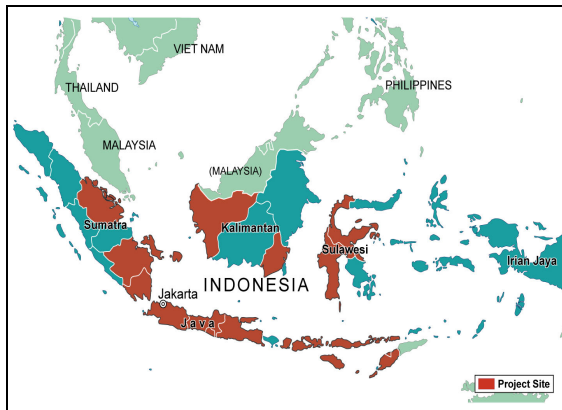


Indonesia

Junior Secondary School Building Construction Project

Report Date: January 2003
Field Survey: December 2002

1. Project Profile and Japan's ODA Loan



Project area location map



The new junior secondary school constructed under this project

1.1 Background

The Indonesian government has positioned the development of human resources as one of the pillars of its national development plan, and has given particular priority to the quantitative and qualitative improvement of universal education¹. In 1994, in order to raise the educational level of the nation in response to the increasing advancement and complexity of society, it extended the education period to nine years by adding three-year early secondary education (junior secondary schools) to the previous six-year primary education (elementary schools) and decided to achieve the goal of making early secondary education compulsory for all eligible students by 2008.

In 1993, the gross enrollment ratio² for junior secondary schools was about 54%. If 100% school attendance was to be attained, it was projected that the number of students would increase by approximately six million and that around 150,000 new classrooms would be necessary for junior secondary schools nationwide. For the time being, it was expected that it would be necessary to build about 30,000 new classrooms during the three-year period from 1996 to 1998, the second half of the period for the Sixth Five-year National Development Plan (1994-1998). Further to these developments, this project was implemented for several purposes, including the construction of new junior secondary schools.

1.2 Objectives

The objective was to construct new junior secondary schools (provision of school buildings and necessary furniture and educational equipment) as a model project in 12 provinces selected from across the

¹ Since it was difficult to attain 100% school attendance due to the unavailability of facilities and the economic conditions of the nation, it was decided that for the time being, the term "compulsory education" would not be used and instead, efforts should be made to spread education under the slogan "universal education."

² The gross enrollment ratio is similar in definition to the gross school attendance rate and is obtained by dividing the figure for all students (regardless of age) attending school at certain level of education by the population figure for the age group normally appropriate to that level of education. By contrast, the net enrollment ratio is obtained by dividing the figure for students studying at their appropriate age level by the population figure for their age group.

nation (at the time of appraisal), and thereby raise the standard of future national expansion and development of junior secondary school facilities.

1.3 Project Scope

(1) Provinces covered by the project³

West Java, Central Java, East Java, Riau, South Sumatra, Lampung, West Kalimantan, South Kalimantan, Central Sulawesi, South Sulawesi, West Nusa Tenggara and East Nusa Tenggara

(2) Details of the project plan

- 1) Construction of schools (including the development of land and surrounding infrastructure)
- 2) Procurement of fixtures and furnishings
- 3) Consulting services

1.4 Borrower/Executing Agency

The government of the Republic of Indonesia/Ministry of Education and Culture (the Ministry of National Education hereafter)⁴

1.5 Outline of Loan Agreement

Loan Amount	20,876 million yen
Loan Disbursed Amount	12,071 million yen
Exchange of Notes	December 1995
Loan Agreement	December 1995
Terms and Conditions	
-Interest Rate	2.5%
-Repayment Period	30 years
(Grace Period)	(10 years)
-Procurement	General untied (Consultant funding procured as partially untied aid)
Final Disbursement Date	December 2000

2. Results and Evaluation

2.1 Relevance

In 1994, when the Sixth Five-year National Development Plan (1994-1998; REPELITA VI) was launched, the Ministry of National Education prepared the government’s policy of universal nine-year basic education (UNYBE). Under this policy, the Ministry included early secondary education (junior secondary school) into its concept of universal education, and, after elementary schools attendance had almost been attained throughout the country, shifted its focus to spreading secondary education services. In 1993, however, the gross enrollment ratio for junior secondary schools was only around 54%, and if 100% school attendance had been attained, the number of students would clearly have increased by about six million. Various educational environments, including new schools, would have had to be established to respond to the rapid increase of students. It was also pointed out that the enrollment ratio for remote and rural areas was low and that there was a gap in educational level between the provinces and between urban and rural

³ The list of 12 provinces shown is as of the project appraisal. Banten separated from West Java as a new province and Bangka-Belitung from South Sumatra. As a result, the number of provinces covered by the project increased to 14.

⁴ At the time of appraisal, the executing agency was the Ministry of Education and Culture, but by the time of evaluation, its title had been changed to the Ministry of National Education.

areas.

Under these circumstances, there was concern that as the number of students grew rapidly, the lack of junior secondary school facilities would bottleneck the spread of educational opportunities, and this prompted the Ministry to recognize that constructing new junior secondary schools was an urgent task to be addressed. For this reason, this project, which aimed to meet the rapidly growing demand for junior secondary schools and other facilities, was deemed relevant, and it was expected that if it was implemented as a model project, it would contribute to promoting the full-scale nationwide development of schools in the future with the aim of eventually catering to an additional six million students.

Meanwhile, at present evaluation stage, PROPENAS (2000-2004), an outline for new national development policies and measures, emphasizes the points listed below as being among the government's policies and guidelines in the field of education.

- Increasing educational opportunities so that high-quality education can equally be provided to all citizens
- Implementing comprehensive human resource development as soon as possible through active participation by all citizens so that the potential of the younger generation can be realized to the fullest

The foregoing indicates that providing educational opportunities on a nationwide scale continues to be a priority issue for Indonesia, and the objective of the project remains relevant at the time of evaluation.

Furthermore, taking into consideration the low enrollment ratio in rural areas, regional gaps in access to education and other factors, the project particularly focused on remote areas and areas where the level of educational service was low, when selecting school construction sites. Therefore, the project is also considered appropriate from the viewpoint of eliminating such regional gaps. In this regard, PROPENAS states expressly that it aims to provide all citizens with wide and equal access to high-quality education. All in all, then, it can be said that the project was in accord with the guidelines of the Indonesian government.

2.2 Efficiency

2.2.1 Project Scope

Initially, project plans called for 606 new junior secondary schools (3,636 classes) to be established in 12 provinces nationwide, and necessary educational equipment to be provided to these schools. In West Java, however, the construction plans for ten sites were cancelled for reasons related to land acquisition⁵. The number of classrooms per school was planned to be six at appraisal but was revised to nine later. According to the executing agency, this revision was made because the construction unit price used at the time of cost estimation was low enough to increase the number of classrooms per school to nine in order to prepare for future growth in educational demand. As a result, the number of new schools and classrooms constructed increased to 596 and 5,364, respectively.

