

Planned Amount	1,006 million yen	
Actual Amount	1,005 million yen	
Exchange of Notes	June 2004	
Grant Agreement	July 2004	
Executing Agency	Ministry of Education and Training (MoET)	
Project Completion	February 2006	
Companies Involved	Contractor	Sumitomo Mitsui Construction Co., Ltd.
	Consultant	Pacific Consultants International
Basic Design	August 2003	
Detail Design	September 2004	
Related Projects	<p>At the time of the Basic Design Study many international organizations and NGOs were providing support to the Lesotho's education sector. The following are leading donors' projects in this sector, along with examples of their activities.</p> <ul style="list-style-type: none"> • "Education Sector Development Program" by the World Bank (classroom construction, scholarship, and distribution of textbooks) • "Education II Project (Basic Education Improvement)" by the African Development Bank (classroom construction and training) • "Water, sanitation and Hygiene (WASH) Initiative" by UNICEF (improvement of water supplies and sanitation facilities) • "Lesotho School Feeding Programme" by the World Food Programme (provision of foods) • Irish Aid (construction of primary schools) 	

2 Outline of the Evaluation Study

2.1 External Evaluators

Shinichi MORI (IMG Inc.)

Setsuko KANUKA (IMG Inc.)

2.2 Duration of the Evaluation Study

Duration of the Study: October 2009—September 2010

Duration of the Field Study: January 9th 2010—January 19th 2010

2.3 Constraints during the Evaluation Study

All the project schools (except for Lancers Gap) were constructed on new sites with most of the attending pupils transferring to them from different schools in their vicinity. Given the short period of evaluation, a detailed comparison of pupils' learning environments and academic performance before and after the project was not possible since it would require extensive interviews at the schools surrounding the project schools.

3 Results of the Evaluation (Rating: A)

3.1 Relevance (Rating: a)

3.1.1 Relevance with the Lesotho Government Policies for Development

The project was in accordance with the priority of development policies of the Government of Lesotho at the time of the Basic Design Study and continued to be so at the time of the Ex-Post Evaluation.

The Government of Lesotho envisages the provision of an equitable basic education to all as a key development goal. Its constitution stipulates that Lesotho will adopt policies aimed at securing that “primary education is compulsory and available to all¹.” The FPE, which was introduced in 2000 to achieve this goal, continued to be implemented at the time of the Ex-Post Evaluation.

Lesotho Government’s present objectives for its education sector were laid out in its Poverty Reduction Strategy, and in its Vision 2020 (a set of national long-term objectives to be achieved by 2020). The Poverty Reduction Strategy states that “Government is convinced that investment in appropriate education is the single most important contribution to the long-term socio-economic development of the country”. In line with these objectives, the Ministry of Education and Training (MoET) developed the Lesotho Education Sector Strategic Plan (ESSP), which covers the period 2005-2015, and a Medium Term Education Sector Plan: 2009-2012 (an update for the ESSP). The Medium Term Education Sector Plan states that one of the four main priority objectives from 2009 to 2012 for this sector is to “ensure that all children have the opportunity to complete a good primary education.”

The Lesotho Government’s firm commitment toward the development of its education sector has continued to be demonstrated by its public spending. From 2000 to 2007, public expenditure on education was 29.8% of total government expenditure, the third highest percentage rate in the world, after Yemen (32.8%) and Oman (31.1%)². For this project, the Government undertook its responsibilities such as securing land for the project schools, building temporary roads for construction sites, and installing electricity and water supply facilities.

As is stated above, improvement of primary education and its equitable provision to all were top priorities of Lesotho Government’s development policy at the time of the Basic Design Study and continued to be so at the time of the Ex-Post Evaluation.

¹ Constitution of Lesotho, Section 28 (b), adopted in 1993

² UNDP, Human Development Report 2009

3.1.2 Relevance with Development Needs

The development needs for the construction of primary schools in the project target districts were deemed as high by the Basic Design Study, and the Ex-Post Evaluation confirmed that the conditions as stated below that brought about the needs for the schools in the districts were still relevant.

- (1) Population growth: the population increased in the target districts partly as a consequence of the combination of a rapid industrialization of Maseru and Berea while the surrounding districts were becoming economically worse off due to drought, thus causing an influx of economic migrants into Maseru and Berea.
- (2) Increases in enrolment to primary education: the number of pupils enrolling into primary education drastically increased with the introduction of the FPE.

The resulting requirements from these conditions at the time of the Basic Design Study were that a total of 450 classrooms needed to be constructed in these districts to match the number of pupils and alleviate overcrowding, as the average pupil to room ratios were 59.5:1 in Maseru and 59.7:1 in Berea, much higher than the MoET's goal of 40:1.

The population growth in the two districts where the project schools were constructed was high between 1996 and 2006, whereas all the other districts except for Mokhotlong marked a decline in population over the same period (Table 1).

Table 1 Population Growth in Maseru and Berea Districts (1996-2006)

District	Total		Growth Rate (1996 -2006)
	1996	2006	
Maseru	393,154	429,643	9.28%
Berea	241,946	256,496	6.01%

Source: Bureau of Statistics, Lesotho (modified by Ex-Post Evaluation team)

The population growth shown in the table above is not as drastic as what was estimated in the Basic Design Study, where it was 24.21% for Maseru and 23.47% for Berea between 1996 and 2001, but the fact that the population was growing in these districts while it was declining in others is a significant detail.

The enrolment drastically increased³ in 2000 when the FPE was introduced and since then the number of pupils enrolling into primary education has remained high.

³ Enrollment has reached its highest in 2003 and has slightly declined since. MoET has yet to fully understand the cause of the decline.

