Philippines

"Elementary Education Project"

Project Summary

Borrower	Government of Republic of the Philippines
Executing Agency	Department of Education, Culture and Sports (DECS)
Exchange of Notes	March 1991
Date of Loan Agreement	July 1991
Final Disbursement Date	June 1996 (Initially planned date: October 1994)
Loan Amount	¥20,020 million
Loan Disbursed Amount	¥20,020 million
Procurement Conditions	General Untied
Loan Conditions	Interest Rate: 2.7%
Repayment Period	30 years (10 years for grace period)

<Reference>

(1) Currency: Philippine Peso (PP)

(2) Exchange Rate: (IFS annual average market rate)

Year	1990	1991	1992	1993	1994	1995	1996
Peso/US$	24.311	27.479	25.512	27.120	26.417	25.714	26.216
¥/US$	144.79	134.71	126.65	111.20	102.21	94.06	108.78
¥/Peso	5.96	4.90	4.97	4.10	3.87	3.66	4.15
CPI (1990=100.0)	100.0	118.7	129.3	139.1	151.7	164.0	177.8

Source: IMF 'International Financial Statistics'

(4) Fiscal Year: January ~ December (School Year: June ~ May)

(5) Abbreviations:

DECS: Departme nt of Education, Culture and Sports
DPWH: Department of Public Works and Highways
DBM: Department of Budget and Management
PICU: Project Implementing Coordination Unit

(5) Terminology

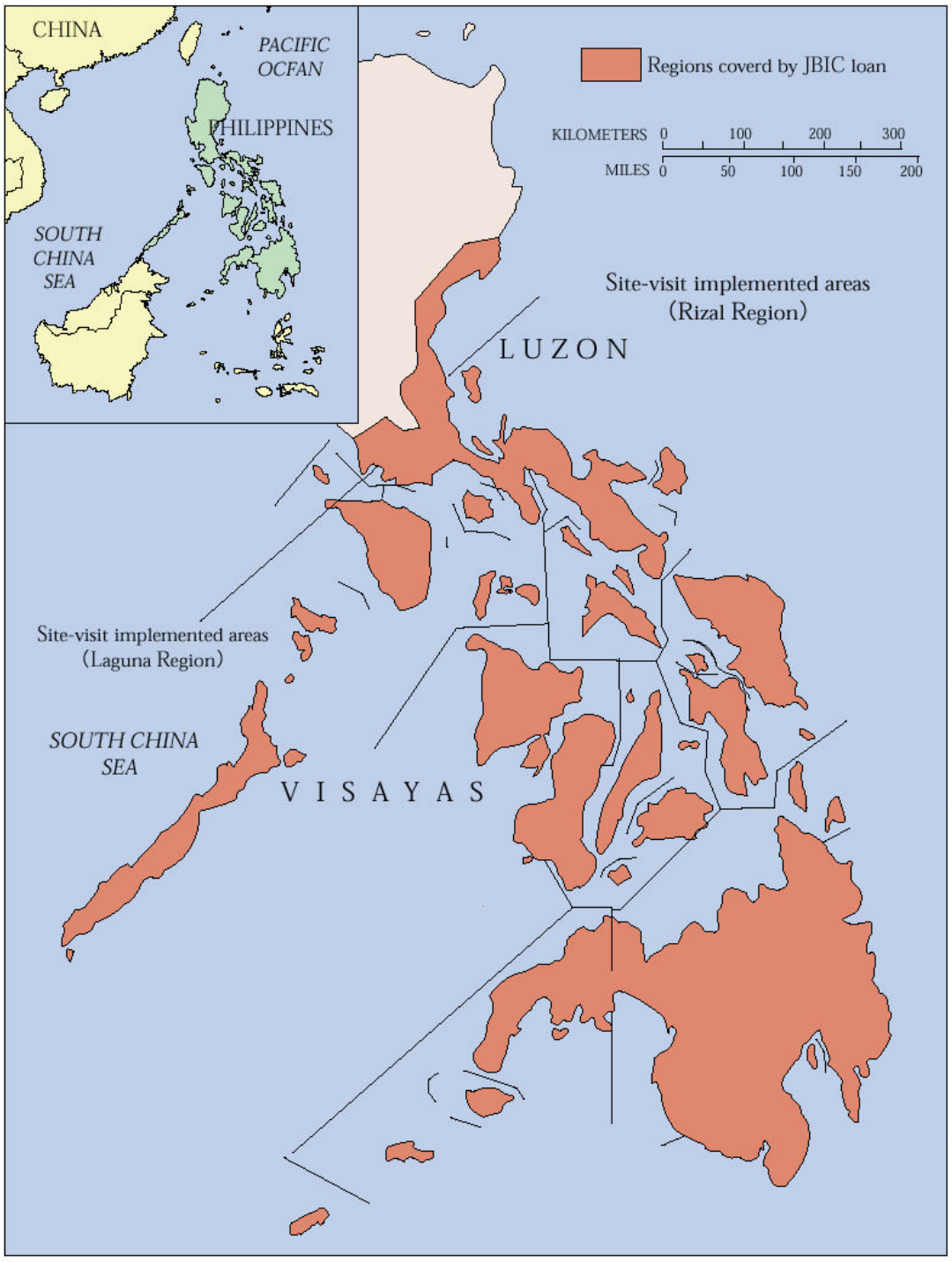
Two-shift system: This system, which is used to remedy a shortage of classrooms or teachers, consists in offering classes in two shifts, one in the morning and the other one in the afternoon. Some developing countries have schools that use a three-shift system (morning, afternoon, and evening).

Net school enrollment ratio: Out of the total number of pupils enrolled at elementary schools, the number of elementary school children whose age corresponds to the regular age of pupils in their school year, divided by the number of school-age children.

Total school enrollment ratio: Total number of children enrolled at elementary schools (including children whose age exceeds the regular age of pupils in their school year), divided by the number of school-age children.

1. Project Summary and Comparison of Original Plan and Actual

1.1 Project Location



1.2 Project Summary and ODA Loan Portion

This project aimed to provide a basic infrastructure for elementary education and raise the efficiency of education-related persons and administration as the development of human resources through elementary education has been raised as a priority in the Medium-Term Development Plan (1987-1992) of the Republic of the Philippines drafted in 1986. Concretely, this project aimed to (1) increase the supply of classroom facilities and educational equipment and materials, (2) raise the quality of teachers and education managers (through training), (3) expand basic education (raise school enrollment ratio and literacy rate, and (4) strengthen the planning and maintenance scheme. Out of these, the JBIC loan covered the foreign currency portion and part of the local currency portion for providing classrooms in Regions IV to XII[1].

This project was co-financed with the World Bank, who refers to it as the 2nd Elementary Education Project. Unless specifically mentioned otherwise, "this project" refers to the entire project, not just the portion covered by the JBIC loan, but also the portions covered by the World Bank and the Philippine government.

