

2-4 Project Operation Plan

2-4-1 Management and Maintenance Plan

Upon the completion of the Project, the two Provinces will be responsible for the management and maintenance of the facilities. Hence, they will be obligated to manage and maintain these facilities appropriately.

2-4-1-1 Management Plan

A major purpose of the Project is to eliminate the number of schools adopting multiple-shift class system. Hence, even though the number of classrooms may increase as a result of Project construction, it is not anticipated that the number of students will rapidly increase. However, it should be secured to increase the number of teachers in the case that the number of students increases as a result of lowering of the enrollment age from eight to seven in primary education.

Concerned with securing the sufficient number of teachers, there are many qualified teachers who are seeking jobs in the urban districts of these two Provinces. Therefore, it is relatively easy to employ new teachers. Hence, neither the scarcity of teachers nor the issue of unqualified teachers will pose a problem.

2-4-1-2 Maintenance Plan

The maintenance activities of school facilities have been carried out under the responsibility of the schoolmaster within the budget appropriated to the school by the Province, including simple repairs such as repainting, re-flooring, and changing broken glass and/or light. Each school has a "School Management Committee" constituted of teachers, parents, and residents in the neighborhood. The Committee functions as the main organization for school management and maintenance. In many cases the school depends upon the Committee for maintenance work including labor in the repair of school equipment and furniture. The repair work of the larger scale goes beyond the capability of Provincial budget. At the same time, it is hardly possible to receive any subsidy from the National budget.

2-4-2 Management Cost

The estimated increase of management expenses (electricity, water, sewage, heating, and personnel) brought on by the implementation of the Project should be borne by the provincial government of Darkhan-Uul and Orkhon

(1) Electricity

The meter-rate system is (56 Tg/kw) in Mongolia, and electric fees at each school are calculated based on the estimate of electricity used. Since the duration of sunshine is long, little light is needed during the summer time (even in the second-shift classes). It is assumed that electricity for the lighting is used for lighting for 6 months (120 days) in winter each year and that electricity for motive power is used in total for 9 months each year excluding summer vacation.

(2) Water

Each Project school may use either city water or water gotten from water-supply wagons or wells. Based upon the standards of the two Provinces, it is estimated that the quantity of water used per day is 20 liters per person. Suppose that the facility is used for 180 days (20 days x 9 months) during one year. For a school that has no access to city water, it will use water supplied by water-supply wagons or by wells. The Mongolian side has not yet determined which water source will be used at each school. Hence, as a matter of convenience, it is assumed that a school will utilize water supplied by water-supply wagons.

a. City water	210 Tg/m ³
b. Water supplied by wagons	1,000 Tg/m ³

(3) Sewage Disposal Expense

The sewage treatment method used at each target school of the Project is either discharged into the public sewerage system or picked up by vacuum wagons. Based upon the standards of the two Provinces, the amount of sewage discharge per day is 20 liter per person. The expense of sewage disposal is estimated based upon the following rates, assuming that the facility is used for 180 days during a year.

a. Discharge into the public sewerage system	110 Tg/m ³
b. Dipping up by vacuum wagons	2,777 Tg/m ³

(4) Heating Expense

The power source of heating has two types: a central type from the City Heating Bureau or a regional heating system and a coal boiler installed at each school. In the central system, the rate is 210 Tg per month per 1m³ of a building floor. On the other hand, for the coal boiler owned by the school, the expense of heating is estimated by multiplying the cost of coals (14,000 Tg/t) by the average amount of monthly coal consumption. The period during which time a heating system is used is assumed to be 7 months from October to April.

(5) Labor Cost

This Project aim to shift from three-shift to double-shift teaching system. Under the current situation where 1 teacher is responsible for 1 homeroom, replacement of teachers among schools will not require the number of teachers. However, if the increase in the enrollment increase, the number of teachers needs to be increased.

As stated in Table 20, when the Government actually decides to lower the enrollment age in primary education, the number of teachers will rise in parallel with an increase in the number of students. Table 18 indicates an increase in the number of teachers at each target school under this Project. The calculation is done from the estimated number of children and necessary classes in case when children aged 7 and 8 are simultaneously enrolled at an elementary school. The difference in the number of classes is considered the increases in the classes for each Grade. The increased number of classrooms should be equal to the increased number of teachers.

Table 20: Increases of Teachers in Parallel with Lowering the Enrollment Age to 7

School Number	D-4	D-11	D-od	O-2	O-3	O-6	O-7	O-16	O-17	O-18	Total
No. of enrolled children aged 8	41	166	99	44	315	95	81	153	103	88	
No. of classes for the 1st grader	2	5	3	2	9	3	3	5	3	3	38
No. of enrolled children aged 7 and 8	81	332	198	88	629	189	161	305	206	175	
No. of classes for the 1st grader	3	10	6	3	18	6	5	9	6	5	71
Increased No. of classes	1	5	3	1	9	3	2	4	3	2	33

This Project includes three new schools, for each of which a new schoolmaster needs to be employed. His/her salary will become an increase in labor cost. Similarly, at a

school where a new boiler is installed, it will be necessary to hire two boiler engineers each, thereby also increasing the labor cost.

2-4-3 Maintenance Cost

For the maintenance of the facilities and equipment provided in the Project, the estimated increase of maintenance expenses should be borne by the provincial government of Darkhan-Uul and Orkhon.

(1) Maintenance of facilities

The following items as maintenance expenses for facilities should be secured.

① Maintenance for deterioration

For the maintenance of the facilities, the following items needs to be considered, and the activities shown in the brackets are necessary to deal with each of the problem.

- Stains on walls (Cleaning of outside bricks, repainting of inside walls)
- Faded colors and/or cracks on inside walls and ceilings (Repainting of inside walls and ceilings)
- Wear and tear or exfoliation on the finishing material on the vinyl sheet floor (Recovering of the floor material)
- Fading color of a blackboard (Repainting)
- Damages on the lighting system caused by getting old (To change bulbs)
- Leakage of water due to old waterproof material (To replace the waterproof material)

② Maintenance for broken portions of a building

- Door
- Window glass
- Toilet booth
- Bulletin board
- Damages on the plug
- Water faucet
- Stool for students

maintenance expenses for broken portions on a building under ② is funded as expenditures for large repairs. Besides the above, there may be troubles with equipment such as damages to a building caused by freezing, electric systems, water supply and drainage, or the heating and ventilating system. In this Project, however, very careful consideration is paid at the time of designing so that trouble does not happen. Hence, it is considered that no large-scale repair work will be required for the time being. Based upon the unit prices established by each Province for large-scale and small-scale repair work, the annual repair expense is estimated.

