



PERSPECTIVE (1)



PERSPECTIVE (2)

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Abbreviations

BOET	Bureau of Education and Training
DOET	Department of Education and Training
EFA	Education for All
IRDS	Institute of Research and Design of Schools
JICA	Japan International Cooperation Agency
MOET	Ministry of Education and Training

Summary

Since its policy change to Doi Moi in 1986, the Social Republic of Vietnam (hereinafter referred to as Vietnam) has been shifting to a market economy and widely opening it up to the world. The country's Five-Year Plan for Socio-Economic Development 2001-2005 recognizes the development and training of human resources as a very important issue. The Ministry of Education and Training (hereinafter referred to as MOET), which developed the Education Development Strategic Plan 2001-2010 and the National Primary Education Development Program, has been working on improving the quality of primary education and educational facilities. However, these efforts have not fully brought successful results.

On the other hand, with the assistance of the World Bank and several other agencies, MOET has renovated and constructed educational facilities, such as the World Bank's Primary Education Project 1994-2002, which constructed about 7,500 classrooms in 36 provinces. Besides this, Vietnam also made a request to Japan for Grant Aid Assistance to construct primary educational facilities in those areas suffering from hurricanes and floods; whereby the Japanese government responded to the request by granting continuous assistance for 16 coastal provinces from 1994 to 1998.

However, the northern mountain region, the target area of this Project, is economically depressed and has been isolated from such development because of its geographical constraints. This large economic gap between the city area and the Project area strongly influences the educational environment, and has created an extremely high shortage of classrooms. One of the major obstacles to the full-day school program, which is introduced as a Vietnamese national goal, is classroom shortages; and this has forced many schools to operate under a double-shift program system. Accordingly, the quality and amount of education that can be provided to the students vary between those schools with a full-day program and those schools with a double-shift program, so it becomes more apparent that the educational opportunities are unequal. Moreover, because many of these school buildings are temporary buildings without doors and windows or decrepit wooden buildings, those school buildings lack durability and functionality. Thus, these buildings do not function efficiently as educational facilities. Furthermore, because rural villages are scattered among the mountain areas and access roads have not been well maintained, students in such remote areas often find it very difficult to attend school on a regular basis.

Based on this background, the Vietnam government requested Grant Aid Assistance from the Japanese government in 1998 to construct school buildings and

procure other related equipment for the improvement of primary school facilities in 8 provinces in the northern mountain region. The construction of school facilities has already been completed in 4 provinces of Ha Giang, Lai Chau, Cao Bang, and Bac Can through the implementing of Phase I of the Project for the Improvement of Facilities of Primary Schools in the Northern Mountain Region; and the other 4 provinces of Bac Giang, Thai Nguyen, Tuyen Quang, and Phu Tho are targeted for the construction of school facilities as the Phase II of the Project.

The Basic Design Study Team was dispatched from August 4 through September 17, 2002, and had discussions regarding the Project's program with MOET, the Project's counterpart on the Vietnamese side. The Team also conducted site surveys at the requested schools, gathering necessary data and information. When the Team return to Japan, the appropriateness, management and maintenance systems and effects of the Project were all examined based on the results of the site surveys; and then the appropriate facility components and scale were set, the necessary equipment was chosen and a rough Project cost was estimated.

The first Draft Report Explanation Team was then dispatched from January 9 through 18, 2003, to give a general description of the Basic Design results. However, both countries could not reach final agreement on several items, mainly concerned with the design of the Project's facility.

After a while, MOET, through a letter dated May 20, 2003, informed the Japanese side that the document known as the "Sample Design for Primary Schools," had been approved by the prime minister (sanction No.355/QD-BXD, dated March 28, 2003), and that the document's contents accurately summarizes the minimum design requirements for all primary schools built in Vietnam from then on; and that all agencies related to the construction of primary school facilities, such as local governments and/or other donors, shall comply with the specifications as described in the "Sample Design for Primary Schools" document.

