



Report and Recommendation of the President to the Board of Directors

Project Number: 39254
October 2008

Proposed Asian Development Fund Grant Mongolia: Education Sector Reform Project

Asian Development Bank

CURRENCY EQUIVALENTS

(as of 28 October 2008)

Currency Unit	–	togrog (MNT)
MNT1.00	=	\$0.000874
\$1.00	=	MNT1,144

ABBREVIATIONS

ADB	–	Asian Development Bank
ADF	–	Asian Development Fund
CPD	–	continuous professional development
EDCM	–	Education Donors' Consultative Mechanism
EFA-FTI	–	Education for All-Fast Track Initiative
EMIS	–	education management information system
ESDP	–	Education Sector Development Program
ESMP	–	Education Sector Master Plan
GDP	–	gross domestic product
ICB	–	international competitive bidding
ICT	–	information and communication technology
IIREM	–	ICT for Innovating Rural Education in Mongolia
JICA	–	Japan International Cooperation Agency
LTM	–	learning and teaching material
MCC	–	Millennium Challenge Corporation
MECS	–	Ministry of Education, Culture, and Science
MIS	–	management information system
MOF	–	Ministry of Finance
MSUE	–	Mongolian State University of Education
NCB	–	national competitive bidding
NGO	–	nongovernment organization
O&M	–	operation and maintenance
PIU	–	project implementation unit
PMU	–	project management unit
PPMS	–	project performance management system
PSTT	–	pre-service teacher training
PSC	–	project steering committee
QCBS	–	quality- and cost-based selection
SEDP	–	Second Education Development Project
SCUK	–	Save the Children UK
SWAp	–	sector-wide approach
SY	–	school year
TA	–	technical assistance
TEDP	–	Third Education Development Project
TTI	–	teacher training institute
UNICEF	–	United Nations Children's Fund

GLOSSARY

<i>aimag</i>	–	administrative unit (provincial)
<i>bagh</i>	–	administrative unit (subdistrict)
<i>ger</i>	–	traditional tent
<i>soum</i>	–	administrative subunit of an <i>aimag</i> (district)

NOTES

- (i) The fiscal year of the Government and its agencies ends on 31 December.
- (ii) In this report, "\$" refers to US dollars.

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GRANT AND PROJECT SUMMARY

Recipient	Mongolia
Classification	Targeting classification: Targeted intervention Sector: Education Subsector: Education sector development Theme: Inclusive social development, gender and development Subtheme: Human development
Environment Assessment	Category C
Project Description	<p>The Education Sector Reform Project will build on the achievements of three previous projects that supported major sector reforms, helped the Government to reorient the education system to the needs of the market economy, and rehabilitated schools. The Project will support the Government to improve the quality and relevance of primary and secondary education with a view to shifting to a 12-year education system. The Project has four components: (i) improving education planning, management, and budgeting; (ii) strengthening pre-service teacher training (PSTT); (iii) enhancing the quality, affordability, and levels of provision of textbooks and other teaching and learning materials, including enhanced innovation in the use of information and communication technology (ICT) in the classroom; and (iv) providing better learning conditions by upgrading the physical infrastructure of teacher training institutes (TTIs).</p>
Rationale	<p>Progress has been made in the education sector over the past decade, partly as a result of effective working relationships between the Government and the Asian Development Bank (ADB) and the other key development partners. However, support is still needed to reform and transform the education system and to upgrade essential services and facilities. ADB has supported the Government to move from an 11-year to a 12-year education system, which will align Mongolia's education system with international standards. Successful implementation of this policy will require a comprehensive reform of the PSTT, reducing the cost and improving the provision of textbooks, streamlining education finance, budgeting and planning, introducing innovative approaches to education by enhancing the use of ICT for education, and improving TTI facilities in support of comprehensive reforms in PSTT. The Project will support the Government to implement this policy effectively and efficiently and to ensure it is sustainable.</p>
Impact and Outcome	<p>The impact of the Project will be improved quality, access, efficiency, and effectiveness of the 12-year education system. The outcome of the Project will be an effective 12-year education system.</p>

Project Investment Plan The project investment cost is estimated at \$10,830,000, of which \$10,000,000 will be financed from Asian Development Fund (ADF) grant funds and \$830,000 will be financed by the Government in the form of taxes and duties.

Financing Plan

Financing Plan
(\$ million)

Source	Total	%
Asian Development Bank	10.00	92.34
Government of Mongolia	0.83	7.66
	10.83	100.00

Source: Asian Development Bank estimates.

Grant Amount ADB will provide a grant of \$10 million from ADB's Special Fund resources to finance 92.34% of the total project cost.

Period of Utilization Until 30 September 2013

Estimated Project Completion Date Until 31 March 2013

Executing Agency Ministry of Education, Culture, and Science (MECS)

Implementation Arrangements A project steering committee (PSC), chaired by the state secretary of MECS, will include senior officials of the Ministry of Finance and MECS, and project *aimag* representatives will provide overall guidance. The PSC will provide strategic guidance, monitor implementation, and ensure funding agency coordination. The PSC will meet quarterly and will be responsible for approving the annual project budget and activity plan and for reviewing and advising on implementation progress. The Project will be implemented through the current project implementation unit (PIU) established under the Education Sector Development Program, Second Education Development Project, and Third Education Development Project, staffed by a project manager and five additional staff, who will be responsible for the overall implementation of activities. The PIU will report to the project director and provide quarterly result-based progress reports to the PSC, MECS management, and ADB.

Procurement Goods and services financed by ADB will be procured in accordance with its *Procurement Guidelines* (2007, as amended from time to time). Procurement of civil works will be carried out through national competitive bidding. Procurement of equipment will be performed through international competitive bidding and national competitive bidding satisfactory to ADB, and shopping.

Consulting Services A total of 18 person-months of international consulting services and 150 person-months of national consulting services will be contracted under the grant funds. The international and national consultants will have expertise in (i) education finance, management, and planning; (ii) textbook provision systems, cost reduction strategies, and textbook

publishing skills; (iii) development and implementation of national strategies for ICT in education, the use of ICT as a learning and teaching tool, and local language educational software development; (iv) all aspects of PSTT; and (v) monitoring and evaluation. Consultants will be selected and engaged in accordance with ADB's *Guidelines on the Use of Consultants* (2007, as amended from time to time).

Project Benefits and Beneficiaries

Students enrolled in primary and secondary schools will be direct beneficiaries of the modernization of the education system. Nationwide, about 540,000 students and their parents will gain from the improved affordability, cost, and durability of textbooks and learning materials. About 110,000 students from poor families will benefit from better targeting of free textbook provision under the Project. About 10,000 student teachers and 1,200 teacher educators throughout the country will benefit from improvements to PSTT in five TTIs and from upgraded teaching and learning facilities. Graduates of these TTIs entering the teaching labor force will be able to improve education quality and to close the urban–rural gap in education achievement. Students and communities in rural areas will benefit from ICT centers of excellence. Other specific project benefits will include: increased planning and management capacity of MECS and local education staff, leading to an improved sector-wide approach (SWAp); and better planning and implementation of ICT investments.

Risks and Assumptions

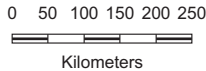
Successful implementation of the Project rests on the assumption that the Government will (i) maintain a high level of budget allocation for the education sector; (ii) be committed to improving funding agency coordination to strengthen the effectiveness and efficiency of the delivery of education services; (iii) maintain its commitment to carry out education reforms, including national curriculum reform; (iv) provide an adequate budget to provide PSTT; and (v) reform the textbook provision system. To achieve its impact, the Project assumes that further steady economic growth in Mongolia will create new job opportunities for graduates. The managerial and technical capacity of MECS is limited in some areas and this might affect the smooth implementation of the extension of the school system to a 12-year system and the introduction of the new textbook provision and reforms in PSTT. This risk will be mitigated through training and capacity building under the Project. A high turnover of officials and senior staff in key agencies, resulting in slow progress or resistance to reforms, is also a risk. That risk will be mitigated through assurances confirming the Government's commitment to education reforms and by adopting a stakeholder participatory approach, and building core technical and management capacity in MECS through the Project and the ADB-funded SWAp technical assistance.

MONGOLIA EDUCATION SECTOR REFORM PROJECT

RUSSIAN FEDERATION



PEOPLE'S REPUBLIC
OF CHINA



- National Capital
 - Provincial Capital
 - City/Town
 - Main Road
 - Provincial Road
 - Railway
 - River
 - Provincial Boundary
 - International Boundary
- Boundaries are not necessarily authoritative.

I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on a proposed grant to Mongolia for the Education Sector Reform Project.

II. RATIONALE: SECTOR PERFORMANCE, PROBLEMS, AND OPPORTUNITIES

2. The Government of Mongolia considers improving the quality of the education system, enhancing access to basic education, and improving higher education to be key instruments to reduce poverty, accelerate economic growth, and reduce disparities in the development process, particularly between rural and urban areas. In accordance with the Government's development strategy, the Project is included in the Asian Development Bank's (ADB's) country operations business plan for Mongolia, 2008–2010.¹ The design and monitoring framework is in Appendix 1.

A. Performance Indicators and Analysis

3. In 1990, immediately before the break-up of the Soviet Union, Mongolia had a high gross enrollment ratio and adult literacy rate. Cessation of Soviet financial and technical support had a dramatic impact on educational provision, quality, and standards and by 1995 the gross enrollment ratio had fallen to 81%. Since this low point, Mongolia has made notable progress toward re-developing its education sector. In 2006, the gross enrollment rate had recovered to 95% for primary and secondary education, and the adult literacy rate had been maintained at 97%. Annual public expenditure on education is high (about 7% of gross domestic product) in comparison with that of many neighboring countries.

4. The ongoing partnership between the Government and ADB and other major funding agencies (notably the Embassy of Japan in the education sector) has been a major factor in the speed of the education sector's recovery. ADB assistance for the education sector began with the Education Sector Development Program (ESDP), which was approved in 1996. ESDP succeeded in implementing measures to rationalize the education system, improve cost recovery, support privatization and private sector provision, strengthen management capabilities, and upgrade education content. It contributed significantly to increasing enrollment rates from 81% in 1996 to 91% in 2002, to decreasing dropout rates from 3.5% to 2.3% over the same period, and to improving the effectiveness of the system and the quality of education services. A post-project performance evaluation in April 2007 rated the program "highly successful". Under the Second Education Development Project (SEDP) and Third Education Development Project (TEDP), approved in 2002 and 2006 respectively, key initiatives supported by ADB have included in-service teacher training, development of curriculum and state education standards, enhancing education management and planning, and rehabilitation of schools and learning spaces. ADB's recent country assistance program evaluation report for Mongolia² rated assistance to education as the best performing part of ADB's portfolio. The proposed Project and the ongoing TEDP are complementary: (i) TEDP supports the development of curriculum and education standards and the proposed Project will support development and provision of textbooks that incorporate the new curriculum; (ii) TEDP supports the national accreditation of teacher training institutes (TTIs) and the proposed Project will enhance overall quality of pre-service teacher training (PSTT); and (iii) TEDP supports in-service teacher training centers (focusing on moving from lecturing to interactive learning, using computer-based problem solving techniques) and the proposed Project supports the use of information and communication technology (ICT) for education and the establishment of ICT centers of excellence (focusing on training and strengthening the skills of teachers to integrate ICT as a teaching and learning tool).

¹ ADB. 2007. *Country Operations Business Plan (2008–2010): Mongolia*. Manila.

² ADB. 2008. *Country Assistance Program Evaluation for Mongolia*. Manila.

5. Although substantial progress has been made in expanding access to education and implementing reforms that strengthen the sector, further focused support is needed in some key areas to improve and sustain education quality. Despite achievements in Mongolia's education sector, a significant proportion of children in rural areas still do not attend primary or secondary school.³ In the countryside, 8% of all children aged 7 to 15 have never enrolled in school, 19% drop out before completing grade 8, and only 55% of students (45% in rural areas) complete upper secondary education. Improving net enrollment rates in rural areas remains a challenge, and there are significant gaps in performance on student achievement tests and progression rates in school for students from rural areas.⁴ Rural–urban migration has brought new challenges in the education sector, as schools in urban centers have seen demand for services increase substantially, while some rural schools are now operating below capacity as a result of outflows from their catchment areas.

6. The Mongolian education system is currently undergoing a major change to align it with international standards. According to Clause 7.2 of the Law on Education, with effect from school year (SY) 2008–2009, the school system will move from an 11-year to a 12-year system, and the school entry age will be lowered from 7 to 6 years. Approximately 43,000 6-year-olds are expected to join the formal education system in 2008. The change will increase total enrollments by about 9% and place greater demands on school and classroom capacity, teaching skills, and the provision of a range of teaching and learning materials. In addition, this transition will require adjustments to the curriculum, PSTT programs, teaching and learning materials, and age-appropriate school facilities for 6-year-old pupils. The Government has a plan in its budgetary framework to finance school facilities for 6-year-old pupils in primary schools, and has allocated funds in the 2009 budget for school facilities for this age group. The Government's commitment is reflected in the Letter of Assurance in Supplementary Appendix F. There will also be an impact on related recurrent costs, budgeting, and management requirements. An overview of the Mongolian education sector and its performance is in Appendix 2. The planned transition to a 12-year school system has brought a new range of concerns about access and quality of education in Mongolia and the key constraints noted above, which are critical to efforts to improve the access and quality of education services, need to be addressed. A timely opportunity now exists for the Education Sector Reform Project to support the Government to move to a 12-year education system in 2008 and to help project beneficiaries (educators, pupils, and parents) to meet the new challenges under the new system.

B. Analysis of Key Problems and Opportunities

7. The Mongolian education system still faces rural–urban disparities in educational achievement; low quality of PSTT; inefficiencies in educational planning and management; and challenges in the provision of low-cost, high-quality textbooks and other learning materials, including the introduction and effective use of ICT in primary and secondary education across the curriculum. The physical infrastructure of TTIs is in urgent need of repair, which reflects shortages in government financing of higher education institutions.

8. **Poverty and Education Costs to Parents.** Poverty continues to be a major national problem, with 32.2% of the population officially categorized as below the poverty threshold.⁵ The poverty levels are much higher in rural than in urban areas, although inward migration to urban areas has created growing pockets of poverty in *ger* settlements. While the percentage of the population below the poverty threshold is decreasing in urban areas, the gap between urban and rural poverty is widening and in the Western Region, 51% of the population is below the poverty

³ United Nations Development Programme (UNDP). 2007. *MDG Implementation. Second National Report*. Mongolia.

⁴ World Bank. 2008. *Mongolia: Public Expenditure and Financial Management Review*. Washington, DC.

⁵ Established at \$2.00 per day, and based on the World Bank Living Standard Measurement Surveys (1998–2002 and 2006).

threshold. Poverty has a significant impact on school attendance and on school quality. Focus group discussions conducted in seven *aimags* with parents, teachers, and *aimag* education officials revealed that in every *aimag* the costs of education to parents, including the costs of textbooks, stationery, school uniforms, and travel to school are major concerns. The World Bank's Household Income and Expenditure Survey (2002/2003) indicates that textbooks are the highest expenditure item in household spending on education, accounting for 46% of educational spending at the primary level and 43% at secondary level. For the poorest segment of the population, textbook costs account for 59% of educational expenditures for primary education and 58% for secondary education. The Government's policy of free textbook allocations to 20% of the students is insufficient given the national poverty level of 32%. It is also not well targeted, and is reported to be administered inefficiently. For families with more than one child of school age to educate, migrants to Ulaanbaatar, and families in rural areas education may be unaffordable, resulting in lower participation in education and higher dropout rates.

9. **Government Financing of Education.** School surveys and focus groups revealed that teachers and school principals are concerned about inadequate capital investment and operational budgets. Funding for maintaining fixed assets is inadequate, leading to shorter asset life cycles and the poor condition and degradation of school buildings and other infrastructure. The guidelines on fixed costs need to be revised to ensure that the ceilings sufficiently cover all relevant expenditure items to minimize cost underruns experienced by most schools. The Government recentralized education financing in 2002, but inconsistencies in budget approval and disbursement remain, as recentralization has not occurred in one-third of schools (those located in Ulaanbaatar). The shift to the 12-year education structure has far-reaching implications for the Government's recurrent costs, budgeting, and management requirements. Increased education enrollments by over 40,000 (9%) per year will also require investments in additional facilities for very young children. An overview of financing in education is in Appendix 2.

10. **Rural–Urban Discrepancies in Education Quality.** A significant proportion of the children in rural areas still do not attend primary or secondary school.⁶ Despite improvements in school attendance over the past 5 years, rural students are still at a disadvantage. In particular, many rural schools closed their upper secondary classes during the school reorganization and rationalization reform in 1997, while provincial center complex schools have only limited numbers of upper secondary spaces. There is a widespread public perception that the quality of education in rural areas is inferior to that in urban areas, which is confirmed by significant gaps in performance. The prospect of moving nearer to better education facilities and opportunities in urban areas is reported to be a major cause of migration to urban areas, especially for women.⁷

11. **Curriculum Reform and the Provision of Teaching and Learning Materials.** The 11-year education system launched in 2005 was accompanied by the development of new state education standards. However, these standards need to be simplified as teachers and teacher educators find them difficult to translate into clear student competencies. The curriculum remains overloaded with content and the assessment system does not test the new skills and competencies that have been added to the existing content requirements. The shift to the 12-year structure will require further reform of the curriculum and a new set of state education standards. A new curriculum is being developed under the ADB-funded TEDP and it will be completed during SY2008–2009 and piloted during the following year. The state education standards date from 2004 and will be revised in 2009. This will require the revision and/or re-publication of all textbooks and teachers' guides from 2010. The development of textbooks and teachers' guides was liberalized and privatized from 2005 and currently private publishers compete in the supply of course materials, which are selected by individual schools. However, the new system is not working

⁶ UNDP. 2007. *MDG Implementation. Second National Report.* Mongolia.