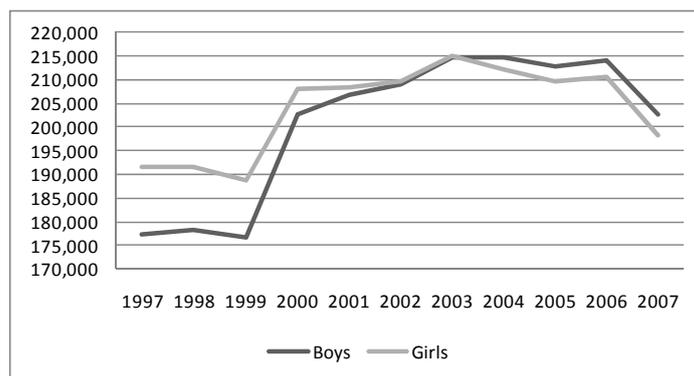


Figure 1 Number of Pupils Enrolling in Primary Education by Sex (1997-2007)

Source: Bureau of Statistic, Lesotho

The net enrolment rate drastically increased from 57% in 1999 to 78% in 2000, but it slightly declined since 2004 and dropped to 72% in 2006⁴. This slight decline was due to the fact that many children enrolled in school later than when they were supposed to and some of the students in the post FPE enrollment bulge moved out of the official primary school age bracket⁵.

The Ex-Post Evaluation found that while the needs for construction of primary schools were high due to the reasons explained above, 16 out of the 17 project schools have not only been used for primary education as originally intended but also for pre-schools (called “reception classes” in Lesotho) and secondary education.

As of January 2010, only one out of the 17 project schools used its facilities solely for primary education; 13 schools had reception classes, and 10 schools were sharing their buildings between primary and secondary schools (called “combined schools”). Table 2 shows how each site uses its facilities.

The Lesotho Government has a policy to have reception classes within its primary schools in order to improve access to education, develop equality of opportunity and enhance the quality of education. The need for reception classes is due in part to the increase in the number of orphans and child-headed households, caused by the prevalence of HIV/AIDS. In Lesotho, 23.2% of the adults aged between 15 and 49 were infected with HIV/AIDS in 2007, the third highest prevalence rate in the world⁶. According to MoET statistics, 28% of children who enrolled in primary schools in 2007 had lost either one or both parents⁷. The reception classes allow

⁴ UN Data

⁵ World Bank, Implementation completion and Results Report (IDA-38130) on a Credit in the Amount of SDR 15.3 Million to the Kingdom of Lesotho for a Second Education Sector Development Project (Phase 2) in Support of the Second Phase of the Education Sector Program, Report No: ICR 00001110, June 29, 2009, p.10

⁶ National AIDS Commission, <<http://www.nas.org.ls/hiv aids/default.php>>

⁷ According to education statistics (2007), the total number of pupils enrolled in primary education is 400,934, of which 26,709 pupils (6.7%) have lost both their parents, 22,481 pupils (5.6%) have lost their mother and 62,145 pupils (15.5%) have lost their father.

orphans taking care of younger brothers and sisters to attend primary school and to benefit from the school feeding programme provided by the Government.

Table 2 Usage of School Facilities for Reception Classes and/or Secondary Schools
(As of January 2010)

School Name	No. of Primary School Classrooms (Planned)	No. of Primary School Classrooms (Actual)	No. of Primary School Classrooms Used for Secondary Schools	No. of Primary School Classrooms Used for Reception Classrooms	No. of Staff Rooms Used for Classrooms
Mahlabatheng	13	8	5	1	1
Ikaheng	15	8	7	1	1
Tlhakanelo	7	5	3	0	1
Senyotong	10	8	0	1	0
Maseru East	15	7	0	0	0
Lesiea	10	7	3	1	1
Makola	12	8	5	0	1
Leqele	19	11	6	2	0
Rasetimela	24	18	4	2	0
Ntjabane	11	11	0	1	1
Baroana	7	7	0	1	1
Ramaqhanyaane	13	7	5	1	0
Phthiatsana	21	13	8	0	0
Tsoelopale-Moho	15	14	0	1	0
Tsolo	11	11	0	0	0
Lenono	7	7	0	1	1
Lancers Gap	19	10	9	0	0

Source: Ex-Post Evaluation team

The reason why some classrooms were used for secondary schools is that the FPE significantly increased the number of pupils completing primary education and entering secondary school, which increased the needs for secondary schools. As Table 3 shows, both gross and net enrolment rates for secondary school students steadily and significantly increased in the last decade.

Table 3 Net and Gross Enrolment of Secondary Education

	Net Enrolment Rate (%)			Gross Enrolment Rate (%)		
	Boys	Girls	Total	Boys	Girls	Total
1999	25.5	35.4	30.4	12.8	22.3	17.5
2004	32.2	41.5	36.8	18.5	29.0	23.7
2009	39.7	55.7	47.6	23.8	39.4	31.5

Source: Lesotho Education Statistics

At many of the combined schools, additional buildings for secondary education were under construction with the support of other donors such as the African Development Bank. The Japanese Government also supports the construction of secondary schools in Lesotho, with an

Exchange of Notes for Grant Aid being signed on March 2008 to construct one school in seven out of the ten districts⁸.

Although it was not intended in the Basic Design Study that the facilities would also be used for secondary education and reception classes, the Ex-Post Evaluation team considered that it was a practical solution and necessary action to respond to the imminent need of alleviating congestion of secondary schools (which is even more serious than that of primary schools) and enabling children of vulnerable households to attend primary schools.

As discussed above, the development needs for the construction of primary schools in the target districts were deemed as high at the time of the Basic Design Study and continued to be so at the time of Ex-Post Evaluation.