(2) Maintenance Expenses for Supplies

As stated earlier, "the School Management Committee" is responsible for maintenance, the Province does not fund the maintenance expenses for supplies.

2-4-4 Aggregating Management and Maintenance Expense

The increase in annual maintenance and maintenance expenses for both Provinces is shown in Table 21. The rate of an increase in expenses in the education budgets, which is brought by this Project, is estimated as an amount equivalent to about 4.23% in Orkhon Province and 1.73% in Darkhan-Uul Province. The education budget of Mongolia approximately doubled during the period of 5 years from 1997 to 2001 at a growth rate of 6-20% each year. The amount of expenditures incurred by the implementation of this Project is small in comparison to the growth rate of the entire education expenses. It is, therefore, inferred that the increase is an amount that can be sufficiently funded by both Provinces.

Table 21: Increase in Annual Maintenance and Management Costs Incurred
By This Project (1,000Tg)

Category	Orkhon Province	Budgetary ratio over 2001	Darkhan-Uul Province	Budgetary ratio over 2001
Facility maintenance expenses	6,495	0.28%	2,986	0.11%
Power rates	12,904	0.55%	6,046	0.22%
Water rates	6,932	0.29%	3,327	0.12%
Sewage disposal expenses	17,014	0.73%	8,150	0.29%
Heating expenses	29,121	1.25%	18,773	0.68%
Labor cost	25,920	1.11%	8,400	0.30%
Total	98,386	4.23%	47,682	1.73%

Chapter 3 Project Evaluation and Recommendations

Chapter 3: PROJECT EVALUATION AND RECOMMENDATIONS

3-1 Project Effect

(1) Direct Effect

By implementing the Project, the less congested classrooms will be realized at the Project schools, which means the decrease in the number of students per classroom. The number of the students per classrooms will decrease from 93.07 in 2000 to 59.10 in 2005 at the completion of the Project. In those schools, without the Project, the number of the students per classroom would increase to 117.62 in 2005. In 3 newly constructed schools in Gel areas, 44 classrooms will be constructed by the Project, which will accommodate 2,816 students in 2005. This means that the Project can provide better access to education for those who go to schools in the great distance (Table 2). Furthermore, by the increase in the number of the school facilities in Gel areas, the number of students in the urban schools will decrease, which will lead to the less congested classrooms among the other urban schools which are not part of the Project.

Table 22 Comparison of Number of Students per Classroom

Name of School		Yr 2000			Yr 2005			
		Enrollments	# of existing clrms	# of students per clrm	Projected Enrollment	# of clrms after Project	# of students per clrm (w/o Project)	# of students per clrm (after Project)
Darkhan-Uul	4	850	0 <14>	— <<60.71>>	1,330	21	—	63.33
	11	339	4 <10>	84.75 <<33.90>>	652	13	163.00	50.15
	D-od	107	0 <2>	— <<53.5>>	387	8	—	48.38
Orkhon	2	709	9 <14>	7.78 <<50.64>>	694	13	77.11	53.38
	3	2,893	29	99.76	3,023	45	104.24	67.18
	6	622	6	103.67	711	12	118.50	59.25
	7	787	8 <14>	98.38 <<56.21>>	1,002	17	125.25	58.94
	16	—	—	—	1,329	20	—	66.45
	17	—	—	—	793	12	—	66.08
	18	—	—	—	694	12	—	57.83
Total/Average		6,307	56 <89>	93.07 <<65.48>>	10,615	173	117.62	59.10

* 1 The bottom row of the 2000 includes the number of classrooms which are judged not usable

*2 No.11 in Orkhon Province has small classrooms with capacity of 20 students, but included in the calculation

(2) Indirect Effects

Because Gel areas are the areas which grow rapidly to accommodate inflow to urban areas, infrastructure development, including public facilities, has been quite insufficient. Thus, without available facilities for community activities for residents, community meetings have to be held outside. It is expected that the 3 new Project schools built in Orkhon Province will be used not only for school-related activities by the parents and PTA members, but also as public facilities by area residents. It is also expected that the Project facilities will be also utilized for other non-formal education programs in the area.

3-2 Recommendations

① Additional Facilities for 3 New Schools

For the 3 new schools, the facilities to be constructed in the Project are classrooms, teachers' rooms, and toilets. However, in order to make the school fully-functional, other facilities such as gymnasiums, library, special classrooms, principal's rooms, etc.. It is recommended that the Mongolian side, by its own efforts, construct these additional facilities making it possible to provide pupils with better learning environment.

② Possibility of the rapid increase in the number of students

MOSTEC has set 2005 as the target year for the completion of all schools in the country to have lowered the starting school age of children. The general understanding in lowering the age to 6 or 7 is that it should be done in the city areas prior to the rest of the nation. The starting school age of 7 beginning in 2004 was used in calculating the number of necessary classrooms for the Project. However, another possibility exists where the starting school age of 6 could begin in Darkhan-Uul and Orkhon Provinces earlier than in other Provinces of the country. If this is the case, the situation of classroom shortages may get worse. Therefore, it is suggested that MOSTEC and the administrations in both Darkhan-Uul and Orkhon Provinces take the appropriate budget actions to construct the necessary number of classrooms, before shortages get too serious.

③ Criteria for school selection

One major reason for the overcrowding of schools in city areas is, as mentioned above, the insufficient number of schools and classrooms outside the urban areas to keep a high enrollment, so many students go to the urban area schools. Many students, however, especially those of the junior secondary level (grade 5-8), tend to prefer to go to so-called "popular schools" which are regarded as the more advantageous and "best schools" for advancing to a higher education. The selecting of those schools instead of schools in their own residential area greatly contributes to the overcrowding of the city area schools. Such a tendency may make the alleviation of classroom congestion impossible to achieve.