⁷ Steiner-Khamsi, Gita, Stolpe, Ines, and Sengedorj, Tumendelger. 2003. Bolovsrolyn tolookh nuudel [School-Related Migration in Mongolia]. *Shine Tol'. Mongolian Journal of Social Sciences* 45 (4): 82–112.

effectively as school administrators, teachers, and parents have expressed concerns about textbook cost, durability, and availability. Full ownership of a complete set of textbooks is achieved by only 37% of students.⁸ Teachers have to purchase their own copies of students' textbooks and the associated teachers' guides. Many cannot afford to do this, which has implications for the quality of the education offered. There also are reported problems with textbook content and with the textbook submission, evaluation, and approval systems. Corruption is reported to be prevalent in the selection and procurement of textbooks, uniforms, and school lunches, and textbook procurement is not covered by the Public Procurement Law.⁹ The current curriculum and the associated textbook problems must be resolved if access to good textbooks is to improve.

12. Pre-Service Teacher Training. One of the main constraints on improving educational quality is the inadequacy of the PSTT system. The teaching profession has suffered a demotion of status, resulting in a shortage of qualified teachers, especially in rural areas. The distribution of teachers is unequal among regions, with disadvantaged areas typically receiving less well-trained teachers. Overall, only 40% of the graduates from TTIs go to work in schools, and fewer still go to work in rural schools, although the Ministry of Education, Culture, and Science (MECS) has introduced financial incentives for teachers in rural areas. University admission requirements for teachers are much lower than for other professions, and are particularly lower for teacher training colleges in provincial cities, compared to TTIs in Ulaanbaatar, as demand for teacher training courses has declined in the provinces.¹⁰ Low entry standards have lowered the standard of teacher graduates. The financing system for higher education, in which all revenues come from tuition fees, means TTIs lack incentives to offer teacher training programs and some have opted to offer other programs that generate more revenues. The adoption of a new student-centered curriculum puts a high premium on effective teacher training and requires pre-service training institutions to provide a range of professional skills required by schools to launch an effective student-centered curriculum. An overview of TTIs is in Supplementary Appendix C.

13. Poor Maintenance of Teacher Training Institutes. Higher education has undergone profound changes since Mongolia's independence, including deregulation and a rapid increase in private higher education institutions, a considerable increase in student enrollments over the last 15 years, and significant changes in government funding of higher education. Faced with priorities for funding primary and secondary education, the Government has cut spending on higher education and introduced fees, which institutions used to offset the loss of direct state funding. From 1997, only heat, water, and electricity costs have been covered by the Government but from 2001 to 2007 even this funding has been limited, despite the 1998 education law, which made specific provision for it. The impact of current funding policies on the quality of provision of PSTT has been significant. Mongolia's TTIs have received very little maintenance and repair for over a decade. Many provide substandard learning environments and spaces. They are in urgent need of investment in laboratories, libraries, ICT, and refurbishment, and such investments are needed to support the proposed reforms in PSTT under the Project. Very little funding is allocated to teaching and learning facilities (for example, to books and journals in the library or to the Internet and e-learning facilities). A generally perceived view is that the physical working environment is not "fit for purpose", with outdated facilities and equipment being the major concern.

14. ICT in Education Policies and Strategies. The Education Sector Master Plan (ESMP) 2006–2015 confirmed that MECS intends to develop ICT capacity and usage across the curriculum

⁸ UNICEF Learning Achievement Study (2008) and project preparatory TA School Survey (2008).

⁹ ADB. 2008. *Risk Assessments and Risk Management Plans for National Systems and the Education and Urban Infrastructure Sectors in Mongolia*. Manila.

¹⁰ At the Mongolian State University of Education (MSUE), the admission requirement for teachers is 350–450 points out of a maximum of 800 in the general education state examinations. The entry level can be as low as 200–250 points in TTIs outside Ulaanbaatar. In contrast, journalism and economics and statistics programs offered at MSUE require a minimum score of 600 points.

(i.e., in all subjects and at all grade levels). ESMP sets targets for levels of computer provision at primary schools (1 computer per 250 students), secondary schools (1 computer per 50 students), and high schools (1 computer per 5 students). In addition, the Government is experimenting in a number of pilot schools with the use of the XO low-cost laptop for all pupils in grades 2–5 as part of the one-laptop-per-child scheme. However, at present there is no clearly defined national ICT strategy and no forward projections or calculations have been undertaken to estimate the total cost implications (total cost of ownership) of any of these targets, nor is there a strategy for the use of computers across the curriculum. Schools complain that their operational budgets are insufficient to pay for recurrent ICT costs (power, telecommunications, maintenance and servicing, and consumables) and there is inadequate investment in teacher training in the effective use of ICT as a teaching and learning tool and in the development of appropriate software in the Mongolian language. Research studies by ADB indicate the potential high cost and low effectiveness of unplanned approaches to ICT provision, the importance of a comprehensive national strategy for ICT in education, and a clear understanding of the downstream cost implications.¹¹

15. **Gender Imbalances in Education.** Girls outnumber boys in school in every *aimag* and in Ulaanbaatar. Eighty percent¹² of students completing secondary education are female, as are 63% of tertiary undergraduates. Girls outnumber boys in every higher education discipline except for art, architecture, and engineering. The disparity between boys and girls is highest in rural areas where dropout rates for boys are much higher than for girls. Boys are expected to undertake herder roles while families encourage and support girls to enter education as a means of providing for themselves. The sharp increase in the direct costs of education has increased these gender disparities, since the cost of boys' education is now a direct charge on families rather than a charge on the state as it was during the central planning period.¹³

16. **Project Rationale.** Despite progress in the education sector over the past decade, in part because of the effective working relationship between the Government and ADB, continuing support for reform, transformation of the education system, and upgrading of essential services and facilities are needed. The demands of transition and the loss of Soviet financial support have created budget problems in educational financing, which in turn have been exacerbated by substandard financial planning and management systems. Schools and higher education suffer from a lack of both capital investment and recurrent budget allocations from the Government and there has been a sharp increase in the direct and the indirect costs of education for parents. These have reduced participation rates, particularly for the poor and vulnerable, and for boys. The deterioration in educational provision in rural areas is one of the major reported causes of migration to the cities, which in turn brings pressure to bear on urban educational institutions.

17. In this context, the key issues in the current Mongolian education system are the need for (i) reform in education finance, planning, budgeting, and management; (ii) strengthening teaching qualifications and skills through PSTT; (iii) improving quality, relevance, affordability, and sustainability in the provision of textbooks and other learning materials, including the effective and innovative use of ICT for education, and in view of the introduction of student-centered learning; and (iv) improving the education infrastructure, particularly facilities, in TTIs. The Project will build on the policy platform established by previous projects and continue the reform agenda in tandem with the government's ESMP and National Development Strategy.

¹¹ ADB. 2008. *Technical Assistance for ICT in Basic Education in 6 Central Asian Countries*. Manila; ADB. 2008. *Consultant's Final Report on the Technical Assistance for Innovative ICT in Education, and Its Potential in Reducing Poverty in the Asia and Pacific Region*. Manila.

¹² United Nations Development Fund for Women (UNIFEM). 2007. *Economic Growth Support and Poverty Reduction Strategy Survey*. Ulaanbaatar.

¹³ ADB and World Bank. 2005. *Mongolia: Country Gender Assessment*. Manila.

18. **Sector-Wide Approach.** The development of a sector-wide approach (SWAp) is a key platform of the ESMP 2006–2015, which was prepared with the assistance of ADB in 2005. An education donors' consultative mechanism (EDCM), co-chaired by MECS, ADB, and the Embassy of Japan, was established in 2005 and it guides collaboration between the Government and its development partners. In 2007, ADB supported a TA project for the Development of a SWAp in Education.¹⁴ Under this TA, the Government has made progress in developing an effective approach to sector-wide planning. The EDCM prepares and monitors annual implementation plans to track the significant progress being made in integrating the SWAp into the Government's internal planning process and the fiscal cycle. The key projects in the education sector in Mongolia are being implemented by one project implementation unit (PIU), an important step toward harmonization. For example, the ADB PIU for the TEDP is also in charge of the Education for All-Fast Track Initiative¹⁵ (EFA-FTI) implementation. ADB TA support for the SWAp has been extended to 2008–2009 and aims to strengthen MECS's core technical and management capacity to take a phased approach to establishing a SWAp in education. The Project complements other funding agencies' efforts by supporting areas they are not addressing, e.g., provision of cheaper textbooks and comprehensive reforms in PSTT. The development of a national ICT strategy complements other funding agencies' investments in computer hardware, including the one-laptop-per-child initiative, funded by several funding agencies. The project concept was presented at the general EDCM meeting. Appendix 3 summarizes external assistance to the Mongolian education sector.

19. **Lessons Learned.** Lessons learned from previous ADB-funded education projects¹⁶ include the need for (i) close funding agency coordination, particularly in areas where there may be overlapping inputs (e.g., school buildings), and a comprehensive working partnership between development partners and the Government; (ii) adequate operation and maintenance (O&M) budgets to support investments in equipment and facilities and to ensure effective usage (this is a major issue, for example, in the development of a national ICT strategy); and (iii) an approach that builds on experience gained in past projects rather than shifting focus to new areas of activity. Thus, the grant assistance for ICT for Innovating Rural Education in Mongolia (IIREM) provides a model for using ICT to develop content, new teaching approaches, and access to information for poor rural schools. It will serve as the starting point for sustainable and cost-effective ICT developments under this Project. Similarly, the expense of learning and teaching materials will have an adverse impact on the curriculum reform currently being undertaken by the ADB-funded TEDP, unless this issue is addressed by the Project. Detailed lessons learned are in Appendix 10.

¹⁴ ADB. 2006. *Technical Assistance to Mongolia for Education Sector Reform*. Manila (attached to ADB. 2006. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to Mongolia for the Third Education Development Project*. Manila).

¹⁵ Launched in 2002, EFA-FTI is a global partnership to help low-income countries meet the education MDGs and the Education For All goal that all children complete a full cycle of primary education by 2015. Funding is channeled through existing bilateral and multilateral channels and through the FTI Catalytic Fund, which supports countries with insufficient resources to implement their education sector plans.

¹⁶ ADB. 1996. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to Mongolia for the Education Sector Development Program*. Manila; ADB. 2002. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to Mongolia for the Second Education Development Project*. Manila; ADB. 2004. *Grant Assistance to Mongolia for ICT for Innovating Rural Education*. Manila; ADB. 2005. *Technical Assistance for the Innovative ICT in Education, and Its Potential in Reducing Poverty in the Asia and Pacific Region*. Manila; and ADB. 2006. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to Mongolia for the Third Education Development Project*. Manila.

III. THE PROPOSED PROJECT

A. Impact and Outcome

20. The impact of the Project will be improved quality, access, efficiency, and effectiveness of the 12-year education system. The outcome of the Project will be an effective 12-year education system.

B. Outputs

21. The Project has four components: (i) improved education planning, management, and budgeting; (ii) strengthened PSTT; (iii) improved quality, affordability, and levels of provision of textbooks and other teaching and learning materials, including enhanced innovation in the use of ICT in the classroom; and (iv) improved learning conditions in TTIs through support for the upgrading of the physical infrastructure. The outputs were derived through extensive consultation with stakeholders from public, private, and nongovernmental sectors at central and local levels, including in remote locations, school visits, school surveys, and focus groups.

1. Component 1: Improved Educational Planning, Management, and Budgeting

22. This component will (i) strengthen the institutional capacity of MECS to enable it to carry out more efficient planning, management, and delivery of education services; and (ii) improve existing education finance policies to promote autonomy, transparency, and accountability at all levels.

23. **Strengthening Information Systems.** Under the SEDP, ADB funding was allocated to finance the procurement of hardware and software for the education management information system (EMIS). Project preparatory TA assessments indicate that continued TA is needed to improve both the technical and operational aspects of the existing system. Currently, there are a number of management information systems within MECS, including the EMIS in the Department of Information, Monitoring, and Evaluation; the human resource MIS in the Department of Public Administration; and the financial MIS in the Department of Economics and Finance. Various departments maintain subsets of the MIS for their own operational and professional disciplines. A school infrastructure MIS subset and better integration of the various systems are urgently needed. The Project will support MECS to: (i) assess the current education planning and management system; (ii) establish guidelines for the use of information for education planning and developing annual implementation plans; (iii) design an MIS system that fully integrates all data sources, including those that may be developed in future; (iv) provide the software and hardware required to carry out data collection and analysis at *aimag*, *bagh*, and *soum* levels; (v) strengthen the capacity of staff in gathering and analyzing statistics, performance and quality indicators, reporting, and forecasting; and (vi) ensure the use of gender-disaggregated data and the inclusion of means to address gender issues in primary and secondary education through a synchronized EMIS. The Project will also help to ensure that the financial MIS subset is compatible with the existing system at the Ministry of Finance.

24. **Improving School-Based Financial Policies.** The Government's recentralization of education financing in 2002 has not achieved its objective of simplifying processes and increasing transparency in school accounting. The process of monitoring and evaluation is not uniform throughout the country despite the fact that the Public Sector Management and Finance Law has clear provisions on transparency, accountability, and control. The Project will support school-based financial reforms in the following areas: (i) conducting assessments of education finance recentralization and reinforcing compliance in all schools throughout the country, including those in Ulaanbaatar; (ii) reforming the public investment system so that fixed asset investments and O&M

budgets are closely linked; (iii) adjusting school budgeting systems to enable them to allocate appropriate amounts for operational expenses (a block grant system based on a funding formula is strongly recommended); (iv) conducting a study on reforming the school teacher salary system and appointment of school and preschool principals in order to enhance responsibility and accountability in schools; (v) preparing a school management handbook and ICT support systems for school management; and (vi) strengthening the capacity of MECS staff, *aimag* finance officers, school administrators, and accountants in budgeting and financial management. With regard to the public investment system, the Project will support the Government by (i) building capacity to assess and monitor investments in infrastructure and facilities in educational institutions; (ii) developing appropriate and practical criteria for the allocation of annual O&M funding; and (iii) setting up a functional MIS to enable adequate monitoring and assessment, to ensure the linkage between investment and recurrent costs, and hence sufficient allocations. In accordance with the gender action plan in Appendix 9, the Project will support (i) development and inclusion of funding criteria to include gender, poverty, and indigenous considerations; (ii) preparation of inclusive social development plans that incorporate an analysis of gender issues and plans for addressing them, including identifying barriers to boys' participation in education; and (iii) a study of policies targeting dormitory subsidies and cash transfers at poor rural households, in particular, for boys.

25. **Midterm National ICT Strategy.** The experience of other countries suggests that ICT is often more expensive than governments realize and that unplanned ICT developments may divert money away from other areas of educational need. Failure to provide sufficient operational budgets to cover hardware replacement, consumables, and other recurrent costs could lead to the widespread non-use, under-use, or misuse of facilities. In addition to the important planning and financing aspects mentioned above, the ICT strategy for the sector should help to guide teaching approaches and ICT arrangements suitable for effective use in Mongolian schools. Studies increasingly emphasize the need to contextualize these arrangements to suit the circumstances of each individual country.¹⁷ Technologically highly sophisticated ICT arrangements may not always be the most cost-efficient in terms of improving teaching and learning. Often less sophisticated, but innovative and more appropriate approaches can add more value to learning, and be more cost-efficient and sustainable.

26. The scale of the financial implications of ICT provision for the education system mean there is an urgent need for an ICT midterm strategy (5 years), detailing the cost implications for primary and secondary education. This should include (i) the legal framework; (ii) ICT objectives and outputs; (iii) curriculum and assessment—encouraging and developing ICT skills and competencies; (iv) short- and medium-term ICT policy and strategy; (v) minimum profiles and target ratios¹⁸ for computer hardware and peripherals; (vi) connectivity; (vii) content development strategy—software and websites in Mongolian and the use of basic applications software in support of subject teaching and learning; (viii) teacher, technician, and school management training; (ix) maintenance and servicing strategies; (x) teacher support services; (xi) school local area network management requirements; (xii) school EMIS specifications; and (xiii) budget support and operational and replacement financing requirements. The Project will finance technical assistance and training in the techniques of national strategy development and the available options; and the operational costs of a national ICT strategy working group, including a series of strategy development workshops.

¹⁷ An IIREM project (TA on Innovative ICT in Education and Its Potential in Reducing Poverty in the Asia and Pacific Region) in 2008 presented case study reports on several countries, including Mongolia.

¹⁸ E.g., the minimum ICT hardware specifications such as number and type of computers, printers, UPS, scanners, projectors, digital cameras, and minimum acceptable ratio of hardware to students.

2. Component 2: Strengthened Pre-Service Teacher Education

27. This component will improve the quality of provision and the outputs of the PSTT system to support to the launch of the new 12-year curriculum. An overview of TTIs is in Supplementary Appendix C.

28. **Curriculum Reform.** The current teacher education curriculum has not been reviewed or updated since 2005–2006. It is overloaded and theoretical, with only 15% of the total credits required for bachelor programs being allocated to teaching practice. There are few opportunities to reinforce ideas and concepts across subjects. The Project will (i) initiate a teacher education curriculum review to ensure conformity with the newly developed teacher standards, and (ii) assist MECS and TTIs to increase school-based teaching practice and the use of ICT in the curriculum.

29. **Comprehensive Quality Assurance System in TTIs.** Low student entry qualifications in TTIs affect the quality of teacher graduates. Furthermore, the student assessment system is predominantly through written tests and oral examinations conducted by individual institutions without reference to national standards. These tests focus on students' ability to remember facts rather than to demonstrate skills gained during study and practice. The Project will assist TTIs and relevant departments of MECS to (i) put in place national minimum admission standards and procedures for all TTIs, (ii) implement a national student teachers assessment framework, and (iii) support teacher educators in five TTIs to implement the quality assurance system. The Project will also help to ensure that the quality assurance system is understood and applied across the sector. The Project will ensure that TTIs (i) take gender into account in teacher training curricula, materials, and courses; (ii) deliver gender-sensitive teaching to all student teachers in TTIs and to all teacher educators; (iii) develop selection criteria that include a focus on gender equity and encourage men to be student teachers in TTIs; and (iv) attract top students to TTIs and teachers to the profession by ensuring attractive salaries and social benefits are in place, including incentives for teachers in rural areas.