3.1.3 Relevance with Japan's ODA policy

Supporting the improvement of access to education and educational environments in Lesotho continued to be in line with the Japanese Government's aid policies at the time of this Ex-Post Evaluation.

In both the Official Development Assistance (ODA) Charter (2003) and the Medium Term Policy on ODA (2005), which form the policy basis for Japanese development cooperation, Japan places priority on education as an important sector to be supported. It identifies the support for the education sector as a main priority under its poverty reduction policy.

In 2002, Japan announced "Basic Education for Growth Initiative" (BEGIN) at the Kananaskis Summit, identifying its strategy to support basic education in developing countries, giving due consideration to the Millennium Development Goals (MDGs) and the Education for All (EFA) - Dakar Framework for Action, both of which were adopted globally in 2000. For BEGIN Japan pledged over 250 billion yen in assistance for education to be provided for low-income countries over five years (starting in 2002)⁹.

Japan's commitment toward improving Africa's educational sector has clearly been demonstrated by its proactive contributions, outlined in a series of Tokyo International Conference on Africa Development (TICAD) beginning with TICAD I in 1993. TICAD II took place in 1998 and TICAD III in 2003 (the same year as the Basic Design Study). In TICAD IV in 2008 Japan reiterated the importance of improving access to basic education in Africa and committed itself to construct 1,000 primary/secondary schools (approximately 5,500 classrooms in total) there.

⁸ In the project for construction of secondary schools, six classrooms, an integrated science laboratory / ICT training room building, staff room building, combined toilets (17 booths) a principal's house and staff houses were constructed at each school. Source: [Japanese ODA Projects](http://www.mofa.go.jp/mofaj/gaiko/oda/data/gaiyou/odaproject/africa/lesotho/contents_01.html#m011902), the Japanese Ministry of Foreign Affairs Website, <http://www.mofa.go.jp/mofaj/gaiko/oda/data/gaiyou/odaproject/africa/lesotho/contents_01.html#m011902>

⁹ Supporting the Joy: Japan's Support for Education of Learning, Ministry of Foreign Affairs

As discussed above, the support to improve access to education and educational environments in Lesotho was in line with the Japanese Government’s aid policies at the time of the Basic Design Study and continued to be so at the time of the Ex-Post Evaluation.

In light of the above, this project has been highly relevant with the Lesotho Government policies for educational development, the development needs in Lesotho as well as Japan’s ODA policy; therefore its relevance is high.

3.2 Efficiency (Rating: a)

3.2.1 Project Outputs

Seventeen primary schools (229 classrooms) were constructed according to plan, except for the construction of 28 latrine buildings (Table 4). In the time between the Basic Design Study and the detailed design study, the prices of construction materials significantly increased in Lesotho. In order to reduce costs, it was agreed that the Lesotho Government would take the responsibility for the construction of 28 latrine buildings at 10 of the schools.

Table 4 Comparison of Planned and Actual Facilities Constructed by Japan

	Primary School	Class-rooms	Principal's Room	Staff Room	Storage Room	Latrine Building (for pupils)	Latrine Building (for staff)	Water Facility
Planned	17	229	17	17	17	62	17	17
Actual	17	229	17	17	17	34	17	17

Source: Ex-Post Evaluation team

The Ex-Post Evaluation team confirmed that the construction of these 28 latrine buildings had not been fully completed¹⁰. For example, it was observed that since 2007 the construction of a latrine building has been left unfinished in Rasetimela. Furthermore, the construction of additional secondary school buildings on the same premises as project primary schools were not necessarily accompanied by the construction of more latrine buildings. As a result, there is a serious shortage of pit latrines at the combined schools.

It was confirmed through the interview with MoET and visits to the project sites by the Ex-Post Evaluation team that the design standards at all the 17 primary schools conformed to Lesotho national building standards and regulations, and there were no major construction faults common to all project schools. According to the school principals and the school management committees of Baroana, Makole and Mahlabatheng Primary Schools, the pit latrines in the latrine buildings constructed by Japan overflow when it rains. Water leakage from the classroom

¹⁰ Since the secondary schools have been constructed on the same premises as the project primary schools, it was not clear which latrine buildings were constructed for which school and how many more latrine buildings are to be built. Most of the records for the construction of latrine buildings undertaken by the Lesotho Government have been lost upon the recent departure of several staff in MoET’s Education Facility Unit.

ceiling was reported at Ikaheng, Phuthiatsana and Lancers Gap and water leakage from latrine buildings' water tanks was also reported at Makole, Ntjabane and Mahlabatheng.

3.2.2 Project Inputs

3.2.2.1 Project period

The project schools were handed over 21 months after the exchange of notes was signed. As the actual design and construction period (21 months) slightly exceeded the period planned in the Basic Design Study (19 months), it was implemented close to the planned schedule (111% of the planned period). The delay in the project period was caused by an external factor; the bidding process took more time than planned because the first round of the bidding turned out to be a failure.

3.2.2.2 Project cost

The planned amount for this project was 1,006 million yen¹¹ and the actual amount spent was 1,005 million yen (99.9% of the planned amount); therefore, in terms of costs, the project was conducted as planned.

The general impression expressed by MoET in relation to the cost of the project was that the construction costs of individual classrooms in this project were higher than the costs at other donors' projects. However, a survey by JICA's Basic Design Study team for the Secondary School Construction Project in Lesotho (undertaken subsequently to this project) concluded that the direct construction costs of the primary schools in this project, which exclude indirect costs (e.g. supervisory services paid to Japanese consultants, salaries and per diem paid to Japanese contractor's employees), were 32,400 yen/m². As the average cost for the construction of primary schools undertaken by the Lesotho Government has been 31,433 yen/m², the cost of the project is deemed as appropriate¹².