However, because all schools were constructed to accommodate nine classrooms uniformly, in some cases the number of classrooms became too large or too small for the locality's actual needs, indicating that understanding of local needs was insufficient. In the future, it will be important to improve and effectively utilize school mapping data (studying local socioeconomic conditions and accessibility for students, for example). In addition, as the number of classrooms built grew, the volume of school furniture and teaching materials to be procured also increased. The reason for the increase in teaching materials was not only that the number of classrooms grew but that new items were added aiming to furnish schools with as many teaching materials as possible according to the curriculums for each subject (science, mathematics, fine arts,

⁵ When the decision to discontinue construction was made, part of the construction work had already started. According to the executing agency, the construction work was subsequently completed using government budgets.

physical education and social studies).

The primary criterion for selecting provinces to be covered by the project was to contribute efficiently to raising the gross enrollment ratio in accordance with government policies. Specific criteria were (1) selecting provinces that ranked low in terms of the gross enrollment ratio and needed more newly built classrooms, (2) selecting provinces that ranked relatively high in terms of economic potential and population density level, and in which there were potentially greater needs for the construction of new schools, and (3) selecting provinces in which projects for improving the quality of secondary education were being implemented by international aid organizations, making it possible to expect this yen loan project to bring tangible benefits.

The important task in the planning stage of the project was to choose sites for constructing some 600 new schools. The criteria for site selection were (1) that a great number of classrooms were needed, (2) that students could economically and geographically afford to attend junior secondary school, (3) that it was technically possible to construct school facilities (for example, a minimum of 6,000 m² of land was available) and (4) that the legal rights pertaining to possession of land were clear. With respect to (1), the executing agency's school mapping data was used to give priority to areas where a large number of school age children did not attend school, and efficient school allocation was planned with one junior secondary school to be located to cater for every five elementary schools.

It was difficult, however, to appropriately apply the selection criteria to all project schools. For some schools, slopes and geologically unstable sites that were inexpensive but technically difficult for construction purposes had to be chosen because the district offices of the Ministry of National Education did not have enough time to select construction sites and there were budgetary restrictions on land acquisition and development.

2.2.2 Implementation Schedule

Initial plans called for construction work to be completed by June 1999, but it is reported that the project was completed in March 2000, about eight months behind schedule. The project period spanned three years and was divided into three phases according to the fiscal years. It was planned that some 200 new schools would be constructed in each phase, and that in each phase, construction work would be completed within 17 months.

In Phase I and II, procedures for obtaining permission and approval to acquire necessary land, as well as the bidding process, took longer than expected, the executing agency was delayed in delivering its budgets⁶. Therefore, preparations for land purchase and development did not progress smoothly, causing the start of the project to be delayed and the construction period to be shortened. After the commencement of construction work, difficulties in improving access roads and bridges in remote areas, and in procuring construction materials and equipment and delivering them to construction sites, affected the progress of construction work. The Project Completion Report points out that for the above reasons, the executing agency was forced to construct new schools in a short period of time and that this influenced the quality of construction work and facilities built.

In order to cope with these problems, the executing agency had dozens of meetings for coordination with provincial offices, consultants supervising implementation and contractors. As a result, the agency explains that in Phase III, substantial improvements were made on progress management and construction

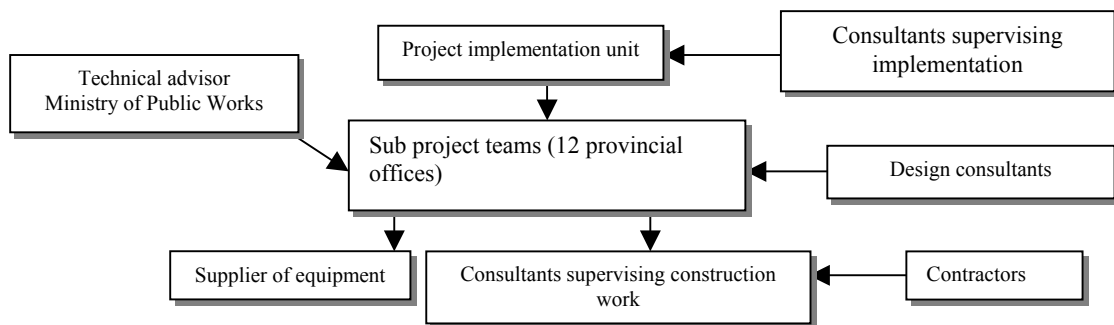
⁶ The project period was divided into phases according to the fiscal years, with each implementation process based on the delivery of a single-year budget. However, the delivery of budgets allocated by the central government to provincial offices did not take place in April, the beginning of the fiscal year, but was delayed until July to October in most cases. This in turn delayed the start of preparatory work, including land acquisition.

work.

2.2.3 Executing System

Previously, in constructing schools, the Ministry of National Education charged the Ministry of Public Works with the design of buildings and the supervision of construction work according to the details of plans (at the provincial level, these tasks were undertaken by the Ministry's provincial offices), and after the completion of construction work, school facilities management was transferred to the Ministry of National Education. In this project, however, the Ministry of Public Works was positioned as a technical advisor. The principal responsibility for supervising construction work was assigned to the Ministry of National Education and its provincial offices, in order to give more consideration to aligning the progress of the project with the procurement and provision of educational equipment, distribution of textbooks and securing of teachers. Thus an implementation system was established to ensure the delivery mechanism of the project.

Figure 1: Implementation system for the project



In some provinces and districts, however, the above implementation system did not function adequately. There were many cases in which the Ministry of Public Works, which did not have the primary responsibility for implementation, failed to actively give advice and guidance, and the provincial offices of the Ministry of National Education, which were not familiar with bidding, contract management, quality control and supervision of construction work, had difficulties in carrying out the project properly. Also, the executing agency points out that site selection problems and the inability of district offices to appropriately assign a sufficient number of personnel to monitoring and supervisory operations during the construction work had serious effects on the progress of project implementation and the quality control of school facilities. It is reported, however, that these provincial and district offices saw improvement in supervisory operations in Phase III on the basis of the experience acquired in Phase I and II.

Improvements were made in the provision of educational equipment, which was included in the project scope. However, with respect to the distribution of textbooks, assignment and improvement of teachers, establishment of school management organizations and other tasks, which were not included in the project scope, it cannot be said that appropriate measures were taken in every detail, due partly to the lack of coordination ability and funds on the part of the executing agency.

2.2.4 Project Cost

On a yen basis, the project was completed at a cost substantially lower than expected. The main reason for this was the depreciation of the rupiah due to the currency crisis in 1997, which made the yen amount paid for construction outsourcing and other costs stretch to cover a larger number of classrooms and procure additional educational equipment. According to the executing agency, contractors adjusted their

contract prices according to the fluctuation of the currency, but this did not pose a particular problem.

2.3 Effectiveness

2.3.1 Construction of Schools

In this project, 596 schools were actually constructed as compared to the initially planned 606. The number of schools built under the project thus came to account for about 8.7% (public schools only) and 4.4% (including private schools) of total schools in the 12 project provinces in 2000. It can be said that the contribution by the project was very large in terms of the number of facilities built: of all schools built in the provinces during the project implementation period, about 60% were built by the project.