30. **Continuous Professional Development (CPD).** Increasing workloads and lack of funding for CPD and research have affected teacher educators' professional development. Lack of foreign languages (particularly English) makes it difficult for them to learn about recent innovations in teacher training and new teaching methodologies, ideas, and approaches. The Project will help to strengthen the CPD of teacher educators by (i) helping MECS and TTIs to adopt a funding mechanism for providing CPD to teacher educators; (ii) assisting TTIs to develop a professional development planning system, including conducting training needs analysis; (iii) training TTI administrators and heads of departments in professional development planning; and (iv) training teacher educators in student-centered learning methods and assessment of student teachers' skills and competencies and using ICT. The Project will also support international institutional links and staff attachment schemes.

31. **Teaching Practice.** International experience indicates that teaching practice and school-based training should be the cornerstone of teacher education. This is not the case in teacher education programs in Mongolia, where content knowledge, educational theory, and practice are delivered separately with an assumption that effective integration of these components will take place in the minds of the students at a later stage. To support school-based teaching practice, the Project will (i) develop a conceptual and regulatory framework for a new school-based teaching practice model, (ii) develop operational guidelines for the new model, (iii) pilot the model in two TTIs in school years 2010–2011 and 2011–2012, and (iv) support full-scale implementation of the new school-based teaching practice model starting in SY2012–2013.

3. Component 3: Improved Affordability, Quality, and Availability of Teaching and Learning Materials

32. This component will (i) reduce the costs and improve the quality and availability of textbooks and teachers' guides in primary schools; and (ii) build on the work of IIREM by continuing the delivery of content, teaching methods, and information to poor schools in rural areas via the cost-effective use of ICT.

33. **Design and Implementation of a Pilot Project.** The pilot project will test the effectiveness of a textbook rental scheme and revolving fund in primary grades. The object will be to reduce the parental costs of education significantly and to increase textbook quality and durability. Adequate availability of textbooks is one of the most important factors in ensuring learning. Experience worldwide, and particularly in other countries in transition, has demonstrated that textbook rental systems, combined with long textbook life achieved through mandatory minimum production specifications, enables textbook origination and production costs to be amortized over at least 4 years, significantly reducing costs to parents. Well-run textbook rental schemes are widely acknowledged to be the least costly and the most effective and equitable form of textbook provision. These systems also underpin rapid development of private textbook publishers in partnership with Government by creating a reliable and predictable textbook market. When combined with a simple computerized textbook ordering system, the system eliminates the risk of waste through lack of sales, thus reducing publishers' costs and hence prices to the schools. Appendix 11 contains an overview of textbook rental schemes and revolving funds.

34. A textbook rental scheme and revolving funds will begin as a pilot in primary schools at select *aimags* and, if successful, will be scaled up to other *aimags*. The component will (i) support the design and implementation of a pilot textbook rental scheme and revolving funds in primary grades; (ii) improve the targeting and transparent administration of MECS support for poor and vulnerable children; (iii) provide training in all aspects of textbook conceptualization, authorship, design, and specification, including the specific requirements of textbooks and teachers' guides to support student-centered learning; (iv) review and reform the competitive textbook submission, evaluation, and contract award system to provide a transparent and timely system, oriented to providing the highest quality and durability at the best prices; (v) provide financial support for the competitive procurement through school-based decision making of about 2 million textbooks for a cost reduction and quality upgrading pilot project, with a view to extending the pilot to the whole of the primary sector if successful; (vi) fund consulting services and training to support the pilot project; (vii) fund fully participatory meetings with parents and schools in all *aimags* in order to generate grassroots understanding and support for new textbook provision strategies; and (viii) fund the design and development of a simple computerized ordering system.

35. **Information Access to Poor Schools in Rural Areas.** IIREM has made a good start on developing strategies and materials specifically oriented to the needs of poor rural schools and it is proposed that the Project should build on these foundations. The Project will support the establishment of ICT centers of excellence in selected schools in rural and peri-urban *ger* areas, with a focus on training and strengthening the skills of teachers to integrate ICT as a teaching and learning tool, rather than on the ICT hardware. The ICT centers of excellence will facilitate understanding among teachers of the benefits of technology in planning their lessons. The component will develop and disseminate locally-applicable models using student-centered methodologies and technology. Such centers will encourage communities of educators to bring innovation to teaching and learning. The component will build on the IIREM mentor schools and teachers' teams and will provide hands-on training and workshops to develop local capacity. It will also support the authorship of manuals, guidelines, users' guides, and simple standard operating procedures; the provision of some basic software applications; and the provision of basic hardware packages to enable schools to develop e-materials. It will also develop ICT in rural schools as a

management tool and provide community access to ICT, particularly for nonformal education purposes. For this component, two groups of schools will be targeted. First, schools that were beneficiaries of the IIREM project will be given priority, to ensure continuity of ICT training. Second, the component will target schools where school management and MECS provide evidence that adequate budget will be made available for ICT operational expenses, and which have an existing technological infrastructure. This second group of schools will include schools in rural areas with at least 30% of enrolled students from poor families and cluster schools, and at least one school in *aimags* with a high proportion of ethnic minorities, such as Bayan-Olgij. In order to keep administration costs low, a maximum of five *aimags* will participate in the pilot. Project preparation included an investigation into Mongolian law relating to charities and charitable trusts and it is understood that a secure textbook revolving fund will qualify for charitable status.

36. The component will support (i) extension of the use of ICT in the delivery of new approaches to teaching and learning targeted at poor rural situations, including ICT training on the use of the common software applications across all grades (e.g., word processing, spreadsheets, presentation software, and databases); (ii) development of software in Mongolian aimed at teacher development through ICT skills upgrading; (iii) creation of a website to encourage collaboration and the exchange of ideas and experiences between rural teachers; (iv) establishment of ICT centers of excellence which focus on strengthening the skills of teachers to integrate ICT into their teaching and on creating communities of educators; (v) development of a disk delivery system for schools without easy access to the Internet; and (vi) the inclusion of the pilot project as an integral part of the national ICT strategy development under component 1. The Project will ensure that (i) textbooks, supplementary materials, ICT applications, and software do not stereotype genders or ethnic groups; and (ii) free textbooks are provided for poor and vulnerable families.

4. Component 4: Upgraded Facilities at Teacher Training Institutes to Support Reforms in Pre-Service Teacher Training

37. This component will improve facilities in selected TTIs by (i) developing technical specifications for laboratory equipment and instructional manuals, holding workshops, and supplying laboratory equipment; (ii) supplying furniture and equipment, including ICT; (iii) rehabilitating facilities; and (iv) improving provision of teaching and learning resources. TTI libraries lack modern materials on new teaching technologies, education journals, and other resources that would facilitate and support independent learning of student teachers. The Project will support: (i) a needs analysis of teaching and learning materials in four TTIs and the Mongolian State University of Education; (ii) authorship, design, and publication of a new generation of teacher training course materials; (iii) production and supply of new teacher training course materials; (iv) provision of Mongolian language abstracts of articles in international journals; and (v) support for library stocks and ICT facilities. To improve the quality of teaching and learning in TTIs, some facilities will be upgraded and classroom furniture and ICT equipment will be provided to selected TTIs. Selection of the TTIs will prioritize: (i) state-run TTIs, (ii) TTIs in Ulaanbaatar and remote *aimags*, and (iii) TTIs that are not included in any present or future expansion or rehabilitation program sponsored by any other agency.

38. **Project Management Capacity Enhanced.** A project steering committee (PSC) with prescribed monitoring and evaluation arrangements will oversee project operations. Transparency (with appropriate guidelines and processes) will be built into all project activities including (i) competitive and open selection procedures for consultants and project staff, (ii) rigorous tendering arrangements for infrastructure and equipment contracting, (iii) mandatory performance and financial reporting, (iv) public reporting requirements for project activities, and (v) external audits and reviews. A website on project activities and outputs will be established and regularly updated to ensure openness and public disclosure.

C. Special Features

39. **Innovative Approach to Education.** Reforms in the management of educational financing will improve efficiency and quality by ensuring that recurrent budgets are adequate, and will enable school facilities and equipment to be used to their full potential. The focus on PSTT will create a stream of well-trained teachers with skills relevant to the new curriculum. The Project's innovations will include (i) lowering costs and upgrading quality of learning and teaching materials, thereby reducing parental costs, increasing access, and improving education quality; and (ii) supporting the effective and innovative use of ICT in education, particularly in rural areas, by developing a national ICT strategy for primary and secondary education and by establishing ICT centers of excellence in selected schools in rural areas.

40. **Poverty Focus.** The Project has a strong focus on poor and otherwise disadvantaged pupils in remote rural areas. The cost of textbooks is a major reason for children not enrolling in school or dropping out and the Project will significantly reduce these costs for parents. It will establish adequate recurrent budgeting, which will reduce school demands for additional parental contributions, another cause of dropouts among poor families. The ICT component will focus on the use of ICT in poor schools in rural areas and *ger* districts in peri-urban areas.

D. Project Investment Plan

41. The project investment cost is estimated at \$10,830,000, of which \$10,000,000 will be financed from Asian Development Fund (ADF) grant funds and \$830,000 by the Government in the form of taxes and duties (Table 1).

Table 1: Project Investment Plan
(\$ million)

Item	Amounts
A. Base Cost^a	
1. Improved Educational Planning, Management, and Budgeting	0.58
2. Strengthened Pre-service Teacher Education	1.78
3. Improved Affordability, Quality, and Availability of Teaching and Learning Materials	4.86
4. Upgraded Facilities at Teacher Training Institutes to Support Reforms in Pre-Service Teacher Training	2.19
5. Project Management	0.75
Subtotal (A)	10.17
B. Contingencies	
1. Physical Contingencies ^b	0.50
2. Price Contingencies ^c	0.15
Subtotal (B)	0.65
Total (A+B)	10.83^d

^a In early 2008 prices, including taxes and duties of \$0.83 million financed by the Government.

^b Computed at 10% for all civil works and 5% for equipment.

^c Computed based on foreign exchange inflation rate of 8.0 % in 2008 and onwards, and local currency inflation rate at 14.9% in 2009, 9.5% in 2010, 9% in 2011, and 8% in 2012 and onwards.

^d Totals may not tally due to rounding.

Source: Asian Development Bank estimates.

E. Project Financing Plan

42. The Government has requested grant financing of \$10 million from ADB's Special Funds resources, representing 92.34% of the total project cost. The remaining \$0.83 million equivalent or 7.66% of total project cost will be provided by the Government in the form of taxes and duties. The financing plan is in Table 2, and detailed cost estimates and financing plan are in Appendix 4.

Grant financing of the Project is considered justified because of its focus on primary and secondary education and education sector reforms to close the rural–urban gap in school participation and educational achievement, and because a part of the investment targets students in poor and remote areas.

Table 2: Financing Plan
(\$ million)

Source	Total	%
Asian Development Bank	10.00	92.34
Government of Mongolia	0.83	7.66
Total	10.83	100.00

Source: Asian Development Bank estimates.

F. Implementation Arrangements

1. Project Management

43. MECS will be the executing agency for the Project. The implementation structure will be based on the project implementation arrangements established under the ESDP and subsequently used successfully for the SEDP and TEDP. The PSC chaired by the state secretary of MECS will include senior officials of MOF and MECS and project *aimag* representatives will provide overall guidance. The PSC will meet quarterly and will be responsible for approving the annual project budget and activity plan and for reviewing and advising on implementation progress. Working groups to advise on and assist with project implementation will be established centrally and in pilot areas. The project implementation unit (PIU) responsible for the daily operation of the TEDP will oversee and manage the work undertaken by the implementing agencies, overall management of project finance, and project implementation. The PIU has been in place since the mid-1990s and the staff are very experienced in procurement, consultant recruiting, and overall project implementation. New PIU staff whose salaries are paid from the grant will be selected and contracted individually in accordance with ADB's *Guidelines for the Use of Consultants* (2007, as amended from time to time). Given the evolving SWAp in Mongolia's education sector, project management needs to be well coordinated with financial planning and management at MECS. In the long term, MECS's capacity to develop and manage an effective SWAp should increase and there should be less dependence on traditional PIUs and more on the use of MECS's structures.

2. Implementation Period

44. The Project will be implemented over a period of 4 years from 2009 to 2013. The detailed implementation schedule is in Appendix 5.

3. Procurement

45. All procurement shall be in accordance with ADB's *Procurement Guidelines* (2007, as amended from time to time). Contracts for goods estimated to cost \$0.5 million or more and contracts for works estimated to cost \$1 million or more shall be procured using international competitive bidding (ICB) procedures. Contracts for goods and works estimated to cost less than the above ICB thresholds but more than \$100,000 shall be procured on the basis of national competitive bidding (NCB) procedures in accordance with the Public Procurement Law of Mongolia, subject to modifications agreed with ADB. Contracts for goods and works estimated to cost \$100,000 or less shall be procured using shopping procedures. For ICB invitations for bids, invitations for prequalification, draft prequalification documents, draft bidding documents,

prequalification, and bid evaluation reports are to be submitted to ADB for prior review and approval. For NCB, the first draft English language version of the procurement documents should be submitted for ADB review and approval regardless of the estimated contract amount. The ADB-approved procurement documents should then be used as a model for all NCB procurement financed by ADB for the Project, and need not be subjected to further review. ADB will review the bid evaluation report and award of contract on a post-review basis. For shopping, ADB will review the award of the contract on a post-review basis. MECS will develop distribution systems for textbooks and learning materials that are acceptable to ADB that will ensure transparent distribution of these goods to project beneficiaries, before disbursing the project funds for these items. The procurement plan is in Appendix 6.

46. **Advance Contracting and Retroactive Financing.** ADB has approved advance contracting to expedite the award of civil works contracts and recruitment of the monitoring and evaluation consultants. It has also approved a request for retroactive financing for civil works and rehabilitation of TTI facilities and equipment. This is due to an urgent need to initiate these works as the construction season in Mongolia is short and to the currently dilapidated state of TTI facilities as a result of limited government funding over the last 10 years. The requested retroactive financing is for eligible expenditures up to \$1 million (equivalent to 10% of the ADB grant) incurred in relation to civil works and recruitment of monitoring and evaluation consultants within a maximum of 12 months before the signing of the Grant Agreement.

4. Consulting Services

47. The Project will require a total of 18 person-months of international consulting services and 150 person-months of national consulting services financed under the ADB grant. A consulting firm will be engaged in accordance with ADB's *Guidelines on the Use of Consultants* using the standard quality- and cost-based selection method (80% quality and 20% cost) and a simplified technical proposal. The international and national consultants will have expertise in (i) education finance, management, and planning; (ii) textbook provision systems, cost reduction strategies, and textbook publishing skills; (iii) development and implementation of national strategies for ICT in education, the use of ICT as a learning and teaching tool and local language educational software development; (iv) all aspects of pre-service teacher training; and (v) monitoring and evaluation. Capacity building for the EA and the PIU will be achieved through consultant inputs, training courses provided by universities, specialized institutes, and firms, and acquisition of additional equipment financed from the grant. To assist the EA and the PIU in expediting project implementation, 3 person-months of national consulting services for monitoring and evaluation will be engaged individually prior to recruitment of the consulting firm. MECS requested ADB for retroactive financing of up to \$40,000 equivalent for expenditures incurred in the recruitment of consultants for monitoring and evaluation. Advance contracting will include advertising the positions, review, and evaluation of candidates on a competitive basis, and clearance of the evaluation and the proposed selection. The Government was advised that approval of advance contracting and retroactive financing does not commit ADB to finance the Project. Indicative consultancy requirements are in Appendix 7 and outline terms of reference for consultants are in Supplementary Appendix C.

5. Anticorruption Policy

48. ADB's *Anticorruption Policy* (1998, as amended to date) was explained to and discussed with the Government and the executing agency. Consistent with its commitment to good governance, accountability, and transparency, ADB reserves the right to investigate, directly or through its agents, any alleged corrupt, fraudulent, collusive, or coercive practices relating to the Project. To support these efforts, relevant provisions of ADB's *Anticorruption Policy* are included in the grant regulations and the bidding documents for the Project. In particular, all contracts financed

by ADB in connection with the Project shall include provisions specifying the right of ADB to audit and examine records and accounts of the EA and all contractors, suppliers, consultants, and other service providers as they relate to the Project.

6. Disbursement Arrangements

49. The grant will be disbursed in accordance with ADB's *Loan Disbursement Handbook* (2007, as amended from time to time). To expedite project implementation through the timely release of grant proceeds, the PIU will establish an imprest account at a commercial bank acceptable to ADB. Disbursements from the imprest account will be supported by an appropriate withdrawal application and related documentation. Such documentation will demonstrate, among other things that the goods and/or services are (i) procured from ADB's member countries and (ii) eligible for ADB financing. The initial amount to be deposited in the imprest account will not exceed the estimated expenditures for the next 6 months, or 10% of the grant amount, whichever is lower. ADB's statement of expenditures procedure may be used to reimburse, liquidate, or replenish eligible expenses that do not exceed \$100,000. In addition, grant funds will be disbursed using direct payment to the consultants or suppliers for civil works and equipment.

7. Accounting, Auditing, and Reporting

50. The Government, through the PIU, will (i) maintain separate financial accounts for the Project, and (ii) have such accounts and related financial statements audited annually by independent auditors acceptable to ADB in accordance with the provision of the Grant Agreement and as specified in ADB's *Financial Reporting and Auditing of Projects Financed by the Bank*.¹⁹ The auditors should have qualifications, experience, and terms of reference acceptable to ADB. The use of the imprest accounts and statement of expenditures will also be part of the annual audit and a separate audit opinion will be submitted. The Government will submit to ADB certified copies (in English) of such audited accounts and financial statements and the related reports to auditors, within 6 months after the close of each fiscal year. For the purpose of complying with the requirements for the annual audited financial statements, the proceeds of this grant may be used to finance expenditures for private financial statements, sector auditors, and translations of auditor's reports into English. The PIU will submit consolidated quarterly progress reports to ADB (in English) and to the Government on all aspects of project implementation. The reports will include details of overall implementation progress, problems encountered during the reporting period, measures taken or proposed to remedy these problems, and the proposed program of activities for the following quarter. Within 3 months of project completion, the PIU will prepare and submit to ADB, in a format acceptable to ADB, a project completion report on (i) the utilization and impact of the grant; (ii) performance of the project; (iii) economic and social benefits generated; and (iv) details about implementation, costs, and other information requested by ADB.

