and maintenance budgets, as the community has a place to get together by constructing rooms in the Project for directors and staff.

Regarding the first impact, as already mentioned, the ex-post evaluation confirmed that the effects of the Soft Component were not clearly demonstrated and the status of daily maintenance was poor. Therefore, it is hard to judge that there have been any particular impacts on reduction of the costs for facility repairs and maintenance by the Project. As for the second impact, many schools visited mentioned that “sickness has decreased compared to previously when no latrines were available”, “sickness has decreased because students study in clean and comfortable classrooms rather than in old ones”. The Beneficiary Survey also confirmed such effects in that, out of 36 valid responses, 27 schools (75%) answered in the affirmative regarding a decrease in sickness, and there was an impact in this regard. This effect, however, could be due to the newly constructed facilities rather than raising awareness by the Soft Component. The third impact was not confirmed in most of the schools directly visited, and no comments were heard on increased activities for income generation or donations from the community.

On top of the above, the ex-post evaluation reviewed the following aspects which were also expected to have some impacts.

- 1) Impact on improving the internal efficiency of education to a certain extent was confirmed. Consistent data for the relevant indicators (promotion, repetition, drop-out rates, etc.) were not obtained through the Beneficiary Survey, but many schools expressed the view that “students do not have to go to distant schools”, “students’ motivation to go to school and learn is increased because of the pleasant learning environment created by the Project”.
- 2) An increasing trend in girls’ enrollment is not necessarily evident when examining the trends in the number of gender-based enrollment data.
- 3) Improvements are partly confirmed for some indicators for assessing the improvement of the educational environment (reduced congestion, introduction of

Full Day School system, etc.)²³. According to the directly visited schools, the results are as shown in Table 6. The average Pupil Section Ratio (PSR) in 2013 was still higher than the target of 50, but it improved to a great extent because of the increased number of classrooms. There are some sites, however, where the increase was due to a decrease in the number of students. Introduction of the Full Day School system²⁴ was not materialized in any of the 36 schools that responded to the questionnaire, which was confirmed similarly in the directly visited schools, and they are operating in shifts²⁵. The Project was designed based on the policy of introducing the Full Day School system and the number of classrooms was increased accordingly, but this did not bring about the change in the operational system. According to interviews at OEB and the directly visited schools, the policy of introducing the Full Day School system was there, but in view of the fact that children had to help their families in household matters and work, it would rather have been a constraint to discourage enrollment. As for the Pupil Classroom Ratio (PCR) which is higher than the standard of 50 in many schools, if the classrooms are fully used in double shifts, the PCR can come down to half.

Table 6 Indicators of Improvement of Educational Environment (2013)

| | Pupil Section Ratio (PSR) | | No. of Full Day Schools | Pupil Classroom Ratio (PCR) | |
|----------------------------|---------------------------|---|-------------------------|-----------------------------|---|
| | Average | No. of schools with PSR of more than 50 | | Average | No. of schools with PCR of more than 50 |
| North Shawa: 13 schools | 55 | 9 | 0 | 90 | 12 |
| West Harerge: 6 schools | 61 | 4 | 0 | 69 | 5 |
| Total: 19 schools | - | 13 | 0 | - | 17 |

Source: Beneficiary Survey

Note: The above table includes 19 school data out of 20 directly visited schools, excluding one site converted to a Teacher Training College.

- 4) No impact of the off-set system²⁶ was confirmed by interviews with OEB.
- 5) Although the Project was designed and implemented by adopting the “Program

²³ Reduction in congestion was not targeted by the Project, and such indicators are not logically consistent with the objective of the Project which is an increase in enrollment. However, it was assumed that there was a possibility of the Project contributing toward such impact, and therefore, additional indicators were examined.

²⁴ Full Day School operates with 5.25 hours of teaching.

²⁵ Shift School operates with 4 hours of teaching. This includes not only double shift schools operating both mornings and afternoons, but one shift schools operating either mornings or afternoons.

²⁶ The off-set system is for adjusting the budget amounts from the central government to the respective regions which receive external assistance from donors to balance the budget allocation to other regions.

Approach” that included a Technical Cooperation Project (Community-Based Basic Education Improvement Project: ManaBU Project) and a Development Study (Increasing Access to Quality Basic Education through Developing School Mapping and Strengthening Micro-Planning: SMAPP), no particular synergy effects were confirmed except for utilizing school maps developed by SMAPP.