Table 1: Construction of junior secondary schools

	1995	1996	1997	1998	1999	2000
Schools constructed by the project	-	184	213	199	-	-
Total schools in 12 provinces (cumulative)	12,634	13,075	13,346	13,496	13,558	13,453
(Of which public schools; cumulative)	5,620	5,916	6,230	6,602	6,767	6,839
Increased number of public schools	-	296	314	372	165	72
Contribution of the project to the construction of schools (in 12 project provinces)	-	62.2%	67.8%	53.5%	-	-
Total schools nationwide (cumulative)	19,968	20,544	20,960	20,960	20,866	20,721
(Of which public schools; cumulative)	9,002	9,449	9,841	10,374	10,495	10,615
Increased number of public schools	-	447	392	533	121	120
Contribution of the project to the construction of schools (in 12 project provinces)	-	41.2%	54.3%	37.3%	-	-

Source: Ministry of National Education

As mentioned above, however, problems related to construction work and its supervision were pointed out during the project implementation period for some schools⁷, and the executing agency indicated that problems remained to be solved with respect to the quality of facility construction. The survey conducted independently by the executing agency in 1998 and JBIC's survey, which was conducted in 2002 under the title "special assistance for project sustainability (SAPS)"⁸, report on the status of newly constructed facilities at the 591 schools surveyed as shown in Table 2.

Table 2: Quality of project school facilities

	Level A	Level B	Level C	Level D	Level E
Condition of building site (vulnerability to natural disasters)	289	119	111	69	3
Condition of facility structure (quality of construction work)	0	295	255	36	5
Condition of finishing work (painting, flooring, windows, etc.)	4	95	307	158	27
Condition of utilities (water supply, electricity, etc.)	0	132	293	70	85
Condition of ceilings and roofs ^{note 1)}	0	0	4	179	1
Condition of school furniture installed ^{note 1)}	0	1	169	24	0
Average distribution ratio	10.6%	23.3%	41.4%	19.5%	5.2%

Source: Ministry of National Education and SAPS reports

Note 1: Only schools covered by JBIC's SAPS survey (195 schools)

⁷ According to JBIC's survey called "special assistance for project sustainability (SAPS)," which was conducted in 2002, 16 of the 200 junior secondary schools surveyed (8%) were classified into the category of "schools requiring urgent repair."

⁸ Data are quoted from the Technical Feasibility Study conducted by the Ministry of National Education in 1998 and the SAPS survey conducted by JBIC in September 2002 concerning the present condition of school facilities. The conditions of facilities after completion are evaluated for each item on a scale of levels A to E. The standards for levels A to E are qualitative, and judgment standards are established for each item in each survey. For all items, level A denotes that facilities are in a good condition, and the degree and types of problems broaden as the scale goes down from level B to level E.

The results of the surveys show that about 40% of the schools surveyed were classified into level C, indicating that many schools had problems with regard to one or more of the survey items. Particularly, it was noted that there were many problems with finishing work, ceilings and roofs, water and electricity supplies, and furniture installation. It is considered that the condition of school facilities affects student satisfaction with school life, the number of classes per school, enrollment ratios and other factors, which in turn influence the quality of education.

2.3.2 Utilization of Schools

The status of utilization of schools constructed under the project is shown by the utilization status of their classrooms. The results of the facility status survey (of 195 schools constructed in Phase III) conducted during the above-mentioned SAPS survey indicate the utilization status of classrooms in each school in Table 3.

Table 3: Percentage of classrooms in use at schools surveyed (as of July 2002)

Classrooms utilization rate	Number of schools	Ratio
Less than 36 %	19	10.0 %
Less than 64 %	43	22.6 %
Less than 97 %	47	24.7 %
Less than 97 - 103 %	14	7.4 %
Less than 136 %	49	25.8 %
Less than 205 %	18	9.5 %

Source: SAPS report

Note: The number of sample schools that provided data is 190. For five schools, no data is available.

The above table shows that at the time of the survey, classrooms were in short or excessive supply in more than half of the schools surveyed and that more cases of “excessive supply” were reported than those of “short supply.” The reason is that because of time constraints and budgetary restrictions on the part of the executing agency, the selection of project sites making effective use of school mapping, including studies of local demand for school attendance and the geographical feasibility of students attending school, was not carried out in a satisfactory manner in some areas (particularly in provinces in Java Island). It can also be pointed out that behind this was the decision to uniformly increase the number of classrooms per school from six to nine in order to prepare for future growth in demand.

2.3.3 Number of Students and the Status of Student Attendance

Table 4 shows the status of utilization for schools built under the project in terms of the number of students and the status of student attendance. In the SAPS survey, 19 junior secondary schools built under the project were used as samples to study the number of students and the status of their attendance in ten districts in three provinces⁹.

⁹ “Sample provinces” refers to the three provinces—West Java (including the current Banten province), South Sumatra and Central Java—where sample schools are located, and a total of ten districts were picked from the three provinces.

Table 4: Number of students and the status of their attendance at project (sample) schools

	2000 survey sample schools	1999 survey sample schools	Number of samples	2000 survey sample provinces (Public schools)	2000 survey sample provinces (All schools)	2000 survey entire nation (Public schools)
Average number of students per school	408.1	406.1	8	662.6	453.9	514.9
Number of students per class	41.9	41.7		43.1	41.7	40.4
Average number of new students per school per year	127.3	123.2	14	225.6	154.5	178.6
Average number of first-grade students per class	44.2	42.9		40.8	39.9	38.9
Average number of dropouts per school	10.6	14.1	16	n.a	18.4	16.1 ^{Note1}
Average dropout rate	2.6%	3.5%		n.a	4.1%	4.4% ^{Note1}
Average number of students who failed to proceed to upper grades in one school	1.3	0.7	15	1.1	0.8	1.7
Average percentage of students who failed to proceed to upper grades	0.3%	0.2%		0.2%	0.2%	0.3%

Source: Ministry of National Education and SAPS reports

Note 1: Figures include those for private schools.

The number of students per class at the sample schools was 41.9, slightly higher than the 40.4 for the national average and slightly lower than the average for all public schools in the sample provinces. Seen from the viewpoint of the number of students per class alone, this indicates that the sample schools are operated with an appropriate number of students in attendance, taking the national average number of students per class (40 students per class) at the time of appraisal into consideration. In other words, it is inferred that class operation does not pose any particular problem as long as it is seen from the viewpoint of the average number of students per class. There are no data on the class attendance rates for the sample schools, but when one considers the figures for dropouts and repeaters, one will note that the sample schools show figures almost similar to the average for all schools in the province or for all public schools nationwide. It is considered that there is no problem specific to the sample schools that affects the status of class attendance.