Appendices

1. Member List of the Study Team

Basic Design Study Team (12 Jun. 2001~11 Jul. 2001)

1. Leader	Tomiaki ITO	Deputy Director, First Contract Division, Procurement Department, JICA
2. Project Coordinator	Aya KANO	Project Monitoring and Coordination Division, Grant Aid Management Department, JICA
3. Chief Consultant / Architectural Design	Shinichi URABE	Mohri Architect & Associates INC.
4. Social Study & Educational Planning I	Tetsuya MURAYAMA	Mohri Architect & Associates INC.
5. Architectural Planning I	Hisafumi MICHIKAWA	Mohri Architect & Associates INC.
6. Architectural Planning II	Ryuta INAGAKI	Yokokawa Architect and Engineers INC.
7. Facility Planning	Yutaka INAGAKI	Mohri Architect & Associates INC.
8. Quantity Survey, Construction & Procurement Planning	Yoshiaki ICHIBAGASE	Mohri Architect & Associates INC.
9. Interpreter	Toshiyuki HANDA	Yokokawa Architect and Engineers INC.
10. Coordinator	Kazuna KOIZUMI	Mohri Architect & Associates INC.

Draft Report Explanation Team (5 Nov. 2001~14 Nov. 2001)

1. Leader	Shoji FUTAMURA	Deputy Director, First Contract Division, Procurement Department, JICA
2. Project Coordinator	Aya KANO	Project Monitoring and Coordination Division, Grant Aid Management Department, JICA
3. Chief Consultant / Architectural Design	Shinichi URABE	Mohri Architect & Associates INC.
4. Facility Planning I	Hisafumi MICHIKAWA	Mohri Architect & Associates INC.
5. Quantity Survey, Construction & Procurement Planning	Yoshiaki ICHIBAGASE	Mohri Architect & Associates INC.
6. Interpreter	Toshiyuki HANDA	Yokokawa Architect and Engineers INC.

2. Study Schedule

2-1 Basic Design Study

Date			Schedule			
			JICA	Consultants		
1	12 Jun	Tue	Narita → UlanBator			
2	13 Jun	Wed	Courtesy call to EoJ, JICA, Ministry of Finance, Ministry of Foreign Affairs, UNICEF, ADB			
3	14 Jun	Thu	Courtesy call to Ministry of Education, Culture and Science			
4	15 Jun	Fri	Site visit at Project schools in Phase 1 Courtesy call to Darkhan-Uul Provincial Office, Explanatory Meeting			
5	16 Jun	Sat	Site Inspection			
6	17 Jun	Sun	Courtesy call to Orkhon Provincial Office			
7	18 Jun	Mon	Meeting at Orkhon Provincial Office, Explanatory Meeting, Site Inspection			
8	19 Jun	Tue	→ UlanBator			
9	20 Jun	Wed	Discussions on Minutes			
10	21 Jun	Thu	Discussions on Minutes			→ Darkhan-Uul Province
11	22 Jun	Fri	Signing on Minutes of Discussion, Report to EoJ and JICA			Site Inspection (D-9, D-
12	23 Jun	Sat	UlanBator → Osaka	→ Darkhan-Uul Province	→ Orkhon Province	Internal Meeting
13	24 Jun	Sun		Internal Meeting, Data Analysis		
14	25 Jun	Mon		School Meeting (D-16(Jiguur), Od)	Site Inspection (O-7,5)	Site Inspection (D- 4,11)
15	26 Jun	Tue		Meeting at Provincial Office	School Meeting (D-4, D-9)	Site Inspection (O-4, 16)
16	27 Jun	Wed		→ Orkhon Province Meeting with Dept. of Construction (Orkhon)	School Meeting (D-11) → Orkhon Province	Site Inspection (O-6, 17)
17	28 Jun	Thu		Architectural Survey	School Meeting (O-6)	Site Inspection (O-11, 3)
18	29 Jun	Fri		Architectural Survey	School Meeting (O-5, 11)	Site Inspection (O-2, 18)
19	30 Jun	Sat		→ UlanBator	School Meeting (O-2)	Internal Meeting
20	1 Jul.	Sun		Internal Meeting, Data Analysis		
21	2 Jul.	Mon		Meeting at MOECS	School Meeting (O-3, 7)	Site Inspection (Orkhon)
22	3 Jul.	Tue		Meeting at MOECS	School Meeting (O-4, 16)	Site Inspection (Orkhon)
23	4 Jul.	Wed		Meeting at MOECS	School Meeting (O-17, 18)	Meeting at Orkhon Provincial Office
24	5 Jul.	Thu		Meeting at MOECS	→ UlanBator	Architectural Survey
25	6 Jul.	Fri		Meeting at MOECS		Quantity Survey
26	7 Jul.	Sat		Internal Meeting, Data Analysis		→ Shanghai
27	8 Jul.	Sun		Internal Meeting, Data Analysis		Data Analysis
28	9 Jul.	Mon		Meeting at MOECS		Quantity Survey
29	10 Jul.	Tue		Report to EoJ and JICA		Quantity Survey
30	11 Jul.	Wed		UlanBator → Osaka		Shanghai → Narita

2-2 Explanation on Draft Final Report

Date			Schedule		
			JICA	Consultants	
1	5 Nov.	MON	Tokyo → Beijing		
2	6 Nov.	TUE	Beijing → UlanBator, Courtesy call to EoJ and JICA		
3	7 Nov.	WED	Meeting at Ministry of Finance, Ministry of Education, Culture and Science		Survey for Educational Equipment
4	8 Nov.	THU	Meeting at Ministry of Education, Culture and Science and Provincial Offices		Meeting at Ministry of Finance
5	9 Nov.	FRI	Site Inspection, Signing on Minutes of Discussion		Meeting at Bureau of Architectural Standards Survey for Educational Equipment
6	10 Nov.	SAT	Internal Meeting		
7	11 Nov.	SUN	Internal Meeting		
8	12 Nov.	MON	Meeting at Ministry of Finance, Ministry of Education, Culture and Science		Meeting at Bureau of Architectural Survey for Educational Equipment
9	13 Nov.	TUE	Report to EoJ and JICA		Meeting at Bureau of Architectural Survey for Educational Equipment
10	14 Nov.	WED	UlanBator → Beijing → Tokyo		