- 6) With regard to the effect on education quality, many schools commented that the motivation of students to go to school and learn increased because of the good learning environment in clean and bright classrooms²⁷ as well as the construction of libraries and pedagogical centers which also impacted positively on the teacher’s teaching practices.

As described above, although the effects of the Soft Component were not clear and other expected impacts were limited, there are positive impacts to a certain degree brought about by improvement of the learning environment through the Project.

3.3.2 Other Impacts

3.3.2.1 Impacts on the natural environment

The ex-post evaluation confirmed that there had been no negative impacts on the natural environment by the Project because none of the schools and WEOs, in out of 36 and 18 valid responses respectively as well as interviews at the directly visited school sites, answered that there were negative impacts on the natural environment due to the Project.

3.3.2.2 Land Acquisition and Resettlement

According to the Beneficiary Survey, all cases of land acquisition and resettlement were compensated by providing alternate houses and land, and therefore, no problems occurred except for 1 site in dispute regarding the borders of the new school compound. The residents involved in the dispute are not occupying the site but are cultivating some land within the school compound, and because of this, the school has not been able to construct the school fence. The site has been under control of the residents since 1991 and they are requesting compensation of alternative land or cash. The problem has been reported to the authorities concerned repeatedly, but there has been no development and the end of the dispute is not in sight at this time. (NS3-3: Qiltu Inka)

3.3.2.3 Unintended Positive/Negative Impacts

No unintended positive/negative impacts are observed.

²⁷ Due to the lower need for additional enrolment, students who were studying in the old, severely damaged classrooms moved to the newly constructed classrooms. It was confirmed that the classrooms constructed by the Project were used as a replacement for the old classrooms that were demolished, etc.

In terms of the fundamental indicator to judge the effectiveness (increase in number of registered students), the achievement was substantially lower than the target as described above. Likewise, the expected impacts are also limited as against the planned impacts, although some effects in association with the improved learning environment are observed to a certain degree. Therefore, the Project achieved its objectives to a limited extent, and thus its effectiveness and impact is low.

3.4 Efficiency (Rating: ①)

3.4.1 Project Outputs

3.4.1.1 Comparison between Plan and Actuality²⁸

Referring to the documents provided by JICA, the following facilities and equipment were provided by the Project at the 38 actual sites in 2 zones as against the initial plan of 57 sites in 3 zones²⁹. The difference between the planned and the actual status is due to the decrease in the number of sites as detailed in Tables 7 and 8.

Table 7 Facility Components Constructed by the Project

| | North Shawa | | West Harerge | | Arsi | | Total | | | |
|----------------------------------|-------------|--------|--------------|--------|------|-----------------|-------|--------|------------|-------|
| | Plan | Actual | Plan | Actual | Plan | Actual | Plan | Actual | Difference | |
| 1. No. of target sites (schools) | 25 | 25 | 18 | 13 | 14 | 0 | 57 | 38 | - 19 | |
| 2. Facility components | | | | | | | | | | |
| a. Classroom | 156 | 156 | 108 | 84 | 84 | Not implemented | 348 | 240 | - 108 | |
| b. Director's Room | 6 | 6 | 2 | 2 | 1 | | 9 | 8 | - 1 | |
| c. Secretary's Room | 6 | 6 | 2 | 2 | 1 | | 9 | 8 | - 1 | |
| d. Staffroom | 17 | 17 | 11 | 7 | 8 | | 36 | 24 | - 12 | |
| e. Storeroom | 17 | 17 | 11 | 7 | 8 | | 36 | 24 | - 12 | |
| f. Library | 25 | 25 | 18 | 13 | 14 | | 57 | 38 | - 19 | |
| g. Pedagogical Center | 25 | 25 | 18 | 13 | 14 | | 57 | 38 | - 19 | |
| h. Latrine (Booth) | Girls | 156 | 156 | 108 | 84 | | 84 | 348 | 240 | - 108 |
| | Boys | 156 | 156 | 108 | 84 | | 84 | 348 | 240 | - 108 |
| | Staff | 46 | 24 | 26 | 8 | | 18 | 90 | 32 | - 58 |

Source: JICA Internal Documents

Note: The number of booths in the staff latrines planned at the time of the Outline Design Study is not correct because it mistakenly includes the number for Type 1 schools which should be excluded, and therefore, the number of staff latrine booths in North Shawa should be 24 and not 46.