2.3.4 Securing and Assigning Teachers

Table 5: Number of teachers at the project (sample) schools

	As of June 2002 sample schools	Number of samples	2000 survey sample provinces (Public schools)	2000 survey sample provinces (All schools)	2000 survey entire nation (Public schools)
Average number of teachers per school (including part-time teachers)	17.9 ^{Note1}	17	30.8	23.8	27.6
Number of students per teacher (including part-time teachers)	20.2 ^{Note1}	17	21.5	19.0	18.7

Source: Ministry of National Education and SAPS reports

Note 1: Figures for June 2002.

Securing a sufficient number of teachers is also important to the effective utilization of schools. The number of teachers per school at the sample schools was relatively smaller than the average for all public schools nationwide and in the sample provinces. One of the reasons for this appears to be that, as compared to existing schools constructed using government budgets, the number of classrooms at the project schools

was small and the classroom utilization rate at the schools was also small. The number of students per teacher, however, indicates that the sample schools operate favorably compared with the average in the sample provinces. It is reported that the number of teachers required is secured by meeting the shortage of regular teachers with the employment of contract, part-time and other teachers at the project schools.

When the project was implemented, the executing agency was concerned that securing teachers would become a problem in areas other than Java Island. Even in Java Island, however, a sufficient number of teachers was not being secured and assigned easily and appropriately. In some cases, elementary school teachers were transferred to the same junior secondary schools as their students when they graduated, and in other cases, the number of contract teachers was increased in order to fulfill the shortage of the teachers. In addition, the teacher allocation was neither adequate nor equal, and some have to teach subjects other than their specialization. These resulted in overtime work for teachers and lack of care for individual students.

2.3.5 Effects of Support by Other International Organizations

Programs supported by other aid organizations during the implementation of the project are as listed below. All of them started in or after 1995 and some of them are continuing even today.

Table 6: Support programs by aid organizations in the educational sector

Organization	Project name	Province where this project is also implemented	Details of support
Japan International Cooperation Agency	Primary and secondary science education expansion program	Nationwide	<ul style="list-style-type: none"> Development of teachers in science and improvement of education at training institutions
	Strengthening of local education plans through participation by local communities	Central Java	<ul style="list-style-type: none"> Training in education planning for school representatives and administrators
	Local education development support survey	Central Java	<ul style="list-style-type: none"> Improvement of the ability to operate schools, teacher training, textbook distribution control and revitalization of parents' associations
World Bank	Project for distributing textbooks and other teaching materials	Nationwide	<ul style="list-style-type: none"> Distribution of textbooks and books and teacher training
	Junior secondary school education project and the basic education project	8 provinces	<ul style="list-style-type: none"> Distribution of textbooks, training of administrators, headmasters and teachers, establishment of student evaluation systems, strengthening of school operation organizations, raising of the awareness of parents and recruitment of auxiliary teachers
Asian Development Bank	Junior secondary school education project II	3 provinces	<ul style="list-style-type: none"> Teacher training, auxiliary teacher recruitment and improvement of teaching methods
	Private junior secondary school education project	5 provinces	<ul style="list-style-type: none"> Training of administrators, headmasters and teachers and distribution of textbooks

Source: Japan International Cooperation Agency

This project aimed at raising the enrollment ratio for junior secondary schools and provided support through the construction of schools and provision of educational equipment. However, in order to improve the quality of educational services, it is essential to not only construct and improve school facilities and educational equipment, but also develop and improve diverse educational resources through the training of teachers, improvement of teaching methods and curriculums, establishment of school operation organizations and encouragement of participation by local communities. In the World Bank's junior secondary school education project, local residents enter into partnership with the school committee of each school (to be described later in the section "Sustainability") to form project units that supervise the

construction of schools, securing of textbooks and educational equipment and teacher assignment. After the construction of schools, local resident continue to participate in school operations and maintenance. This system is called the “New School Unit Model.” There are some project schools which follow this model and take a similar approach to operations and maintenance.

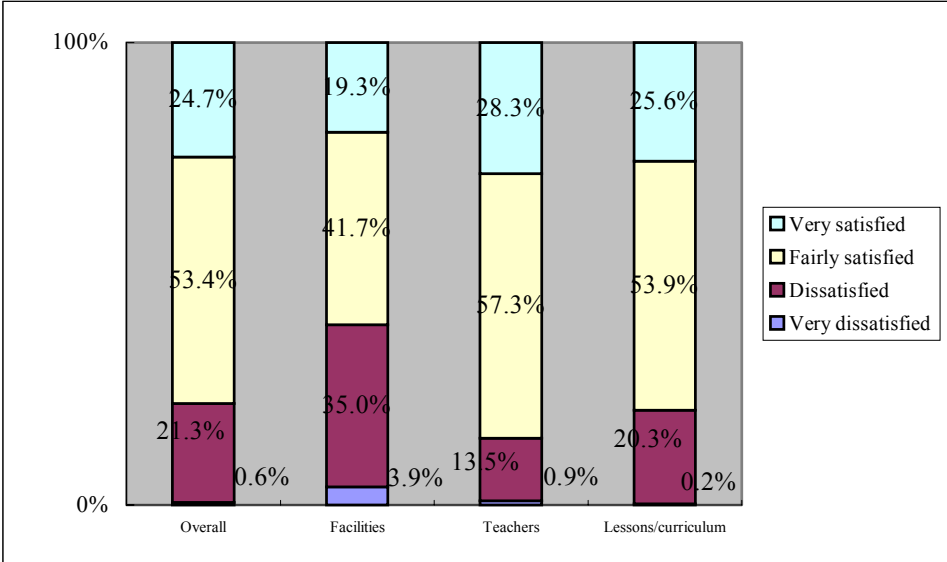
2.4 Impact

2.4.1 Student Satisfaction

In the SAPS survey, 940 students from 19 schools were surveyed concerning their satisfaction with the educational services. The ratio of male to female students was almost equal, and ratios for parental occupation were 38.7% for farmers, 37.9% for salaried workers, 8.3% for self-employed persons, 6.0% for civil servants and 4.4% for others. Thirteen- to fifteen year-old students, who are eligible for junior secondary school education, accounted for 84% of the total students.

As Table 7 shows, 78.1% of students were satisfied with their overall school life. On the other hand, the remaining 21.9% replied that they were not satisfied. The overall level of satisfaction was estimated at 3.02 if the highest score was 4.

Table 7: Results of the student satisfaction survey



Source: SAPS report
 Note: In the survey, four points were given to the answer “very satisfied,” three to “fairly satisfied,” two to “dissatisfied” and one to “very dissatisfied.”

The rating for satisfaction with facilities was only 2.76, with 56.2% of students’ requests about junior secondary schools concentrated on facility improvement. The percentage of requests for the improvement of classrooms, furniture and materials/equipment was largest, followed by requests for the improvement of sports facilities, libraries and laboratories.

As compared to satisfaction with facilities, satisfaction with teachers and lessons/curriculums as a whole were high, at 3.13 and 3.25, respectively. The SAPS survey, meanwhile, pointed out that there were shortages of teaching materials and textbooks, reflecting the insufficient budgets allocated by local governments to early secondary education. Only 16.4% of students were provided with textbooks individually, and 63.4% shared textbooks among themselves. One distinctive feature of the results of the

survey is that satisfaction declined as the school year goes up.