According to this, the designs (including items requested by the Vietnamese side during the first visit of the Draft Report Explanation Team) for the Project schools were again reviewed by the Japanese side, especially taking into account those specifications as described in the "Sample Design for Primary Schools" document; and according to this review, it was agreed between both countries that the resulting increases in construction costs would be covered by a reduction in the number of Project schools. As a result, on July 16, 2003, both countries agreed to exclude TQ-10 (the Xuan Quang school) from the Project school list. Consequently, the second Draft Report

Explanation Team has been organized for dispatch from August 10 through 16, 2003.

The Project schools were selected from the final 89 existing primary schools, based on the following selection criteria, which were agreed on by the Basic Design Study Team and the country of Vietnam.

Only schools which fulfill all the criteria listed below were selected for the Project.

- 1) The present and future demand for primary education facilities is quantitatively estimated by a set of data such as the number of school-aged children, the rates of population growth, enrollment ratio, completion rates, etc...
- 2) No other program or plan for new / undergoing classroom construction by the Ministry of Education and Training, local government, other donors, NGOs and so forth.
- 3) The ownership of land for construction is legally secured.
- 4) No constraints against construction such as occupation of out-of-law houses.
- 5) Access road for the movement of materials and for the construction works is properly constructed.
- 6) Topographically safe and appropriate-sized for construction.
- 7) No foreseen natural and environmental or social hazard.
- 8) Sufficient teachers, budget allocation and necessary cooperation from concerned people for the proper operation and maintenance of the facilities are secured.
- 9) Temporary classrooms during the period of construction can be prepared in the case of reconstruction.

Schools which fulfill the criteria listed below are given priority in selection.

- 10) Urgently needs the rehabilitation because of over aging and / or damage of the existing buildings.
- 11) Urgently needs the construction of additional classrooms due to overcrowding.
- 12) Incomplete schools¹ which are not provided with higher grade classes and are distant from the complete schools².

In order to set the size of the Project facilities, the calculation of the number of classrooms was based on the projected number of students attending a full-day school

¹ Schools not having all class grade levels from 1 to 5

² Schools which have at least one class for all grade levels

program in the 2006 academic year, at 35 students per classroom, which is the standard class size in Vietnam. The number of classroom shortages was calculated by subtracting the number of existing usable classrooms from the required number of classrooms. For those which showed classroom shortages as two or less per school, the Project excluded those schools from the list and requests Vietnam to construct the classrooms through their own efforts.

Based on this formula, 48 schools were finally selected for the Project.

Since MOET recognizes the Sample Design for Primary Schools as its criteria for designing primary schools in Vietnam, the Project designs also follow the same criteria.

The Project components include Classrooms, a Principal's Room, a Teaching Aid Room and Toilet facilities as the minimum necessary for the managing of a school. The Project facility components for each province are shown in Table-1.

Table-1 Projected Facility Components for each Province

Province	School (Schools)	Classroom (Rooms)	Toilet (Buildings)	Principal Room (Rooms)	Teaching Aid Room (Rooms)	Total Floor Area(m ²)
Bac Giang	16	158	20	3	4	9,074.74
Thai Nguyen	14	106	16	8	12	6,413.13
Tuyen Quang	9	54	9	2	3	3,037.30
Phu Tho	9	86	10	4	4	5,039.45
Total	48	404	55	17	23	23,564.62

Table-2 describes the educational furniture necessary for school operation provided by the Project.

Table-2 Component of Educational Furniture

Room Name	Content of Furniture
Classroom	Desks for students (two students per desk), Chairs for students, Desk for teachers, Chair for teachers, Blackboard
Principal Room	Desk for principal, Chair for principal, Cabinet, Blackboard
Teaching Aid Room	Cabinet, Meeting Desks (two person per desk), Chairs for teachers, Blackboard

Although the Vietnamese side requested educational equipment and materials, the Project finally decided not to include them as a part of the Project component because the list of equipment and materials, which is based on the new curriculum, has not been well prepared; and in addition, the Project schools are already equipped with such items, and with proper maintenance, should last for several years.

Since the related personnel at the Project schools lack sufficient knowledge for correct facility use and maintenance methods, proper maintenance activities have not been implemented. Considering this situation, the Project will introduce a software component in order that each Project school will utilize Project facilities in an effective and sustainable way. Targeting members of the school management committees at the Project schools, the following activities will be implemented: 1) workshops will be held to analyze current situations and problems regarding maintenance activities at each schools and to raise awareness among participants; 2) guidelines will be produced for the effective use and maintenance of facilities; and 3) proper training and related activities regarding the use of these guidelines will be provided.