1.3 Background (at the time of appraisal)

1.3.1 Current Status and Problems of Elementary Education Sector (at time of appraisal)

(1) Problems in Philippine elementary education sector at time of appraisal[2]

Although, based on an examination of the elementary school enrollment ratio and adult literacy rate at the time of appraisal, the Philippines' education level had reached a certain level[3], the rapid increase in the number of pupils due to population growth and the lack of funds due to a slowdown in economic growth, the Philippines' elementary education sector faced the two problems of "delayed handling of quantitative expansion" and "declining quality due to quantitative expansion". Concretely, problems were concentrated on the following four points.

1) The educational infrastructure required for education and study, particularly classrooms, desks etc. was lacking. While the number of classrooms were increased through the 1st Elementary Education Project of the World Bank (described later), there was still an 8% shortage in classrooms, and this shortage was particularly marked for Region XII, where it reached 25%.[4]

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1 As indicated in section 1.1, the Philippines were divided into 12 regions at the time of appraisal, 1 metropolitan area, and 1 autonomous region. Thereafter, Region XII and part of Region IX separated to become the Autonomous Region of Muslim Mindanao (ARMM).

2 In the Philippines, elementary education (6 years, from ages 7 to 12 was compulsory (at the time of appraisal).

3 The net school enrollment ratio for elementary education (1986 to 1988) was 98%, and the adult literacy rate (1985) was 88%.

4 The above figures, which attest to the insufficient state of education, were obtained as follows. (The value at right

2) In addition to insufficient mastery of their materials and teaching technology by teachers, the regional offices of the Department of Education, Culture, and Sports (DECS) had insufficient capability to manage schools.

3) DECS lacked information gathering capability from locale of education, and its monitoring and evaluation systems were inadequate.

4) The dropout rate for elementary education was high. The dropout rate was particularly in agricultural areas and impoverished areas, indicating that income disparities have a major influence on the dropout rate.

(2) Attitude of Philippine government

To deal with the problems mentioned in (1), the Aquino administration (1986-1992) selected the enhancement of elementary education as a priority. Actually, at the time of the appraisal of this project, the education budget and its percentage within the government budget for the education sector have been rising every year (11% in 1985 → 15% in 1990). However, the major part of these budgets have been allocated for the improvement of teachers' salaries, and the budget earmarked for the creation/enhancement of education infrastructure, including classrooms, was insufficient, and the degradation of the education infrastructure had become conspicuous. As a result of the above, improvement of the elementary education environment was urgently required.

1.3.2 Relationship between Elementary Education Sector Development Plan and This Project

As the development of human resources through elementary school education has been raised as a priority in the Medium-Term Development Plan (1987 to 1992) of the Republic of the Philippines, the DECS has selected the "expansion of high-quality education opportunities" as the objective for the medium-term plan for education sector, particularly defining for elementary education the goals of raising the school enrollment ratio and lowering the dropout rate, as well as attaining a given standard for the scholastic aptitude level. The United Nations and a number of bilateral donors have provided assistance in this direction, but the majority of this assistance has been of small scale and unable to sufficiently fill demand. Under these circumstances, the DECS, based on the results of a survey of the education sector assisted by the World Bank in 1988, drafted the plan for this project. As shown in Figure 1.1, the World Bank took the lead, funding the first elementary education project, and the majority of this project's components are a continuation of the first project. A concrete description of the components of this project is provided in Appendix, but the portion covered by the JBIC loan consists in the expansion of classrooms (Regions IV to XII), and that components not covered by the JBIC loan were funded by the World Bank and budget of the Philippine government.

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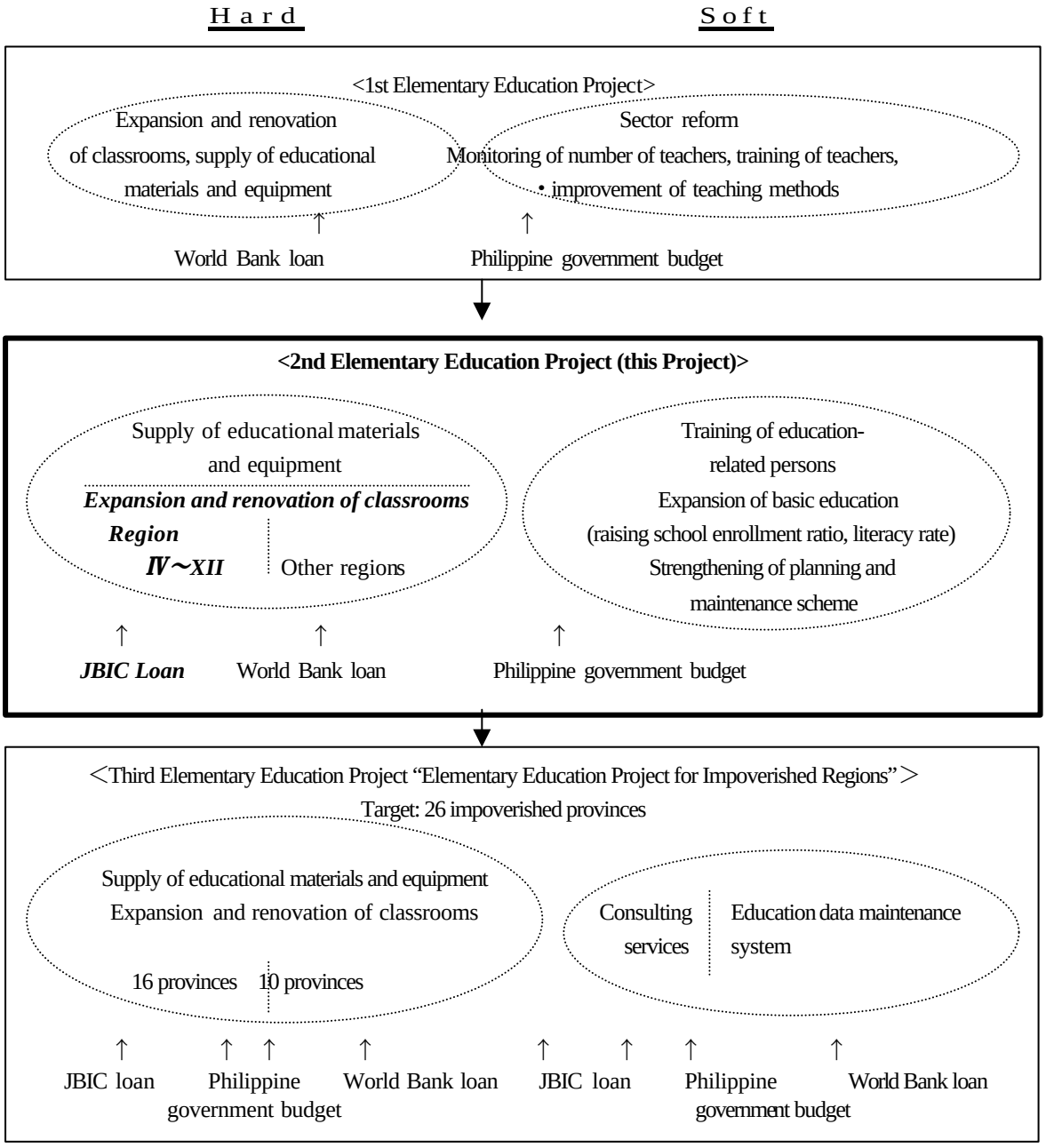
is also sometimes called "classroom shortage percentage".) Classroom shortage percentage = (Number of classrooms / Needed number of classrooms (Number of pupils/standard number of pupils per classroom = 40) - 1) x 100.