The survey determined that the satisfaction with facilities was the main factor that affected overall satisfaction. Both the executing agency and officials of the district government's education bureau are of the opinion that there are high levels of need for the improvement of facilities and equipment, and that if facilities are improved in accordance with the Minimum Services Standards (SPM), in which the central government presents to local governments standards for various administrative services that should be provided by them after decentralization, it would be possible to raise student satisfaction. The SAPS survey reports that teaching materials and furniture provided for some project schools are poorly maintained and that laboratories and other special facilities are used not for those purposes but as storage space for materials.

2.4.2 Changes in the Enrollment ratio for Junior Secondary Schools

PROPENAS states the goal of raising the gross enrollment ratio for junior secondary schools to 78.9% (11.65 million students) by the end of 2004. As indicated in Table 8, the national average improved from 53.5% in 1993 to 73.0% at the end of 2000. Therefore, there is a strong possibility of attaining the goal set in PROPENAS by the end of 2004.

All of the provinces covered by the project also raised the gross enrollment ratio for junior secondary schools as compared to 1995. The national average rose by 10.2 percentage points during the period from 1995 to 2000 while the average for the project provinces improved by 11.4 percentage points. And of the 12 project provinces, seven, including three in Java Island where a large number of new schools were constructed, saw improvement exceeding the national average. Furthermore, the enrollment ratio in 2000 was 39% higher than in 1995, and given the fact that substantial improvement was seen in rural areas, where a larger number of schools were constructed under the project, rather than in urban areas, it can be said that the project contributed to raising the enrollment ratio.

Table 8: Changes in gross enrollment ratio at the project provinces and nationwide (Unit: %)

	1993	1995	1998	1999	2000
West Java (including Banten)	42.5	53.2	61.8	63.4	69.3
Central Java	53.5	65.1	78.2	83.7	75.3
East Java	54.7	64.1	77.9	80.9	79.0
Riau	49.8	56.8	66.8	67.7	70.9
South Sumatra (including Bangka-Belitung)	47.0	55.5	63.6	63.8	72.1
Lampung	45.3	63.5	68.8	69.6	72.6
West Kalimantan	43.7	49.4	57.1	54.3	60.0
South Kalimantan	49.2	57.8	64.1	66.2	66.1
Central Sulawesi	46.6	53.0	54.2	52.3	61.1
South Sulawesi	50.5	56.0	62.3	63.4	66.1
West Nusa Tenggara	46.6	54.6	57.2	61.9	66.6
East Nusa Tenggara	41.6	49.0	49.1	51.3	56.1
Average for the 12 provinces	47.6	56.5	63.4	64.9	67.9
National average	53.5	62.8	70.7	72.3	73.0

Source: Ministry of National Education

Note: Shading indicates provinces that saw the degree of improvement in the gross enrollment ratio exceed that for the national average.

In the satisfaction survey for students in the SAPS survey, it was found that 98.0% of students entered the schools after they graduated from elementary school (the percentage of students transferred from other junior secondary schools was 0.5%), and 60.2% of students replied that the schools were geographically the closest. This means that the project contributed to increase the number of students by providing many

students with favorable access to schools, not by simply prompting the transfer of students from overcrowded schools.

2.4.3 Number of Students per Class

Since the project increased the number of schools and classrooms, the number of students per class in the project provinces generally came close to the standard level, which was 40 or less, and this enabled the continuous provision of educational opportunities in more favorable environments. As shown in Table 9, despite the sharp increase in numbers of students, the number of students per class declined or remained the same as before (on average across the 12 project provinces), indicating that the project contributed to improving educational services in this respect.

Table 9: Changes in the number of students per class and school in the project provinces and nationwide

	1996	2000	1993	2000	1993	2000
	Number of students per class		Number of students per school		Number of students ('000)	
West Java(including Banten)	42	42	528	506	1,143	1,338
Central Java	43	42	445	438	1,089	1,166
East Java	42	41	398	404	1,171	1,184
Riau	37	37	326	321	134	159
South Sumatra (including Bangka-Belitung)	39	39	321	346	241	306
Lampung	39	38	304	304	219	275
West Kalimantan	39	39	234	249	112	139
South Kalimantan	35	34	250	252	95	81
Central Sulawesi	36	38	217	222	66	71
South Sulawesi	38	37	250	328	270	299
West Nusa Tenggara	40	38	423	482	124	126
East Nusa Tenggara	39	37	254	249	101	141
National average	40	39	367	366	7,082	7,585

Source: Ministry of National Education

Note: Figures refer to the average including private schools.

2.4.4 Status of Entrance by Graduates from the Schools Surveyed into Schools of Higher Grade

Due to the increase in the opportunities to attend junior secondary school, the status of entrance into higher educational institutions such as senior high schools and various vocational schools improved, and this can be cited as part of the impact of the project on educational services. The SAPS survey studied the above-mentioned sample schools concerning the status of entrance into higher educational institutions, and the results are shown in Table 10.

Table 10: Status of entrance by graduates from the sample schools into higher educational institutions

	Less than 20%	20 – 39%	40 – 69%	60 – 79%	80 – 100%
Distribution of the percentages of students entering into senior high schools or vocational schools at the 17 sample schools which replied to the survey	2	5	4	3	3
	11.8%	29.4%	23.6%	17.6%	17.6%
Distribution of the percentages of students finding employment at the 17 sample schools which replied to the survey	9	5	3	0	0
	52.9%	29.4%	17.7%	-	-

Source: SAPS survey

Note: Figures are those available at the end of 2000. In addition to “entering senior high schools or vocational schools” and “finding employment,” many students were classified into the category “other.” This category includes students who first attend short-term vocational courses or other programs governed by the Ministry of Labor and then find employment three months to one year later.

Table 11: Percentage of students entering senior high schools or vocational schools in the sample provinces and at the national level (as of 2000)

	Percentage of students entering ordinary senior high schools (SMU)	Percentage of students entering vocational schools (SMK)	Total percentage of students entering schools of higher grade
Sample provinces (West Java, Central Java, South Sumatra)	39.0 %	26.2 %	65.2 %
Nationwide	44.4 %	30.3 %	74.7 %

Source: Ministry of National Education

Attention needs to be paid to the small number of samples taken, but the average percentage of students entering schools of higher grade from the sample schools (which mostly concentrates in the 20-39% and 40-69% ranges) seems to be slightly low as compared to that for the sample provinces (65.2%) and the national average (74.7%). The executing agency explains that behind this tendency is the fact that the sample schools are located in relatively remote areas and there is a shortage of easily accessible higher educational institutions in their localities, and that as a result, many students choose to find employment (including attending vocational courses run by the Ministry of Labor) or to engage in businesses run by their families.

In general, the percentage of junior secondary school graduates entering schools of higher grade tended to decline during the period from 1997 to 1998, which was affected by the currency crisis, but it has risen continuously in subsequent years. The average percentage for the whole of Indonesia also reached its peak in 1996, at 83.4%, then declined to 69.5% in 1998, and recovered to 74.7% in 2000. As indicated in the above table, it cannot be said that the percentage for the sample schools is relatively high, but it is considered that the project made certain contributions to maintaining the percentage of students entering senior high schools or higher educational institutions.