The rough cost estimate for the Project is calculated to be 1.367 billion Japanese Yen (1.36 billion Japanese Yen for the Japanese side work and 7 million Japanese Yen for the Vietnamese side work), and the total amount of construction time is estimated at approximately 54 months including the detail design period, when the Project is implemented through the Japanese Grant Aid Program.

Through the implementation of the Project, the effects described below can be expected.

【Direct Effect】

Improvement of the Study Environment

Through construction of the 404 classrooms by the Project, the existing decrepit and temporary classroom buildings, which are approximately 20% of all the classrooms, will be replaced and the Project schools will be provided with the capacity to hold a larger number of students. With the reduction of the classroom population from 107.4

students to 34.2 students per room³, the learning environment of the classrooms will be better. The Project will also provide a principal's room and a teaching aid room for schools which do not have them. Thus, the Project schools will have a better learning and teaching environment.

Implementation of the Full-Day School Program

Because of the improvement of classroom shortages through the implementation of the Project, the schools, which are now forced to operate under a double-shift program, will be able to change their operation to a full-day school program. Therefore, the ratio⁴ of classrooms capable of implementing the full-day school program will be increased from 31.75% to 99.2 %.

Improvement of the Sanitary Environment

The Project will provide well-equipped toilet facilities with the number and sizes based on the number of classrooms to be built. Thus, the shortage of toilet facilities as well as the general sanitary environment shall be markedly improved.

Acquiring Skills and Knowledge for Proper Facility Maintenance and Management

By introducing the Software Component, each Project school will understand the importance of the proper maintenance of facilities and acquire the basic skills and knowledge for such maintenance. Furthermore, the appropriate implementation of the maintenance activities enables sustainable use of the existing facilities as well as the Project facilities, decreasing the maintenance cost in the long run.

【Indirect Effect】

Use of the Facilities by the Community

The Project facilities will be used not only for primary education but also for social educational activities such as adult education or literacy education, as well as for non-educational purposes such as community activities. In this ways, the Project facilities will greatly contribute to the surrounding communities.

³ Number of Students per Classroom = Total Number of Students divided by Number of Usable Classrooms

⁴ Classroom Ratio capable for the Full-Day School Program: Total Number of Classrooms divided by Appropriate Number of Class

In conclusion, the Project is highly expected to bring many positive benefits as mentioned as well as to contribute to the improvement of Basic Human Needs of the society; thus, the implementation of the Project through the Japanese grant aid scheme is deemed worthy and meaningful. If the items mentioned below are improved, this Project will be implemented more smoothly, and thus more effectively contribute to improving the general educational environment.

Approach to the Full-Day school Program

The current level of student attendance in the primary schools is quite high in Vietnam. However, after the adoption of the full-day school program, which will take a large amount of the students' time, many students in the farming villages and lower income families may encounter difficulty in school attendance. This causes serious concern as it might widen education-opportunity gap between the social classes. Thus, in order to prevent such problems from happening, the Vietnamese side is well advised to effectively eliminate any possible negative effect which the implementation of the full-day school program might cause.

In order to smoothly introduce and fully establish the acceptance of the new full-day school system in the schools, it is necessary to secure a sufficient number of teachers and to obtain the understanding from students, parents and the community about the purpose and goals of the full-day school program system as well as working on the facility shortage problem. To increase the number of subject teachers for the new subjects, the Vietnamese government needs to provide the pre-service training of subject teachers for these new subjects and to support the conversion from current teachers teaching all the subjects to subject teachers. Furthermore, at the provincial and school level, careful preparation is required such as examination of the new school operation system and conduct of the campaign for all the related people.

Implementation of Proper Maintenance Activities

Currently, school maintenance activities are not being carried out in an effective or systematic way, and also, proper preventative maintenance procedures for building facilities are not being implemented in any periodic fashion. When any problems arise, it seems that only temporary measures are taken to solve them. However, for the continuous and permanent use of both the existing and Project school facilities, it is absolutely essential that these kinds of activities be performed appropriately. In order to achieve and support such activities, the schools need to be well organized, the partnerships between the schools and their surrounding communities need to be

promoted, and the awareness of all the related people needs to be raised.