In summary, although the actual construction period slightly exceeded the planned period and the latrine building construction (for which the responsibility was handed over to the Lesotho Government) was not fully completed, they are judged to have been caused by external factors and the actual cost was within the planned amount; taking all aspects of the project outputs and inputs into consideration, the Efficiency of the project is evaluated as high.

¹¹ The amount on the Exchange of Notes

¹² When the cost of indirect expenses (i.e. salaries for Japanese technical staff) is included, the cost performance is 46,300 yen/m², which indicates 30% of the project cost is indirect expenses.

3.3 Effectiveness (Rating: a)

3.3.1 Quantitative Effects (Results from Operation Indicators)

According to the Basic Design Study, the primary objective of the project was that the construction of 17 schools would provide educational facilities for 11,450 children, improving their learning environment.



Photo 1 Tsolo



Photo 2 Ramaqhanyane



Photo 3 Maseru East

In order to assess the achievement levels of the set objectives, the planned and the actual figures on the following indicators were used for comparison.

- (1) Enrolment
- (2) Pupil to classroom ratios and average square meters per pupil in classrooms
- (3) Pupil to teacher ratio¹³

(1) Enrolment

The expected total number of primary school pupils to enroll in the project schools was 11,450. MoET made the decision to transform some of the primary schools into “combined schools” with a view to accommodating increasing numbers of secondary education students (see “3.1 Relevance”). As a result, 55 classrooms from 10 project schools were being used for secondary education. In addition, 13 schools were using one or two classrooms for “reception classes” in order to alleviate the burden on school aged children (especially orphans) who must take care of young brothers and sisters. Table 5 shows the planned and the actual enrolment at the 17 project schools as well as their current and prospective occupancy rates. As of 2009, a total of 13,197 children enrolled into the project schools (8,459 pupils at primary level, 4,234 students at secondary level and 504 children to reception classes), exceeding the planned number of 11,450 although the 13,197 did include children attending reception classes and secondary level.

Out of the seven schools that were solely used for primary education (and for reception classes), five schools have reached an occupancy rate of over 90% and one has the prospect of reaching the same occupancy level in the near future. The occupancy rate of the remaining one primary school (Senyotong in Berea) is projected to remain low; according to the school principal, it is

¹³ The pupil to student ratio has been added by the Ex-Post Evaluation team to assess the project’s effects; it was not one of the indicators set in the Basic Design Study.

because the school is not fully operational as a half of the school's teachers were/are chronically ill. The current or prospective occupancy rates of all of the combined schools are high (at approximately 90% or higher), therefore except for Senyontong all the projects schools are deemed to be in effective use.

Table 5 Enrolment and Occupancy Rates of the 17 Primary Schools

	Name of Primary Schools	Planned Enrolment	Enrolment in Primary Classes	Occupancy Rate	Enrolment in Reception Classes	Enrolment in Secondary Classes	Combined Occupancy Rate	Effectiveness as of 2009	Annual Growth in the Number of Students (2007-2009)	Effectiveness (Prospect)
1	Mahlabatheng	650	438	67%	40	328	124%	High (Comb)	12%	
2	Ikaheng	750	308	41%	20	275	80%		11%	High (Comb)
3	Tlhakanelo	350	174	50%	12	443	180%	High (Comb)	35%	
5	Senyontong	500	233	47%	30	0	53%		6%	Low (Prim)
6	Maseru East	750	418	56%	38	0	61%		65%	High (Prim)
8	Lesiea	500	903	181%	45	394	268%	High (Comb)	19%	
10	Makola	600	340	57%	0	417	126%	High (Comb)	29%	
11	Legele	950	760	80%	70	758	167%	High (Comb)	24%	
12	Rasetimela	1,200	894	75%	71	491	121%	High (Comb)	14%	
13	Ntjabane	550	661	120%	45	0	128%	High (Prim)	9%	
14	Baroana	350	342	98%	34	0	107%	High (Prim)	4%	
15	Ramaqhanyaane	650	184	28%	28	298	78%		14%	High (Comb)
16	Phthiatsana	1,050	500	48%	0	427	88%	High (Comb)	1%	
17	Tsoelopale-Moho	750	690	92%	45	0	98%	High (Prim)	-1%	
18	Tsolo	550	861	157%	0	0	157%	High (Prim)	7%	
19	Lenono	350	370	106%	26	0	113%	High (Prim)	25%	
20	Lancers Gap	950	473	50%	0	403	92%	High (Comb)	22%	
	Total	11,450	8,549	75%	504	4,234	116%			

Remarks: Occupancy rates do not necessarily indicate the congestion level of the schools since additional classrooms have been constructed at some of the combined schools.

Comb: combined schools; Prim: primary education only

Source: MoET, Ex-Post Evaluation team

(2) Pupil to classroom ratios and average square meters per pupil in classrooms

Pupil to classroom ratios and average square meters per pupil in classrooms are indicators for assessing the improvement of a learning environment. Table 6 indicates: the number of pupils per classroom; the average square meters per pupil in a classroom among the schools located in the vicinity of the project sites¹⁴ in 2002; the projected figures in the same area in 2006; and the confirmed figures for the project schools (recorded at the time of the Ex-Post Evaluation).