2.4.5 Impact of the Project as a Model Project

As mentioned above, the design and construction of school buildings was previously commissioned to the Ministry of Public Works, but in this project, an implementation system was established in which design, contractor selection, contract conclusion, construction and supervision were all performed under the direction of, and under the responsibility of, the Ministry of National Education's provincial and district offices, with the Ministry of Public Works only acting as a technical advisor. The objective was to secure educational equipment, teachers and other resources, and to develop facilities in a unified manner. By applying such an implementation system to the project, the executing agency recognized the project as a model one.

However, the Ministry of Public Works' involvement was passive, and the Ministry of National Education's provincial offices, which were not familiar with bidding, contract supervision, quality control and construction work supervision, had some difficulties in carrying out the project smoothly. Moreover, some district offices reportedly failed to assign a sufficient number of its personnel to monitoring and supervisory operations during the project implementation period, resulting in the necessity of repairing some of the facilities after the project was completed.

Consequently, after the implementation of the project, development of schools under this system was not promoted, and it was not applied on a nationwide scale. There are cases, however, in which the New School Unit Model was introduced in which the school committee formed for each school worked with local residents to choose contractors and supervise the project (including procuring textbooks and educational equipment, securing teachers, managing funds and maintaining constructed facilities).

2.4.6 Other Impacts

The project required the acquisition of land for constructing nearly 600 junior secondary schools. Land

was acquired in accordance with laws and guidelines established by the government, and negotiations about the amount of compensation were performed following the prescribed procedures. The executing agency reports that the number of disputes with residents and landowners arising from land acquisition was very small. However, the settlement of one of these disputes, which involved a landowner and the district government, was left to the court. In general, because the project's purpose was constructing public junior secondary schools, the understanding and support of neighboring residents with respect to the provision of land was obtained smoothly. The executing agency also reports cases in which, after schools started to be used, local residents began commercial and other activities in the neighborhood, increasing the traffic of people and even prompting land prices to rise.

2.5 Sustainability

2.5.1. Operation and Maintenance

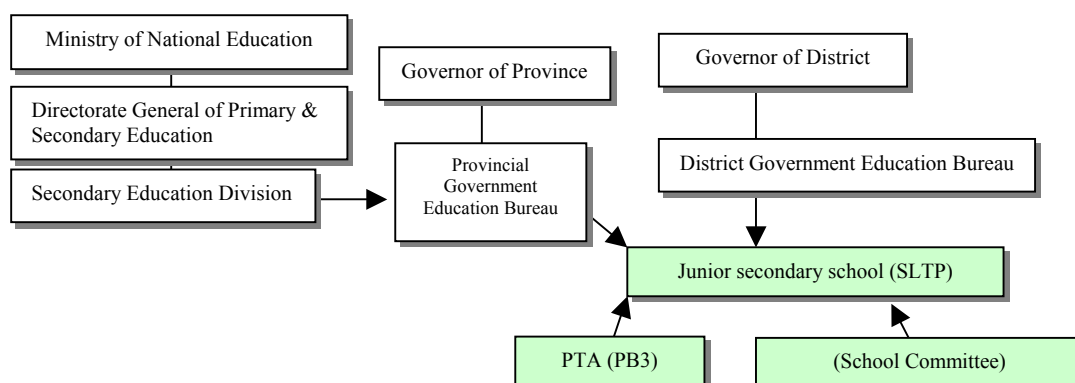
(1) Organizational system

Secondary education administration is under the jurisdiction of the Directorate General of Primary & Secondary Education, the Ministry of National Education¹⁰. Prior to the decentralization, these were the administrative functions of education-related bureaus of provincial and district governments in addition to those of the Ministry of National Education and its local offices, and this meant that several lines of command and direction competed, making educational administration inefficient.

After the decentralization of January 2001, however, the provincial and district offices of the Ministry of National Education were abolished and integrated into the education bureaus of provincial and district governments. Following this move, direct educational administration for elementary and junior secondary schools has come to be undertaken by the education bureaus of district governments, and the role of the Directorate General of Primary & Secondary Education, the Ministry of National Education is limited to national development planning for the educational sector, overall coordination, advice, guidance and other operations.

¹⁰ There are also Islamic schools called "madrasah," which are under the jurisdiction of the Directorate General of Islamic Institutions Development, the Ministry of Religious Affairs.

Figure 2: Relationships between the organizations responsible for the operation and maintenance of public junior secondary schools



In parallel with the organizational reform of educational administration bodies that followed decentralization, efforts are being made to establish sustainable and independent school operation and maintenance organizations under the leadership of the central government with “school-based management (SBM)” and “community participation” as their keywords, and these efforts are translating into central policies for improving the educational administration systems.

Prior to decentralization, schools were operated and budgets were allocated under the leadership of governments, and community support consisted mainly of the indirect involvement by parents’ associations (PB3) in operations and maintenance costs through payment of tuition fees.

SBM, however, calls upon each school to perform school operations independently, and leaves many of the decisions related to school operations to the individual school. At the same time, budgets are directly allocated to each school, and expenditures are also left to the discretion of each school. This system was introduced in Indonesia in 1999. As an organization central to SBM, a school committee is established to ensure the transparency of school management and solicit community support.

A school committee generally consists of teachers, prominent persons from local communities, representatives of parents, and officials of the district government. It is responsible for procuring facilities (improvement and expansion of classrooms and other facilities) and equipment required for educational activities, accepting and controlling budgets, planning for and organizing intramural and extramural activities, cleaning and repairing facilities and raising funds. These activities are only carried out properly if the committee is operated in an ideal manner. Much depends on the understanding of the headmaster and teachers about SBM and their motivation toward SBM, the income level of parents and status of the school involved (its history, presence of influential alumni, etc.). Some school committees/boards are similar in function to parents’ associations and only collect tuition fees and discuss how to use them. In other areas, no committee is established to implement the promotional activities for SBM undertaken by the government.

School committees have been formed at 11 out of the 19 sample schools covered by the SAPS survey. Many of the committees, however, have not reached the level where they can perform the roles and functions they are essentially required to do, and their abilities and financial resources are still so limited that improvements in the operation and maintenance of facilities and materials/equipment, as well as in the quality of education services, cannot be expected from them. At the national level as well, SBM is required to take root in society and be revitalized, and it can be said that SBM is still at the stage where efforts should be made to diffuse successful examples and educate involved personnel.

The district government has a meeting with headmasters and representatives of teachers in the district about once every semester to discuss and exchange views on the improvement of curriculums and teaching methods as well as problems related to maintenance of facilities. At this meeting, schools periodically report to the district government the progress of the learning process, implementation of various school activities and the actual condition of use of facilities and equipment, including requests relating to these. Reports on expenditures as well as revenues from tuition fees and donations are submitted to the district government about once every month. If the school committee directly receives and controls budgets, it reports to the district government.