[Figure 1.1 Philippine Elementary Education Project Financed by JBIC & World Bank]



1.4 History

1988		Implementation of survey on education sector by the World Bank
1989	June	Start of this Project by the Philippine government
1989	October	Dispatch of Appraisal Mission of this Project by the World Bank (~ November)
1990	May	Request by the Philippine government concerning total of ¥238.4 billion (total of 41 projects) including this Project as the 17th ODA Loan candidate projects to the Philippines
	July	Approval of this Project by WB Board of Directors
		Loan Agreement signing concerning $2 million for this Project between the World Bank and the Philippine government
		Dispatch of JBIC Appraisal Mission (~ August)
1991	February	Prior notification by the Japanese government concerning total of ¥120.408 billion for 17 projects including this Project as 17th ODA Loan to the Philippines
	March	Exchange of Notes
	July	Loan Agreement signing
1994	October	Extension of loan disbursement period
1996	June	Completion of this Project (loan completion)

1.5 Comparison of Original Plan and Actual

1.5.1 Comparison of Original Plan and Actual

	Project Item	Plan[5]	Actual (JBIC portion)	Difference
JBIC・World Bank	***I.Supply of classroom facilities, materials and equipment***			
	1. Construction plan of classrooms etc. (Region IV~XII covered by JBIC loan)			
	① Expansion of classrooms (rooms)	**26,552**	**49,600(38,940)**	**+23,048**
	② Reconstruction of classrooms (rooms)	**9,763**		
	③ Renovation of classrooms (rooms)	**36,527**	**32,500(25,350)**	**△1,3790**
	④ Expansion of multi-purpose workrooms (rooms)	**4,336**	**2,994(2,337)**	**△1,342**
	⑤ Reconstruction of multi-purpose workrooms (rooms)	**5,171**		
	⑥ Renovation of multi-purpose workrooms (rooms)	**2,856**	**2,468(2,278)**	**△5,559**
	⑦ Installation of toilet (toilet stools)	**2,856**	**4,288(3,958)**	**+1,432**
Mainly Philippine government (partly World Bank)	2. Production and supply of desks (1,000 desks)	1,500	2,520	+1,020
	3. Printing and distribution of textbooks and guidebooks for teachers			
	①Textbooks (1,000 copies)	44,000	84,000	+39,854
	②Guidebooks (1,000 copies)	146		
	③Reference books, charts (copies)	2,800	n.a.	
	4. Supply of educational and teaching facilities	No detailed design	No detailed data	n.a.
	II. Training of teachers and education managers			
	1. Training of teachers, headmasters and education managers			
	①Training of teachers (persons)	450,000	84,824	△365,176
	②Training of headmasters (persons)	19,000	20,064	△3,936
	③Training of education managers (persons)	5,000		
	2. Revision of training of new teachers, etc.	Implementation of survey	Completion of survey	Mostly as planned
	III. Expansion of basic education			
	1. Implementation of pilot project to prevent lower dropout rate (schools)	24	95	+71
	2. Evaluation of above pilot project	Implementation of evaluation	Completion of evaluation	As planned
	3. Literacy education [6]	No detailed design	294,971 persons	—
	IV. Strengthening of planning and maintenance scheme			
	1. Introduction of elementary education assessment system [7]	Introduction of assessment system	Assessment system not introduced	Not introduced
	2. Construction of integrated data system for basic education information at national level	Integration of system	Implemented	As planned
	3. Evaluation of planning and budgeting methods by DECS	Survey and evaluation	Completion of survey and evaluation	As planned
	4. Improvement of information management and processing system by DECS	Preparation of manuals etc.	Preparation of manuals not completed	Not completed

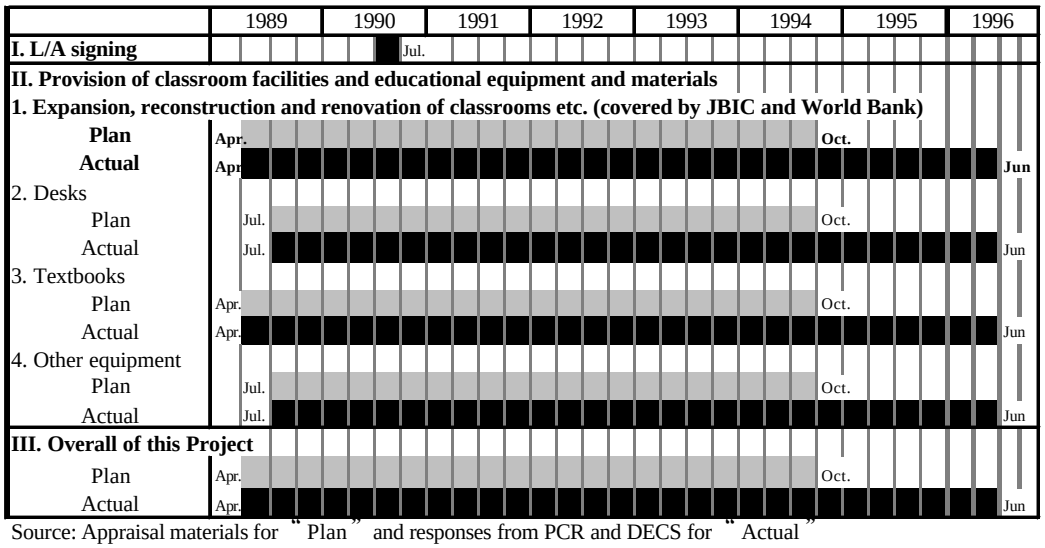
Source: Appraisal materials for "Plan", and JBIC, World Bank and DECS materials for "Actual"

[5] As the planned numbers listed in appraisal materials were not clearly specified, the planned numbers listed here consist of the sum of the portion covered by the JBIC loan and the World Bank loan.

[6] Schooling for literacy education is implemented for elementary school children and young generations who have dropped out of school.

[7] The National Educational Testing Research Center (NETRC) had introduced a system for analyzing and evaluating various types of education-related data such as pupil grades.