3. List of Parties Concerned in the Recipient Country

Ministry of Education, Culture and Science

Mr. ERDENESUREN Baatar	Vice Minister
Mr. GANSUKH Purevjav	Director, Economic-Monitoring and Assessment Department
Mr. BATJARGAL Ayush	Deputy Director, Economic-Monitoring and Assessment Department
Mr. N. Ayurzana	Economic-Monitoring and Assessment Department
Ms. BATZAYA Tsedev	International Cooperation Department
Mr. KITAO Yoshinobu	Education Policy Advisor
Ms. B. Oyunaa	Coordinator, MOSTEC-ADB ESDP
Mr. Chimedtseren	Public Administration Cooperation Department

Ministry of Foreign Affairs

Mr. GULGOU Jantsan	Deputy Director, Asia and America Department
Mr. DAVAAJARGAL Lundaa	Asia and America Department

Ministry of Finance and Economy

Mr. KHOSBAYAR Amarsaikhan	Department of Economic Cooperation Management and Cooperation
Ms. CHULUUN Luvsanbaldan	Department of Economic Cooperation Management and Cooperation
Mr. NASANBUYAN Lodoidamba	Department of Economic Cooperation Management and Cooperation

Darkhan-Uul Aimag

Mr. KHAYANKHIRVAA Damdin	Governor, Mayor of Darkhan City
Mr. BATSUKH Devee	Vice Governor
Mr. Gunchin	Chairman, Aimag Assembly
Mr. GAMBAT	Director, Urban Planning Department
Mr. Batjargal	Director, Social Development Policy Department
Mr. AMAGALAN	Education and Culture Center
Mr. Denjin	Social Development Policy Department

Orkhon Aimag

Mr. DAULETBAI Kaseni	Governor, Mayor of Erdenet City
Mr. D. Oyunbat	Vice Governor
Mr. G. Dugeree	Vice Mayor
Mr. G ANBOLD Huusin	Chief Officer, Governor's Office
Ms. Ts. Ariunaa	Director, Social Development Policy Department
Mr. P. Lkhagwasuren	Director, Industry, Agriculture and Environment Department
Mr. A. Dembererin	Education and Culture Center
Mr. GANBOLD Ishvaanjil	Chief Architect
Ms. D. Enkhtuya	Education Officer, Social Development Policy Department
Mr. B. Altankhuyag	Land Officer

Ministry of Environment

Mr. TSUBOUCHI Toshinori	JICA Expert
Mr. Sodnom	Department of Information, Monitoring and Assessment

Darkhan Metallurgical Kombinat

Mr. FUJIMOTO Yasushi	JICA Expert
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UNICEF

Ms. Gabriella De Vita	Assistant Representative
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Embassy of Japan

Mr. FUKAZAWA Hiroshi	First Secretary
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JICA Mongolia Office

Mr. MATSUMOTO Kenji	Resident Representative
Mr. YAMADA Akira	Resident Assistant Representative

4. Minutes of Discussions

Minutes of Discussions On the Basic Design Study On the Project for the Improvement of Primary Education Facilities (phase II) In Mongolia

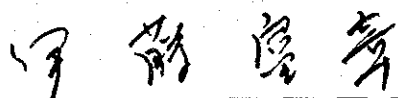
In response to a request from the Government of Mongolia, the Government of Japan decided to conduct a Basic Design Study on the Project for Improvement of Primary Education Facilities (phase II) (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent to Mongolia the Basic Design Study Team (hereinafter referred to as "the Team"), which is headed by Mr. Tomiaki Ito, the Deputy Director, First Contract Division, Procurement Department, JICA, and is scheduled to stay in the country from 12th June to 11th July, 2001.

The Team held discussions with the officials concerned of the Government of Mongolia and conducted a field survey at the study area.

In the course of discussions and field survey, both parties confirmed the main items described on the attached sheets. The Team will proceed to further works and prepare the Basic Design Study Report.

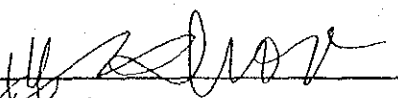
Ulaanbaatar, the 22nd June, 2001



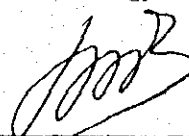
Mr. Tomiaki Ito
Leader
Basic Design Study Team
Japan International Cooperation Agency



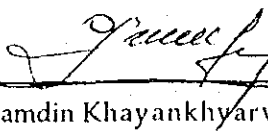
Mr. Baatar Erdenesuren
Deputy Minister
Ministry of Science, Technology Education and Culture
Mongolia



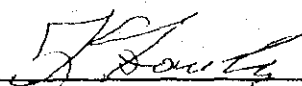
Mr. Jantsan Gulgou
Deputy Director
Asia and America Department
Ministry of Foreign Affairs
Mongolia



Mr. Khosbayar Amarsaikhan
Director General
Department of Economic Cooperation
Management and Coordination
Ministry of Finance and Economy
Mongolia



Mr. Damdin Khayankhyarvaa
Governor
Provincial Government of Darkhan Uul
Mongolia



Mr. Kaseni Dauletbai
Governor
Provincial Government of Orkhon
Mongolia

ATTACHMENT

1.Objective of the Project

The objective of the Project is to improve the educational environment by constructing/expanding school buildings.

2.Project sites

The sites of the Project are the Province of Darkhan Uul and the Province of Orkhon. The fifteen-(15) sites listed in Annex-1 have been confirmed as the candidate sites to be surveyed for the Project.

3.Responsible and Implementing Agency

3-1.The Responsible Agency is the Ministry of Science, Technology, Education and Culture hereinafter referred as "MOSTEC")

3-2.The Implementing Agency is MOSTEC, the Province of Darkhan Uul and the Province of Orkhon (hereinafter referred as " the Provinces".)

4.Items requested by the Government of Mongolia

After discussions with the Team, the items described in Annex-2 were finally requested by Mongolian side. JICA will assess the appropriateness of the request and will recommend to the Government of Japan for approval.