²⁸ The Grant Aid for Community Empowerment scheme aims to provide the amount in the Exchange of Notes (E/N) to the counterpart government, and therefore, it is anticipated that the outputs may be changed after the Detailed Design and actual procurement. However, the ex-post evaluation is conducted based on the initial plan.

²⁹ As mentioned in 3.2.1.2 Operation Indicators, there is one site where furniture materials have been left unassembled. The Construction Management Consultant also mentioned that the furniture materials were not transported and not installed at 2 sites out of 38 schools due to difficulty in road access. Instead, the materials were handed over to the respective WEOs. The names of the sites, however, are not recorded and it was not possible to identify them.

Table 8 Equipment Provided by the Project (Furniture)

| Room | Numbers | | Item | Number per room | Total | | |
|-----------------------|---------|--------|------------------------------|-----------------|-------|--------|------------|
| | Plan | Actual | | | Plan | Actual | Difference |
| a. Classroom | 348 | 240 | Combined Desk (for 2 pupils) | 24 | 8,352 | 5,760 | - 2,592 |
| | | | Teacher's Table | 1 | 348 | 240 | - 108 |
| | | | Teacher's Chair | 1 | 348 | 240 | - 108 |
| | | | Blackboard | 1 | 348 | 240 | - 108 |
| | | | Noticeboard | 1 | 348 | 240 | - 108 |
| | | | Duster | 1 | 348 | 240 | - 108 |
| | | | Dust Bin | 1 | 348 | 240 | - 108 |
| b. Director's Room | 9 | 8 | Office Table | 1 | 9 | 8 | - 1 |
| | | | Armrest Chair | 1 | 9 | 8 | - 1 |
| | | | Teacher's Table | 1 | 9 | 8 | - 1 |
| | | | Teacher's Chair | 4 | 36 | 32 | - 4 |
| | | | Shelf | 1 | 9 | 8 | - 1 |
| c. Secretary Room | 9 | 8 | Cupboard | 1 | 9 | 8 | - 1 |
| | | | Typist Table | 1 | 9 | 8 | - 1 |
| | | | Teacher's Chair | 4 | 36 | 32 | - 4 |
| | | | Padded Chair | 1 | 9 | 8 | - 1 |
| d. Staff Room | 36 | 24 | Filing Cabinet | 1 | 9 | 8 | - 1 |
| | | | Office Table | 1 | 36 | 24 | - 12 |
| | | | Teacher's Table | 4 | 144 | 96 | - 48 |
| | | | Staff Chair | 25 | 900 | 600 | - 300 |
| | | | Noticeboard | 4 | 144 | 96 | - 48 |
| | | | Filing Cabinet | 1 | 36 | 24 | - 12 |
| e. Store | 36 | 24 | Coat Hanger | 3 | 108 | 72 | - 36 |
| | | | Table Chair | 2 | 72 | 48 | - 24 |
| | | | Store Shelf | 9 | 324 | 216 | - 108 |
| f. Library | 57 | 38 | Cupboard | 1 | 36 | 24 | - 12 |
| | | | Periodical Stand | 1 | 57 | 38 | - 19 |
| | | | Library Table | 6 | 342 | 228 | - 114 |
| | | | Chair | 36 | 2,052 | 1,368 | - 684 |
| | | | Library Shelf | 8 | 456 | 304 | - 152 |
| | | | Office Table | 1 | 57 | 38 | - 19 |
| | | | Armrest Chair | 1 | 57 | 38 | - 19 |
| | | | Filing Cabinet | 1 | 57 | 38 | - 19 |
| | | | Cupboard | 1 | 57 | 38 | - 19 |
| g. Pedagogical Center | 57 | 38 | Noticeboard | 1 | 57 | 38 | - 19 |
| | | | Teacher's Table | 1 | 57 | 38 | - 19 |
| | | | Teacher's Chair | 1 | 57 | 38 | - 19 |
| | | | Work Bench | 5 | 285 | 190 | - 95 |
| | | | Stool | 50 | 2,850 | 1,900 | - 950 |
| | | | Shelf | 3 | 171 | 114 | - 57 |
| | | | Blackboard | 1 | 57 | 38 | - 19 |
| Dust Bin | 4 | 228 | 152 | - 76 | | | |

Source: JICA Internal Documents

Note: 24 combined desks for 2 pupils were provided per classroom, and the total seating capacity was only 48. This is because it was difficult to install 25 combined desks in terms of the furniture installation plan, and 3 pupils actually sit at one combined desk. There was an agreement with the Ethiopian side during the Outline Design Study about the arrangement.