G. Project Performance Management System

51. MECS will establish a comprehensive project performance management system (PPMS) acceptable to ADB. The PPMS will (i) assess project performance; (ii) evaluate delivery of planned activities; (iii) measure project impacts; (iv) measure education, social, and economic benefits, focusing on disadvantaged students from poor, remote, and rural areas; and (v) monitor progress toward the Millennium Development Goals and other government targets. PPMS indicators will serve as a basis for reports on project implementation and the reform process, education quality and access to education, and progress toward the Millennium Development Goals. Some indicators will be monitored by routine administrative and financial data. Where feasible, indicators will be disaggregated by socioeconomic level and gender. The monitoring and evaluation specialist

¹⁹ ADB. 1989. *Financial Reporting and Auditing of Projects Financed by the Bank*. Manila.

and consultant will assist MECS and PIU to determine project-specific indicators and to develop a cost-effective and efficient monitoring and evaluation system before implementation of the Project. To ensure that the project outputs and ADB objectives, including inclusive growth and social development, are implemented, the Project will develop tools, including an e-tool for pro-poor governance to measure the impact of the project components. For the textbook reform component, baseline and follow-up information will be collected from beneficiaries and non-beneficiaries to measure impact and assess the costs and benefits of reforms.

H. Project Review

52. ADB and the Government will jointly undertake reviews of the Project at least once a year. The reviews will assess progress in each component, identify issues and constraints, and determine necessary remedial action and adjustments. A midterm review will be conducted during the third year of implementation. This will (i) review the scope, design, and implementation arrangements and identify adjustments required; (ii) assess implementation progress against performance indicators; and (iii) recommend changes in the design or implementation arrangements, if necessary.

IV. PROJECT BENEFITS, IMPACTS, ASSUMPTIONS, AND RISKS

53. **Project Benefits.** The targeted outcome of the Project is an effective 12-year school system that will have a positive impact on human capital development, poverty reduction, and inclusive social development. The close link between educational development and poverty reduction, productivity improvement, economic growth, and an improvement in general living conditions is well established. The Project focuses on quality improvements to the national education system that will complete the transition of Mongolia's education system and improve enrollment and retention rates. The direct beneficiaries of the modernization of the education system will be all students enrolled in primary and secondary schools. Nationwide, about 540,000 students and their parents will benefit from the improved affordability, cost, and durability of textbooks and learning materials. About 110,000 students from poor families will benefit from better targeting of free textbook provision under the Project. About 10,000 student teachers and 1,200 teacher educators throughout the country will benefit from improvements to PSTT in five TTIs and upgrading of teaching and learning facilities. Graduates of TTIs entering the teaching labor force will be better equipped to improve education quality and to close the urban–rural gap in education achievement. Students and communities in rural areas will benefit from the ICT centers of excellence. Better targeting of textbook provision and cheaper textbooks will enable poor students to improve their educational achievements. It will also reduce dropout rates and increase enrollment rates. Sound budgeting, planning, and financing in the education sector will enable more efficient and effective delivery of services to overcrowded schools in Ulaanbaatar and to deprived rural schools. Other specific project benefits include stronger planning and management at MECS and among local education staff, leading to an improved SWAp, and more capacity to plan and implement ICT investments.

54. **Economic Impacts.** The Project supports the education system's efforts to improve education quality, access, effectiveness, and efficiency. Economic internal rates of return were derived for the Project; the main quantifiable benefits were future earnings and capacity. The most significant economic benefit will come from increases in future earnings of better educated school graduates. Capacity building assistance for MECS in areas related to financial analysis, management, and budgeting will help to improve efficiency and effectiveness in the delivery of education services and will reduce transaction costs. Public expenditure on education as a share of gross domestic product is projected to average 6.5% in the period 2009–2012. It can be assumed that the budget will be sufficient to continue education service delivery at the current rate and to finance the modernization of the system. The Government's share in the Project is included

in the budget. Based on a projection of education expenditure, it can be assumed that the Project is financially sustainable (Appendix 3 and Supplementary Appendix A).

55. **Poverty Reduction and Social Dimensions.** Poverty and education are strongly related, and better education services are an important contribution to human and economic development. One of the most persistent issues in Mongolia's education system is a rural–urban gap in education quality, educational achievement, school participation, and dropout rates. Children in rural areas tend to be left out of upper secondary schooling because of a combination of lack of access and limited household funds. Poverty contributes to dropout rates directly, through out-of-pocket and opportunity costs, and indirectly, through parental background. Rural students who tend to perform worse and drop out after the 8th grade are highly likely to be poor. High dropout rates reinforce the vicious cycle of inter-generational transmission of poverty. Dropout rates for boys at secondary level are high among poor families in urban areas while, in rural areas, children drop out even at primary level. Specific pro-poor and social development measures of the Project include lower education costs for parents and greater use of ICT as a teaching and learning tool, particularly in rural schools. Therefore, the Project will support the Government in its efforts to improve the existing system to reduce urban–rural disparities. The summary poverty reduction and social strategy is in Appendix 8. According to the ADB and World Bank Mongolia country gender assessment (2005),²⁰ schoolgirls outnumber schoolboys in every *aimag*, including Ulaanbaatar. The Project will directly benefit all teachers through its training programs, which are expected to enhance the attractiveness of the teaching profession. Over 90% of teachers are female so the Project will encourage more men to work as basic education teachers. This will enable children to broaden their role models, which is particularly important given the poor school attendance and higher dropout rates of boys. The Project will also help to present gender roles and issues under the PSTT component. The gender action plan is in Appendix 9. More generally, the Project will encourage parents to send their children to school through the provision of textbooks, more qualified teachers, and lower costs for parents.

56. **Ethnic Minority Issues.** Kazakhs are the most significant ethnic minority in Mongolia and accounted for 4.4% of the total population in 2002. They retain a distinct cultural identity, which is recognized under Article 8 of the Mongolian Constitution, which allows Kazakhs to use their native language in education, communication, and the pursuit of cultural and scientific activities. At the same time, Kazakhs practice a pastoral, nomadic lifestyle similar to the ethnic majority Khalk in rural areas. Basic education and literacy rates are similar across ethnic groups, although some differences in levels of secondary school attendance are beginning to emerge. Geographical isolation and poverty appear to affect ethnic minorities' educational attainment rather than their membership of a minority culture. Improvements in educational provision under the Project will therefore be similar for ethnic minorities and the Khalk majority. The Project will (i) support translation of textbook and educational software into the Kazakh language; and (ii) select at least one school in Bayan-Olgii *aimag* for the ICT subcomponent, as reflected in the gender action plan, in Appendix 9.

57. **Environmental Aspects.** The Project will rehabilitate existing TTI buildings and facilities. No land acquisition is required and there will be no negative environmental or resettlement impact. The Project is classified as category C for the environmental aspect.

58. **Land Acquisition and Resettlement.** With no planned land acquisition, the Project is unlikely to trigger ADB's involuntary resettlement policy.

59. **Project Assumptions.** The major project assumptions are (i) favorable economic growth in Mongolia; (ii) continued funding and support of education by the Government; and (iii) acceptance

²⁰ ADB and World Bank. 2005. *Mongolia: Country Gender Assessment*. Manila.

of policy and legislative changes by decision makers, key stakeholders, and the community at large. Other assumptions include: (i) staff trained under the Project will remain in the education system after their qualifications have been upgraded; and (ii) an improved curriculum, better teachers, and lower costs for parents will increase enrollment and attendance rates.

60. **Risks and Mitigation Measures.** At present, managerial and technical capacity at MECS is limited and this may affect the smooth transition to a 12-year school system. This risk will be mitigated through training and capacity building under the Project. High turnover of officials and senior staff in key agencies resulting in slow progress or resistance of reforms is also a risk. The risk of high turnover of officials will be mitigated through government assurances that confirm its commitment to education reforms and by adopting a stakeholder participatory approach and building core technical and management capacity in MECS through the Project and the ADB-funded SWAp TA. Allegations of corruption in the selection and procurement of textbooks, including the approval, publishing, and distribution of textbooks may pose another risk. However, this will be mitigated through training and consultative workshops with key stakeholders and by capacity building under the Project.

V. ASSURANCES

61. In addition to the standard assurances, the Government has given the following assurances, which are incorporated in the legal documents.

- (i) The Government will provide all necessary counterpart funds for project implementation on time. The Government will make timely submission of annual budgetary appropriation requests and ensure prompt disbursement of appropriate funds during each year of project implementation.
- (ii) Within 2 years of grant effectiveness, MECS will have developed, approved, and introduced a new PSTT curriculum. The Government will ensure that all curricula in the five TTIs will conform to the same program standards and will not vary in structure.
- (iii) Within 2 years of grant effectiveness, MECS will have approved budgeting and planning reforms, including its related MIS and have prepared a time-bound action plan for these reforms, and that by the midterm review, implementation has progressed to full institutionalization of these reforms.
- (iv) Within 6 months of the effectiveness of the Grant Agreement, the Government will ensure that the PPMS will have been established.
- (v) The Government will ensure that (a) evaluation, selection, and performance criteria for bidders and contractors respectively have been clearly identified in a consultative manner and rigorously applied; (b) tender and evaluation committee members have appropriate procurement, professional, or technical qualifications or experience to evaluate the tenders and have been provided with relevant and appropriate training in evaluation techniques; (c) inspection and supervision of contractor performance will be strengthened and only products/works that fulfill the contract requirements will be accepted; and (d) the anticorruption action plan and codes of ethics and integrity are developed and implemented.
- (vi) The Government will ensure that the Project will be implemented in accordance with the gender action plan.
- (vii) By the end of the second year of project implementation, MECS will have developed a 5-year strategy and policy for ICT in education and relevant authorities will have approved such a plan. The approved plan will include clear budgetary allocations for the total costs of ownership of ICT hardware investments in the education sector. By the end of the second year of project implementation, MECS will have developed a

- time-bound action plan for implementation of the ICT strategy in the education sector.
- (viii) By the end of the first year of project implementation, MECS will have developed a time-bound action plan for enhancing textbook production and provision, by the second year, MECS will have commenced implementation of the action plan for enhancing textbook production and provision based on the pilot system, and within the 6 months after the pilot implementation for the textbook enhancement is completed, MECS will have evaluated the pilot project. Based on the results of the pilot implementation of the textbook rental scheme and revolving funds, the pilot shall be scaled up if successful; or revised for further pilot implementation; or if unsuccessful, alternative solutions may be considered.
 - (ix) The Government will ensure that disbursements will be made based on achieving milestones in the Project, such as establishment of the textbook rental scheme and revolving funds trust fund for the textbook provision and the approval of the ICT national policy for the ICT subcomponent.
 - (x) The Government will ensure that an appropriate management authority is established as for the pilot textbook rental scheme and revolving funds. The Government will ensure that appropriate legal charters and operational rules and regulations are established for the operation of the textbook rental scheme and revolving funds.
 - (xi) The Government will ensure that sufficient resources for training supplies and materials, and repair and O&M of facilities and equipment are made available to project-supported public PSTT institutions throughout and after the project implementation period.
 - (xii) The Recipient shall ensure that adequate budget be provided to the schools for electricity, access to the Internet, and other basic infrastructure to operate ICT facilities and training equipment provided under the Project.

VI. RECOMMENDATION

62. I am satisfied that the proposed grant would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve the grant not exceeding the equivalent of \$10,000,000 to Mongolia from ADB's Special Funds resources for the Education Sector Reform Project, on terms and conditions that are substantially in accordance with those set forth in the draft Grant Agreement presented to the Board.

Haruhiko Kuroda
President

28 October 2008

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Risks and Assumptions
<p>Impact Improved quality, access, efficiency, and effectiveness of the education sector</p>	<ul style="list-style-type: none"> • Gross enrollment rate among school age population maintained at 95% and net enrollment rate increased from 89.9% in 2007 to 95% by 2015 • Improved performance on assessment exams for graduates from TTIs (baseline data to be established) by 2015 • Improved financial policies in schools, resulting in increased recurrent budget allocations and capital investment (baseline data collected during the project preparatory TA) by 2015 • Parental costs of education reduced by 15% in real terms (baseline data collected during the project preparatory TA) by 2015 	<ul style="list-style-type: none"> • National statistics • MECS baseline and/or research studies on enrollment, grade progression, school graduation, textbook provision, and pre-service teacher training • Progress reports on Millennium Development Goals • School surveys and parent focus groups collected during the project preparatory TA 	<p>Assumptions</p> <ul style="list-style-type: none"> • Education continues to be a priority of the Government and it continues to provide adequate budget allocations • Continued robust economic growth and government revenue growth <p>Risk</p> <ul style="list-style-type: none"> • Limited managerial and technical capacity at MECS might affect the smooth transition to a 12-year school system. This risk will be mitigated through training and capacity building under the Project
<p>Outcome Effective 12-year education system</p>	<ul style="list-style-type: none"> • Enrollment of 6-year-olds increased from 75% in 2008 to 95% by 2014 • Student transition from lower to upper secondary education increased from 81% in 2003 to 85% by 2014 • Transition from grade 11 to grade 12 increased to 60% by 2014 (baseline data to be collected in 2009) • Completion rates of boys in secondary education increased from 45% in 2007 to 65% by 2014 	<ul style="list-style-type: none"> • MECS annual reports generated through EMIS • Grade 10 national examination results published by MECS • Grade 12 examination results published by MECS 	<p>Assumptions</p> <ul style="list-style-type: none"> • An improved curriculum, better teachers, and lower costs for parents will increase enrollment and attendance rates • Acceptance of policy and legislative changes by decision makers, key stakeholders, and the community at large to new and unfamiliar innovations in the curriculum and learning assessment system
<p>Outputs 1. Improved educational planning, management, and budgeting</p>	<ul style="list-style-type: none"> • Consolidated EMIS system designed, installed, and tested by early 2010 • School-based financial policy framework agreed by end 2010 • Government resolution on revised financial policies for basic education issued by mid-2011 • National strategy, with cost estimates, developed through consultations and published by end of 2010 	<ul style="list-style-type: none"> • MECS EMIS reports • Endorsed school-based financial policies • Endorsed national ICT strategy 	<p>Assumptions</p> <ul style="list-style-type: none"> • Staff trained to implement information systems remain in their posts • Designed system is adequate for the task • Strong government commitment to develop an effective national ICT strategy

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Risks and Assumptions
2. Strengthened pre-service teacher education	<ul style="list-style-type: none"> • Reformed TTI curriculum in place by 2010 • National student admissions procedures revised by end of 2010 • National student teacher assessment in place by end of 2010 • Continuous professional development program for teacher educators developed and implemented by 2011 • School-based teacher practice model piloted by 2012 and scaled up by 2014 • Learning and teaching materials for TTIs developed by 2012 	<ul style="list-style-type: none"> • MECS EMIS reports • Project monitoring and evaluation 	<ul style="list-style-type: none"> • Government provides adequate financing for TTIs • Professional teaching staff are able to apply new knowledge and skills and remain in the education system after their qualifications are upgraded • Improved facilities will provide a better learning environment
3. Improved affordability, quality, and availability of teaching and learning materials	<ul style="list-style-type: none"> • Fifty MECS staff, authors and publishers trained in textbook development techniques by about 2010 • New system for textbook submission, evaluation, and approval established by 2010 • Up to 80% of students in primary grades using the textbook rental scheme by 2014. • Textbook cost reduction and quality improvement measures agreed and implementation started by 2011 • Fourteen ICT centers of excellence established in project schools by about 2010 and 1,000 teachers trained in ICT as a teaching and learning tool by 2011 • New Mongolian language educational software developed by 2011 	<ul style="list-style-type: none"> • MECS reports • Project monitoring and evaluation, including citizenship report cards • Average annual textbook price comparisons • Surveys carried out by MECS and PIU 	<p>Assumptions</p> <ul style="list-style-type: none"> • Government provides sufficient budget for improving textbook provision and adequate and cost-effective utilization of ICT investments • Education stakeholders, including publishers, accept proposed reforms in textbook provision <p>Risk</p> <ul style="list-style-type: none"> • Reforms in the textbook provision, given allegations of corruption reported to be prevalent in the selection and procurement of textbooks, including the approval, publishing, and distribution of textbooks. The risk will be mitigated through training, consultative workshops with key stakeholders, and capacity building
4. Upgraded facilities at teacher training institutes to support reforms in pre-service teacher training	<ul style="list-style-type: none"> • Facilities of five TTIs rehabilitated and upgraded by 2014 	<ul style="list-style-type: none"> • MECS reports • Project monitoring and evaluation • Surveys carried out by MECS and PIU • Feedback reports from educators and students at TTIs 	<p>Assumptions</p> <ul style="list-style-type: none"> • Government provides sufficient budget for preventive maintenance of TTIs • Qualified and competent design and construction firms will bid for contracts

Activities with Milestones	Inputs
<p>Component 1</p> <p>1.1 Assess the education planning and management system and MECS information systems by end of the first quarter of 2009 and prepare action and implementation</p>	<ul style="list-style-type: none"> • ADB: \$10 million

Activities with Milestones	Inputs
<p>plans by end of the second quarter of 2009.</p> <p>1.2 Establish guidelines for the use of information for education planning and develop an implementation plan by end of the third quarter of 2009.</p> <p>1.3 Design an MIS system that can fully integrate the EMIS, human resource MIS, financial MIS, school infrastructure MIS, and other subsets (including future systems) by the third quarter of 2010.</p> <p>1.4 Procure and install software and hardware required to implement MECS and <i>aimag</i> level data collection and analysis fully by end of 2010.</p> <p>1.5 Establish a working group at MECS to review, analyze, and identify constraints of the prevailing school-based financial policies and their impacts on cost-efficient delivery of basic education services by end of the first quarter of 2009.</p> <p>1.6 Produce a school management handbook, including budgeting and financial management, design and develop computer-based tools to facilitate the application of school management handbook by end of the first quarter of 2010.</p> <p>1.7 Conduct national consultative workshops on ICT strategy by end of 2009.</p> <p>1.8 Develop total costs of ownership of ICT investments by end of the third quarter of 2009.</p> <p>1.9 Publish and approve national ICT strategy by end of 2010.</p> <p>Component 2</p> <p>2.1 Review curriculum and develop new TTI curriculum by mid-2009.</p> <p>2.2 Develop national student admission procedures by end of the second quarter of 2009.</p> <p>2.3 Develop and implement student teacher assessment system by end of 2010.</p> <p>2.4 Develop guidelines for new teacher practice system by end of the third quarter of 2011.</p> <p>2.5 Develop new continuous professional development system for teacher educators by end of the second quarter of 2009.</p> <p>2.6 Conduct needs analysis of teaching and learning materials by mid-2009 and develop new textbooks and resource materials by end of 2012.</p> <p>2.7 Develop and implement journal abstract scheme for TTIs by end of the first quarter of 2010.</p> <p>Component 3</p> <p>3.1 Reform bid submission, evaluation, and award system by end of 2011.</p> <p>3.2 Reform textbook ordering system by end of 2011.</p> <p>3.3 Develop and implement textbook cost reduction strategies by end of 2011.</p> <p>3.4 Develop ICT for rural areas in the pilot project by end of 2012.</p> <p>3.5 Develop Mongolian language software by end of 2012.</p> <p>3.6 Establish web portal for rural teacher training by end of 2010.</p> <p>3.7 Develop website to encourage teacher collaboration by end of 2011.</p> <p>Component 4</p> <p>4.1 Agree on selection criteria and identify priority TTIs for rehabilitation and upgrading of TTIs by second quarter of 2009.</p> <p>4.2 Prepare tender documents, contract companies (during winter seasons 2009–2013), and start rehabilitation works (during summer periods 2010–2013).</p>	<ul style="list-style-type: none"> • Government: \$830,000

EMIS = education management information system; ICT = information and communication technology; MECS = Ministry of Education, Culture, and Science; MIS = management information system; PIU = project implementation unit; TA = technical assistance; TTI = teacher training institute.