(1) Construction of the Buildings and Facilities

Details of items are listed in Annex-2.

(2) Procurement of the Equipment

Details of items are listed in Annex-2.

The final component of the Project, however, will be determined after further study.

5.Japan's Grant Aid Scheme

5-1. The Mongolia side understands the Japan's Grant Aid Scheme explained by the Team, as described in Annex-4.

5-2. The Mongolian side will take the necessary measures, as described in Annex-5, for smooth implementation of the Project, as a condition for the Japan's Grant Aid to be implemented.

6.Schedule of the Study

6-1. The consultants will proceed to further studies in Mongolia until 11th July, 2001.

6-2. JICA will prepare the draft report in English and dispatch a mission in order to explain its contents in mid-November, 2001.

6-3. In case that the contents of the report is accepted in principle by the Government of Mongolia, JICA will complete the final report and send it to the Government of Mongolia by early in March, 2002.

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7. Other relevant issues

7-1. Selection of Project Sites

Both Parties confirmed the criteria for the Site Selection listed in Annex-3. Project sites will be, however, determined by Japanese side according to the site survey and analysis in Japan, therefore the areas and schools listed in Annex-1 are not confirmed to be selected for Japan Grant Aid.

7-2. Design of Buildings

Both parties confirmed the principle for the design of buildings and equipment described below.

- 1) Building should be designed with respecting the standards, laws and regulations of educational facilities in Mongolia.
- 2) The number of classrooms should be designed with considering the needs necessary to comply with circumstances at present and in near future, such as school age population in a school district/its substitute.

The design, however, should be adequate, considering the present conditions.

7-3. Preparation of the Project site

The Mongolian side shall secure land for the Project, and clear, level and reclaim the site prior to the commencement of the Project. In addition, the Mongolian side shall also assure there will be no construction or any other project at the Project site.

7-4. VAT

The Mongolian side shall exempt Japanese juridical and physical nationals engaged in the Project from custom duties, internal taxes including VAT, and other physical levies which may be imposed in Mongolia regarding the procurement of equipment, material and services under the verified contract.

7-5. Environmental Impact Assessment

The Mongolian side shall confirm the requirement of the Mongolian Law on Environmental Impact Assessment related to the Project, and shall take necessary actions to obtain the formal approval from the Ministry of Nature and Environment prior to the commencement of the Project.

7-6 Allocation of teaching and administrative staff

The Mongolian side shall assign the sufficient number of teaching and administrative staff to satisfy the increase of the facilities by the implementation of the Project.

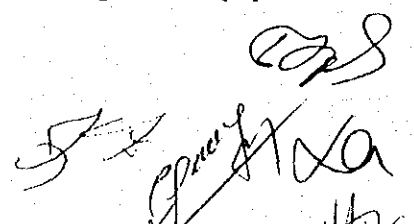
7-7. Steering Committee

For the sake of smooth implementation of the Project, the steering committee for the Project composed of MOSTEC, the Provinces and the ministries and agencies concerned will be established by the middle of July 2001, under the responsibility of MOSTEC. The Mongolian side will submit the member list of the above-mentioned committee to JICA Mongolia Office.

7-8. Maintenance

The Mongolian side shall ensure budget and personnel to maintain the buildings and equipment after the completion of the Project.

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7-9. Lowering of the school age and change of education system

The Mongolian side explained their policy to lower the school age, eight to six or seven, and to change the present education system (4-4-2) in future, and the Japanese side took note that explanation.

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Annex-1 The List of School to be Surveyed