With regards to the educational equipment which was planned to be provided when there was a balance of residual budget during the implementation stage, it has not been provided because there was no budget left, according to the Procurement Management Agency and OEB.

In the Project, workshops were held in the target schools as part of the Soft Component activities. A plan of regular maintenance activities including cleaning was prepared and at least 2 designs of wall paintings with slogans for promoting maintenance, cleaning, proper use of latrines and hygiene were painted on the walls of the school facilities. Through questionnaires and site visits, the wall paintings were confirmed in most of the schools but maintenance plans (or similar documents) were not confirmed.

3.4.1.2 Analysis of Difference between Plan and Actuality

The reason for the reduction in outputs is the budget shortage due to cost escalation. In particular, estimation of the construction costs in the Detailed Design sharply increased and more than doubled compared to the costs in the Outline Design (254% of the plan) as shown in Table 9.

Table 9 Unit Cost Comparison for Construction Area (m²)

| | Estimates in O/D (April 2007) | Estimates in D/D (August 2008) |
|---|----------------------------------|-----------------------------------|
| Unit costs for construction area (m ²) (Ethiopia Birr) | 1,876.0 | 4,760.4 |
| | (100%) | (254%) |

Source: JICA Internal Documents

According to JICA internal documents and interviews with the Procurement Management Agency, the major factors causing the cost escalation are 1) cost inflation of the construction materials and personnel due to the construction rush³⁰, and 2) different cost estimation methods between the Outline Design and Detailed Design³¹.

As a result, the number of sites decreased from 57 in the initial plan to 38 due to the

³⁰ Estimated costs in the Detailed Design compared with those in the Outline Design for cement which accounts for 70 % of the unit costs doubled, costs for wood building materials increased 1.7 times, costs for reinforcing steel doubled and supervision of construction and design increased by 30 %.

³¹ Construction costs were estimated using an average of sample contracts from 4 local construction companies prepared in April 2007, which are different from the lump sum contracts adopted by the Japanese Grant Aid scheme and they did not reflect inflation during the construction. Moreover, the unit costs in one of the 4 reference contracts were largely inaccurate and influenced the estimate in the Outline Design Study. Such problems were corrected by the Procurement Management Agent at the Detailed Design stage. In particular, the cost estimation methods based on Bill Quantity (BQ) of the 4 reference contracts was the major factor that affected the difference from the lump sum method that takes inflation and various risk factors into account. (Interview with Procurement Management Agent)

budget shortage. The detailed changes in the number of sites are presented in Table 10. At the Detailed Design stage, 42 sites were planned, but due to the budget shortage and lack of technically qualified contractors, tenders for 3 out of the 11 lots were canceled, and the contract for the remaining 8 lots (31 schools) was signed to start the construction. The supplementary tenders in April and September 2009 took place because surplus budgets were available due to the devaluation of the Ethiopian currency against the dollar and therefore additional 7 sites were added. As described above, the actual number of sites was lower than not only the planned number in the Outline Design but also in the Detailed Design.

Table 10 Changes in Number of Sites

| | O/D April to October 2007 | D/D March to June 2008 | Tender October 2008 | Supplementary Tender April and September 2009 | Actual |
|--------------|------------------------------------|------------------------------|------------------------|---|--------|
| North Shawa | 25 | 25 | 21 | 4 | 25 |
| West Harerge | 18 | 17 | 10 | 3 | 13 |
| Arsi | 14 | Not implemented | | | |
| Total | 57 | 42 | 31 | 7 | 38 |

Source: JICA Internal Documents, interviews with Procurement Management Agency and documents from the Agency

3.4.2 Project Inputs

3.4.2.1 Project Cost

The actual project cost was the same amount, 1,041 million yen, as planned (Grant Limit), but since the outputs decreased from the planned outputs (by 33% for the number of sites which declined from 57 to 38, and by 31% for the number of classrooms which declined from 348 to 240), the project cost was regarded to be higher than planned³².