1.5.2 Implementation Schedule



Source: Appraisal materials for "Plan" and responses from PCR and DECS for "Actual"

1.5.3 Project Cost and Fund Procurement

Item	Plan			Actual		
	Foreign currency (¥ 1 million)	Local currency (million peso)	Total (million peso)	Foreign currency [Note] (¥ 1 million)	Local currency (million peso)	Total (million peso)
[Mainly JBIC and World Bank]						
1. Expansion of classrooms etc.						
Expansion and renovation of classrooms	7,825	5,270	6,428	n.a.	12,683	n.a.
(JBIC portion)	**(4,004)**	**(2,371)**	**(2,964)**	**(5,128)**	**(3,272)**	**(4,044)**
[**Mainly the Philippine government**]						
Desks	739	692	802	n.a.	1,647	n.a.
Textbooks	4,694	508	1,202	n.a.	1,527	n.a.
Other equipment	459	8	76	n.a.	-	n.a.
Sub-total	13,717	6,478	8,508	13,832	15,857	18,900
2. Training of teachers	119	109	858	-	29	29
3. Expansion of basic education	116	106	127	-	147	147
4. Strengthening of planning and management scheme	167	54	79	-	3	3
5. Contingency	847	405	530	-	-	-
Total	14,966	7,152	9,368 (¥63,277 million)	13,832	16,036	19,079 (¥86,724 million)

Source: Appraisal materials for "Plan" and DECS materials for "Actual"

Note: As foreign and local currency statistics for the portion funded by the World Bank could not be obtained, the local currency statistics listed in this table include a part of the foreign currency portion.

Exchange rate: Plan; ¥154.00/US$, ¥6.7548/Peso (Rate at the time of JBIC appraisal in July 1990)
Actual; ¥120.05/US$, ¥4.5455/Peso (Weighted average of IFS annual average rate between 1989 and 1996)

[Fund Procurement] (Share of Project Cost Borne by each Fund Provider)

[Plan]

Item	Plan			
	JBIC (¥ 1 million)	World Bank ($ 1 million)	Government (million Peso)	Total (million Peso)
1.Expansion of classrooms etc	**20,020**	200	985	8,508
2. Training of teachers	-	-	127	858
3. Expansion of basic education	-	-	123	127
4. Strengthening of planning and maintenance scheme	-	-	79	79
5. Contingency	-	-	530	530
Total	**20,020**	200	1,844	9,368 (¥63,277 million)

Exchange rate: ¥154.00/US$, ¥6.7548/Peso (Rate at the time of JBIC appraisal in July 1990)

[Actual]

Item	Actual			
	JBIC (¥ 1 million)	World Bank ($ 1 million)	Government (million Peso)	Total (million Peso)
2.Expansion of classrooms etc	**20,020**	175	9,878	18,900
2. Training of teachers	-	-	29	29
3. Expansion of basic education	-	-	147	147
4. Strengthening of planning and maintenance scheme	-	-	3	3
Total	**20,020**	175	10,057	19,079 (¥86,724 million)

Source: JBIC and World Bank appraisal materials for "Plan" and materials from DECS for "Actual"

Exchange rate: Weighted average of IFS annual average rate between 1989 and 1996; ¥120.05/US$, ¥4.5455/Peso

2. Analysis and Evaluation

2.1 Evaluation on Project Implementation (Project Scope/Implementation Schedule/Project Cost/Implementation Scheme)

2.1.1 Project Scope

Since, as previously mentioned, this project had two objectives, namely improvement of the problems of "delayed handling of quantitative expansion" and "declining quality due to quantitative expansion" affecting the Philippine elementary education sector at the time of the appraisal, this evaluation does not just cover only quantitative expansion in the form of the plan to increase the number of classrooms covered directly by the JBIC loan, but also components not covered by the JBIC loan that are designed for qualitative improvements.

[Portions Covered by JBIC and World Bank Loans]

(1) Expansion, reconstruction, and renovation of classrooms[8]

As shown in section 1.5.1, while the number of expanded classrooms was 1.9 times the initially planned number, the number of classrooms that were reconstructed and renovated was just two thirds of the initially planned number, so that there were large quantitative changes in the project. There were two main reasons for these changes, as follows.

(i) The Ramos administration (1992 to 1998) that followed the Aquino administration drafted a plan to "establish schools in every barangay (the smallest administrative unit in the Philippines), and the funds for this project were used first to establish new schools in barangay that did not have a single school.

(ii) As part of efforts to promote the decentralization of power, authority regarding the establishment of elementary schools has been delegated in part to local governments, so that renovations that can be done at low cost are implemented at the local government level.

In this way, quantitative changes in the project's implementation have been mostly the result of changes in the policies of the Philippine government. (Part of the reconstructions and renovations that were not accomplished by this project will be done as part of the Third Elementary Education Project, which is also funded through JBIC loan.)

In projects of this nature, which comprise a large number of small-scale components spanning a large area, it is inevitable that the quantities calculated during appraisal must later be changed according to the circumstances. The fact that a flexible approach was taken including holding periodic discussions among JBIC, World Bank, and the executing agency to revise quantities according to the needs of each region and school, was a positive aspect of this project. Moreover, in the subsequent Third Elementary Education Project, an even stronger attempt is being made to

[8] The standard classroom model measures 6 m x 8 m, and assumes a capacity of 40 pupils per class. Fluorescent lamps and fans are provided in each classroom.

grasp needs according to the actual conditions of each region and school.

(2) Expansion, reconstruction, and renovation of multi-purpose workrooms[9]

The number of multi-purpose workrooms that were expanded as part of the project was only approximately two thirds of the initially planned number, and the number of such workrooms that were reconstructed or renovated was only one third of the initially planned number. This was due to the fact that the expansion of new classrooms was prioritized, as earlier mentioned, as well as to the fact that the majority of schools preferred expansion of classrooms to new multi-purpose workrooms, and it should be appreciated that the decrease in the number of workrooms constructed, reconstructed, or renovated through this project was the result of a flexible response to the needs of each region and school.

Schools for which planned multi-purpose workrooms did not get expanded conduct drawing and handicrafts classes and homemaking classes in regular classrooms instead.

(3) Installation of toilets

The number of toilets that were constructed through this project was approximately 1.5 times the initially planned number. The main reason for that came from an indication of insufficient number of toilets at schools by DECS, and consequently it set the policy of building a number of toilets equivalent to the number of classrooms. It can be evaluated as a reasonable change. The additional toilets were in many cases installed behind each classroom due to space considerations[10].

[Portions Covered by the Philippine Government and the World Bank (JBIC Loan Excluded)]

(1) Production and supply of desks, textbooks, educational equipment[11]

The number of desks that were supplied through this project was approximately 1.6 times higher than planned. This increase, caused by the increase in the number of newly expanded classrooms, is considered to have been suitable.

The number of textbooks and teacher's manuals that were printed and distributed was approximately 1.9 times higher than initially planned. This was made possible by the fact that a sufficient budget was allocated with the aim of improving the 2:1 ratio of pupils to textbooks

9 Multi-purpose workrooms are mainly drawing and handicrafts classrooms and homemaking classrooms, and they are designed larger than regular classrooms.

10 The toilets installed in each classroom are designed to be used by both boys and girls. The results of the local survey that was implemented showed that there is no particular objection to having toilets used by both boys and girls at most schools in the Philippines, but depending on the region, it is necessary to segregate boys from girls for religious reasons, so that in future detailed designs, it is desirable to incorporate the opinions of teachers, PTAs, etc. to the greatest extent possible.

11 Educational implements such as terrestrial globes, maps, and equipment for experiments.

recorded during the planning stage of the project to 1:1, and this increase is considered to have been appropriate.