Concern Regarding the School Construction Done by Vietnam

Several efforts to construct classrooms and improve classroom shortages are being made by the local people in conjunction with the People's Committees. In order for the Vietnamese side to best implement all work done for facility improvement on its own, an accurate forecast and analysis needs to be made in regards to the number of students attending school in the future. Moreover, the country of Vietnam needs to recognize and to fully acknowledge such voluntary effort by the local people and their communities as well as the close communication with Bureau of Education and Training and Department of Education and Training. In summary, the Vietnamese side need pay more attention to maintaining a high level of coordination of any and all school development projects that donors may bring, including this Project.

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Chapter 1 Background of the Project

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Since its policy change to Doi Moi in 1986, the Social Republic of Vietnam (hereinafter referred to as Vietnam) has been shifting to a market economy and widely opening it up to the world. The country's Five-Year Plan for Socio-Economic Development 2001-2005 recognizes the development and training of human resources as a very important issue. The Ministry of Education and Training (hereinafter referred to as MOET), which developed the Education Development Strategic Plan 2001-2010 and the National Primary Education Development Program, has been working on improving the quality of primary education and educational facilities. However, these efforts have not fully brought successful results.

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However, the northern mountain region, the target area of this Project, is economically depressed and has been isolated from such development because of its geographical constraints. This large economic gap between the city area and the Project area strongly influences the educational environment, and has created an extremely high shortage of classrooms. One of the major obstacles to the full-day school program, which is introduced as a Vietnamese national goal, is classroom shortages; and this has forced many schools to operate under a double-shift program system. Accordingly, the quality and amount of education that can be provided to the students vary between those schools with a full-day program and those schools with a double-shift program, so it becomes more apparent that the educational opportunities are unequal. Moreover, because many of these school buildings are temporary buildings without doors and windows or decrepit wooden buildings, those school buildings lack durability and functionality. Thus, these buildings do not function efficiently as educational facilities. Furthermore, because rural villages are scattered among the mountain areas and access roads have not been well maintained, students in such remote areas often find it very difficult to attend school on a regular basis.

Based on this background, the Vietnam government requested Grant Aid Assistance from the Japanese government in 1998 to construct school buildings and procure other

related equipment for the improvement of primary school facilities in 8 provinces in the northern mountain region. The construction of school facilities has already been completed in 4 provinces of Ha Giang, Lai Chau, Cao Bang, and Bac Can through the implementing of Phase I of the Project for the Improvement of Facilities of Primary Schools in the Northern Mountain Region; and the other 4 provinces of Bac Giang, Thai Nguyen, Tuyen Quang, and Phu Tho are targeted for the construction of school facilities as the Phase II of the Project.

(1) Project Schools

It was during the Basic Design Study Team Dispatch when both countries, on the 12th of August, 2003, signed the Minutes of Discussion which documented a total of 90 survey candidate schools (refer to attachment). However, after careful consideration of the current situations in each province, the Vietnam side made an additional request to replace the 4 schools listed in the following table.

Table 1-1 List of Requested School Replacement

Name of Province	Originally Requested Schools (School ID)	School Names after Replacement (School ID)
Thai Nguyen	Mo Che (TN-8)	Ba Xuyen (TN-8)
Thai Nguyen	Duong Thanh (TN-19)	Ha Chau (TN-19)
Tuyen Quang	Ky Lam (TQ-8)	Son Nam (TQ-8)
Tuyen Quang	Ky Lam (TQ-8s)*	Dang Chau Sub school (TQ-17s)
Phu Tho	Dich Qua (PT-3)	Phuong Trung (PT-3)

* Ky Lam (TQ-8s) Sub school will become the Sub school of Dang Chau after the integration, thus, the name of Dang Chau Sub school is assigned, and the school ID will be TQ-17s.