(2) Operation and Maintenance of School Facilities

The SAPS survey classifies the status of operations and maintenance of junior secondary school facilities in Indonesia, including those of the project schools, into the three categories specified below and it explains the distinctive features of each category.

Table 12: Classification of the maintenance status of school facilities

	Headmaster's attitude toward maintenance	Distinctive features of the maintenance status for facilities and equipment
Good maintenance	The headmaster is aware that each school should take independent responsibility for maintenance and puts his/her energies into fund procurement.	<ul style="list-style-type: none"> • Facilities are kept very clean. • Materials are posted in classrooms and the teachers' room, and rooms are nicely decorated. • Broken furniture is immediately removed and replaced with new one. • Students, teachers and community members participate in repair and cleaning activities. • Local communities provide labor, equipment and funds for repair and maintenance. • The headmaster is respected by teachers.
Fair maintenance	If there are scarce funds, the headmaster only takes emergency measures for maintenance.	<ul style="list-style-type: none"> • Facilities are kept reasonably clean. • Some of the broken furniture is left as it is. • Part of the lavatory section is closed. • Funds for building additional facilities or remodeling facilities are used for maintenance.
Inappropriate maintenance	The headmaster is not interested in maintenance and cites insufficient funds as the reason for the inappropriate maintenance . He/she attributes the present status of facilities and equipment to the irresponsibility of students.	<ul style="list-style-type: none"> • Facilities are dirty and trash is found here and there. • Broken furniture and equipment is left as it is in the classroom and is never replaced. • Lavatories are broken. • Teachers are not willing to work with, and lack close ties with, local communities.

Source: SAPS report

The present condition of school facilities constructed under the project was often affected by the performance of construction work. Educational equipment is sometimes poorly stored in some schools and therefore is stolen or is left as is with no appropriate measures taken. The executing agency indicates that the initiative of the headmaster has major effects on the maintenance of facilities and equipment. If the headmasters of the project schools serve as headmaster for another school or live far away from their school, and if their approach to parents' associations or school committee is weak, sufficient cooperation from teachers and neighboring residents cannot be obtained easily for the cleaning and repair of facilities.

Increasing maintenance budgets is essential to repair facilities and renew equipment when necessary. The situation of budgets may be improved depending on community involvement and SBM activities. The SAPS survey also reports cases where additional buildings were constructed and educational materials/equipment were improved at schools because the local community was actively involved in school operations and sufficient fees could be collected from the parents' associations.

Under these circumstances, in order to spread SBM and minimize the gaps in facility maintenance

among the schools in the future, it is necessary for the executing agency to develop guidelines for, and start training in, maintenance of facilities and equipment.

(3) Assignment and Quality of Teachers

Regarding the schools surveyed, there is no particular problem with the academic level of teachers, but due to the central government's pre-decentralization teacher assignment policy, there is a strong tendency to assign inexperienced young teachers to these newly established schools. The results of SAPS's sample school survey indicate that in 2002, teachers who had three to seven years of experience accounted for a large percentage of total teachers, and it is pointed out that the advantage of this is that these schools have teachers who have received the latest education at university and have a high level of teaching qualifications, while the disadvantage is that there is no transfer of information and techniques from experienced to less experienced teachers.

The SAPS report also indicates that teachers are not assigned to schools appropriately and are in short supply at some schools and in excessive supply at others. There is a gap in the number of teachers assigned between schools in remote areas and those in or around cities, and between old schools and newly established ones. In addition, it is pointed out that subjects teachers are responsible at school do not always correspond with those they studied at university. In order to cope with this problem, some schools send their teachers to training institutions so that they develop their skills to teach a second subject. In general, it is argued that it is possible to solve the shortage of teachers at individual schools if appropriate reassignment of teachers among schools is considered at the provincial government level. After decentralization, however, there have been restrictions on the reassignment of teachers, such as a decrease in opportunities for teachers to be transferred across the districts, and restraints on the number of newly employed teachers depending on budget allocation priorities.

Furthermore, low motivation among teachers has been noted. This is caused by the low income level of teachers and the lack of motivation in the system of promotion. The low income level of teachers results in teaching concurrently at other schools as contract teachers and being engaged in side jobs, making it impossible for them to devote themselves to education and to extra-curricular school activities. It has been pointed out that another factor affecting teacher morale is the decline in the quality of their accommodation when they go to work for schools in remote areas. On the other hand, there are cases where activities for teachers to train each other and exchange information, called "MGMP"¹¹, are conducted to improve the quality of educational services. These activities include development of learning programs for students and teaching methods, and are contributing to standardizing teaching methods among the schools and developing new courses of study.

2.5.2. Operations and Maintenance Budgets

Since decentralization, budget allocation to each sector has been left to the discretion of district governments. District governments, which put emphasis on social development, including education and health, have seen budgets allocated to primary and secondary education, including ordinary and development budgets, continue to grow in recent years. In order to eliminate the gap in budget allocation among the regions, the law was revised in August 2002 to earmark at least 20% of national and local government budgets for the educational sector. In general, however, maintenance expenses incurred by public schools still cannot be covered with government budgets.

Ordinary expenditure items include salaries for part-time and contract teachers, excluding the

¹¹ Musyawara Guru Mata Pelajaran

headmaster and regular teachers (only regular work hours)¹², overtime pay, purchase of supplies and teaching materials related to intramural and extramural activities, holding of examinations, teacher training, utilities and facility operation and maintenance. Among these items, the average annual amount of budget required for facility maintenance per school is approximately 25 million rupiah. Even if the parents' association provides funds, however, the sample schools covered by the SAPS survey can in fact secure revenues of only about nine million rupiah per school on average.

Each school (or school committee) submits its annual budget plan to the district government each year. Ideally, in order to fill the gap between its proposed budget and the required budget, the district government obtains approval for funding from parents' associations or local communities when formulating its budget, or considers increasing tuition fees and taking other measures. The fact is, however, that only a limited number of parents' associations and local communities are actively involved in annual budget planning.

Behind the expectations for the revitalization of SBM during the ongoing decentralization is the intention of schools to solve the shortage of operations and maintenance funds through the understanding and cooperation of parents' associations and local communities. This leads partly to increasing the financial burden on parents.

In fact, in order to cover shortages of operation funds, most of the junior secondary schools cannot help but depend on tuition fees and non-compulsory admission fees paid by parents, as well as other contributions. A great portion of these revenues other than government budgets are used for the purchase of supplies, payment for salaries for teachers other than regular ones and other purposes, making it impossible to secure sufficient funds for the maintenance and renewal of facilities and equipment.

The monthly tuition fee per student ranges from about 5,000 to 15,000 rupiah. According to the executing agency, schools that boast longer histories and have traditionally performed better receive more abundant financial support through payment by parents of tuition fees and the provision of donations. Abundant financial support enables schools to actively build additional facilities and remodel facilities, purchase textbooks and teaching materials and increase the number of contract teachers.