Table 6 Pupil to Classroom Ratios and Average Square Meters per Pupil in Classrooms

		Basic Design Study (Schools Located in the Areas Surrounding Project School Sites)		Ex-Post Evaluation (Project Schools)
		2002 (Pre-Project)	2006(Post-Project: Including Project Schools)	2009 (Actual)
Pupil/Classroom Ratio	Maseru	59.46	53.02	56.65*
	Berea	59.74	54.33	47.29*
Average m ² per Pupil in a Classroom	Maseru	1.08m ²	1.21m ²	1.13m ² **
	Berea	1.07m ²	1.18m ²	1.35m ² **

Source: Ex-post evaluation team

* The number of pupils enrolled in primary education at the project school in the target district divided by the number of classrooms used for primary education at the project schools in the target districts

**The number of classrooms used for primary education at the project schools in the target districts multiplied by classroom area (64.0 m²) divided by the number of pupils enrolled in primary education at the project schools in the target districts¹⁵

¹⁴ The range for surrounding area is set as 3km for rural area and 2km for urban areas.

¹⁵ Basic Design Study Summary, Basic Design Study Report (Attachment A-8-2)

As shown in the table, the actual figures did not reach the planned figures in Maseru, but the pupil to classroom ratio has decreased and the average square meters per pupil in classrooms have increased compared to those of surrounding schools in 2002. In Berea, the goal was achieved where the actual figure reached the planned figures.

(3) Pupil to teacher ratio

The average number of pupils per teacher at the project schools was 44.07 at the time of the Ex-Post Evaluation, which is lower than the 49.11 average pupils recorded (at the time of the Basic Design Study) within 53 schools surrounding the project sites. According to MoET and the principals, the project schools attract qualified teachers who are seeking for better working environment.

The project has contributed to an improvement of the learning environments, as in the project schools (compared to the surrounding schools' statistics taken before the project was implemented): the pupil to classroom ratio has decreased; the average square meters per pupil in a classroom has increased; and pupil to teacher ratio has decreased.

3.3.2 Qualitative Effects

Interviews with principals and teachers at the project schools verified that the project had improved the learning environments for pupils, leading to the improvements in students' academic performances¹⁶. According to observations made by teachers, being released from congested classrooms with insufficient furniture (many pupils in congested schools are obliged to sit on the floor) had meant that pupils were now able to concentrate more on their classes and that teachers had less difficulty in drawing their pupils' attention. The overall dropout rate of the 17 schools was 3% in 2009 according to the Ex-Post Evaluation team's interviews, which was lower than the national dropout rate of 6% (2005)¹⁷.

In addition to improving access to primary education and improving learning environments by constructing classrooms, the Basic Design Study listed the following direct effects of the project.

- (1) A water supply facility would provide safe water for 11,450 pupils and their teachers.
- (2) A principal's room and a staff room would establish a basis for school management and operation by providing spaces conducive for: managing a school, preparing for classes, marking exams, and exchanging information with fellow teachers.

¹⁶ The improvement of students' academic performances was not foreseen by the Basic Design Study, but was confirmed as an indirect project effect by the Ex-Post Evaluation.

¹⁷ 2006 Statistical bulletin, MoET

- (3) Latrine buildings with hand washing water taps attached or provided nearby would improve hygiene and sanitary conditions in schools by promoting overall education in these areas and increasing pupils' hand-washing practices.

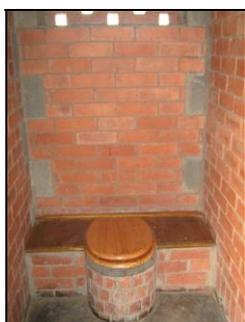


Photo 4 Pit Latrine



Photo 5 Pit Latrine Buildings



Photo 6 Well

Provision of safe water has been achieved as planned by the construction of water supply facilities at all the 17 schools.

To establish a basis for school management and operation, a principal's room and a staff room were constructed as planned at all the 17 schools, however seven out of the 17 schools use their staff rooms as classrooms since there were an insufficient number of classrooms as they were also used by reception classes and secondary school. Principals' rooms were used as intended at all the schools, but were shared by secondary school principals at the combined schools.

In all primary schools in Lesotho public hygiene and sanitation education has been conducted as a part of the regular teaching program, so teachers are instructed to teach pupils to wash their hands after using the toilets and before eating. Many schools have found it difficult to manage and maintain their water taps attached to the latrine building (refer to "3.5 Sustainability"), while the taps located closer to the classroom buildings were being used and hand washing was being practiced by pupils. Construction of water supply facilities has made it possible for pupils to practice what they have learnt about hygiene in the classroom and has improved hygiene and sanitary conditions at the schools.

This project has largely achieved its objectives; therefore its effectiveness is high.

3.4 Impact

3.4.1 Intended Effects

The Basic Design Study projected that the project would encourage parents who live within a reasonable traveling distance of the schools to be more interested in educational matters, which would result in revitalization of the parents' associations and community activities at schools. It was found that although most of the schools allowed their classrooms to be used for community

activities (including church services); there had been no major interactions between the schools and the surrounding communities, except for at one school –Ntjabane¹⁸.

Quantitative data that indicates impacts upon schools in the vicinity of the project schools could not be obtained. According to principals and teachers at the project schools, the project has alleviated the congestion in other schools since most of the pupils enrolled in the project schools have transferred from other schools in the vicinity.

3.4.2 Other Impacts

Since the FPE provides free meals to children, jobs for three to five cooks per school have been created. A night watchman has also been employed at each school. A significant volume of employment was created during the construction of the schools, with local contractors being hired who simultaneously obtained new technologies and quality control measures from Japanese contractors.

Neither relocation of residents nor land acquisition was needed for this project and there was no perceivable environmental impact caused by the construction of the schools.

3.5 Sustainability (Rating: b)

3.5.1 Structural Aspects of Operation and Maintenance

In terms of school management and maintenance the following task assignments were laid out in the Basic Design Study.