EDUCATION SECTOR

A. Structure of the Education System

1. The education system in Mongolia is based on 11 years of general education. According to Clause 7.2 of the Law on Education, with effect from school year (SY) 2008–2009, the system will move to a 12-year school system, and the school entry age will be lowered from 7 to 6 years. About 43,000 6-year-olds are expected to join the formal education system in 2008. Primary and lower secondary education is compulsory. Primary education will include grades 1–6. Lower secondary education will include grades 7–10 and upper secondary education will include grades 11–12. The Constitution stipulates free basic education to all children.

2. Only half of Mongolian children receive any form of early childhood education¹ and enrollment of children in rural areas and children from herder families in preschool programs is particularly low. In 2006, 58.1% of children 2–6 years of age were enrolled in preschools and kindergartens. In 2007–2008, 92.7% of the primary school age group was enrolled in primary schools. Secondary education enrollment was 86.8%. Net enrollment rate for primary and secondary education was 89.9%.

3. In SY2007–2008 there were 754 general education schools in Mongolia with a total 542,505 students. According to Ministry of Education, Culture, and Science (MECS) statistics there were 23,778 teachers employed in general education schools, of which 22,891 were full time teachers. The average teacher to student ratio is 25.5.² The shortage of teachers in SY2006–2007 was 479 with the highest number of vacancies in Ulaanbaatar schools. Of the 754 general education schools in SY2007–2008, 210 were in Ulaanbaatar and the remainder schools were located in *aimags*. Of the total, 71 schools were primary only, 167 were grades 1–10, and 516 were grade 1–11. Most schools taught in Mongolian, although in Bayan-Olgii schools offered instruction in the Kazakh language.

4. A total of 495 boarding schools enrolled 44,037 students in SY2007–2008 (about 8% of the overall student population), of which 38,255 were herders' children. Overall, 51,118 students were willing to live in dormitories, although demand exceeded supply and many students were forced to live in rented accommodation or with relatives in order to attend school.

5. MECS administers vocational education and training and the Ministry of Social Welfare and Labor administers short courses that offer vocational and specialization certificates. According to MECS statistics, in SY2007–2008, there were 56 technical and vocational institutions, with a total of 29,906 students, of whom 13,835 were female. In primary vocational institutions 29,109 students were enrolled, of whom 13,498 were female. In secondary vocational institutions 797 students were enrolled, of whom 337 were female.

6. In academic year 2007–2008, there were 162 higher education institutions in Mongolia comprising 43 state-owned higher education institutions and four state-owned vocational education and training centers, 109 private institutions, and six branches of foreign universities. Student enrollments have tripled from about 33,000 to over 150,000 since the withdrawal of Soviet financial support in 1991. Over the last 3 years about 66% of students were in state-

¹ Nettleton, Steve. 2007. *Traveling Schools Bring Education to Migrant 'Herder Children'*. Available: http://www.unicef.org/infobycountry/mongolia_40960.html

² ADB. 2007. *Program Performance Evaluation Report in Mongolia: Education Sector Development Program*. Manila.

owned institutions and 34% in private. The gender differential in both state and private institutions has not changed, with 61% of students being female. The percentage of women in state institutions has remained constant at about 60%.

B. Challenges and Constraints in the Education System

7. Mongolia began a standards-based curriculum reform in 1998 and began standardized testing a year later. Secondary education standards were introduced in 2003. These emphasize the importance of comprehensive skills—learning to know, learning to perform, and learning to socialize. General subject areas include science and technology and English. While these standards are consistent with the acquisition of skills that are needed for work and life, the current curriculum and teaching practices are not very consistent with these goals.

8. The school curriculum and teaching methods have not kept up with the new demands in the labor market. The curriculum continues to be too theoretical and is focused on traditional academic subjects, while teaching continues to be teacher-centered rather than interactive. It encourages memorization rather than critical and creative thinking and individual learning rather than teamwork. While information and communications technology (ICT) and English language subjects are part of the curriculum, teachers are generally not well prepared to teach these subjects. In many cases, the teaching of ICT is limited by the poor availability of computers in schools and inadequate operational budgets. The teaching of thinking and behavioral skills can be integrated into every aspect of the curriculum through discovery-oriented teaching methods that include interactive learning, applying knowledge to real-life problems, integrating teamwork and peer tutoring into the learning process, and inviting student input into the structure and subject matter of lessons. However, these methodologies require trained teachers and adequate classroom facilities to make them effective in terms of delivery new educational outputs.

9. The implementation of student-centered learning will take time and require substantial investments in pre- and in-service training. In the short run, teaching life skills as a separate subject (e.g., health, citizenship, or financial literacy education) may be a practical option. To improve teaching, teachers also should have adequate materials and should conduct routine assessments of student progress, focusing on their ability to use the knowledge acquired. The Government is currently developing such a national assessment system for primary education.

10. **Rationalizing Education Sector Facilities.** A systematic restructuring of education institutions was undertaken under the ADB-funded Education Sector Development Project. This aimed to improve the efficiency and cost-effectiveness of the education system during the 1990s, the most severe period of transition. In the mid-1990s school attendance was poor, many schools were dysfunctional, and teachers were not paid for months (at that time the maximum monthly salary was MNT24,500).³ A nationwide school mapping study was completed in April 1997 and a plan was prepared for comprehensive school rationalization. Of the 171 schools identified for restructuring, 136 (80%) were restructured by August 1998 and 35 (20%) were restructured by June 2002. One of the major outputs was the development of “complex schools,” a rationalization initiative that brought several adjacent neighborhood schools under common management. In 2007, about 20% of students and 21% of teachers and school service staff of Ulaanbaatar were in complex schools. The model is now considered to be a blueprint for the development of primary and secondary education services in urban areas, as these schools

³ ADB. 2007. *Program Performance Evaluation Report on the Education Sector Development Program in Mongolia*. Manila.

generally have more efficient management and better facilities and equipment than other schools. At the same time, rural students do not have equal access to upper secondary education. A number of rural schools closed their upper secondary classes during the school reorganization and rationalization reform in 1997, while *aimag* complex schools have only limited numbers of upper secondary spaces. An assessment of the outcomes from the rationalization and reorganization reform suggests that these reforms may have perpetuated the widening gaps in educational outcomes between urban (*aimag* center and capital city) and rural (*soum and bagh*) schools, exacerbated the problems of access to senior secondary education, and possibly contributed to migration from rural areas.

11. **Teacher Training Institutes.** The Mongolian State University of Education (MSUE), the Mongolian National University, the University of Social Sciences, and four teachers colleges are the major teacher training institutes (TTIs) of Mongolia. In rural areas there are universities in Khovd, Bayan-Olgii, Arkhangai, and Dornod *aimags*. These universities and colleges prepare about 2,800 teachers annually and over 40% of them will continue to offer teacher training in early childhood education, primary and secondary schools, and the technical and vocational education and training sector. The MSUE is the largest TTI in Mongolia. It consists of 12 schools and four teacher training colleges.⁴ Two TTIs are in Ulaanbaatar; one trains teachers for primary schools and the other specializes in preschool education. MSUE is the only institution that covers all levels of teacher training including preschool, primary and secondary education, and higher education. Currently 8,000 students are enrolled in MSUE, of whom 600 are in master programs and 300 in doctoral programs. MSUE employs 450 lecturers and 200 non-teaching staff. About 50% of faculty members hold advanced academic and scientific degrees. MSUE offers 4-year bachelor programs in more than 50 specializations. About 70% of teachers currently working in primary and secondary schools are MSUE graduates. MSUE and two of the teacher training colleges annually produce about 1,400 graduates, about 50% of the total number of teacher graduates from TTIs in Mongolia. The Preschool Teacher Training College currently has 952 students and 26 teaching staff. It offers a 2-year course called Teacher and Methodologist. About 100 students graduate every year, and according to the management of the TTI, 70% of them continue with a teaching career.

12. There is a decreasing interest in teacher training courses in the TTIs outside Ulaanbaatar, which now have problems in recruiting sufficient numbers of students to continue running teacher training courses. As a result, provision of teacher education programs is no longer considered to be a profitable or sustainable business.

13. **Vocational Education.** Vocational education does not yet serve the real needs of the labor market. Upper secondary and tertiary education need to accommodate diverse student needs, interests, and capabilities. Vocational education therefore should be part of a diverse system of learning options. Vocational education can be accessed after completing lower secondary or upper secondary, while technical education requires an upper secondary education. Vocational and technical education in Mongolia accounts for only 9% of total enrollment in post-basic education, which reflects the heavy bias of post-basic education toward academic university degrees. The system also needs sufficient flexibility to allow students to experiment and develop their full potential. While technical education is fully integrated with higher education, vocational education in Mongolia has no connection with technical colleges or the academic education track (secondary and higher education).

⁴ Originally, five teacher training colleges were attached to MSUE but the TTI in Dornod has now become an independent HEI.

14. **Higher Education.** Currently, higher education institutions do not fully serve the needs of the knowledge economy. Universities have been subject to an accreditation system since 1998, but this system is not obligatory and is considered to be weak in terms of the assessments performed. In addition to introducing more student-centered teaching practices and more practical programs, the higher education system needs to be more flexible. Open systems can facilitate student mobility by recognizing relevant prior experience, degree equivalences, and credits earned elsewhere. A well-designed and unified system of higher education admission tests is beneficial, because educating the most capable students can foster innovation, thus driving reforms and progress in the economy.

C. New 12-Year Education Structure

15. The new 12-year education structure was introduced into schools in September 2008. It replaced the previous 11-year structure, which itself was introduced only in 2005. The new 12-year structure will bring Mongolia in line with an increasing number of former socialist countries who are now opting for 12-year systems.

16. The new 12-year system poses a number of challenges for the education system in Mongolia. For example, there are many who complain that the system has not yet properly adjusted to the introduction of the 11-year system in 2005 and that introducing a 12-year system in 2008 may be too hasty. The many problems that need to be resolved include the following.

- (i) The need to provide additional classroom, kitchen, and dormitory facilities that are both age- and gender-sensitive. Because the education structure will be expanded downwards and 6-year-olds will be accepted into primary schools for the first time, there is a need to provide additional classroom and dormitory space plus chairs, desks, shelving, and lavatory and washing facilities appropriate to the age and size of the children concerned.
- (ii) The enrollment of young children (7-year-olds from 2005 and 6-year-olds from 2008) requires a substantial program of both in-service and pre-service teacher training to prepare teachers with new skills in (a) early childhood education and the development of early literacy in particular, (b) the demands of the new 12-year curriculum, (c) new teaching methods and approaches to deliver the new methodological approaches specified as part of the new curriculum, and (d) the achievement of new skills and competency based learning outputs.
- (iii) The 12-year system requires the previous curriculum to be amended to accommodate 6-year-olds. Teacher training is dependent upon the availability of the new curriculum.
- (iv) New learning and teaching materials and supplementary reading books are all required and have to be written and delivered on schedule.

D. Financing of Education

1. Economic and Budget Forecasts

17. Best practices in transitional economies have indicated that expenditure for the education sector ranges between 4% and 8% of national gross domestic product (GDP) and between 10% and 20% of total public expenditure. Using these comparative indicators, Mongolia can be regarded as having paid significant attention to its education sector. Actual education sector expenditure accounted for 5.1% of total national GDP in 2006 and 4.9% in 2007. It accounted for 15.3% of total public expenditure in 2006 and 13.4% in 2007. Education

expenditure increased from MNT189 billion in 2006 to MNT234 billion in 2007 (an increase of 24%), see Table A2.1.

Table A2.1: Education Budget Expenditure (Historic, Planned, and Projected)

Expenditure	Historic		Planned		Project Implementation				
	2006	2007	Year 0 2008	Year 1 2009	Year 2 2010	Year 3 2011	Year 4 2012	Year 5 2013	Year 6 2014
GDP in Current Prices (MNT billion)	3,715	4,807	5,779	6,644	9,543	11,231	12,915	14,853	17,080
GDP Growth Rate (% nominal)	33.6	29.39	20.22	14.96	35.65	17.68	15	15	15
Public Expenditure (MNT billion)	1,237	1,749	2,564	2,476	3,167	3,598	3,875	4,456	5,124
Public Expenditure as % of GDP	33.3	36.4	44.4	37.3	33.2	32.0	30.00	30.00	30.00
Education Sector Budget (MNT billion)	189	234	386	425	467	514	646	743	854
Education Sector Budget as % of GDP	5.1	4.9	6.7	6.4	4.9	4.6	5	5	5
Education Sector Budget as % of Public Expenditure	15.3	13.4	15.1	17.2	14.7	14.3	16.7	16.7	16.7

GDP = gross domestic product.

Source: Asian Development Bank estimates based on Ministry of Finance data.

18. Based on the current economic outlook, the Ministry of Finance (MOF) has submitted the national 2008 budget to the parliament, which has approved it. The budget for the education sector in 2008 is MNT386 billion, accounting for 15.1% of total public expenditure and 6.7% of national GDP. Discussions with the MOF indicated that the budget was based on the assumption that (i) prices of copper and gold in international markets will remain high, and (ii) the nominal GDP growth rate will be 20.2% at year-end 2008.

19. For the proposed period of implementation of the Education Sector Reform Project (assuming 4 years between 2009 and 2013) and thereafter (2014–2021), a nominal annual GDP growth rate of 15.0% has been assumed by the project preparatory TA team in order to estimate the national nominal GDP, while local economists and policy makers revealed that they would be more optimistic. Based on this assumption, education sector expenditure would remain at an acceptable and maintainable level, at about 5% of national GDP and in the range of 14.3%–17.2% of total public expenditure during and after project implementation (See Tables A2.2 and A2.3).

Table A2.2: Education Budget Expenditure (Post-Project Implementation)

Expenditure	Post-Project Implementation						
	Year 7 2015	Year 8 2016	Year 9 2017	Year 10 2018	Year 11 2019	Year 12 2020	Year 13 2021
GDP in Current Prices (MNT billion)	19,643	22,589	25,977	29,874	34,355	39,508	45,434
GDP Growth Rate (% nominal)	15	15	15	15	15	15	15
Public Expenditure (MNT billion)	6,089	7,916	10,291	13,378	17,391	22,609	29,391
Public Expenditure as % of GDP	30	30	30	30	30	30	30
Education Sector Budget (MNT billion)	982	827	910	1,001	1,101	1,211	1,333
Education Sector Budget as % of GDP	5	5	5	5	5	5	5
Education Sector Budget as % of Public Expenditure	16.1	10.4	8.8	7.5	6.3	5.4	4.5

GDP = gross domestic product.

Source: Asian Development Bank estimates based on the Ministry of Finance's 2008 draft budget.

20. **Recentralization of Education Financing.** The Government recentralized education financing in 2002. The tasks of consolidating school budgets and preparing the sector's budget proposal were assigned to MECS, and budget disbursement was assigned to MOF, through a newly created treasury office. As a result of these changes, education finance officers were appointed as provincial representatives of the Economics and Finance Department of MECS, based at *aimag* education and culture departments. Treasury officers from MOF were transferred to *aimag* treasury offices. In addition, schools were allowed to have only one budget account to which the *aimag* treasury offices would have direct access. The purpose of this reform was to simplify processes and increase transparency in school accounting.

21. Recentralization has not occurred in one-third of schools (those in Ulaanbaatar). This is inconsistent with the law, which was meant to restructure education financing nationally. While in other *aimags*, MECS and MOF provincial staff have separate roles in budget preparation and disbursement respectively, the treasury office in Ulaanbaatar still performs both functions. As a result, the treasury office submits aggregate information on school budgets directly to MECS. Unlike the provincial offices, the treasury office in Ulaanbaatar is accountable to the office of the mayor (rather than to MECS or MOF). Schools in Ulaanbaatar are also waived from applying the revised school funding formula. The case of Ulaanbaatar is less a problem of education finance and more of accountability and control. The chances of leaks are greater in a system in which approval and disbursement are administered by the same agency, and where there are no uniform processes of monitoring and evaluation in place.