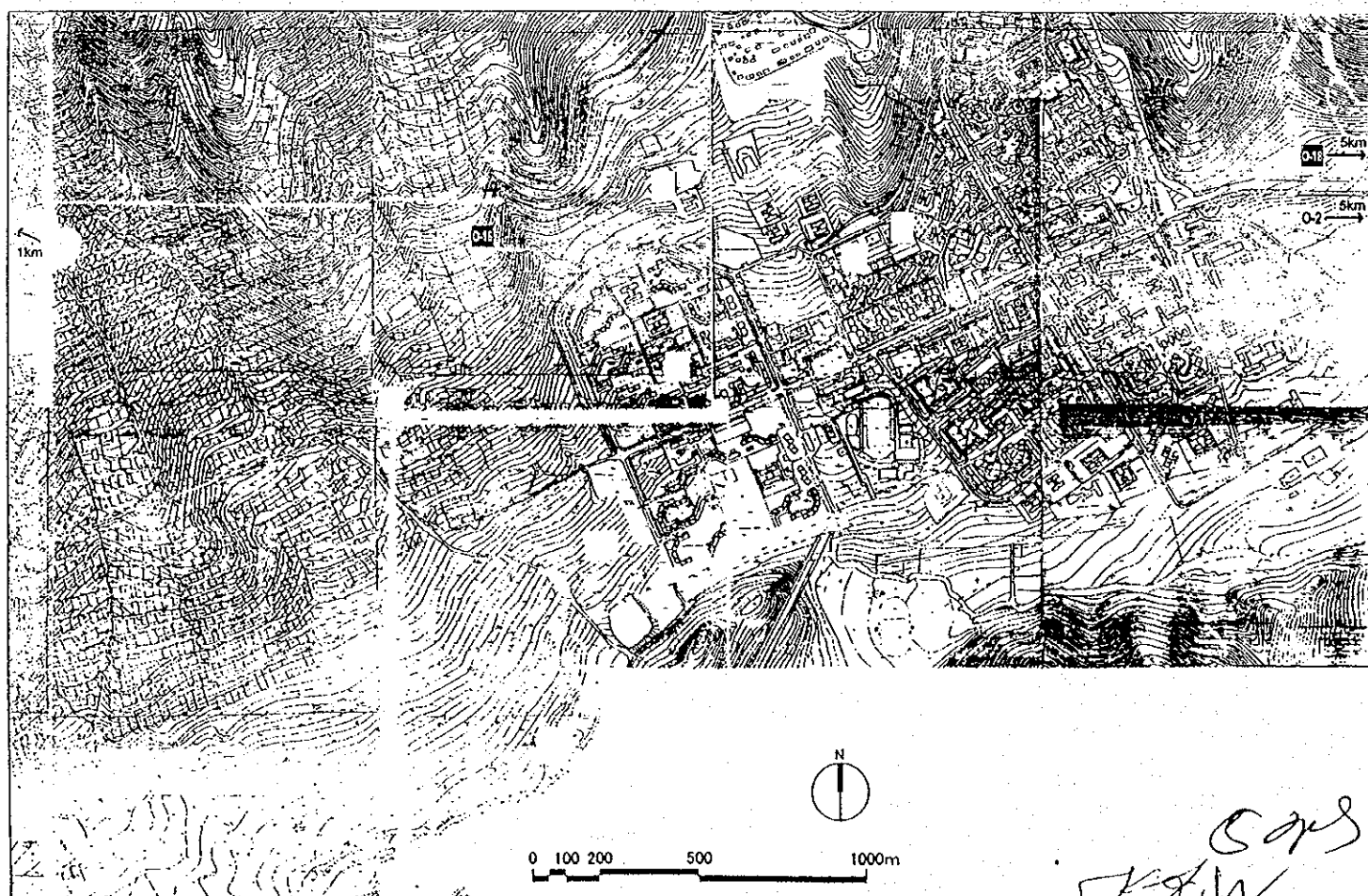
1. Darkhan-Uul Province

No.	School
1	No.4 school
2	No. 11 school
3	Od No.3 school
4	No. 9 school
5	Jiguur complex

2. Orkhon Province

No	School
1	New school (No. 16)
2	New school (No. 17)
3	New school (No. 18)
4	No. 3 school
5	No. 2 school
6	No. 5 school
7	No. 11 school
8	No. 7 school
9	No. 6 school
10	No. 4 school

The map of new schools are shown below.



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Annex-2 Requested Components

1 Facilities

- (1) Classrooms
- (2) Staff Rooms
- (3) Sanitation Facilities

2 Equipment

- (1) Desks and Chairs
- (2) Educational Materials and Equipment

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Annex-3 Criteria for the Site Selection

1. shortage of classroom, adoption of multiple shift
2. physical and structural conditions of the existing schools
3. pupil enrollment in the existing school, its school district and /or administrative district
4. ability of communities and school to carry out maintenance

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1. Grant Aid Procedure

1) Japan's Grant Aid Program is executed through the following procedures.

Application (Request made by a recipient country)

Study (Basic Design Study conducted by JICA)

Appraisal & Approval (Appraisal by the Government of Japan and Approval by Cabinet)

Determination of (The Notes exchanged between the Governments of Japan

Implementation and the recipient country)

- 2) Firstly, the application or request for a Grant Aid project submitted by a recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to determine whether or not it is eligible for Grant Aid. If the request is deemed appropriate, the Government of Japan assigns JICA to conduct a study on the request. If necessary, JICA send a Preliminary Study Team to the recipient country to confirm the contents of the request.

Secondly, JICA conducts the study (Basic Design Study), using Japanese consulting firms.

Thirdly, the Government of Japan appraises the project to see whether or not it is suitable for Japan's Grant Aid Programme, based on the Basic Design Study report prepared by JICA, and the results are then submitted to the Cabinet for approval.

Fourthly, the project, once approved by the Cabinet, becomes official with the Exchange of Notes signed by the Governments of Japan and the recipient country.

Finally, for the implementation of the project, JICA assists the recipient country in such matters as preparing tenders, contracts and so on.

2. Basic Design Study

1) Contents of the Study

The aim of the Basic Design Study (hereinafter referred to as "the Study"), conducted by JICA on a requested project (hereinafter referred to as "the Project"), is to provide a basic document necessary for the appraisal of the Project by the Government of Japan. The contents of the Study are as follows:

- a) confirmation of the background, objectives and benefits of the Project and also institutional capacity of agencies concerned of the recipient country necessary for the Project's implementation;
- b) evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from the technical, social and economic points of view;
- c) confirmation of items agreed on by both parties concerning the basic concept of the Project;
- d) preparation of a basic design of the Project; and
- e) estimation of costs of the Project.

The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid project. The Basic Design of the Project is confirmed considering the guidelines of Japan's Grant Aid Scheme.

The Government of Japan requests the Government of the recipient country to take whatever measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even through they may fall outside of the jurisdiction of the organization in the recipient country actually implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country through the Minutes of Discussions.

2) Selection of Consultants

For the smooth implementation of the Study, JICA uses a consulting firm selected through its own procedure (competitive proposal). The selected firm participates the Study and prepares a report based upon the terms of reference set by JICA.

At the beginning of implementation after the Exchange of Notes, for the services of the Detailed Design and Construction Supervision of the Project, JICA recommends the same consulting firm which participated in the Study to the recipient country, in order to maintain the technical consistency between the Basic Design and Detailed Design as well as to avoid any undue delay caused by the selection of a new consulting firm.

3. Japan's Grant Aid Scheme

1) What is Grant Aid?

The Grant Aid Program provides a recipient country with non-reimbursable funds to procure the facilities, equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under principles in accordance with the relevant laws and regulations of Japan. Grant Aid is not supplied through the donation of materials as such.

2) Exchange of Notes (E/N)

Japan's Grant Aid is extended in accordance with the Notes exchanged by the two Governments concerned, in which the objectives of the project, period of execution, conditions and amount of the Grant Aid, etc., are confirmed.

3) "The period of the Grant" means the one fiscal year which the Cabinet approves the project for. Within the fiscal year, all procedure such as exchanging of the Notes, concluding contracts with consulting firms and contractors and final payment to them must be completed.

However, in case of delays in delivery, installation or construction due to unforeseen factors such as weather, the period of the Grant Aid can be further extended for a maximum of one fiscal year at most by mutual agreement between the two Governments.

4) Under the Grant, in principle, Japanese products and services including transport or those of the recipient country are to be purchased.

When the two Governments deem it necessary, the Grant Aid may be used for the purchase of the products or services of a third country.

However, the prime contractors, namely consulting, contracting and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means persons of Japanese nationality or Japanese corporations controlled by persons of Japanese nationality.)

5) Necessity of "Verification"

The Government of the recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by the Government of Japan. This "Verification" is deemed necessary to secure accountability of Japanese taxpayers.