3.4.2.2 Project Period

The project period was significantly longer than the planned period since it took 36 months, which was nearly double the 19 months for the 2 zones of North Shawa and West Harerge, excluding Arsi, estimated in the Outline Design Study. According to interviews with the Procurement Management Agency and others, the following are the reasons: 1) local Ethiopian contractors usually do not have enough funds and cannot get the construction started just after the contract is signed as planned but must wait until advance payment is made, 2) due to difficulty in procurement of cement, construction at

³² The Grant Aid for Community Empowerment scheme aims to provide the amount in the Exchange of Notes (E/N) to the counterpart government, and therefore, it is anticipated that the outputs may be changed after the Detailed Design and actual procurement. However, the ex-post evaluation is conducted based on the initial plan.

some sites was temporarily suspended, 3) additional contracts were signed using the surplus budgets that became available because of devaluation of the local currency, and 4) at some sites due to the delay in construction, the rainy season set in and construction was suspended until the rainy season was over.

As described above, the project cost was as planned but exceeded the plan in view of the reduction in outputs³³, and the project period significantly exceeded the plan. Therefore, the efficiency of the project is low.

3.5 Sustainability (Rating: ②)

3.5.1 Institutional Aspects of Operation and Maintenance

The operation and maintenance system of primary schools by the government definition has been unchanged since the time of planning to date, and function accordingly. The Federal Ministry of Education established the Guidelines for Organization of Education Management, Community Participation and Education Finance (commonly known as the Blue Book), in August 2002, and defined the roles and responsibilities of educational administration organizations following the decentralization policy. At Woredas, villages and schools, there are Woreda education management committees, village education management committees and PTA respectively. The same system was operating both at the time of planning and the ex-post evaluation. Regular meetings of PTA and village educational management committees have also been held. However, the system for carrying out school maintenance according to the plan is weak and it was quite rare for WEOs to respond to school requests when repairs were necessary. In most cases, repairs need to be financed by the schools, and no maintenance plans were observed at schools during the ex-post evaluation.

3.5.2 Technical Aspects of Operation and Maintenance

In terms of technical aspects, minor repairs can be done by schools but there are difficult ones that cannot be managed by schools depending on what to repair. The Guidelines (Blue Book) are widely used as mentioned above, but no maintenance manuals for the facilities and equipment were confirmed at the directly visited sites. In addition, it was planned to construct facilities that would not require repairs for a few years after the completion of the Project according to the Outline Design Study, but 3 years after the Project completion, defects in the facilities and equipment were found in many of the

³³ The Grant Aid for Community Empowerment scheme aims to provide the amount in the Exchange of Notes (E/N) to the counterpart government, and therefore, it is anticipated that the outputs may be changed after the Detailed Design and actual procurement. However, the ex-post evaluation is conducted based on the initial plan.

schools within 3 years after the project completion, as mentioned later in 3.5.4 Current Status of Operation and Maintenance. According to the interviews at the school sites, changes of door keys, repainting of blackboards and other minor repair of the facilities and furniture could be done by teachers and parents, but there were many cases that called for external technicians such as for roof leaks, and cracking of basements, floors and walls.

3.5.3 Financial Aspects of Operation and Maintenance

Since the sites are operating as primary schools, it can be judged that sustainability to a certain degree is confirmed, but the budgets for repairing the facilities and equipment are inadequate. The major sources of the operational and maintenance budgets are 1) school grants³⁴ and 2) income generating activities (selling eucalyptus logs and grasses for cattle, etc.), and other than school grants, almost none of the budget is allocated from the government. There is also limited support from the community and parents, except for the salaries for employing guards. The newly constructed facilities provided by the Project also need some repairs at this time, but the necessary budget is not available. Measures to prepare the budget have to be taken for facility defects that have already occurred but have been left unrepaired as well as for the necessary expenses for regular maintenance³⁵ in the future.