22. Schools prepare 3-year budget strategies in the spring of every year, and submit a detailed budget proposal based on the current fiscal year's budget norms to the finance officer of the *aimag* Education and Culture Department by 1 July every year. The requirement for 3-year budget proposals to be submitted by schools is likely to be removed because it is considered to be unrealistic. Discussions with MOF and MECS officials revealed that school principals and accountants need to be trained to prepare these budgets and to receive a refresher course every 2 years. In particular, they need to be trained to account for both variable and fixed costs in the school expenditure line items. In July of each year, all finance officers

meet for 2 weeks in the finance office of MECS in Ulaanbaatar to prepare budget proposals in the official format. At this stage, and based on student numbers, reallocations may occur, affecting how the budget is distributed between variable and fixed costs. School budgets for the following fiscal year are based on budget norms formulated in the fourth quarter of the previous year. Since the budget norms are adjusted upwards annually, overall budgets for schools prepared at the central level are often higher than those submitted by the Education and Culture Department finance officers.

2. Approved 2008 Budget

23. The expenditure on education, culture, and science in 2008 was approved at MNT386.6 billion, an increase of MNT151.8 billion or 65% compared with 2007. Of this amount, 17% (MNT64.3 billion) is for preschool education, 48% (MNT185.4 billion) for general education, 7% (MNT27.7 billion) for vocational education, 10% (MNT39.5 billion) for higher education, 6% (MNT23.4 billion) for culture and arts, 3% (MNT12.8 billion) for science, and 9% (MNT33.4 billion) for other educational organizations (Table A2.3).

Table A2.3: Budget Composition of the Education, Culture, and Science Sector

Subsector	2006 (actual)	2007 (actual)	2008 (approved)
Nursing schools	519.4	693.6	64,345.2
Kindergartens	29,177.5	39,778.0	
General education schools	96,447.6	119,792.6	185,397.1
Vocational training centers	8,791.7	15,110.2	27,761.2
Universities and colleges	24,633.9	0.0	39,491.6
Other educational organizations	21,293.0	36,071.5	33,391.7
Culture and arts organizations	11,289.0	15,645.5	23,482.7
Scientific organizations	6,679.5	7,706.4	12,816.7
Total	198,831.6	234,797.8	386,686.2

Source: Ministry of Finance.

3. Financial Implications of the 12-Year General Education Structure

24. As from SY2008–2009, according to Clause 7.2 of the Law on Education, MECS will shift from the 11-year school system to a 12-year system, with the enrollment of 6-year-old children into grade 1. This will require additional finance to cover building of schools, dormitories, classroom and dormitory furniture, and related facilities; training teachers; and printing more textbooks and teaching materials. Operational costs for schools (both variable and fixed) are also expected to increase.

25. Because MECS financial projections were not made available to the project preparatory TA team, a rough estimation of the incremental cost of moving to a 12-year system is outlined in Table A2.4.

Table A2.4: Estimates of Incremental Costs of Moving to a 12-Year School System (2008–2015)

No.	Items	Unit	Quantity	Unit Cost (\$)	2008–2009 ^a	2009–2010	2010–2011	2011–2012	2012–2013	2013–2014	2014–2015
1	Number of Classrooms to be Built	Room	1,107	7,000	7,752					388	
2	Number of Table and Chair Sets	Set	43,029	50	2,151						
3	Dormitory Rooms	Room	1,312	7,000	9,184					459	
4	Dormitory Beds	Bed	6,504	100	650						
5	Toilets (for school and dormitories)	Toilet	3,422	60	205						
6	Sinks (for school and dormitories)	Sink	3,554	60	213						
7	Teacher Training Costs	Teacher	738	3,000	2,213						
8	Textbooks (for socially targeted groups)	Set	17,212	15	258						
9	Teaching Manuals for Teachers	Set	1,229	50	61						
10	Operational Costs (variable and fixed costs)	%	22		4,978	4,978	4,978	4,978	4,978	5,825	4,978
Annual Incremental Costs (\$'000)					27,667	4,978	4,978	4,978	4,978	6,672	4,978
Annual Incremental Cost (MNT million)					32,370	5,824	5,824	5,824	5,824	7,806	5,824

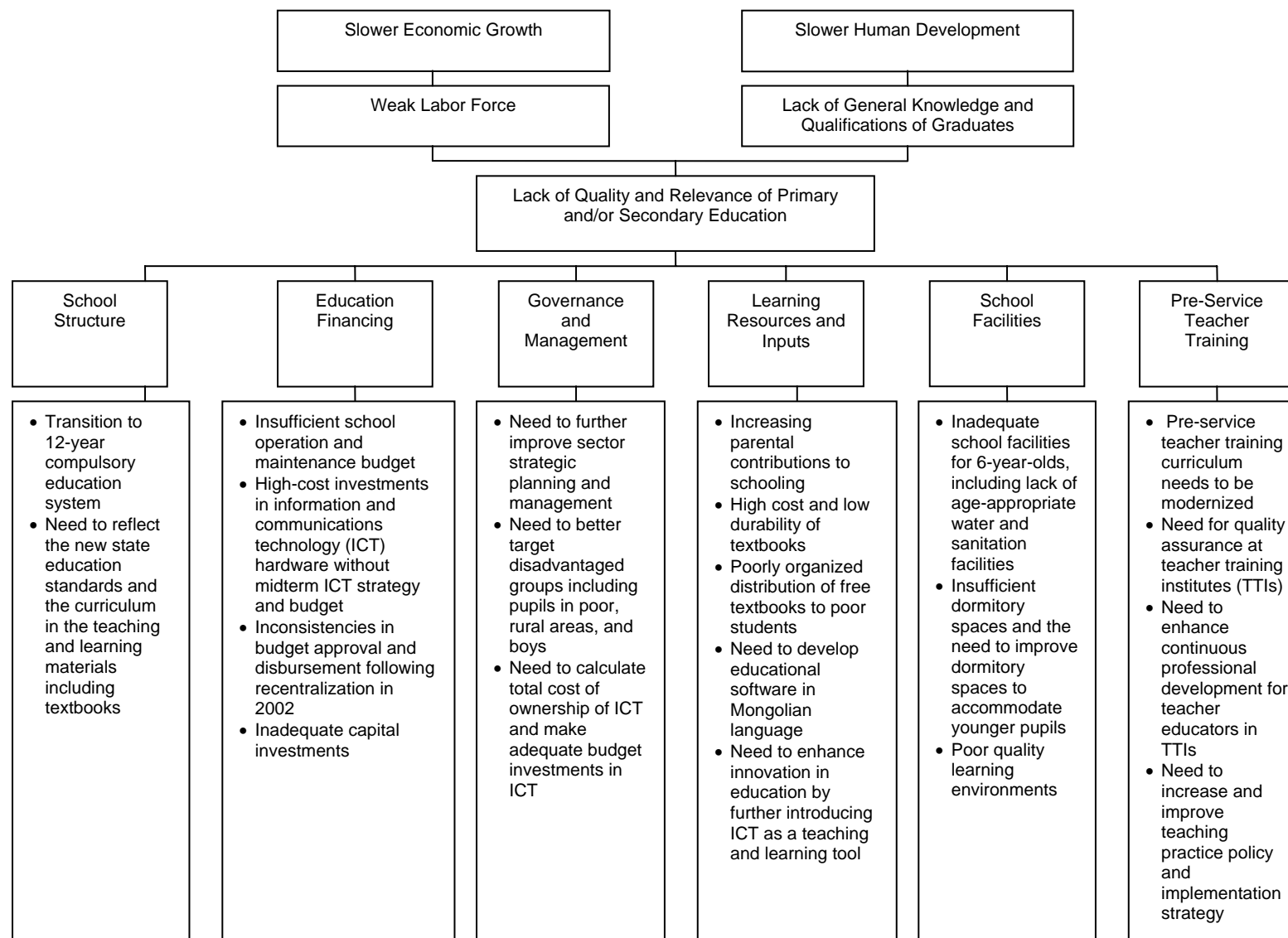
^a One-off.

Source: Asian Development Bank estimates.

26. It is forecast that in SY2008–2009, grade I enrollment will be 68,803, including 43,029 6-year-old children and 25,774 7-year-old children. The 43,029 6-year-old children will need 1,229 classrooms and 1,229 teachers, based on the MECS target of 35 pupils per class and per teacher. The public investment program is financing the construction of 122 classrooms in 2008. The remaining 1,107 classrooms will need to be constructed at a unit cost of \$7,000 per classroom. It is estimated that only 40% of the 1,229 teachers needed are readily available for 6-year-old pupils in 2008. The other 60% (738 teachers) will need to be trained at an average cost per teacher of \$3,000. It is assumed that 40% of the 6-year-old children will be from poor and disadvantaged households will therefore be provided with books at the Government's expenses. The cost of items such as dormitory rooms, beds, and sinks were estimated as per discussions with MECS and validated by market data. Incremental operational costs, including variable and fixed costs, were estimated at 22% of the total 2008 one-off incremental costs, based on historic cost.

27. The projections were made from 2008 to 2015, the end of the transitional period. The total incremental cost of shifting to the 12-year system is estimated to be \$27.7 million (MNT32.4 billion), including \$22.7 million as an incremental one-off cost and \$4.9 million as incremental operational costs for 2008. The incremental operational costs are projected to remain unchanged in most of the other years, except that for SY2013–2014 when capital replacement costs are included for classrooms and dormitories that will have been in operation for 5 years.

Figure A2: Problem Tree Analysis: Mongolia's Education System



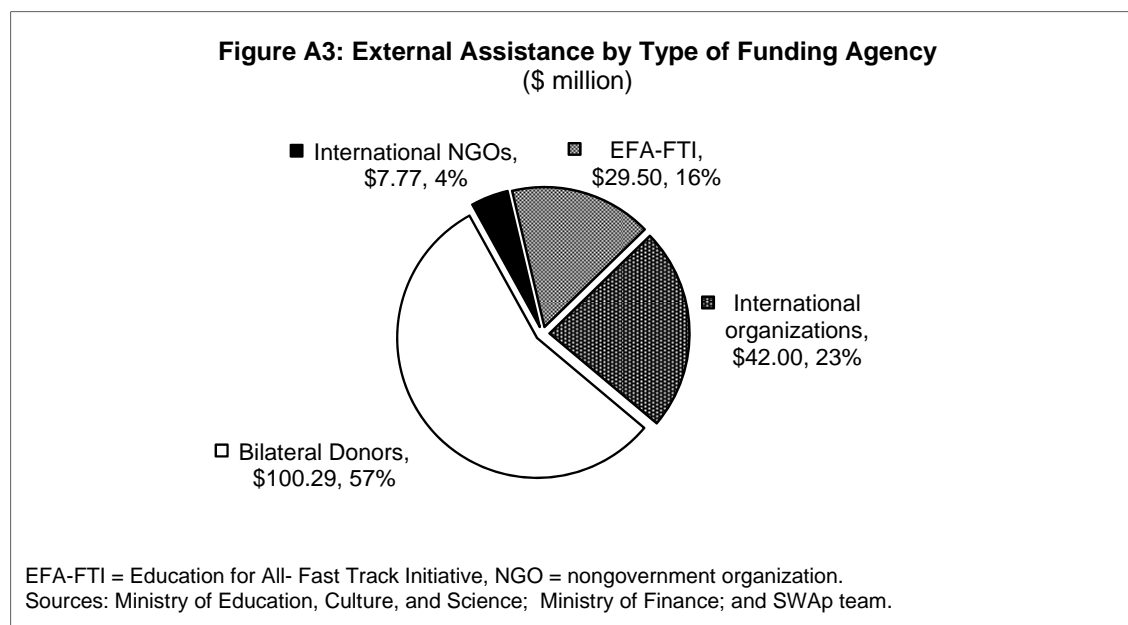
Source: Asian Development Bank.

EXTERNAL ASSISTANCE TO THE MONGOLIAN EDUCATION SECTOR

1. The Government of Mongolia has been receiving external assistance for the education sector since early 1990s. The Government of Japan is a major bilateral donor, providing grants for renovation and upgrading of primary and secondary schools, strengthening teacher training, and information and communication technology (ICT) in education. The Asian Development Bank (ADB) is continuing to support education sector reforms through concessional loans and technical assistance. The Government has signed the largest compact in the history of the Millennium Challenge Corporation (MCC), part of which will be devoted to developing the vocational training system in Mongolia. Under the Education for All-Fast Track Initiative, in joint collaboration with World Bank and ADB, the Ministry of Education, Culture, and Science (MECS) is improving access to basic education and enhancing the quality of its services. The World Bank is helping to establish classroom libraries in 383 *soum* and *bagh* schools, conducting teacher training through professional development networks and improving national monitoring of quality and efficiency under the Rural Education Support Project financed from an International Development Association grant. The United Nations Children's Fund (UNICEF) and World Vision are active in preschool, primary, and secondary education. The European Commission and Save the Children UK are supporting quality preschool and basic education and building the capacity of civil society to advocate for access to education for children with disabilities. German technical cooperation provides assistance for demand-oriented vocational training, especially for the building trade (in cooperation with ADB and the Japan Fund for Poverty Reduction). Overall, external assistance to the education sector development has significantly increased in the last few years. Most has been in the form of grants.

2. To enhance harmonization and coordination and improve the efficiency of external assistance, the Government and the donor community agreed to establish a sector-wide approach (SWAp) in the education sector. The Education Donors' Consultative Mechanism (EDCM) is now fully operational and is co-chaired by ADB and the Government of Japan. One of the key components for implementing the SWAp in the education sector is to develop a comprehensive short-term plan reflecting key objectives and strategies of education sector development and enhance the integration of the Government's education initiatives and those of funding agencies. To implement the Master Plan to Develop Education in Mongolia, the SWAp team has developed a comprehensive 2008 annual implementation plan, in close consultation with EDCM and MECS. This plan highlights partnership arrangements between the Government and funding agencies and provides a detailed outline of priority investment areas and targeted activities within the framework of the new master plan.

3. Total current external funding to the education sector is estimated at \$179.6 million, with \$26.7 million projected to be spent in 2008. Financing is provided by 10 funding agencies through 20 outstanding projects. Of the total financing, 57% is expected to come from bilateral agencies, 23% from international organizations, 16% from the Education for All-Fast Track Initiative, and 4% from international nongovernment organizations. The Government of Japan is providing 62% of all bilateral assistance and MCC financing accounts for 25%. ADB and the Education for All-Fast Track Initiative are among the biggest sources of funding for the country's education sector and provide the majority of the funds from the international organizations. International nongovernment organizations such as Save the Children UK and World Vision have also increased their contributions. External assistance for the education sector is summarized in Figure A3 and Table A3.1.



4. External assistance for education in 2008 was allocated among the subsectors as follows: 11% for early childhood education, 63.7% for primary and secondary education quality and efficiency, 16.3% for improving technical education and vocational training, 8.3% for higher education, and the remaining 0.7% for nonformal education expansion. Details are presented in Table A3.1.

Table A3.1: Development Partner 2008 Budget by Subsector
(\$ million)

Activities by Subsector	Amount
Early Childhood Education	2.935
Primary and Secondary Education	17.003
Technical Education and Vocational Training	4.365
Nonformal Education	0.180
Higher Education	2.215
Total	26.698

Sources: 2008 Ministry of Education, Culture, and Science annual implementation plan and SWAp team.

Table A3.2: Overview of Externally Financed Projects to the Education Sector
(\$)

Project	Year	Donor	Type	Total Cost	Implementing Agency
Nonformal Skills Training for Unemployed Youth and Adults	2006–2009	ADB	Grant	1,000,000	Ministry of Construction and Urban Development
Education Sector Reform	2007–2008	ADB	Grant	600,000	MECS
ADB TA Total				1,600,000	
Second Education Development Project (SEDP)	2003–2008	ADB	Loan	14,000,000	MECS PMU
SEDP	2003–2009	Nordic Development Fund	Loan	8,075,000	MECS PMU
Third Education Development Project	2006–2012	ADB	Loan	13,000,000	MECS PMU
ADB Loans Total				35,075,000	
Grassroots Human Security Aid	1991–2007	Japan	Grant	9,337,737	JICA Japanese Grant Aid for Human Resource Development Scholarship
Human Resources Development Project	2001–2011	Japan	Grant	2,944,100	JICA
SEDP (school renovation, construction)	2003–2007	Japan	Grant	45,000,000	JICA
Theatrical Lighting, Sound System	2004–2007	Japan	Grant	480,000	JICA
Teaching Methods Improvement Towards Children Development of Mongolia	2006–2009	Japan	Grant	1,700,000	JICA
Elementary School Building Expansion	2004–2007	Japan	Grant	3,000,000	JICA
Japan Total				62,461,837	
Education for All	2007–2009	EFA-FTI	Grant	29,500,000	MECS PMU/World Bank
EFA-FTI Total				29,500,000	
Rural Education Development Project	2006–2012	World Bank	Grant	4,000,000	MECS PMU
World Bank Total				4,000,000	

Project	Year	Donor	Type	Total Cost	Implementing Agency
Vocational Education Project	2007–2012	MCC	Grant	25,512,856	MCC
MCC Total				25,512,856	
Child Friendly School	2007–2011	UNICEF	Grant	380,000	MECS
Nonformal Education/Multigrade Teaching	2007–2012	UNICEF	Grant	545,000	MECS
Early Childhood Development	2007–2013	UNICEF	Grant	400,000	MECS
UNICEF Total				1,325,000	
Primary and Secondary Education	2007–2009	World Vision	Grant	6,000,000	World Vision
Mongolia Australia Targeted Capacity Building and Small Activity Facility	2003–2008	Australian Agency for International Development	Grant	6,600,000	Australian Agency for International Development
Basic education	2006–2009	European Commission and SCUUK	Grant	321,400	SCUUK
Preschool	2006–2010	European Commission and SCUUK	Grant	1,444,600	SCUUK
Integrated Urban Development, Construction Sector, and Vocational Education and Training Promotion Program	2006–2010	German Technical Cooperation	Grant	5,715,000	German Technical Cooperation
Others Total				20,081,000	
Total: All Grants				144,480,693	
Total: All Loans				35,075,000	

ADB = Asian Development Bank; EFA-FTI = Education for All-Fast Track Initiative; JICA = Japan International Cooperation Agency; MCC = Millennium Challenge Corporation; MECS = Ministry of Education, Culture, and Science; MOF = Ministry of Finance; PMU = project management unit; SCUUK = Save the Children UK; UNICEF = United Nations Children's Fund.