6) Undertakings required to the Government of the recipient country

- a) to secure a lot of land necessary for the construction of the Project and to clear the

- b) to provide facilities for distribution of electricity, water supply and drainage and other incidental facilities outside the site;
 - c) to ensure prompt unloading and customs clearance at ports of disembarkation in the recipient country and internal transportation therein of the products purchased under the Grant Aid;
 - d) to exempt Japanese nationals from customs duties, internal taxes and fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contracts;
 - e) to accord Japanese nationals whose services may be required in connection with the supply of the products and services under the verified contracts such as facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work;
 - f) to ensure that the facilities constructed and products purchased under the Grant Aid be maintained and used properly and effectively for the Project; and
 - g) to bear all the expenses, other than those covered by the Grant Aid, necessary for the Project.
- 7) "Proper Use"
The recipient country is required to maintain and use the facilities constructed and equipment purchased under the Grant Aid properly and effectively and to assign the necessary staff for operation and maintenance of them as well as to bear all the expenses other than those covered by the Grant Aid.
- 8) "Re-export"
The products purchased under the Grant Aid shall not be re-exported from the recipient country.
- 9) Banking Arrangement (B/A)
a) The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in a bank of Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the verified contracts.
b) The payments will be made when payment requests are presented by the Bank to the Government of Japan under an Authorization to Pay (A/P) issued by the Government of recipient country or its designated authority.
- 10) Authorization to Pay (A/P)
The Government of the recipient country shall bear an advising commission of an Authorization to Pay.

4. Necessary measures undertaking by each government

Major undertaking to be taken by each government is shown in the Appendix-1.

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K. P.

Appendix-1 Necessary measures undertaking by each government

NO	Items	To be covered by Grant Aid	To be covered by Recipient side
1	To secure the land for the Project and		●
2	To clear, level and reclaim the site when needed		●
3	To construct gates and fences in and around the site		●
4	To construct the parking lot	●	
5	To provide proper access road to the Project area, when needed		●
6	To remove existing facilities, when needed		●
7	To construct roads		
	1) Within the site	●	
	2) Outside the site		●
8	To construct the building	●	
9	To provide facilities for the distribution of electricity, water supply, telephone, sewage, drainage, heating and other incidental facilities		
	1) Electricity		
	a. The distributing line to the site		●
	b. The drop wiring and internal wiring within the site	●	
	c. The main circuit breaker and transformer	●	
	2) Water Supply		
	a. The city water distribution main to the site		●
	b. The supply system within the site (receiving and/or elevated tanks)	●	
	3) Drainage		
	a. The city drainage main (for storm, sewer and others) to the site		●
	b. The drainage system (for toilet sewer, ordinary waste, storm drainage and others) within the site	●	
	4) Gas Supply		
	a. The city gas main to the site		●
	b. The gas supply system within the site	●	
	5) Telephone System		
	a. The telephone trunk line to the main distribution frame / panel (MDF) of the building		●
	b. The MDF and the extension after the frame / panel	●	
	6) Furniture and Equipment		
	a. General furniture		●
	b. Project equipment	●	
10	To bear the following commissions to a bank of Japan for the banking services based upon the B/A		
	1) Advising commission of A/P		●
	2) Payment commission		●

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11	To ensure prompt unloading and customs clearance at the port of disembarkation in recipient country		
	1) Marine(Air) transportation of the products from Japan to the recipient country	•	
	2) Tax exemption and customs clearance of the products at the port of disembarkation		•
	3) Internal transportation from the port of disembarkation to the project site	•	
12	To accord Japanese nationals whose services may be required in connection with the supply of the products and the services under the verified contract such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work		•
13	To exempt Japanese nationals from customs duties, internal taxes, including VAT (Value Added Tax), and other fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contract		•
14	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid		•
15	To bear all the expenses, other than those to be borne by the Grant Aid, necessary for construction of the facilities as well as for the transportation and installation of the equipment		•

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Annex-5 Necessary Measures to be taken by the Mongolian Side

The Mongolian side will take necessary measures to:

- (a) to secure a lot of land necessary for the construction of the Project and to clear the site;
- (b) to provide facilities for distribution of electricity, water supply and drainage and other incidental facilities outside the site;
- (c) to ensure prompt unloading and customs clearance at ports of disembarkation in the recipient country of the products purchased under the Grant Aid;
- (d) to exempt Japanese nationals from customs duties, internal taxes and fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contracts;
- (e) to accord Japanese nationals whose services may be required in connection with the supply of the products and services under the verified contracts such as facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work;
- (f) to ensure that the facilities constructed and products purchased under the Grant Aid be maintained and used properly and effectively for the Project; and
- (g) to bear all the expenses, other than those covered by the Grant Aid, necessary for the Project.

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Minutes of Discussions
On the Basic Design Study On the Project for
the Improvement of Primary Education Facilities (phase II)
In Mongolia
(Explanation On Draft Report)

In June, 2001, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched a Basic Design Study Team on the Project for Improvement of Primary Education Facilities (phase II) (hereinafter referred to as "the Project") to Mongolia, and through discussion, field survey, and technical examination of the results in Japan, JICA prepared a draft report of the study.

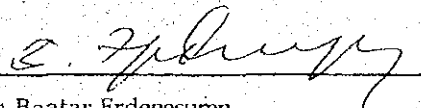
In order to explain and to consult with the official concerned of the Government of Mongolia on the components of the draft report, JICA sent to Mongolia the Draft Report Explanation Team (hereinafter referred to as "the Team"), which is headed by Mr. Shoji Futamura, the Deputy Director, First Contract Division, Procurement Department, JICA, from 6th November to 14th November, 2001.

As a result of discussions, both parties confirmed the main items described on the attached sheets.