(2) Teachers' training and education managers'[12] training

The training of teachers and education managers has been reduced to approximately one fifth compared to the initial plan, and teachers' training in particular has been considerably reduced. The reason for these reductions is that the funds required for such training were supposed to be taken from "maintenance expenses and other working expenses" of regional DECS offices, but actually this budget was not increased, which made it impossible to secure sufficient training funds.

Regarding the development of the education sector, it is important for recipient countries, first of all, to realize the importance of enhancing and strengthening "soft" aspects and to implement enhancements and strengthening of both "soft" and "hard" aspects in a balanced manner.

Based on this experience, the JBIC has made the strengthening of "soft" aspects an integral part of its loan coverage in recent years, and in order to achieve smooth implementation, actions in relation to the government and executing agency of the developing country are being taken by the JBIC. For example, in the Third Elementary Education Project (co-financing with the World Bank) that follows this project, various efforts are being made to raise the overall level of elementary education, for example by making the coordination with JICA and other aid organizations as well as making its loan cover of "soft" aspects (training of teachers using consulting services, development of curricula, etc.).

On the other hand, a survey on improvement methods was conducted as planned regarding the training of new teachers. Related laws were revised based on the results of this survey and a given measure of results was obtained.

(3) Expansion of basic education

Several pilot projects have been implemented at model schools in impoverished regions to study measures to reduce the dropout rate. There were 24 schools during the planning stage, but pilot projects were actually implemented at a total of 95 schools. The reason for this increase in the number of schools where pilot projects were implemented is that, since the budget authorities placed emphasis on reducing the dropout rate, the DECS was able to secure budget increases. As mentioned in section 2.3, the results of these pilot projects showed a sharp decline in the dropout rate at the target schools, and the projects are considered to have demonstrated a certain effectiveness with regard to the consideration of measures to reduce the dropout rate in the future.

294,971 persons completed literacy classes with regard to literacy education. In this regard, while no detailed targets were established at the time of the appraisal, the DECS has given a high evaluation of the above results, and this initiative is considered to have contributed to a certain degree to the improvement of the literacy rate among adults.

[12] Staff of regional DECS offices, in charge of managing local schools in their area.

(4) Strengthening of planning and maintenance scheme

As mentioned in section 1.5.1, strengthening of the planning and maintenance scheme consists of the following components.

(i) Introduction of elementary education assessment plan
(ii) Structuring of integrated data system at the national level
(iii) Evaluation of planning and budget setting methods at the DECS
(iv) Provision of information management and processing system at the DECS

Some of these components, in relation with other budget items, did not receive sufficient budget allocations and as a result could not be completed (see section 1.5.1). However, the Third Elementary Education Project, which follows this project, continued strengthening of the planning and maintenance scheme through the use of consulting services.

2.1.2 Implementation Schedule

This project was initially planned to be completed in October 1994, but it was actually completed in June 1996, or 18 months behind schedule, and the JBIC extended the loan disbursement period once, and the World Bank three times. The following 4 points can be listed as the reasons for this delay.

(i) The portion of the funding borne by the Philippine government greatly increased, and therefore the Department of Budget and Management (DBM) was unable to smoothly perform budget allocation (described later in section 2.1.3).
(ii) The Project Implementing Coordination Unit (PICU) within the DECS, which was to be attached to this project, was not formed (described later in section 2.1.4).
(ii) Under the initial plan, a preparation period (for ground leveling work) prior to the commencement of construction was not given sufficient consideration.
(iv) The impact of national disasters, foremost among them the eruption of Mount Pinatubo

Among the above-listed reasons, (i) is the main one. In principle, delays in projects such as this JBIC funded project due to the recipient country taking time to make budget allocations is not desirable because of the necessity and urgency of implementing the project. However, considering that the share of the project cost borne by the Philippine government greatly increased, this delay can be considered to have been unavoidable to some extent.

Moreover, the fact that because the disbursement procedure used was the reimbursement one regarding the project cost the Philippine government had to advance the funds (raising advance funds was difficult), plus the fact that the budget amounts allocated by the DECS, which is part of the central government, were lower due to the decentralization of power implemented in 1991 (32.959 million peso or 13% of the total budget in 1991, and 39.123 million peso, or a lower share of 10%, in 1994) represented as many limitations. Among these factors, the disbursement procedure, considering the financial status of the DECS, which is the executing agency, it is believed that there is room for considering the introduction of the special account procedure. The

special account procedure has been employed for the Third Elementary Education Project based on the experience of this project, and thus the experience of this project has been put to useful use.

On the other hand, with regards to (iii), if DECS made the engineers of the Department of Public Works and Highways (DPWH) to which the procurement and construction of the classroom construction portion of this project was subcontracted, participate from the planning stage of this project, and accurately estimated the construction period including the preparation period, the delay in the implementation schedule would probably have been avoidable to a certain extend.

2.1.3 Project Cost and Fund Procurement

(1) Project Cost

The project cost during the planning stage was ¥14,966 million in foreign currency, 7,152 million peso in local currency, thus a total of 9,368 million peso (¥63,277 million). The plan was for the JBIC to provide ¥20,020 million and the World Bank US$200 million (equivalent to ¥30,800 million), and the Philippine government to provide the remaining ¥12,320 million out of its own funds.

In actual fact, there was an overrun in total project cost of almost 200%, to 19,079 million peso. This cost overrun was mainly caused by (i) the expansion of a number of new classrooms, which is comparatively most costly than the renovation of classrooms, exceeding the originally planned number by approximately 1.9 times, (ii) higher construction material prices due to the construction boom in the Philippines during this period, thus the cost overrun was primarily caused by external causes in the form of government policy and economic conditions.

(2) Analysis by fund provider (JBIC, World Bank, Philippine government)

The World Bank loan portion became US$175 million compared the initially planned US$200 million. This change was due to changes in the portions covered by the JBIC and World Bank loans during loan agreement negotiations, with Region IV, which the World Bank loan was initially planned to cover, ultimately being placed under the JBIC loan coverage, and the high dollar and low peso, which caused the peso-denominated payment amount to come up to a smaller US$ amount.

Region IV was added as an extra component with regard to the portion covered by the JBIC loan, and the whole loan amounts were disbursed.

Meanwhile, the portion borne by the Philippine government increased by approximately 5 times. Though the budget allocation for this increase was not performed smoothly (as previously mentioned), everything was, as a result, covered by the Philippine government. It was deemed to be evaluated that this could be attributed to the efforts of the Philippine government.

2.1.4 Implementation Scheme

(1) Executing Agency

The executing agency for this project was the DECS. The creation of Project Implementing Coordination Unit (PICU) attached to this project and part of the DECS (consisting of about 5 members) had been planned.

Actually, due to the fact that other budget items exceeded the amounts originally planned, the PICU was not formed, and just 2 members were appointed to fulfill its function for this project and another project. The result was a shortage in manpower to assure coordination with the DPWH and other related organizations and collect the evidential documents for making the SOE (Statement of Expenditure) required at the time of the request for disbursement to the JBIC, which obstructed the smooth implementation of the project. It is thought that this problem could have been remedied to a large degree through the help of consultants, even without the creation of the PICU to be specially attached to this project.