Apart from ordinary budgets from the district government, subsidies called "block grants" may be provided directly by the central government to schools with a weak revenue base, with the aim of bolstering their operations and maintenance. Schools apply for such subsidies by proposing how they will use them, and the district government chooses schools to which such subsidies will be granted. For families that have difficulties in paying the fees required by the parents' association or sharing the financing of the school, support is provided through the social safety net (JPS) program, which contributes to maintaining the enrollment ratio.

3. Feedback

3.1. Lessons Learned

In the case of a project where many uncertain factors pertain to the efficiency of implementation, it is necessary to make preparations for and consider strengthening and further ensuring the supervision of implementation by planning a learning process that enables trials and improvements.

For a project where efficiency of implementation is affected by many uncertain factors, such as the distribution of project sites in a geographically broad area and the adoption of a different implementation

¹² Salaries for headmasters and regular teachers account for the largest percentage of the junior secondary school expenditure items. Budgets for these salaries are secured without difficulty as personnel expenses for civil servants, and the salaries are paid directly by district governments. These factors do not affect the school operations and maintenance budgets discussed here.

system from previous ones, it is considered necessary to make preparations for and consider strengthening and further ensuring the supervision of implementation by, for example, planning a learning process that enables trials and improvements, and taking into consideration the timing for the delivery of budgets on the part of the executing agency, among other factors.

This project contributed to a substantial improvement in the enrollment ratio, and class operation at the project schools compares favorably with provincial and national averages, but there have been some cases where improvement was required in terms of maintenance after the completion of facility construction.


When similar projects are organized in the future, it is hoped that a sufficient length of time will be allocated to planning and construction work. It is also hoped that due consideration will be given to the implementation system by analyzing the feasibility of the New School Unit Model introduced by the World Bank, as well as to the securing and improvement of educational resources other than facilities and materials/equipment.

3.2 Recommendations

(To JBIC)

The Ministry of National Education has already started to take measures with respect to the proposals made in the SAPS survey, including repairing school buildings and clarifying the roles and responsibilities of the central and local governments. Therefore, JBIC needs to continue monitoring their progress.

Comparison of Original and Actual Scope

Item	Plan	Actual
1. Project Scope		
1. Constructing new schools		
- West Java	155 schools	 As planned
- Banten (new)		
- Central Java	116 schools	
- East Java	116 schools	
- Riau	18 schools	
- South Sumatra	35 schools	
- Bangka-Belitung (new)		
- Lampung	35 schools	
- West Kalimantan	24 schools	
- South Kalimantan	12 schools	
- Central Sulawesi	12 schools	
- South Sulawesi	41 schools	
- West Nusa Tenggara	24 schools	
- East/West Nusa Tenggara	18 schools	
Total	606 schools	
2. Procuring furniture		
A. For classrooms	305,424 items	461,304 items
B. For the teachers' room	35,148 items	73,904 items
C. For laboratories	44,844 items	41,124 items
D. For libraries	46,056 items	38,976 items
3. Procuring educational equipment		
A. For science	145,440 items	585,272 items
B. For mathematics	25,452 items	181,780 items
C. For fine arts	19,998 items	25,628 items
D. For physical education	44,238 items	50,064 items
E. For social studies	18,180 items	62,580 items
4. Consulting services		
Foreign consultants	48 M/M	65 M/M
Local consultants	105 M/M	129 M/M
2. Implementation Schedule		
1. L/A conclusion	Nov. 1995	Dec. 1995
2. Phase I (construction, equipment procurement)	Nov. 1995 – Mar. 1997	Aug. 1996 – Aug. 1997
3. Phase II (construction, equipment procurement)	Nov. 1996 – Mar. 1998	Jun. 1997 – Jun. 1998
4. Phase III (construction, equipment procurement)	Nov. 1997 – Mar. 1999	Aug. 1998 – May 2000
5. Consulting services	Apr. 1996 – Jun. 1999	Sep. 1996 – Mar. 2000
3. Project Cost		
Foreign currency	4,569 million yen	2,369 million yen
Local currency	19,991 million yen (444,244 million Rp.)	10,257 million yen (394,150 million Rp.)
Total	24,560 million yen	12,626 million yen
ODA loan portion	20,876 million yen	12,071 million yen
Exchange rate	Rp.1 = 0.045 yen (as of Apr. 1995)	Rp.1 = 0.026 yen (weighted average for 1996 - 1999)

Third Party Evaluator's opinion on
Junior Secondary School Building Construction Project

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Relevance

This project is relevant as argued by the evaluator for several reasons.

- (1) As mentioned in the evaluation report, there is a significant gap between the 9th year universal education objective and the availability of school building (supply side problem). This is partly reflected by a relative low the gross enrollment ratio of 54%.
- (2) Education plays important role for poverty reduction including for agriculture development where most of the poor depend for their livelihood. One cannot imagine that Indonesia could reach its self sufficiency in rice production in the mid of 1980s without expansion of basic education. Expansion of school building especially in rural areas is expected to reduce cost of living of the poor through increasing an access to public services – which is normally cheaper than the private ones – and reduce other costs like transportation cost for the young poor kids to get to their school. Thus from this perspective, the expansion of school buildings is also relevant and compatible with the interim poverty reduction strategy paper which was launched by the Government of Indonesia at the end of 2002.
- (3) Upgrading both quantity and quality of education is the key determinant for the improvement of Indonesia's competitiveness. Indonesia is lack behind its competitors in both human resource endowments (quantity) and the quality of human resources as well. This project can become a trigger for achieving both objectives.

Taken those altogether, I agree with the evaluator, this project is relevant with the Indonesian development objectives.

Impact

Before doing such analysis on the impact of the project let me raise some issues on the efficiency and the effectiveness of the project.

First, as mentioned in the evaluation report, there was a delay in implementing the project and the contractors forced to complete the project in a shorter period. This will raise the issue of possibility of a declining in the project quality and a reduction in the time span of the building. This may also inflate the cost of the project adjusted with the quality of the project.

Second, Table 3 in the evaluation report also raises the planning problem. Most of new school built resulted either in short or excessive supply. This implies in the future improvement in projecting local demand and the geographical feasibility of students attending school is essential.

On the first impact of the project, I agree with the evaluator that the improvement of school facilities is important and the main factor that affected overall satisfaction. It is reflected in Table 7 that shows the dissatisfaction of school facilities is the highest among other variables including teacher or curriculum. Therefore building the new school and facilities is expected to improve the satisfaction of the students and hopefully will trigger an improvement in the student quality.

As predicted in the previous part, the project has not only increased an access to school and also prompting the transfer of students overcrowded schools. But is not clear whether these projects have been able to reduce the cost of education (including transportation or other costs) or not. This is particularly important since according to many studies including the World Bank in 1992 and 1999 that show other costs than fee are the most important determinant of the cost of education and hence affected the rate of school attendance of the poor.

The positive side effect of this project is to induce students to continue their education to a higher level. As shown in Table 10 of this report there is an indication of this "positive side effect". But it is important to note many other factors affect the continuation rate of education. In addition, in my opinion it is too early to take that conclusion because that figure may reflect temporary impact rather than the permanent one.