Sources: Ministry of Education, Culture, and Science; Ministry of Finance; and SWAp team.

DETAILED COST ESTIMATES AND FINANCING PLAN

Table A4.1: Detailed Cost Estimates by Expenditure Categories

Item	MNT Million			\$'000			% of Total Base Cost
	Local	Foreign	Total ^a	Local	Foreign	Total ^a	
A. Investment Costs							
1. TTI Facilities	256.0	2,560.1	2,816.1	218.8	2,188.1	2,406.9	24
2. ICT, Equipment, and Furniture							
a. MIS Hardware and Software	26.3	263.3	289.6	22.5	225.0	247.5	2
b. ICT Software	55.5	554.6	610.0	47.4	474.0	521.4	5
c. ICT Hardware	83.0	830.1	913.1	71.0	709.5	780.5	8
Subtotal (A2)	164.8	1,647.9	1,812.7	140.9	1,408.5	1,549.4	15
3. Books and Instructional Materials							
a. Students' Textbooks	342.1	3,420.8	3,762.9	292.4	2,923.8	3,216.2	32
b. PSTT Library Materials	87.8	877.5	965.3	75.0	750.0	825.0	8
c. Publications	38.8	388.4	427.3	33.4	332.0	365.4	4
Subtotal (A3)	468.7	4,686.8	5,155.5	400.8	4,005.8	4,406.6	43
4. Training and Workshops							
a. Training	19.9	199.3	219.2	17.5	170.3	187.8	2
b. Workshops	2.1	21.1	23.2	1.8	18.0	19.8	0
Subtotal (A4)	22.0	220.3	242.3	19.3	188.3	207.6	2
5. Consulting Services							
a. Consulting Services – International	0	443.2	443.2	0	378.8	378.8	4
b. Consulting Services – National	0	546.9	546.9	0	467.4	467.5	5
Subtotal (A5)	0	990.1	990.1	0	846.3	846.3	8
6. Annual Implementation Costs	0	877.5	877.5	0	750.0	750.0	7
Total Investment Costs	911.5	10,982.8	11,894.3	779.8	9,387.0	10,166.8	100
Total Baseline Costs	911.5	10,982.8	11,894.3	779.8	9,387.0	10,166.8	100
7. Contingencies							
a. Physical Contingencies	45.6	549.1	594.7	39.0	469.3	508.3	5
b. Price Contingencies	13.2	168.1	181.2	11.2	143.6	154.9	2
Subtotal	58.8	717.2	775.9	50.2	612.9	663.2	7
Total Project Costs	970.3	11,700.0	12,670.2	830.0	10,000.0	10,830.0	107

^a Numbers may not sum precisely because of rounding.

ICT = information and communication technology, MIS = management information system, PSTT = pre-service teacher training, TTI = teacher training institute.
Source: Asian Development Bank estimates.

Table A4.2: Detailed Cost Estimates by Financiers
(\$'000)

Item	ADB		Government		Total	
	Amount	%	Amount	%	Amount	%
A. Investment Costs						
1. TTI Facilities	2,355.0	90.9	235.5	9.1	2,590.5	23.9
2. ICT, Equipment, and Furniture						
a. MIS Hardware and Software	241.0	90.9	24.1	9.1	265.1	2.4
b. ICT Software	500.1	90.9	50.0	9.1	550.1	5.1
c. ICT Hardware	748.0	90.9	74.8	9.1	822.8	7.6
Subtotal (A2)	1,489.0	90.9	148.9	9.1	1,637.9	15.1
3. Books and Instructional Materials						
a. Students' Textbooks	3,082.3	90.9	308.4	9.1	3,390.7	31.3
b. PSTT Library Materials	809.8	90.9	81.0	9.1	890.8	8.2
c. Publications	356.9	90.9	35.7	9.1	392.6	3.6
Subtotal (A3)	4,249.0	90.9	425.1	9.1	4,674.1	43.2
4. Training and Workshops						
a. Training	181.1	90.9	18.6	9.1	199.7	1.8
b. Workshops	19.0	90.9	1.9	9.1	20.9	0.2
Subtotal (A4)	200.0	90.9	20.5	9.1	220.5	2.0
5. Consulting Services						
a. Consulting Services – International	400.0	100.0	0	0	400.0	3.7
b. Consulting Services – National	500.0	100.0	0	0	500.0	4.6
Subtotal (A5)	900.0	100.0	0	0	900.0	8.3
6. Annual Implementation Costs	807.0	100.0	0	0	807.0	7.4
Total Investment Costs	10,000.0	92.3	830.0	7.7	10,830.0	100.0
Total Project Costs	10,000.0	92.3	830.0	7.7	10,830.0	100.0

ADB = Asian Development Bank, ICT = information and communication technology, MIS = management information system, PSTT = pre-service teacher training, TTI = teacher training institute.
Source: Asian Development Bank estimates.

Item	Year 1				Year 2				Year 3				Year 4			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
2.2.2 Implement student admission procedures																
2.2.3 Develop student teacher assessment system																
2.2.4 Operationalize student teacher assessment system																
2.2.5 Train teacher educators in student assessment procedures																
2.2.6 Publish student teacher assessment handbook																
2.3 Reformed teaching practice policy																
2.3.1 Develop selection criteria for teaching practice clinic schools																
2.3.2 TTIs and/or clinic schools develop regulations for new teacher practice system																
2.3.3 Pilot school-based teacher practice model																
2.3.4 Produce teacher practice guidelines																
2.3.5 Implement school-based teacher practice model																
2.3.6 Training workshops																
2.4 CPD for teacher educators																
2.4.1 Develop CPD system for teacher educators																
2.4.2 TTIs develop performance and development plan system																
2.4.3 Training needs analysis for teacher educators																
2.4.4 Train management staff in performance and development plan system																
2.4.5 Train teachers in student-centered learning techniques																
2.4.6 Overseas attachments																
2.4.7 Training workshops to disseminate results																
2.5 Teaching and learning materials provision																
2.5.1 LTM needs analysis																
2.5.2 Develop textbooks and other LTMs																
2.5.3 Develop Mongolian abstract scheme																
2.5.4 Implement abstract scheme																
2.5.5 Training courses in LTM authorship and design																
Component 3: Learning and Teaching Materials Provision and Reform																
3.1 Reform of LTM system																
3.1.1 Reform of bid submission, evaluation, and award system																

Item	Year 1				Year 2				Year 3				Year 4			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
3.1.2 Reform of textbook ordering system																
3.1.3 Establishment of cost reduction strategies																
3.1.4 Ongoing textbook evaluator support and training																
3.1.5 Authorship and publisher training																
3.1.6 Develop TRS and/or TRF																
3.1.7 Pilot for TRS and/or TRF																
3.1.8 Scale up TRS and/or TRF																
3.2 Pedagogic and information access for rural schools																
3.2.1 Pilot project to develop ICT for rural areas																
3.2.2 Develop Mongolian language software																
3.2.3 Establish web portal for rural teacher training																
3.2.4 Develop website to encourage teacher collaboration																
3.2.5 ICT learning objects																
3.3 Textbook procurement																
3.3.1 Textbook production																
Component 4: Physical Facilities to Support Reform in TTIs																
4.1 TTI designs																
4.1.1 Develop designs																
4.1.2 Supervision and monitoring																
4.2 Teaching and learning resources provision																
4.2.1 Library stock procurement																
4.2.2 ICT procurement																
4.3 Rehabilitation																
4.3.1 Progress review																
4.3.2 Rehabilitation																

CPD = continuous professional development; ICT = information and communication technology; LTM = learning and teaching material; MECS = Ministry of Education, Culture, and Science; MIS = management information system; TRS/TRF = textbook rental scheme and revolving fund; TTI = teacher training institute.

Source: Asian Development Bank.

PROCUREMENT PLAN

Project Information

Country	Mongolia
Name of Recipient	Mongolia
Project Name	Education Sector Reform Project
Grant Reference	P39254
Date of Effectiveness	
Amount US\$ (total from all financiers)	\$10,830,000
Of which Committed, \$	tbd
Executing Agency	Ministry of Education, Culture, and Science
Approval Date of Original Procurement Plan	tbd
Approval of Most Recent Procurement Plan	tbd

Publication for Local Advertisement ^a	tbd
Period Covered by this Plan	2009–2013

^a General procurement notice, invitations to pre-qualify and to bid, calls for expressions of interest.

Procurement Thresholds, Goods and Related Services, Works and Supply and Install

Procurement Methods	To be used above/below (\$)
International Competitive Bidding works	At least \$1,000,000
International Competitive Bidding goods	At least \$500,000
National Competitive Bidding works	Less than \$1,000,000
National Competitive Bidding goods	Less than \$500,000
Shopping Works	Less than \$100,000
Shopping Goods	Less than \$100,000

Procurement Thresholds, Consultants Services

Procurement Methods	To be used above/below (\$)
Quality- and Cost-Based Selection	At least \$200,000
Consultants Qualifications Selection	Less than \$200,000
Least Cost Selection	Less than \$100,000

List of Contract Packages in Excess of \$100,000, Goods, Works and Consulting Services

Ref	Contract Description	Estimated Costs (\$)	Procurement Methods	Expected Date of Advertisement	Prior Review (Y/N)	Comments
1	TTI Facilities	2,590,500	NCB	1 st Quarter 2010	Y	Financed by ADB
2	MIS Hardware and Software	265,100 (1 package)	NCB	4th Quarter 2010	Y	Financed by ADB
3	Web Portal	100,000	Shopping	4th Quarter 2009	Y	Financed by ADB
4	ICT Learning	400,000 (100 packages)	Shopping	4th Quarter 2009	Y	Financed by ADB

Ref	Contract Description	Estimated Costs (\$)	Procurement Methods	Expected Date of Advertisement	Prior Review (Y/N)	Comments
	Objects					
5	ICT Hardware	822,800	NCB	4th Quarter 2009	Y	Financed by ADB
6	Books and Instructional Materials	4,674,100 (40–45 packages)	NCB	1 st Quarter 2010	Y	Financed by ADB
7	Consulting Services	900,000	QCBS (quality to cost ratio of 80:20)	1 st Quarter 2009	Y	Financed by ADB

ADB = Asian Development Bank, ICT = information and communication technology, MIS = management information system, NCB = national competitive bidding, QCBS = quality- and cost-based selection, TTI = teacher training institute.

Table A6: Proposed Detailed Contract Packages

Description	Number of Contracts	Cost Estimate per Contract	Aggregated Total Cost Estimate	Mode of Procurement	Responsible Agency
A. Civil Works					
1. TTI Facilities	5–8	120,000–240,000	2,590,500	NCB	PIU
B. Goods and Services, Equipment					
1. MIS Hardware and Software	1	265,100	265,100	NCB	PIU
2. Web Portal	1	100,000	100,000	Shopping	PIU
3. ICT Learning Objects	100	4,000	400,000	Shopping	PIU
4. ICT Hardware	10	40,000–80,000	822,800	NCB	PIU
5. Books and Instructional Materials	40–45	70,000–76,000	4,674,100	Shopping	PIU
C. Consulting Services	3	658,000	900,000	QCBS	PIU
Total Contract Packages			9,752,500		

ICT = information and communication technology, MIS = management information system, NCB = national competitive bidding, PIU = project implementation unit, QCBS = quality- and cost-based selection, TTI = teacher training institute.

Source: Asian Development Bank.

NATIONAL COMPETITIVE BIDDING PROCEDURES

1. **National Competitive Bidding.** The procedures to be followed for national competitive bidding shall be those set forth in the Public Procurement Law of Mongolia of 1 December 2005, effective since 1 February 2006, as amended (Attachment 1 dated 6 February 2007), with the clarifications and modifications described in the following paragraphs required for compliance with the provisions of the Procurement Guidelines.

- (i) **Applicable procurement procedure.** Bidding shall be conducted in accordance with the Open Bidding Procedure, as defined in Chapter Two of the Public Procurement Law of Mongolia subject to the provisions stated in paragraph ii (c) below.
- (ii) **Participation in bidding and preferences**
 - (a) Government-owned enterprises in Mongolia shall be eligible to participate in bidding only if they can establish that they are legally and financially autonomous, operate under commercial law, and are not a dependent agency of the procuring entity, or the project executing agency (EA) or implementing agency (IA).
 - (b) Prospective bidders shall be permitted to request bidding documents either in person or by mail upon submission of a written application. Bidding documents shall be sold to anyone who is willing to pay the required fee for the bidding documents, and no other conditions shall be imposed on the sale of the bidding documents. The bidding documents shall be delivered, at the prospective bidders' preference, either by hand or by mail or courier, provided that the bidder is willing to pay the mail or courier delivery charges, which should be specified in the bid invitation. Each bidder shall be allowed to purchase only one set of the bidding documents for a given tender. No limitations shall be imposed on any bidder as to the number of tenders in which it may participate during a given period of time, but the bidder's qualification (financial and technical capabilities) for award of contract(s) shall be assessed on the basis of its capacity to meet the aggregated qualifying requirements for the award of contracts for which it has submitted the lowest evaluated substantially responsive bids.
 - (c) Interested foreign bidders from eligible countries shall be allowed to participate without being required to associate or form joint ventures with local bidders. Foreign bidders shall be eligible to participate in bidding under the same conditions as local bidders. Mongolian bidders and goods manufactured in Mongolia shall be given no preference over foreign bidders and goods manufactured outside Mongolia, either in the bidding process or in the evaluation of bids.
 - (d) Prior registration shall not be a requirement for any bidder to participate in bidding.
 - (e) Pre-qualification of contractors shall not be required, except in the case of large or complex works and with the prior written concurrence of ADB.
- (iii) **Advertising.** Invitations to bid shall be advertised in the Mongolian national language in at least one widely circulated national daily newspaper and freely accessible, nationally-known website in accordance with Article 21.1 of the Public

Procurement Law of Mongolia. Bidding of NCB contracts estimated at (a) \$500,000 or more for Goods and related services, and (b) \$1,000,000 or more for Works shall be advertised concurrently with the general procurement notices on ADB's website.

- (iv) **Standard bidding documents.** Standard bidding documents, acceptable to ADB, shall be used. The bidding documents shall provide clear instructions on how bids should be submitted, how prices should be offered, and the place and time for submission and opening of bids. Bidders shall be allowed to submit bids by hand, by mail, or by courier.
- (v) **Qualification criteria and evaluation criteria**
 - (a) Qualification criteria shall be clearly specified in the bidding documents, and all criteria so specified, shall be used to determine whether a bidder is qualified. The evaluation of the bidder's qualifications should be conducted separately from the technical and commercial evaluation of the bid. When post qualification is applied, the assessment of bidders' qualifications shall be carried out only after the preliminary and detailed evaluation of bids has been completed by the EA/IA and, in doing so, the qualifications of the bidder who has submitted the lowest evaluated substantially responsive bid shall be assessed first. The evaluation of a bidder's qualifications shall only take into account the bidder's capacity and resources to perform the contract, in particular its experience and past performance on similar contracts, capabilities with respect to personnel, equipment, and construction or manufacturing facilities, and financial position. In carrying out the post-qualification assessment, the EA/IA shall exercise reasonable judgment in requesting, in writing, from a bidder only missing factual or historical supporting information related to the bidder's qualifications and shall provide a reasonable time period (that is, a minimum of 7 days) to the bidder to provide his response.
 - (b) Evaluation criteria to be used in the evaluation of bids shall be clearly specified in the bidding documents, and evaluation criteria other than price shall be quantified in monetary terms. All evaluation criteria so specified, shall be taken into account in bid evaluation. Merit points shall not be used in bid evaluation.
- (vi) **Bid opening, evaluation, and award of contract**
 - (a) Bids shall be opened in public, immediately upon the stipulated deadline for submission of bids. Bidders' representatives and the Project's beneficiaries from the concerned local community who choose to attend shall be allowed to attend. The name of the bidder and total amount of each bid, including discounts, shall be read aloud and recorded in the Bid Opening Record. Bids received after the deadline for bid submission shall be rejected and returned to the bidders unopened. Immediately after completion of the bid opening proceedings, a copy of the Bid Opening Record shall be posted at a prominent location, accessible to the public, outside the office of the concerned procuring entity and shall be retained at the same location until the award of contract has been notified. A copy

of the Bid Opening Record shall be promptly provided to all bidders who submitted bids.

- (b) All bids shall not be rejected or new bids invited without ADB's prior written concurrence.
 - (c) No bid shall be rejected merely on the basis of a comparison with the owner's estimated cost or budget ceiling without the ADB's prior written concurrence.
 - (d) A bid containing material deviations from or reservations to the terms, conditions or specifications of the bidding documents shall be rejected as not substantially responsive. A bidder shall not be permitted to withdraw material deviations or reservations once bids have been opened. Bidders shall not be eliminated from detailed evaluation on the basis of non-material, minor deviations, or reservations.
 - (e) The evaluation of bids shall be done in strict adherence to the criteria specified in the bidding documents, and contracts shall be awarded to the qualified bidder offering the lowest evaluated and substantially responsive bid.
 - (f) Bidders shall be requested to extend the validity of their bids only under exceptional circumstances and, in all such cases, the EA/IA shall obtain ADB's approval for the extension of the bid validity period in a timely manner, and subsequently, communicate such request for extension of the validity period of the bids in writing to all bidders before the date of expiry of their bids. Bidders shall have the right to refuse to grant such an extension of the validity of their bids without forfeiting their bid securities. Bidders agreeing to extend the validity date of their bids shall also extend the validity period of their bid securities.
 - (g) In the case of contracts of more than 18 months' duration, the bidding documents and the resultant contract shall provide for price adjustment, based on a formula acceptable to ADB, which shall be disclosed to the bidders in the bidding documents.
 - (h) If a bidder that submitted the lowest evaluated bid refuses to accept the arithmetical corrections made by the EA/IA during the evaluation of its bid, its bid shall be disqualified and its bid security shall be forfeited.
 - (i) A bidder shall not be required, as a condition for award, to undertake obligations not specified in the bidding documents or otherwise to modify its bid as originally submitted.
 - (j) There shall be no post-bidding negotiations with the lowest evaluated bidder or any other bidder. No bidder shall be required, as a condition for the award of contract, to change his bid price or otherwise materially alter his bid after it has been submitted.
 - (k) A bidder declared ineligible by ADB, based on a determination by ADB that the bidder has engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing an ADB-financed contract, shall be ineligible to be awarded an ADB-financed contract during the period of time determined by ADB.
- (vii) **Inspections of accounts and records.** Bidding documents and contracts under national competitive bidding procedures financed by ADB shall include a provision requiring suppliers and contractors to permit ADB to inspect their accounts and records relating to the bid submission and the performance of the

contract by the supplier and/or contractor, as the case may be, and to have them audited by auditors appointed by ADB, if so required by ADB.