Moreover, as already mentioned in section 2.1.2 regarding procurements for the construction plan, including the expansion of classrooms and the installation of toilets, etc., such work was performed as planned by the DPWH. The DPWH managed on a monthly basis the progress status of individual projects using a computerized project management system, and it dispatched quality assurance units to all schools where construction was completed. In case these units detected any problems, measures to remedy the problems were requested of the contractors. As such, the performance of the DPWH was satisfactory.

(2) Consultant

Consultants were hired as planned for the training of teachers and strengthening the structure of the DECS, but implementation supervision and support were not included in the TOR from the start. However, in light of the following points, it is considered that the hiring of consultants for implementation supervision and support was needed.

(i) The DECS had no experience whatsoever in the area of project implementation for the project funded by the JBIC.
(ii) The DECS in 1989 was implementing 7 projects in addition to this project, and accordingly manpower shortages were predicted to some degree from the beginning.
(iii) Generally, overall implementation supervision for projects of this nature, which encompass a large number of small-scale sub-projects, is not easy.

In the future, for projects of this nature that comprise a large number of small-scale components spanning a large area, in which overall implementation supervision is complex and not easy, it will be necessary to consider including consultant support for implementation supervision, taking into consideration the manpower status of the executing agency. The above point was adequately reflected in the Elementary Education Project that followed after this project.

2.2 Evaluation on Operation and Maintenance

2.2.1 Operations and Maintenance Scheme

The responsibility for the maintenance of classrooms was transferred from the DECS to each school following construction, with the budget for this maintenance provided by each local government. Moreover, from 1994, the maintenance of existing facilities is being given greater importance and budgets for this purposes are increasing, and minor repairs such as broken window panes are enabled by donations by the local governments (Barangay, PTAs, and NGOs, and thus no problems in particular were reported[13].

2.2.2 Operations and Maintenance

This evaluation was done through visits of 5 elementary schools in the Philippines (in the Laguna and Rizal districts in Region IV) as a site survey, in order to verity the "hard" aspects in particular to ascertain the status of classroom maintenance and grasp the problems faced by each school by conducting interviews. The survey method consists in distributing questionnaires and conducting interviews to the school principal, 5 teachers (in case there were fewer than 5 teachers, all the teachers), and 5 pupils (5th or 6th grade pupils) for each school. Table 2.1 shows the results of the survey.

As shown in Table 2.1, the classroom maintenance status can be said to be largely satisfactory. Of course, site surveys were conducted at only 5 schools all situated in Region IV, and it is not possible to draw general conclusions on the overall maintenance status for this project based on these results alone. However, although 2 out of the 5 schools were visited on an unannounced basis, no particular difference was detected in their maintenance status compared to the other 3 schools. (Although they did not know of the visit in advance and thus were unable to do special preparations for the event, they had a maintenance status comparable to that of the other schools.) Based on this fact, the maintenance status of elementary schools at least in the surveyed region is considered to be at a satisfactory level. Furthermore, the pupils were seen cleaning their classrooms with zeal at all the visited schools, and the observers felt a high sense of ownership of teachers and pupils in relation to their classroom.

[13] However, according to the interviews conducted at the schools, there are schools where a considerable part of the funds for maintenance come from sources other than the barangay (donations by PTAs and NGOs, for example), with budget allocations by the local government being insufficient. It is surmised that schools where donations by PTAs and NGOs still do not cover budget needs face a shortage of maintenance funds.

[Table 2.1 Current Status at Schools Covered by Site Surveys]

Name of school	Construction (rooms) implemented by this Project	No. of pupils (persons) (at the time of appraisal)	No. of classrooms (rooms)/No. of pupils per classroom	No. of teachers (persons)/No. of pupils per teacher	Maintenance status in the classroom	Others (comments etc.)
Langkiwa	Renovation (1)	170	3/57	3/57	Although the external appearance was good. Teachers were on a break, so the classrooms were locked and could not be checked inside.	There is still a shortage of teachers, textbooks and desks.
Ganado	Not covered by this project [Note]	260	5/52	5/52	Satisfactory overall	Due to a shortage of classrooms, some pupils study at the assembly hall of the village. There is also a severe shortage of teachers.
Santa Rosa II	Expansion (14)	2,104	38/55	40/53	Satisfactory overall	No comments in particular
Mapandan	Expansion (5)	884	14/63	17/52	Satisfactory overall	Extremely satisfied.
Angona	Expansion (6)	3,272	56/58	64/51	Satisfactory overall	Since toilets were not part of the classroom package, a shortage of toilets resulted. (Toilets were built at a later date through donations.)

Note: Although it was found out, after it was visited, that this school was not covered in the scope of the project, its data is included for reference purposes.

On the other hand, as can be seen in Table 2.1, some schools with a particularly high pupil/classroom ratio have more than 60 pupils per classroom, and all schools exceed the fixed capacity of 40 pupils per classroom. Thus, at these schools, the adoption of a two-shift system with classes being held in the morning and then again in the afternoon is unavoidable.

Furthermore, there is also a shortage of teachers as the background of the two-shift system, in addition to the shortage of classrooms. According to the DECS, the basic policy is to add one teacher for each additional classroom that is constructed, but since the bare minimum of teachers is allocated, when teachers are away to attend seminars or on sick leave, a shortage immediately results. Also, the chronic shortage of teachers leads in many cases to the hiring of part-time teachers without proper qualifications. Actually, the average national ratio of teachers to pupils, which was 1:32 in 1989, declined to 1:34 in 1995. Thus, it is believed necessary to consider increasing the number of teachers in parallel with classrooms as a major issue in the education sector.

2.3 Evaluation on Project Effects and Impacts

2.3.1 Results and Statistics Expected at Time of Appraisal

(1) Improvement of the status of insufficient number of classrooms

38,940 new classrooms have been provided through this project (only portion covered by JBIC loan). On the other hand, the shortage of classrooms has not been resolved completely due to the rising number of pupils. If this project had not been implemented, there would have been a shortage of 46,160 classrooms, compared to a shortage of 7,220 classrooms at the end of this project, showing that this project importantly contributed to reducing the gap between demand and supply of classrooms.

(2) Remediation of regional differences in education

Region XII (See shaded part in Table 2.2) was at the time of the appraisal mentioned as a region with a particularly pronounced shortage of classrooms regarding differences in education among regions. (Region XII had a 22% shortage of classrooms.) When the project was implemented, Region XII was divided into Region XII and the Autonomous Region of Muslim Mindanao (ARMM), where a total of 9,950 classrooms were additionally constructed, which can be said to have made an important contribution toward correcting regional differences in education. Furthermore, this project responded to local needs of small villages without schools in impoverished areas by constructing schools, and special mention should be made of the fact that 1,388 schools were built in such areas in the regions covered by the JBIC loan.

[Status of Number of Classrooms in the Philippines ~ Comparison Before and After Project Implementation]

(Parts in bold correspond to portion covered by JBIC loan.)