(2) Additional Facilities and Equipment Requested

A Teachers' Room and Waste Disposal Facility were requested in addition to the Classrooms, Principal's Room, Teaching Aid Room and Sanitary Facilities (Toilet, Water Well and Manual Pump) as provided in Phase 1 of the Project. As for educational equipment, the Vietnam side, on the basis of the equipment listed in Phase 1 of the Project, requested several new additional items that correspond to the newly introduced curriculum for the new first grade starting in September.

Chapter 2 Contents of the Project

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2-1 Basic Concept of the Project

2-1-1 Overall Goal and Project Purpose

The net school enrollment rate of primary education in the Socialist Republic of Vietnam (hereinafter referred to as Vietnam) has reached almost 100%. This shows that access to a primary education has been rapidly improving. The Government of Vietnam has developed two priority plans, one is called the “Education Development Strategic Plan for 2001 - 2010,” which is for the entire education sector in general, and the other is the “National Primary Education Development Program,” which is similar but specifically emphasizes the primary education sector. These plans aim to improve the quality of education by reducing classroom shortages and gradually shifting to a full day schooling at the primary education level.

Although a high student enrollment rate has been achieved in the Northern Mountain Region(the Project area), many schools are obliged to conduct classes in temporary wooden classrooms, and so an adequate learning environment has not been secured. Moreover, classroom shortages in many schools have been one of the obstacles against introducing a full day schooling and the schools are obliged to conduct double-shift classes. In the present state of affairs, the differences in the educational quality between students who have to study with limited school curriculum under a double-shift system and students who can study in a full day schooling have been growing.

The purpose of the Project is to increase the number of classrooms that can conduct full day classes by replacing the old temporary wooden classrooms with the construction of new classrooms, and building additional classrooms, thereby significantly improving the learning environment. The overall goal of the Project is to improve the quality of primary education in the Northern Mountain Region of Vietnam.

2-1-2 Outline of the Project

In order to achieve the project purpose, the Project intends to improve the learning environment by constructing classrooms and sanitary facilities for the 48 primary schools that were selected from the 90 candidate schools in the four provinces of the

Northern Mountain Region that the Government of Vietnam originally requested aid for, and provide principal's and teaching aid rooms for those schools which do not have them.

In addition, for the effective and continuous use of these facilities for years to come, the Project will implement a software component program for the appropriate maintenance of facilities, not only for the newly constructed schools, but also for all other existing facilities at the Project schools.

2-1-3 Dispatch of the Second Draft Report Explanation Team

In this Project for the improvement of 49 primary schools' facilities selected originally from among 90 schools, a draft report generated from the basic design study had been prepared, whereby the first Draft Report Explanation Team was dispatched from January 9 through 18, 2003. However, both countries could not reach final agreement on several items, mainly concerned with the design of the Project's facility.

After a while, MOET, through a letter dated May 20, 2003, informed the Japanese side that the document known as the "Sample Design for Primary Schools," had been approved by the prime minister (sanction No.355/QD-BXD, dated March 28, 2003), and that the document's contents accurately summarizes the minimum design requirements for all primary schools built in Vietnam from then on; and that all agencies related to the construction of primary school facilities, such as local governments and/or other donors, shall comply with the specifications as described in the "Sample Design for Primary Schools" document.

According to this, the designs (including items requested by the Vietnamese side during the first visit of the Draft Report Explanation Team) for the Project schools were again reviewed by the Japanese side, especially taking into account those specifications as described in the "Sample Design for Primary Schools" document; and according to this review, it was agreed between both countries that the resulting increases in construction costs would be covered by a reduction in the number of Project schools. As a result, on July 16, 2003, both countries agreed to exclude TQ-10 (the Xuan Quang school) from the Project school list. Consequently, the second Draft Report Explanation Team has been organized for dispatch from August 10 through 16, 2003.

2-2 Basic Design of the Requested Japanese Assistance

2-2-1 Design Policies

(1) Basic Policies

The Project schools shall be selected from the original 90 schools that the Vietnamese side requested aid for. They shall be those schools which are deemed to not have enough classrooms to accommodate all its students when operating on a full day schooling with 35 students per classroom. Further, it was judged that the temporary wooden classrooms presently being used are too difficult to repair. They need to be demolished and new classrooms need to be constructed. The number of classroom shortages shall be calculated by subtracting the number of these temporary wooden classrooms from the total number of "existing" classrooms. Also, schools with a shortage of only one or two classrooms shall be excluded because it can be assumed that the Vietnamese side is able to improve them through its own self help efforts.