3.5.4 Current Status of Operation and Maintenance

As presented in Table 11, defects in the facilities constructed in the Project have occurred widely. Most of them have been left without repair due to budget shortages. There are cases where the defects happened 1 or 2 years after the Project completion or even during the construction or straight after the completion of the Project, according to the responses from the schools³⁶. The Preliminary Study and Outline Design Study both pointed out the importance of quality control because the construction work is supervised by a local consulting firm and the construction is done by local contractors under the

³⁴ In Ethiopia, there are two types of school finances: Block Grants provided by the government, and School Grants financed through the General Education Quality Improvement Program (GEQIP). The amounts of the Block Grant which are used for recurrent school expenditures other than salaries are defined by the Blue Book at 10 Birr/year per student for Grades 1 to 4, and 15 Birr for Grades 5 to 8. However, it is also reported that there are Woredas that provide lower amounts than those defined or even in kind, not in cash. As for the School Grant in 2012/13, 40 Birr/year per student from Grades 1 to 4, and 50 Birr for Grades 5 to 8 were provided. The answers obtained through the Beneficiary Survey were mostly "School Grant", but there may be confusion about the strict source of funding among the respondents.

³⁵ During the Outline Design Study, approximately 2,100 Birr/year per school were estimated to be necessary for maintenance costs for re-painting (interior walls and ceilings, steel sash (window frames), blackboards) and sludge removal.

³⁶ According to the Construction Supervision Consultant, there were contractors who did not respond in spite of that fact that the Consultant pointed out the defects.

Grant Aid for Community Empowerment scheme. For reference, there are some sites where high standard school facilities were constructed by the Oromia Development Association (ODA), a local non-government organization (NGO)³⁷, 2002 (more than 10 years before), but the facilities still appeared to be firm and durable, and the schools were satisfied with the quality. In light of the above, it is assumed that the defects in the facilities may be attributed not only to maintenance problems but also to quality control in construction supervision.

Table 11 Overall Situation of Defects of Project Facilities

| Item | Schools that answered there are problems | |
|-------------------------|--|-----|
| | Number | % |
| 1 Roof | 12 | 33% |
| 2 Pillar/beam | 4 | 11% |
| 3 Ceiling | 19 | 56% |
| 4 Wall (inside/outside) | 17 | 47% |
| 5 Floor | 18 | 50% |
| 6 Window | 14 | 39% |
| 7 Door | 32 | 89% |

Source: Beneficiary Survey (36 valid responses to School Questionnaire)

By confirming the situation at the directly visited school sites, door problems such as damage to knobs and keys were obvious in most of the schools. (The problems could have been avoided by using a different type of key, such as a bar-type lock.) In addition, problems were found of cracks in the concrete basement, floors and walls, leaking roofs in several schools, and a cover of precipitating tank of the latrine and a big hole in 1 school, which would not be regarded as minor defects and raise concerns in view of safety and durability. Most of the water



Figure 2 Broken door knob & key hole that is changed to a bar key

³⁷ The Oromia Development Association (ODA) was founded in 1993 as a local non-profit organization, and it has constructed a total of 316 school facilities from primary to higher education to date. According to the interviews with ODA, in case of primary schools, proposals from communities and schools are reviewed and selected, and detailed needs are also confirmed with Woreda and Zone Education Offices. 90% of the construction costs is borne by the community and school side, and the rest is financed by ODA. On top of that, ODA provides technical staff such as engineers directly from ODA. All the construction contractors and furniture suppliers are procured in Addis Ababa, and material procurement and construction supervision are carried out with particular consideration given to quality assurance. During construction, a junior engineer is stationed at the site with rotational visits by a senior engineer. The quality of the furniture is strictly checked in Addis Ababa, and it is transported to the construction site. According to the interviews at the schools with ODA school facilities, they explained that it was effective that the school formed a committee which received training together with local contractors for about 2 weeks, and the committee conducted monitoring with strong ownership during the construction work.

tanks beside the latrines were damaged and not in a usable condition at the visited sites. Many schools commented that since the school was closed during the rainy season, the water tanks collecting rainwater were little use and there was no incentive to repair them. At most of the sites, there were no wells and as a result, no access to water.

With regard to furniture, as mentioned in 3.2.1.2 Operation Indicators, the surfaces of the blackboards were worn down and sometimes had holes. Many schools pointed out the low quality of the original blackboards³⁸. However, there are some schools which repaint them regularly and therefore, the problem of the blackboards could be due to both the original quality and maintenance issues. Regarding other furniture items, some of the students' desks and chairs and many of the noticeboards and shelves were found to be damaged. According to the Beneficiary Survey, out of 36 valid responses, 15 schools complained about the quality of the furniture.