- School management committees: assistance in maintenance activities, monitoring, and management of the school
- Schools: school management, implementation of regular inspection, and maintenance of school facilities and water supply equipment
- MoET: securing the necessary number of teachers, management and maintenance of school facilities, and monitoring of school management through the District Field Inspectorate
- Parents and communities: provision of labor for school maintenance activities

There are two main issues regarding organizational sustainability, which has resulted in the current situation where appropriate and timely maintenance measures have failed to be undertaken. The first is with the school management committees, due to a gap between the roles they were expected to play and the roles that they have played. The second is with the Ministry, due to inefficient distribution of responsibilities in terms of facility maintenance.

¹⁸ At Ntjabane, parents constructed a garden and a house to exhibit cultural artifacts in the school premises.

(1) School management committee

The tasks assigned to school management committees were to assist schools in maintenance activities, while also monitoring and managing schools. School management committees were active in most of the project schools but their roles were limited to the managerial issues relating to pupils, parents and teachers, and they were not capable of providing effective solutions for a school's maintenance problems. The Basic Design Study recommended that the committees perform the role of a bridge between schools and communities by actively seeking community involvement in school maintenance, thereby raising a sense of communal ownership of the project schools and nurturing a community's interest in educational matters; however, only a few recognize that the role of community mobilization was their responsibility and even fewer have successfully carried it out.

(2) Ministry of Education and Training

The tasks assigned to MoET include: conducting regular monitoring to ensure that the facilities are properly maintained; providing advice to the schools; and allocating sufficient human and financial resources required for managing the schools and maintaining the facilities. The Ex-Post Evaluation team discerned that monitoring was being conducted regularly and advice was being offered accordingly, but the organizational arrangements for allocating financial resources to be used for maintenance were not fully functioning.

At the Ministry level, the CEO (Chief Education Officer) Primary has the most authority over budgetary matters for primary education. Under the CEO Primary, school inspectorates conduct regular school monitoring. As of January 2010, there were 34 school inspectors in ten districts to monitor all private and government schools (approx. 1,500 primary schools). These inspectors visit schools periodically, discuss pedagogical and administrative issues with school staff and compile a report on these which is submitted to the Chief Inspectorate.

The Ex-Post Evaluation team gathered that the primary responsibility, in all the government schools (200 primary schools and 95 secondary schools), for the administrative issues including those related to maintenance rested not only with the CEO Primary but also with the CEO Teaching Services¹⁹.

When a maintenance problem occurs that is beyond the capacity of a government school or a school management committee, a Supervisor under CEO Teaching Services²⁰ is required to

¹⁹ Although there was no official document clearly stipulating the division of responsibilities between the two departments, this was confirmed by the interviews with both CEO Primary and CEO Teaching Services, and by the Ex-Post Evaluation's wrap-up meeting with MoET chaired by the Principal Secretary of the Ministry. According to CEO Teaching Services insistence, since CEO Primary has the information on, and the budget for, all primary schools it should be primarily responsible for the maintenance of primary schools.

²⁰ There are only two Supervisor's positions and one of them was vacant at the time of the Ex-Post Evaluation.

collect information from inspectors and make a proposal to CEO Primary in order to solve the problem. Upon submission of a proposal, the CEO Primary will seek a financial source outside the set annual budget for maintenance finances (Utility Fund - allocated to all primary schools) to address the problem.

The dysfunctional division of responsibilities between the two departments, i.e. information and budget rest with CEO Primary while the responsibility for maintenance rests with CEO Teaching Services, causes institutional inefficiency. Supervisors never submit any proposals and most of the maintenance problems of the government primary schools are not solved at Ministry level.

In addition to the tasks related to maintenance, securing the appropriate number of teachers is also one of MoET's responsibilities. At the time of the Ex-Post Evaluation 194 teachers were assigned at the 17 project schools, of which 95% were qualified teachers²¹. Most of the unqualified teachers were already enrolled in the Distance Teacher Education Programme (DTEP)²², at the end of which they will become qualified teachers. The average pupil to teacher ratio at the 17 schools was 44:1 in 2009, which is slightly higher than the national average of 41:1 in 2006, but is significantly lower than 49:1 the average for the 53 schools in the vicinity of project sites in 2002²³. Since the national average of the percentage of unqualified /under-qualified teachers was approximately 40%, teachers placed at the project schools are of a higher standard.

3.5.2 Technical Aspects of Operation and Maintenance

A technical guidance manual for inspection and maintenance of facilities was provided to all the project schools at the time of handover and regular maintenance procedures for most of a school's facilities do not require any specific technical skills beyond a teacher's capabilities, except for that of wells. The Ex-Post Evaluation team found that none of the schools were following the guidance of preventive/regular maintenance of the wells, partly due to lack of funds and partly due to technical difficulty.

²¹ The percentage of unqualified teachers in the nation was 30% at the time of the Project's Basic Design Study.

²² DTEP is a four-year program for unqualified and under-qualified teachers. Through DTEP, 447 teachers became qualified in 2006, 316 in 2007, and 437 in 2008. As of 2009, over 2,216 teachers were taking DTEP courses. (Source: World Bank, Implementation completion and Results Report (IDA-38130) on a Credit in the Amount of SDR 15.3 Million to the Kingdom of Lesotho for a Second Education Sector Development Project (Phase 2) in Support of the Second Phase of the Education Sector Program, Report No: ICR 00001110, June 29, 2009). As stated in the Basic Design Study DTEP planned to produce 500 qualified teachers in 2006 and 250 in 2007, DTEP was implemented as planned. According to MoET statistics, the number of unqualified teachers was 4,227 out of a total of 10,428 teachers (42%) in 2006. One thousand one hundred ninety four (1,194) teachers became newly qualified from 2006 to 2008 through DTEP although the percentage of unqualified teachers has almost remained the same since the Basic Design Study, as the number of qualified teachers decreased while the number of un-qualified teachers has increased.