The calculation of the number of classrooms to be constructed and the sizes of the facilities is based on the projected number of students in the Project completion Vietnamese academic year of 2006 and the size of the land available for construction at each Project site. In general, the maximum number of classrooms that the land can accommodate will be built.

The facility components of the Project shall be based on what is considered the "minimum necessary" required for school operation, which are basic classrooms and sanitary facilities. Principal's rooms and teaching aid rooms will be provided only for those Project schools that do not have these rooms. In addition, the Project will provide blackboards, desks and chairs for classrooms as well as for the principal's rooms and teaching aid rooms, which will also receive cabinets, etc.

(2) Policies Regarding the Conditions of Nature

The climate in the Northern Mountain Region varies in temperature throughout a year - hot in the summer and cool in the winter. The amount of annual rainfall is high and it is concentrated during the rainy season. To meet these climatic conditions, the preparation of the Project facility designs shall take natural ventilation and heat insulation properties into consideration, as well as minimizing the effects of rainfall, to

create a good classroom environment. The safety of the land on which the Project sites are located has been generally confirmed as secure for construction. But, as some of the Project schools are located in flood areas, measures such as constructing high floors shall be considered when designing the school facilities for those Project schools.

As a measure to protect against damage from hailstorms in the winter and tornadoes in some areas, strong and durable roof structures and materials shall be selected. Further, as termite damage was discovered at many Project school buildings during the site survey period, use of wood shall be avoided as much as possible.

(3) Policies Regarding the Socio-economic Conditions

1) Effective Use of the Land

The Project Areas are located both in mountainous areas and on flat land. Many Project sites are surrounded by rice paddies etc. and the school grounds at those sites are small. Thus, for purposes of efficient use of the land, two storied buildings shall be planned in the design of the schools, except for schools requiring only a small number of classrooms, and they shall be single storied.

2) Reduction of Facility Maintenance Costs

The Project area, located in the Northern Mountain Region, is a relatively disadvantaged area for economic development and the percentage of families living in poverty is relatively high. During the Site Survey period at the Project schools, the Study Team learned that the poor conditions of the existing school facilities were due to inadequate maintenance procedures. Thus, the Project facilities, in order not to subject the schools to any additional or unnecessary financial burdens, shall be carefully designed so that future upkeep and maintenance costs can be kept at a minimum and be within the allowable budgetary fund limits.

(4) Policies Regarding Architectural Standards

The building standards by which all school facility construction in Vietnam is guided, including school construction projects by the Ministry of Education and Training (hereinafter referred to as MOET), can be found in The Design Standards, which is compiled and issued by the Vietnam Ministry of Construction. In general, the designs and construction of primary school facilities are completely left to the discretion of each district as long as they fall within these building codes. Each district prepares a new

design for each project or it can pay a licensing fee and use the designs from other projects.

Moreover, due to the recent approval of the new Sample Design for Primary Schools by the Prime Minister which was issued by the Ministry of Construction on March 28, 2003, the minimum requirements for all school construction projects shall, from that date on, be based also on the specifications found in the above Sample Design document.

In addition to the Design Standards, the Ministry of Construction has set up the Building Codes of Vietnam that stipulates various facility construction regulations. Therefore, the designs and plans of the Project facilities shall be based on the Design Standards, the Building Codes of Vietnam and the Sample Design for Primary Schools.

(5) Policies Regarding the Use of Local Contractors and Construction Materials

1) Institute of Research and Design of Schools (IRDS)

The Institute of Research and Design of Schools (IRDS) works under MOET to set up standard designs for school facilities and conducts research activities related to school facilities. It also works as a private consultant to design mainly secondary and upper secondary schools. As a team of consultants and architects, the IRDS has a staff of over 150 people and more than 80% of its annual income comes from design activities. The IRDS also has its own small building construction department. In view of this, and for smooth Project implementation, it is considered most effective for the Project to cooperate with MOET through IRDS, entrusting IRDS with the assistant supervision work of the facility designs for the Project.