As for the overall status of cleaning, it did not appear that it was regularly done except for a few schools. In particular, the latrines looked seriously unhygienic. The effect of the Soft Component as already mentioned appeared not to be demonstrated.

As described above, some problems have been observed, particularly in terms of the financial aspect, in repair of the facilities and equipment, in addition to the institutional and technical aspects. However, since the sites are operating as primary schools with the necessary institutional arrangements, it can be judged that sustainability is confirmed to a certain degree. In conclusion, sustainability of the project effect is fair.

4. Conclusions, Lessons Learned and Recommendations

4.1 Conclusions

The Project was implemented to improve access to primary education through expanding and newly constructing primary school facilities in the Oromia Region. As a result of the ex-post evaluation, the Project was relevant to Ethiopia's development plan and needs in terms of primary school construction as well as Japan's ODA policy for Ethiopia, but the Project design was not appropriate in terms of target school selection, etc. Therefore, its relevance is fair. In terms of the fundamental indicator to judge the effectiveness (increase in number of registered students), the achievement was substantially lower than the target. The expected impacts are also limited as against the planned impacts, although some effects in association with the improved learning environment are observed to a certain degree. Therefore, the Project has achieved its objectives to a limited extent, and its effectiveness and impact of the Project are low. The

³⁸ According to the interviews at the visited sites, one school mentioned that they paid an additional amount to the contractor to install a different type of blackboard as a special arrangement. Another school mentioned that they refused to accept the blackboards at first because of the poor quality.

project costs were as planned but exceeded the plan in view of the reduction in outputs, and the project period significantly exceeded the plan. Therefore, the efficiency of the Project is low. Regarding the operation and maintenance of the Project, problems have been observed particularly in terms of the financial aspect for repair of the facilities and equipment. However, since the sites are operating as primary schools with the necessary institutional arrangements, sustainability is confirmed to a certain degree. In conclusion, the sustainability of the project effectiveness is fair.

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

4.2 Recommendations

4.2.1 Recommendations to the Implementing Agency

- One new school site was temporarily converted to a Teacher Training College to meet an acute need to produce primary school teachers, and the students at the primary school were moved and have been studying in a nearby guesthouse without basic educational facilities since 2010. Since the facilities at the site were constructed for the primary school students, OEB is requested to take the necessary measures until they go back to the school site to improve the appropriate learning environment for the students in the guesthouse by means of increasing the number of classrooms and so on.
- One school site was once upgraded to a “complete school.” However, due to budget system changes and subsequent shortages, it was not able to recruit teachers. The school had to return to being a 1st cycle school again. Since it is the responsibility of the Ethiopian side to allocate the necessary number of teachers, OEB is requested to assist the teacher recruitment finances of the school.
- Regarding the facilities and equipment at the target sites, OEB is requested to grasp the current situation in collaboration with local education offices in view of safety and durability as well as urgency and need for repairs. In doing so, it is recommended to include technical personnel with professional knowledge in construction and design because a deliberate survey is required to assess the cause of the defects, including whether there are any serious defects. In addition, the school directors need to take measures to mobilize the budget which will be necessary on a regular basis for maintenance (repainting and sludge removal) together with the PTA and village educational management committee members.
- Overall, the status of daily maintenance and cleaning appears to be not well-conducted. On the other hand, in schools where the school directors demonstrated good leadership, the situation was better. OEB and local education offices are recommended to develop capacity of the school directors as the key to

good school management to perform daily maintenance including regular cleaning.

- In the absence of the deployment of librarians, many schools limited the opening hours of the library. However, there are some schools which efficiently operated the library for as many hours as possible by assigning teachers with no teaching assignments or students from higher grades. Local education offices are recommended to arrange sharing such good experiences of full utilization of the library with other schools during regular school directors' meetings and other occasions.

4.2.2 Recommendations to JICA

- Regarding the facilities and equipment at the target sites, JICA needs to facilitate OEB for appropriate maintenance. JICA is recommended to confirm with OEB the survey results in order to grasp the current situation including judgment of the urgency and need for repair as well as the progress of measures taken for the necessary budget appropriation. At the same time, it is recommended that JICA should conduct monitoring visits to target sites to confirm the status of use of the facilities and equipment.