²³ The national average of the teacher to student ratio was 47:1 in 2002 when the Basic Design Study was conducted.

3.5.3 Financial Aspects of Operation and Maintenance

According to the Basic Design Study, MoET prioritizes government schools over other schools in budget allocation and has the policy that the Government would bear the entire running and maintenance costs for all government schools. As the necessary operational expenses for project schools are minimal it is within the Government's financial capabilities (and responsibility) to provide funding for them, as was laid out in the Basic Design Study. At the time of the Ex-Post Evaluation a very limited level of maintenance activities were being conducted by the schools, due partially to a lack of funds allocated for maintenance caused by the ineffective distribution of responsibilities within the Ministry.

The FPE uniformly, as of 2009, provides all schools with salaries for teachers, stationery, and textbooks, as well as the "Utility Fund," a maintenance and operation expense of 8 Maloti²⁴ per pupil per year²⁵. The eight schools that are connected to piped water (Water and Sanitation Authority: WASA) have to pay at least 4 to 5 Maloti per pupil as a water fee out of this Utility Fund. After these schools conduct minor maintenance jobs, such as repair of door knobs/locks or windows, there are usually no funds left for the pumping up of excreta from the pit latrines (5,000 Maloti every 4-6 years). Other major maintenance requirements, such as reinforcement/repainting of roofs to stop or prevent water leakage, replacement of broken doors, and painting of columns on the exterior of classrooms, are totally beyond their budget capacity. In most combined schools, secondary schools cover the expenses that cannot be covered by the Utility Fund, such as water bills and collection of excreta. Although the Basic Design Study stated that the maintenance cost of water supply facilities would be paid directly by MoET, not from the Utility Fund, the actual practice is that the maintenance of water supply facilities is paid from the Utility Fund, which places a great burden on project schools' maintenance budget. Furthermore, since a larger number of pupils than planned in the Basic Design Study are currently using the pit latrines at the project schools (more prominent in the combined schools), the schools are facing the necessity to pump out excreta at a greater frequency than what was projected in the Basic Design Study.

The FPE prohibits all primary schools (both private and government) from collecting any fees from parents, so schools are obliged to raise funds by selling sweets, organizing concerts or by renting out classrooms during weekends to community people and churches. According to school principals, since the introduction of the FPE, parents have come to consider that all school expenses should be covered by the Government and thus they are generally not willing to contribute anything toward school maintenance.

²⁴ The Utility Fund was set as 5 Maloti per child per year during the Basic Design.

²⁵ MoET provides a subvention fund to a school when its budget permits. The use of this additional fund is the responsibility of each school. The project schools that have received the fund have used it to purchase sports' uniforms or to repair windows, but have not used it to maintain water supply facilities.

3.5.4 Current Status of Operation and Maintenance

(1) Classroom buildings

All rooms are cleaned by pupils on a daily basis under the supervision of teachers. All the schools once a year check and record an inventory of all the furniture and equipment, and report it to back to MoET in accordance with the Government's regulations. No major loss of equipment due to insufficient supervision has been reported so far. At all the project schools it was commented that door locks and knobs were easily broken, and the Ex-Post Evaluation team actually observed broken locks and knobs at most project schools. This may have been caused by the use of cheap materials. It was said in the contractor's report (submitted after the project's construction) that "door locks and knobs are sold in a local market and can be purchased easily; therefore if they were broken it would be possible for the schools to repair or replace them by themselves". However, as project schools do not have sufficient budget for maintenance they are unable to replace them.

(2) Latrine buildings and water supply facilities

According to the schools' principals the latrine buildings are cleaned at least once a week. All project schools are supposed to be equipped with a sufficient number of latrine buildings and a water supply facility, but (as discussed in "3.2 Efficiency") there is a serious shortage of toilets because 28 latrine buildings (at 10 schools, of which the construction was to be undertaken by MoET) were either used by secondary schools or not constructed. According to the Basic Design Study, the pupils' pit latrines would fill up every 8 years and the teachers' pit latrines filling up every 11 years. It has only been four years since the schools were constructed: one school (Lesiea) has already had excreta collected; the pit latrines of two schools (Maseru East and Tsoelopele-'Moho) have already filled up but the schools have been unable to have excreta collected due to a lack of available funds; and four schools' pit latrines have almost filled up but the schools have not secured funds for collection (Ikaheng, Leqele, Ntjabane, and Phuthiatsana). Overall, the condition of the toilets in many of the schools was filthy since they were used by more pupils than originally planned for, and discipline, attention, and care needed to keep them clean were absent at these schools. The majority of the schools have lost a multiple number of toilet seats (some were stolen and some intentionally broken), many toilet doors were broken either by intruders or by children, and some of the toilets were completely out of use because of water/waste over-flowing from the latrine pit holes - apparently caused by them being placed in an inappropriate location.

Almost all water taps installed in the toilet buildings were broken by intruders/children and are now out of use. However, in order to avoid pupils wasting water, the schools do not repair these taps and, at most project schools, children now fetch water from other functioning water taps

(all the schools have at least one water tap functioning) by bucket. School principals prefer that all water taps be kept under a teacher's strict control, in order to minimize wastage. Toilet buildings are usually not located close to the classrooms, thus monitoring of taps is difficult; so installation of water taps in the latrine buildings has under these circumstances been deemed to be unnecessary.

As none of the schools were following the guidance of preventive/regular maintenance of the wells (see "3.5.2 Technical Aspects of Operation and Maintenance"), some wells became dysfunctional. At Baroana Primary School, it was reported that students brought water from surrounding villages and dug a spring on their own since a handle of the well pump had broken.