Region	Number of pupils			Sufficient number of classrooms		
	Before project implementation	After project implementation	Increase	If project had not been implemented	After project implementation	Number of expanded classrooms through this project
NCR Note2	1,078,184	1,336,231	+258,047	-9,626	-5,825	3,801
CAR	190,171	238,273	+48,102	126	2,086	1,960
Region I	571,492	630,349	+58,857	-5,065	-4,473	592
II	385,029	455,346	+70,317	-1,210	-163	1,047
III	997,255	1,163,204	+165,949	-7,303	-4,043	3,260
IV	**1,366,575**	**1,703,670**	**+337,095**	**-15,167**	**-7,379**	**7,788**
V	**737,325**	**836,973**	**+99,648**	**-1,679**	**-142**	**1,537**
VI	**927,836**	**1,030,264**	**+102,428**	**160**	**955**	**795**
VII	**717,350**	**882,642**	**+165,292**	**-5,011**	**-129**	**4,882**
VIII	**536,403**	**593,534**	**+57,131**	**2,023**	**2,901**	**878**
IX	**555,042**	**608,237**	**+53,195**	**-4,776**	**-806**	**3,970**
X (including XIII)	**601,564**	**838,326**	**+236,762**	**-5,978**	**-1,957**	**4,021**
XI	**752,053**	**841,472**	**+89,419**	**-5,839**	**-720**	**5,119**
XII (including ARMM)	**556,292**	**808,951**	**+252,659**	**-9,893**	**57**	**9,950**
Total	9,972,571	11,967,472	+1,994,901	-69,238	-19,638	49,600
JBIC loan portion	**6,750,440**	**8,144,069**	**+1,393,629**	**-46,160**	**-7,220**	**38,940**

Note 1: Sufficient number of classrooms consists of the difference between the actual number of classrooms and the required number of classrooms (existing number of classrooms - required number of classrooms), and a negative number signifies a shortage. The required number of classrooms is obtained from the number of pupils, dividing this number by 36 (36 pupils per classroom). The figure of 36 pupils per classroom is obtained by multiplying the limit of 40 pupils per classroom by 0.9. This calculation method conforms with the calculation method described in a World Bank report.

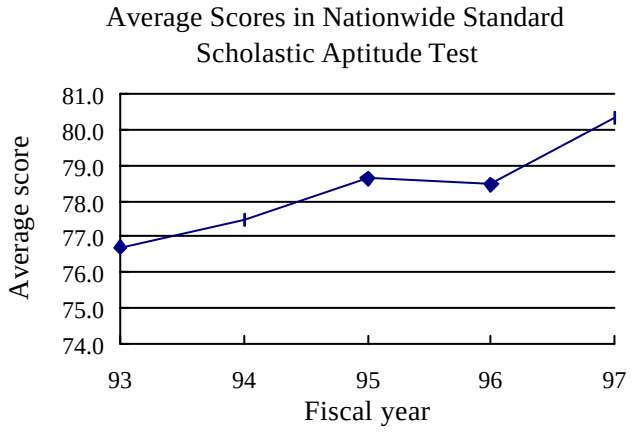
Note 2: In the NCR area, most schools use a two-shift system, so a limit of pupils per classroom of 80 pupils (40 pupils x 2) was used in calculations.

Source: World Bank Report and DECS

(3) Qualitative improvement of education

A nationwide standard test has been implemented from fiscal 1993 to monitor the degree of qualitative improvement in education. Figure 2.2 shows the results.

Figure 2.2 Transit of Nationwide Standard Scholastic Aptitude Test Result



These results show that the quality of education has improved to a certain degree. The main factors behind this improvement is, in addition to the fact that training of teaches and education managers was performed as part of this project, the fact that, almost during the same period as this project, teachers' salaries were raised, which is thought to have made the teaching profession more attractive from a pecuniary viewpoint. (In 1989, the average teacher's salary was 3,102 peso, and this increased to 8,605 peso in 1997. This is equivalent to a real increase of about 30%, factoring in inflation.)

While improving the ratio of teachers to pupils and the ratio of textbooks to pupils is important in order to achieve qualitative improvements in education, as mentioned previously the ratio of teachers to pupils actually worsened from 1:32 in 1989 to 1:34 in 1995 due to the natural increase in the number of students. On the other hand, the ratio of textbooks to pupils, which used to be 1:2, was reported to have improved to close to 1:1 at the time of the survey conducted in November 1998. This is believed to be the result of the emphasis on textbook distribution in the Third Elementary Education Project that followed this project.

(4) Decline in dropout rate

A pilot project with the following contents was implemented on an experimental basis as part of this project in order to lower the dropout rate. As a result, the following improvements were recorded at the schools where this pilot project was implemented.

[Table 2.3 Change in Dropout Rate at Pilot Project Implementation Schools]

Pilot Project Contents	Droupout rate (%)	
	Before implementation	After implementation
Implementation of school lunches (elementary school children only)	5.1	**0.7**
Implementation of education of school lunches and nutrition (elementary school children and parents)	5.8	**1.0**
Use of various educational materials matching scholastic aptitude level	7.7	**4.2**
Participation of parents in workshops using above materials	5.6	**1.9**

Source: World Bank Report

On the other hand, the DECS has reported that the dropout rate is rising for the Philippines overall. According to the DECS, a large percentage of dropouts is caused by economic reasons in the family of the pupils, and measures such as the implementation of school lunches that take into consideration low-income families implemented in the pilot project are considered to importantly contribute to reducing the dropout rate. Careful consideration of various aspects such as the limitation of the targets is required, because such measures need fiscal expenditure, but they must be good references when designing measures to lower the dropout rate.

2.3.2 Additional General Evaluations

(1) Balance between quantitative expansion and qualitative improvement

The target of the loan provided by the JBIC and the World Bank for this project were components designed for the quantitative expansion of education, and these components were smoothly implemented, but components designed for qualitative improvement such as teachers' training and the introduction of an elementary education assessment plan, whose implementation was planned with using Philippine government funding, were not sufficiently implemented in the end.

In the Third Elementary Education Project that followed this project, the experience from this project was fully utilized, with efforts made to raise the level of elementary education as a whole by including "soft" aspects in the portion covered by the JBIC. (See (2) below.)

(2) Regarding improvements in subsequent project

As support toward the Philippine elementary education sector subsequently to this project, the aforementioned Third Elementary Education Project has been taken up. As part of this project, "soft" aspects were also included within the coverage of the JBIC loan, and efforts were made to raise the overall level of education, through the following project contents. Furthermore, strengthening of the division offices (province level) of the DECS and other measures are expected to promote the decentralization of power in the educational sector in the Philippines.

(i) Expansion and reconstruction of additional school facilities, distribution of textbooks, and preparation of educational materials and equipment through a bottom-up approach, taking into consideration the needs of each region and each school
(ii) Establishment of Educational Management Information System (EMIS)(Note 1)
(iii) Establishment of School Improvement and Innovation Fund (SIIF)(Note 2)
(iv) Consulting services(Note 3)

(Note 1) Educational Management Information System (EMIS)
An organizational information management and processing system designed to enable effective project coordination between the DECS headquarters and regional offices and the smooth implementation of educational budgets based on data by improving access to education-related information, the quality of information, and provision of timely information, will be built. Concretely, an integrated system for the processing, saving, and search of educational data will be built.