Ulaanbaatar, the 13th November, 2001

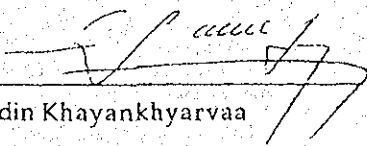
二 村 昌 治

Mr. Shoji Futamura
Leader
Draft Explanation Team
Japan International Cooperation Agency

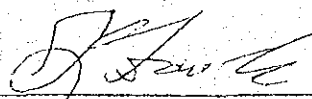


Mr. Baatar Erdenesuren
Deputy Minister
Ministry of Science, Technology, Education and Culture
Mongolia

Mr. Khosbayar Amarsaikhan
Director General
Department of Economic Cooperation
Management and Coordination
Ministry of Finance and Economy
Mongolia



Mr. Damdin Khayankhyarvaa
Governor
Provincial Government of Darkhan Uul
Mongolia



Mr. Kaseni Dauletbaev
Governor
Provincial Government of Orkhon
Mongolia

ATTACHMENT

1. Component of the Draft Report

The Government of Mongolia agreed and accepted in principle the components of the draft report explained by the Team. The selected schools are shown in Annex-1.

2. Japan's Grant Aid scheme

The Mongolia side understands the Japan's Grant Aid Scheme and the necessary measures to be taken by the Government of Mongolia as explained by the Team and described in Annex-5 and Annex-6 of the Minutes of Discussions signed by both parties on 22nd June, 2001.

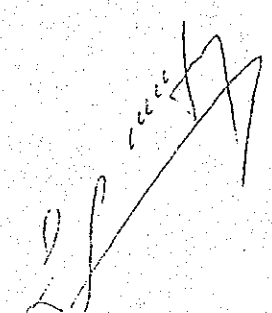
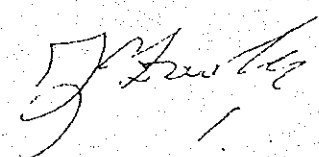
3. Schedule of the Study

JICA will complete the final report in accordance with the confirmed item and send it to the Government of Mongolia by early in March 2002.

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4. Other relevant issues

4-1. Preparation of the Project sites

The Mongolian side shall secure land for the Project, and clear, level and reclaim the sites prior to the commencement of the construction works. These preparation works shall be completed by October 2002, for phase-1 and by October 2003, for phase-2.

Phase 1; Orkhon No. 3, No. 16, No. 17, No. 18

Phase 2; Darkhan Uul No. 4, No. 11, Od. No. 3. Orkhon No. 2, No. 7, No. 6

4-2. Reform of Education System and Revision of the Educational Law

The Mongolian side explained their policy to lower the school age, from eight to six or seven, and to change the present education system (4-4-2). The Mongolian side also explained that the bill of revision of the Education Law for this reform is now under deliberation in the Parliament. The Mongolian side ensured that this bill would be passed and entrance to school from the age of seven would be implemented in the Province of Darkhan Uul and the Province of Orkhon by 2005. The Japanese side took note of the explanation.

4-3. VAT

The Mongolian side shall exempt Japanese nationals engaged in the Project from custom duties, internal taxes including VAT, and other fiscal levies which may be imposed in Mongolia regarding the procurement of equipment, materials and services under the verified contract. VAT imposed on services shall also be exempted.

4-4. Necessary Authorization

The Province of Darkhan Uul and the Province of Orkhon shall accord Japanese nationals engaged in the Project all necessary permissions, approvals, licenses, admissions, sanctions or any authorization required in Mongolia for executing the Project, or shall extend assistance to Japanese nationals in obtaining such necessary permissions promptly. MOSTEC shall also monitor and supervise the progress of obtaining such authorization.

4-5. Plan of Converting into Dormitory

The Mongolian side explained their plan to convert 6 classroom of Darkhan Uul No. 11 School into dormitory. The Japanese side took note of the explanation.

4-6. Steering Committee

The Team confirmed a member's list of the steering committee described in the Minutes of Discussions signed by both parties on 22nd June, 2001.

4-7. Allocation of Students

The Team explained the necessity of appropriate allocation of students for maximization of the effects of the Project.

4-8. Allocation of Budget and Personnel

The Mongolian side shall secure budget and personnel, especially teaching staff, for implementation and for operation/maintenance of the facilities and equipment.

4-9. Construction of the Slope

The Mongolian side requested the Team to construct a slope for handicapped students beside entrance steps at Orkhon No. 7 School. The Team took a note of the request.

Annex-1 The List of Selected Schools

1. Darkhan-Uul Province

No.	School
1	No.4 school
2	No. 11 school
3	Od No.3 school

2. Orkhon Province

No	School
1	New school (No.16)
2	New school (No.17)
3	New school (No.18)
4	No. 3 school
5	No. 2 school
6	No. 7 school
7	No. 6 school

NOTE; The number doesn't indicate the priority.

5. Cost Estimation Borne by the Recipient Country

School	Site Measurement	Grading		Surface obstacles removal	Infrastructure Connection				Exterior works		B/A, A/P commission	Total
		Cut	Backfill		Water pipe	Sewage pipe connection	Heating pipe connection	Electric power	Fence	Gate		
Stage 1												
O-3	432	0	0	0	400	400	1,000	35	0	0		
O-16	432	1,559	1,313	0	0	0	0	700	6,480	108		
O-17	432	0	0	0	0	0	0	350	6,561	108		
O-18	432	3,807	3,207	0	0	0	0	350	6,910	108		
	1,728	5,366	4,520	0	400	400	1,000	1,435	19,951	324	3,505	38,629
Stage 2												
D-4	432	0	0	464	0	0	5,000	490	0	0		
D-11	432	0	0	0	400	400	0	175	0	0		
D-od	432	0	0	291	400	400	1,000	280	4,830	108		
O-2	432	1,577	1,329	0	400	400	1,000	35	4,830	0		
O-6	432	0	0	129	400	400	1,000	35	0	0		
O-7	432	1,980	1,146	0	400	400	1,000	35	4,147	0		
	2,592	3,557	2,475	884	2,000	2,000	9,000	1,050	13,807	108	3,747	41,220

(1,000Tg)

6. References

1. National Statistical Office of Mongolia (2001) Mongolian Statistical Yearbook.
2. Project Implementation Unit MAP-21 (1999) Mongolian Action Programme for the 21st Century MAP-21.
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8. Ministry of Science Technology, Education and Culture (2000) Mongolia Education Sector Strategy 2000-2004.
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10. Bureau of the Architectural Standards (1998) Architectural Standards of Educational Facilities.

JICA