Some problems have been observed in terms of the organizational, financial and technical aspects of sustainability in this project; therefore the sustainability of the project is fair.

4 Conclusion, Recommendations and Lessons Learned

4.1 Conclusion

The relevance of the project has been evaluated as high because the construction of primary school classrooms and improvements in the learning environments are in line with the Lesotho Government's development policy and Japanese Government's aid policy, while meeting the needs of local population. Although the use of classrooms not only for primary education but also for reception classes and secondary education was not intended in the project, this application is considered as a practical solution in response to the imminent needs of the local population. The efficiency of the project has been evaluated as high, considering that although the actual construction period slightly exceeded the planned period and the latrine building construction (for which the responsibility was handed over to the Lesotho Government) was not fully completed, they are judged to have been caused by external factors and the actual cost was within the planned amount. The effectiveness of the project has been evaluated as high since the current or prospective occupancy rates of all of the schools except for one are high (approximately or over 90%) and the learning environment including sanitary and hygienic conditions has improved. Some other positive impacts were reported, such as the alleviation of congestion at schools located in the surrounding areas and creation of job opportunities for some members of the local community. The sustainability of the project has been evaluated as fair because some water supply facilities and pit latrine buildings have not been well maintained due to insufficient financial resources.

In light of the above, this project is evaluated to be (A) highly satisfactory.

4.2 Recommendations

4.2.1 Recommendations to the Executing Agency

(1) Structural sustainability

(a) School management committees

School management committees have been established as planned and are in active operation, although the majority of them have not fulfilled a function recommended in the Basic Design Study - a bridge between schools and communities. Most of the schools have not successfully integrated into the community, which could constitute a reason for why these schools have been subjected to intrusions or vandalism. Although classrooms are open to the communities during weekends, many principals were not interested in creating strong ties between communities and the schools. Some of these intrusions could be avoided if the communities surrounding the schools had more interest and gave attention toward the schools. Therefore, MoET should compile a set of best practices for interactions between schools and communities, and disseminate them nationwide.

(b) Ministry of Education and Training

Information and budget regarding the operation and maintenance of primary schools rest with the CEO Primary while the responsibility of maintenance rests with the Supervisor under CEO Teaching Services. MoET should re-examine the maintenance regime for the primary schools in order to overcome this institutional deficiency.

(2) Technical and financial sustainability

As operational and maintenance needs vary between schools, the Utility Fund (8 Maloti per pupil per year) uniformly allocated to all primary schools does not necessarily correspond to the needs of each individual primary school. Those schools that receive water from WASA have to use more than half of their Utility Fund on paying water fees and after other minor maintenance expenditures these schools cannot pay for the pumping up of the excreta from their pit latrines (see "3.5 Sustainability"). Those schools that have their own water supply (well) may not need the same amount of the Utility Fund as others, but once the hand pump or borehole breaks down, the savings that could be accrued from their excess Utility Fund would not be sufficient to rehabilitate the equipment. There are also water leakage problems that cannot be solved technically or financially by an individual school's own efforts. As such the Utility Fund should be limited to daily operation and maintenance (a smaller amount should be allocated to those schools that have wells), leaving major maintenance or large expenditure such as rehabilitation of wells and pumping up of excreta to be dealt with and paid for by MoET. Furthermore, as none of the project schools were following the guidance of preventive maintenance for the

wells, it is recommended that regular mechanical maintenance be conducted by a contractor on a collective basis (one contract for all schools), so that wells can be used for an extended period with minimal breakage.

The condition of the toilets in many of the schools were filthy, and some had been damaged by intruders and some damaged by pupils. Broken seats had not been replaced with new seats partially because of a lack of funding and partially because a lack of attention. The fact that a few schools were actually maintaining the pit latrines in good condition indicates that the condition of pit latrines is mostly dependent on a school's discipline and attention. The filthy condition of pit latrines discourages pupils especially girls from attending school, which will lead to a decline in enrolment. In order to raise motivation of the schools to maintain pit latrines in a proper manner, the condition of pit latrines should be inspected regularly and/or could be linked to the Utility Fund amount allocated to individual schools.

4.2.2 Recommendations to JICA

Since the physical problems with educational facilities, notably, the overflowing of pit latrines when it rains, and water leakage from the classroom ceiling and latrine buildings' water tanks, came about after the warranty period had expired, the attribution for the responsibility of these problems is not clear (see "3.2.1 Project Outputs"). If the repair of facilities is judged to be done in a cost-efficient manner, it is recommended that JICA takes remedial measures while investigating the cause of the problems.

4.3 Lessons Learned

Conformity with the generally accepted Lesotho standards does not necessarily mean that the adopted design is ideal for the local circumstances (see "3.5.4 Current Status of Operation and Maintenance"). For example, most of the water basin taps in the latrine buildings, which were constructed to conform to the generally accepted Lesotho standards, have been left broken. This is because the latrine buildings are located far from classroom buildings making it impossible for teachers to control children's use of water from the taps, so they considered that it was better to leave them broken and have children bring water in buckets from other taps closer to the classroom buildings to the latrine buildings. Another example is the wooden latrines seats, which can be commonly found in primary schools in Lesotho: many of them have already come off the concrete pits creating a filthy condition where pupils had to sit directly on concrete pits. By visiting various non-project schools the Ex-Post Evaluation team found that one type of toilet seat (a wider wooden board with a hole) was more durable and easier to clean. The lesson from the project is that when deciding specifications of accessories for the facilities, the current practices at other schools should be observed and afterwards the most adaptable and durable in the local circumstances should be adopted.