(Note 2) School Improvement and Innovation Fund (SIIF)
The School Improvement and Innovation Fund will be established at the national level for the implementation of pilot projects to solve various problems in the elementary education administration, such as the introduction of school lunches and the establishment of dispensaries, and also, at the province level, for the encouragement of a sense of initiative at each school through the stimulation of curricular and extra-curricular activities based on proposals from school principals and employees, closer integration of schools with their local community, and so on.

(Note 3) Consulting services

As described below, "soft" components such as policy improvements, curriculum improvements, and teaching guidelines, are all covered by the JBIC loan, including the portions covered by the World Bank.

During the planning stage, at the DECS central level, establishment of project implementation guidelines as well as guidance and assessments on detailed educational investment plans have been made. At the level of each province, discussions will be held with related parties (local municipalities, education committees, school principals, PTAs etc.) and detailed education investment plans will be drafted. Moreover, a more active dialog between schools and homes and the local community is promoted using local NGOs to raise awareness about the importance of education and participation in school management.

During the implementation phase, detailed education investment plans prepared for each one of the above 26 provinces is implemented. At the central level, activities to improve curricula, textbooks, and guidance procedures are implemented[14] as measures for policy improvements, and research for the education of infants and SIIF at the national level are implemented as measures for education research. At the provincial level, procurement assistance, supervision, school facilities expansion, textbook distribution, teachers' training and SIIF are implemented.

During the evaluation stage following implementation, project evaluations are performed at the level of each province, and the data from these surveys are compiled at the central level, and the experiences gained as a result are disseminated to other regions via workshops.

[14] Coordination with JICA is also aimed for the development of teaching guidelines etc.

3. Lessons Learned

- **Regarding the development of the education sector, it is important, first of all, for the governments of recipient countries to realize the importance of improving and strengthening "soft" aspects, and to improve and strengthen both "soft" and "hard" aspects in a balanced manner. The ODA loans for the education sector requires that JBIC fully takes into consideration the budget limitations of the governments of the target recipient countries, and that they include "soft" aspects within the scope of their loans as needed, or that it cooperates with the Japan International Cooperation Agency (JICA) or other donors so that "soft" aspects get implemented alongside the "hard" aspects without delays.**

Regarding the development of the education sector, along with the improvement of "hard" aspects (facilities), strengthening of "soft" aspects (teachers' training, project management system, etc.) are indispensable. In the case of this project, the aim was to achieve both quantitative expansion and qualitative improvement in the field of elementary education in the Philippines, but the JBIC loan covered only the "hard" aspects, mainly the construction of new classrooms. As a result, "soft" aspects were left to the Philippine government to provide for using the national budget, but as insufficient funds were allocated for the training of teachers, "soft" aspects were not adequately implemented.

With regard to the development of the education sector, first of all, the governments of recipient countries must be aware of the importance of enhancing and strengthening "soft" aspects and must enhance and strengthen both "soft" and "hard" aspects. Moreover, when providing assistance such as this project, the donors' side (in this case, the JBIC) should fully consider the budget limitations of the governments of recipient countries and, if appropriate, include "soft" aspects in the coverage of their aid, promoting the implementation of both "soft" and "hard" aspects without delay.

Based on the above concepts, the JBIC has been working in the direction of strengthening also "soft" aspects in recent years, and it is encouraging the governments of recipient countries and executing agencies in this direction to promote smooth implementation. For instance, in the Third Elementary Education Project (co-financing with the World Bank) that follows this project, work is being done toward raising the level of elementary education as a whole through coordination with other aid organizations such as JICA and by making ODA loans cover "soft" aspects (teachers' training using consulting services, development of curricula, etc.).

- **For projects of this nature that comprise a large number of small-scale components spanning a large area, it will be necessary to consider including consultant support for implementation supervision, taking into consideration the manpower status of the executing agency, based on the fact that overall implementation supervision is complex and not easy.**

The creation of Project Implementing Coordination Unit (PICU) attached to this project and part of the DECS (consisting of about 5 members) had been planned. Actually, due to the fact that other budget items exceeded the amounts originally planned, the PICU was not formed, and just 2 members were appointed to fulfill its function for this project and another project. The result was a shortage in manpower to assure coordination with the DPWH and other related organizations and collect the evidential documents for making the SOE required at the time of the request for disbursement to the JBIC, which obstructed the smooth implementation of the project. It is thought that this problem could have been remedied to a large degree through the help of consultants, even without the creation of the PICU to be specially attached to this project.

Therefore, overall implementation supervision for projects of this nature, which encompass a large number of small-scale components across a large area, is not easy, and thus the manpower situation of the executing agency should be carefully considered when deciding whether to include consultant support as part of the project scope for implementation supervision.

Based on the above concepts, the Third Elementary Education Project has allocated specialists hired to provide consulting services to central and regional offices of the executing agency, and is actively working toward raising project implementation support and executing agency capabilities.

(Appendix)

<Project Scope>

(1) Increased supply of educational facilities and educational materials and equipment	1) Classroom expansion plan Expansion, reconstruction, and renovation of classrooms (covered by ODA loan) Expansion, reconstruction, and renovation of multi-purpose workrooms Expansion of toilets 2) Production and supply of desks 3) Printing and distribution of textbooks, teachers' guidebooks, reference materials, etc. 4) Supply of educational aids such as terrestrial globes, maps, and equipment for experiments.
(2) Training of teachers and education managers	1) Revision of implementation training, new teachers' training, teacher certification testing, and teacher implementation training plans for teachers, school principals, and education managers, in order to raise educational capabilities and class management capabilities.
(3) Improvement of school enrollment ratio and literacy rate through expansion of basic education	1) As a measure to lower the dropout rate among pupils from low-income families, a pilot project will be implemented among selected schools from the most impoverished cities in 6 regions. 2) In order to establish more comprehensive measures to lower the dropout rate, various measures, consisting principally of the methods introduced in the above-mentioned pilot project, will be evaluated with regard to their effectiveness in lowering the dropout rate. 3) In order to provide basic education for students who cannot receive regular school education, the Department of Education, Culture, and Sports (DECS) will expand its literacy training program.
(4) Strengthening of planning and management scheme	1) An elementary education assessment program will be introduced at the National Educational Testing and Research Center for the periodic evaluation and monitoring of elementary school pupil grades. 2) Improvement of access to education-related information, improvement of information quality, and timely supply of information will be performed in order to promote the decentralization of education planning and education management. Concretely, an integrated system for processing, saving, and searching basic education data will be created. 3) A review of forecasting methods for basic data (for example, number of pupils attending school, calculation of unit costs and price escalation rate) required for calculating DECS target values and required funds, and the evaluation of forecasting methods based on these data will be performed. 4) A systematic information processing and processing system designed to improve information processing for policy-making and work at the DECS will be prepared. Concretely, this will include the proposal of measures, the creation of manuals, and the organization of workshops.