2) Local Contractors

The local contractors in Vietnam are composed of both government enterprises under the Ministry of Construction and small private enterprises that were established after the introduction of a market economy. Many of the local contractors work in school facility construction projects. Thus, under the guidance of the Japanese contractors, the construction skills possessed by these local contractor enterprises can be utilized to meet the requirements for Project implementation. To simultaneously conduct construction work at the many Project sites that are widely scattered over the four provinces of the Northern Mountain Region, it is necessary to use more than one local contractor for the subcontractors. Also, it is

very important to carefully select the subcontractors so that all the school facilities will have the same uniform quality of construction. It is appropriate to choose subcontractors from Hanoi to have the consistent quality of construction.

3) Local Construction Materials

It is desirable to use local construction materials as much as possible for simplicity of operation and maintenance of the completed facilities as well as to keep these costs and expenses as low as possible. Since Vietnam adopted a market economy, it has become possible to procure basic construction materials of sufficient quality within the country, such as steel bars and cement. Thus, the facility designs and plans for the Project shall take into account the use of only local construction materials and equipment which will not require any special finishing materials or advanced construction methods, and will provide ease of operation and maintenance of facilities.

(6) Policies Regarding the Facility Operation and Maintenance Capability of the Project Implementing Agency

School facility operation and maintenance costs are financed with fees collected from the parents of students at each school by the People's Committee. The fee per student varies from school to school, but is in the range of 30,000 to 80,000 Vietnamese dongs (240 to 650 Japanese yen) per year. Although the amount is small, the financial burden of each family should be considered. In addition to the fee, parents of students and area residents provide the labor and materials for school facility operation and maintenance. Even so, the implementation of appropriate maintenance is not carried out. In view of the difficult financial situations of the schools, the facility designs for the Project buildings shall be prepared to use locally procured materials that will keep operation and maintenance costs to a minimum. In addition, the Project will make use of the software component to help promote the effective and continuous use of both new and existing school facilities. The proposal for the software component is described in Section 2-4-7.

(7) Policies Regarding the Grade of Facilities and Equipment

The grade of the Project facilities and equipment shall be of minimum quality, and shall be decided by taking the local specifications of school facilities into consideration,

as long as they satisfy the above-mentioned natural and socioeconomic conditions. The size and specifications of primary schools constructed by other donors will be used as a reference for the Project facility designs; however, a specific design for the Project will be prepared from the Project's own viewpoint in terms of cost reduction measures. Other rooms or facilities provided shall be based on the minimum necessary, like those provided in phase I of the Project; in this case, principal's rooms and teaching aid rooms. For this Project, the facility designs used for phase I of the Project shall be completely re-examined to satisfy the requirements for efficient and effective implementation plans, including further cost reductions, as laid out by the Japanese Grant Aid Cooperation. The facilities will be designed to maintain a certain level of quality, but reduce the costs of the construction.

(8) Policies Regarding Construction Schedules

The Project schools are widely scattered over the vast four provinces in the Northern Mountain Region, and the progress of Project construction will be more or less affected by the rainy season from June to September. During the rainy season, not only the local branch roads, but also the main road from Hanoi is cut off several times a year by floods. In general, it is considered highly likely that the transportation of equipment and materials to Project sites may be interrupted by floods. However, due to better road conditions, the period when access roads are unusable will be shorter in this phase of the Project than it was in Phase I of the Project, and so will not greatly affect the Project construction schedule.

In addition, the progress of work to be done by the Vietnamese side requires special attention and should be carefully monitored from the early design period stage. As construction cannot start until the Vietnamese side finishes necessary demolishing of existing buildings at the same Project sites, confirming that time schedules are being strictly adhered to is absolutely necessary.

The standard construction period shall be 8 months for single story school buildings and 10 months for two-storied school buildings. By taking into consideration the efficiency and the capability of local subcontractors, the entire Project construction period shall be 12 months. Considering the amount of construction work and the geological conditions at the Project sites, it is appropriate to divide the construction period into three years. The first stage will cover Bac Giang province, the second stage will cover Thai Nguyen province and the third stage will cover Tuyen Quang and Phu Tho provinces.