4.3 Lessons Learned

4.3.1 Lessons learned during Planning (Outline Design Stage)

- Improving the accuracy of the Outline Design: Considering the Grant Aid for Community Empowerment scheme for employing a local consulting firm for the Detailed Design, it is important to ensure that more accurate plans are developed at the Outline Design stage. In African countries where classroom expansions are in rapid progress, there is a great possibility that the situation has largely changed just in a few years, and therefore, the Outline Design Study has to be conducted based on the latest direct data collected from the schools of the priority list because it provides the basis for judgment of the relevance and implementation of the Project. With regard to the project costs, it is necessary to estimate the accurate amounts as far as possible and estimation of the project duration should also be carried out more practically by reflecting the local context.
- Confirming needs and setting appropriate evaluation indicators: The Project aims to increase the capacity to enroll additional children and eventually to increase the number of registered students. However, the need for increased student numbers was not well confirmed at the target sites and therefore, the effectiveness was negatively influenced because there was a gap between the plan and the actuality. In addition, the effects of damaged classrooms and congestion should have been well anticipated,

and such effects could be considered in the effects of the Project and the effective indicators set accordingly.

- Issues in setting target for student increase: As found in the Project, it is necessary to consider that setting targets for the increased number of students is methodologically not easy because both demand (projection of enrolment) and supply (number of classrooms and their deployment) need to be well examined, and also they are influenced by not only the situation at the target sites but also by the situation in the responding school catchment areas and/or neighboring schools. In a country like Ethiopia where many over-age school children are enrolled, it is not appropriate to project demand based on the school-age population, population growth rate, etc. and projection is difficult as it is influenced by improvements in internal efficiency such as promotion, repetition and dropout rates. As for the supply side, in a situation where most of the primary school construction activities are covered by community support but not controlled by the government administration, accurate information on the number of classrooms in neighboring schools (the present and future plans) needs to be collected at a particular time when school constructions are rapidly progressing. Therefore, both demand and supply need to be examined more thoroughly in terms of confirmation of needs, but when it is difficult to do so, it is pointed out as a lesson learned that the project objective and related effective indicators need to be reviewed and might be different.
- Examining the contents of the request based on the actual school situation: The Project was designed to provide facility and equipment components based on national standards and the policy for introducing the Full Day School system in terms of component items and size. However, as a result, it was not consistent with actual needs and some facilities and equipment were not used to their full potential. Also, the reason for adopting the shift system at the target sites was because introducing the Full Day School system might be a constraint that would discourage enrollment in the actual situation. When examining the policy targets, careful consideration should be given to whether they are feasible and not too ambitious in view of the actual situation of the schools. Items and size also need to be determined in view of urgency and need, as the Japanese Grant Aid scheme prioritizes. Individual needs surveys at each site on the status of the existing facilities are also necessary to avoid duplication of construction of the same facilities so that cost-efficiency can be improved.

4.3.2 Lessons Learned during Implementation (Detailed Design and Construction Stage)

- Improving the quality of the Detailed Design: In the Project, the essential processes

were not fully carried out, such as finalization of the list of target schools based on the results of the site survey as expected by the Outline Design and confirmation of the needs of each site. In the Grant Aid for Community Empowerment scheme, different consultants conduct the Outline Design (Japanese consulting firm) and the Detailed Design (local consulting firm), and therefore it is difficult to ensure consistency and the checking mechanism does not function well compared to the General Grant Aid scheme. More capable procurement management is required to ensure consistency between the Outline Design and Detailed Design, and to strengthen the function to revise the plan when necessary at the Detailed Design stage.

- Implementing effective soft component: In order to improve the quality as well as to raise awareness of maintenance, it is necessary to implement the soft component more effectively. For reference, the case of a local NGO (ODA) which constructed high standard school facilities using local contractors similarly to the Grant Aid for Community Empowerment scheme shows that a committee was formed at the school and contributed to the quality assurance of construction supervision. Such practices may be considered for reference in similar projects with many widely dispersed construction sites, because supervision is limited if carried out just by visiting Japanese technical personnel or construction supervision consultants.