- (viii) **Complaints by bidders and handling of complaints.** Bidders' complaints shall be handled in accordance with the procedures set out in Chapter Seven of the Public Procurement Law of Mongolia.
- (ix) **Disclosure of decisions on contract awards.** At the same time that notification on award of contract is given to the successful bidder, the results of the bid evaluation shall be published in a local newspaper or well-known freely accessible website identifying the bid and lot numbers and providing information on (a) name of each bidder who submitted a bid; (b) bid prices as read out at bid opening; (c) name of bidders whose bids were rejected and the reasons for their rejection; and (d) name of the winning bidder, and the price it offered, as well as the duration and summary scope of the contract awarded. The procuring entity/EA/IA shall respond in writing to unsuccessful bidders who seek explanations on the grounds on which their bids were not selected.
- (x) **ADB member country restrictions.** Bidders must be nationals of member countries of ADB, and offered Goods and Works must be produced in and supplied from member countries of ADB.

REQUIRED CONSULTING INPUTS

Table A7: Matrix of Required Expertise per Component

Component	Expertise	Consultants	Person-Months	Source
1	Education planning and management system consultant	1 international 2 national	1.5 10	ADB
	Education finance consultant	1 international 2 national	1.5 12	ADB
	ICT policy consultant	1 international	1	ADB
		4 national	20	
2	Teacher training curriculum reform specialist	1 international 1 national	1.5 3	ADB
	Teacher education quality assurance specialist	1 international 1 national	2 5	ADB
	Teaching practice policy specialist	1 international	1	ADB
		3 national	15	
	Professional development specialist	1 international	1	ADB
		2 national	10	
	Teaching and learning materials consultant	1 international 3 national	1 18	ADB
3	Textbook systems and textbook cost reduction specialist	1 international 1 national	2 5	ADB
	Textbook evaluation specialist	1 international	1.5	ADB
		1 national	4	
	Authorship and publisher training specialist	1 international 1 national	1 4	ADB
	ICT in education consultant	1 international	1.5	ADB
		2 national	18	
4	Educational software development specialist	1 international 1 national	1.5 8	ADB
	TTI facilities construction specialist	2 national	15	ADB
	Monitoring and evaluation specialist	1 national	3	ADB
	Total international consultants		18	
	Total national consultants		150	

ADB = Asian Development Bank, ICT = information and communication technology, TTI = teacher training institute.
Source: Asian Development Bank.

SUMMARY POVERTY REDUCTION AND SOCIAL STRATEGY

Country/Project Title: Mongolia/Education Sector Reform Project			
Lending/Financing Modality:	ADF Grant	Department/Division:	East Asia Department/Social Sectors Division
I. POVERTY ANALYSIS AND STRATEGY			

A. Linkages to the National Country Poverty Reduction Strategy and Country Partnership

Mongolia's National Development Strategy 2008 states that one of the key priorities of the Government is improving the quality of and access to basic education and health services. This will support employment and income-generating activities and supporting sustainable human development. In implementing these activities, the Government will ensure that the poor and other vulnerable groups have equal access to basic social services, supporting their opportunities for employment and participation in economic activities. The objective will be for each person to reach satisfactory levels of education, food availability, and health.¹

The Project was designed to closely reflect national priorities defined in the National Development Strategy. In particular, the Project will:

- (i) contribute to an improvement in the quality of, and access to education at all levels by (a) reducing the annual costs of education to parents, currently estimated to be equivalent to 50%–70% of the monthly minimum subsistence level set by the National Statistical Office; (b) improving the targeting of free textbook support to the poorest; (c) improving access to information, skills, and training in poor rural areas by developing information and communication technology (ICT)-based education services pioneered by the ICT for Innovating Rural Education in Mongolia (IIREM) project; (d) improving the efficiency and use of ICT in primary and secondary schools through support for the development of a national strategy for ICT in basic education; (e) providing technical assistance (TA) to rationalize the existing education planning, management, implementation, and monitoring systems at the Ministry of Education, Culture, and Science (MECS) in order to improve the provision of funding to *aimags* and schools and thus to improve educational efficiency and quality; (f) improving pre-service teacher training (higher education) in an effort to improve quality inputs into the basic education subsector; and (g) improving the teaching and learning environment through rehabilitation and upgrading of teacher training institute facilities;
- (ii) contribute to education sector development by (a) providing technical assistance, training, and support in planning, management, implementation, technical, and professional issues, including the coordination, synchronization, and upgrading of existing management information systems to MECS and Ministry of Finance (MOF) staff, including *aimag* education staff, who will be supported to strengthen their capacity to plan, manage, administer, and regulate the system; (b) supporting activities to improve pre-service teacher training, which will directly and indirectly enhance the quality of professional staff, teacher training courses, and assessment of teacher trainees, and will attract a higher quality of applicants and ensure that a higher proportion of graduates continue into the teaching profession; (c) addressing textbook provision and ICT investment and usage, both of which are closely associated with quality and student performance. (textbooks represent the biggest single cost that parents incur in sending their children to school and a national ICT strategy for education will ensure optimum usage and impact of existing and future investments in ICT); and (d) improving efficiency through investments in new and rehabilitated facilities such as classrooms, dormitories, libraries, learning equipment, textbooks, and instructional materials.
- (iii) contribute to poverty reduction by increasing access to better basic education services, particularly in rural and peri-urban areas, and by improving opportunities for increased financial earnings.

B. Poverty Analysis

Targeting Classification: Targeted Intervention-non-income Millennium Development Goals

1. Key Issues

The World Bank Mongolia Poverty Assessment (2006) found that “a composite profile of a poor Mongolian is a person who lives in rural areas, has many children, works with livestock and has a lower secondary or lesser standard of education.” There are important differences in per capita gross domestic product and poverty incidence between Ulaanbaatar and the rest of the country: Ulaanbaatar has the highest per capita income and lowest poverty rate and rural areas have the lowest per capita income and highest poverty rate. Poverty incidence in rural areas is higher than in urban areas (43% versus 30% in urban areas in 2002 and 37.9% against 27.9% in 2006). The lowest poverty levels

are in Ulaanbaatar (about 27% in 2006), where half of the population lives. The highest levels (51% in 2006) are in the Western Region. Until 1998, poverty was more significant in urban than in rural areas (in 1998, 39.4% of urban residents and 32.6% of rural residents were below the poverty threshold) but from 2002 that situation has been reversed. From 1998 to 2006 urban poverty levels have declined from 39.4% to 27.9%, but over the same period rural poverty has worsened from 32.6% to 37.9%. The differential poverty gap between urban and rural areas has deteriorated by 15.4% to the detriment of rural areas between 1995 and 2006. Between 2002 and 2007 the national poverty thresholds calculated by the National Statistical Office increased by over 300%, although the combined consumer price index and dollar exchange rates decreased the value of the MNT by only 180% over the same period. It is significant that the poverty thresholds have been increased far more in rural areas than in urban areas. Thus, the poverty threshold in Ulaanbaatar increased by only 297% between 2002 and 2007 whereas the poverty thresholds in Central, Khangai, and Western Regions have been increased by approximately 370%. This is a clear indication that it is becoming more expensive to live in rural areas. In 2007 there was an 11% differential between the poverty thresholds for Ulaanbaatar and the Eastern Region. The National Statistical Office poverty threshold is based on an estimate of the income necessary to purchase a 2,100 kilocalorie diet, with adjustments for essential non-food expenditures.

The World Bank analysis of the Living Standards Measurement Survey of 1998 and 2002 found that the negative impact of poverty on school dropout rates is significant at every level of schooling—even at primary level where completion rates are normally close to universal—and poverty has the largest effect on upper secondary dropouts. Poverty affects children's educational outcomes directly (out-of-pocket and opportunity costs) and indirectly (family or parental background). Educational quality (measured by 2006, 2007 basic education examination results conducted by the Education Evaluation Center) is significantly lower in rural areas. One of the major causes of high dropout rates, which is of specific significance to the poor, is the high parental cost of education. A 100-school survey conducted by the project preparatory technical assistance (TA) indicates that the national average annual cost of sending a child to school varies from MNT83,000 in grade 1 to MNT115,000 in grade 8. However, there are significant regional variations and education costs to parents are generally higher (up to MNT150,000) and the quality of education lower in rural areas than in Ulaanbaatar. The regional average monthly poverty threshold income was established at MNT54,500 in 2007 so that the parental costs of education can represent between 1.5 and 2 times the monthly income for a person on the poverty threshold. Textbooks represent the highest single cost followed by travel to school, school uniforms, and stationery. Textbook availability is rated as the most important indicator of student performance by parents and teachers and a reduction in the cost of textbooks to parents will have an impact on access to education for the poor. Almost 30% of schools surveyed indicated that they did not receive the free textbook allocation for poor and vulnerable children and most schools indicated that in any case it was insufficient to meet needs and poorly administered. Improving the targeting of the free textbook allocation and the efficiency of the Government's flagship social assistance program, the Child Money Program, will have a significant impact on the affordability of education to the poor, particularly in rural areas. Starting from 2006, the Child Money Program has provided MNT3,000 per month and MNT25,000 per quarter to all children aged 0–18 regardless of household income. Early findings of the ADB-funded Participatory Poverty Assessment and Monitoring Project indicate that these payments are an important source of income for very poor families, although the informal charges levied by many schools and the overall parental costs of education (see above) are too high for the poor, even with Child Money Program support. Migration from rural to peri-urban areas has grown as migrants seek better education, health, and other services, and income-generating opportunities. This has caused overcrowding in urban schools. High migration rates can also be associated with poor student performance in *soum* and *bagh* schools, and the indirect cost of schooling in relation to household per capita expenditure increases significantly above grade 8. As a result, poorer families are under-represented in upper secondary education in both rural and urban areas. In effect, poverty is an important factor in determining whether a child is enrolled in school and also whether a child can progress to senior secondary and higher education. Yet, without unhampered access to quality education, opportunities for earning a reasonable income and rising above the poverty line are restricted; graduates of at least secondary education are significantly less likely to be poor.

2. Design Features

While the Project aims to improve education sector efficiency as a whole, there will be an emphasis on strengthening institutional capacity in education sector planning, management, implementation, monitoring, and resource allocation. As far as poor and disadvantaged families and/or areas are concerned, the intended and expected results will ensure lower costs for parents, better targeting of pro-poor subsidies, more inclusiveness, transparency, and efficient monitoring, which will improve access, relevance, quality, and equity in education. The Project will establish rural pilot schools to continue the educational initiatives of ICT pioneered in the IIREM project and to pilot teacher upgrading through distance education. These pilot schools will also benefit from the management information system and budgeting initiatives resulting from the finance system components. The project design has taken into account the following factors that hinder basic education enrollment and attainment levels in disadvantaged areas: (i) high levels of poverty; (ii) high costs for parents in sending children to school, a particular issue for poor families and families in *ger* settlements in urban areas; (iii) poor targeting of educational subsidies for the poor; (iv) distant location of the school; (v) lack of effective use of ICT investments; and (vi) lack of qualified teachers in some rural areas.

<p>C. Poverty Impact Analysis for Policy-Based Lending Not applicable.</p>
<p>II. SOCIAL ANALYSIS AND STRATEGY</p>
<p>A. Findings of Social Analysis</p> <p>As far as targeted beneficiaries are concerned, social problems related to education are largely a rural phenomenon, although overcrowding in urban areas resulting from inward migration from rural areas is a growing problem and dropout rates and failures to enroll are increasing in <i>ger</i> areas around cities. First, children tend to be left out of upper secondary schooling because of a combination of lack of access, poor educational quality, and limited household affordability. Despite general progress in school attendance over the past 5 years, rural students are still at a disadvantage. In particular, rural students in <i>bagh</i> and <i>soum</i> do not have equal access to upper secondary education because rural schools closed senior secondary grades during the reorganization and rationalization reform in 1997, while provincial center schools have only limited spaces. Attrition rates are significantly higher among rural children, and educational quality, measured by exam results, is significantly worse in rural schools. Poverty directly, through out-of-pocket and opportunity costs, and indirectly, through parental background, contributes to dropout rates. Rural students who tend to perform worse and drop out after the 8th grade are highly likely to be poor. High dropout rates are a concern because of their long-term implications for inter-generational transmission of poverty. Second, there are shortcomings in implementing systems of teachers' incentives, resource allocation, and public assistance to rural schools. An assessment of the outcomes from the rationalization and reorganization reform indicated that the reform effort seems to have perpetuated the widening gaps in educational outcomes between urban (<i>aimag</i> center and capital city) and rural (<i>soum</i>) schools. Third, the tendency to migrate from rural areas to <i>aimag</i> centers and eventually to Ulaanbaatar has been very strong. According to findings of the survey <i>Children on the Move: Rural-urban Migration and Access to Education in Mongolia</i>, the major reasons for households to move were to find jobs (34.3%), to give children better education (31.2% overall but the most important reason among women), and to get closer to services and information (20.6%). During the last 10 years, 30% of migrants coming to Ulaanbaatar have been school-age children. As a result of this additional burden, some urban schools have to organize classes in three shifts with up to 60 pupils per class. School-age migrant children are more than three times more likely to be out of school than children of long-term residents. A third of migrant children have dropped out of their schools mainly because of registration problems, discrimination at school, and family poverty. This situation not only contradicts the expectations of many migrants, who came to the city to get their children a better education, but also negatively affects the quality of education in areas of both origin and destination. If the trend continues, it will create serious burdens on the capital city's schooling, housing, infrastructure, environment, and social services. If the impacts of migration are not considered more systematically, national goals for access to education will probably not be achieved.</p> <p>More access to high-quality and relevant basic education for rural students is a priority for equitable and sustainable development in Mongolia. Therefore the Project will assist the Government (both directly and indirectly) in addressing options to improve access for rural children, including (i) reducing costs for parents, (ii) improving targeting of educational subsidies, (iii) increasing the efficiency of planning and budgeting, (iv) improving the availability and usage of key quality inputs into the education system, (v) focusing on improved quality in rural schools, and (vi) improving the efficiency and quality of pre-service teacher education.</p>
<p>B. Consultation and Participation</p> <p>The assessment and consultation were done jointly with the Government to ensure participation by all relevant stakeholders. All the executing agencies (EAs) and other stakeholders were consulted. The Project was designed in a participatory process involving major government and nongovernment stakeholders at national and provincial levels, school directors and teachers, community leaders, and development partners through regular consultations, workshops, and presentations. During the project preparatory TA, interviews were conducted with all of the above, plus all development partners and foreign and local NGOs actively involved in the education sector. Field visits were made to schools and education departments in seven <i>aimags</i> in addition to school visits in urban and peri-urban areas of Ulaanbaatar. Focus group discussions with teachers and parents were organized in five <i>aimags</i> and a comprehensive school survey was administered in 100 schools in five <i>aimags</i> (over 13% of the total number of Mongolia schools) based on a preliminary test survey organized in 20 schools in two other <i>aimags</i>. A total of 18 schools were visited by project preparatory TA consultants and were studied in detail through visits to dormitories, classrooms, libraries, computer labs, kitchens, washing and toilet facilities, and sports halls. Written submissions were invited from higher education and teacher training institutes and a survey of selected higher education institutions was also undertaken.</p> <p>During implementation, the Project will maintain broad stakeholder participation in all of its activities. It will encourage (i) nationwide consultation in the rationalization of the planning, management, implementation, monitoring, and resource allocation in the education sector; (ii) partnership between education and training institutions and industry in</p>

developing and delivering market-oriented training curricula and programs; (iii) greater parental involvement in school management; (iv) active consultation and participation of parents in the design of low-cost textbook rental schemes and revolving funds; and (v) greater school and parental involvement in administration and decision-making on subsidy schemes for the poor.

2. What level of consultation and participation (C&P) is envisaged during the project implementation and monitoring?
 Information sharing Consultation Collaborative decision making Empowerment

3. Was a C&P plan prepared? Yes No

This Project was designed jointly with the Government and other stakeholders and all of the executing agencies were consulted. They agreed to ensure participation by relevant stakeholders by following a participatory approach during project implementation, especially in the implementation, operation and maintenance of improved facilities, and civil works. The project steering committee set up under the Second and Third Education Development Projects will be used to provide policy guidance for this Project to coordinate consultation and participation, and to ensure consistency, harmonization, and continuity of activities in the context of the sector-wide approach.

C. Gender and Development

1. Key Issues. According to the ADB/World Bank Mongolia country gender assessment (2005), more girls than boys are enrolled in school in every *aimag*, including Ulaanbaatar city. This pattern emerged in the immediate post-transition period, although the gap has narrowed in recent years. Dropout rates for boys at secondary level are high among poor families in urban areas, while in rural areas, children drop out even at primary level. The gender gap is particularly noticeable at higher levels of education: women constituted 80% of students who had completed secondary education in a survey conducted by the United Nations Development Fund for Women-Economic Growth Support and Poverty Reduction Strategy.

2. Key Actions. Measures included in the design to promote gender equality and women's empowerment—access to and use of relevant services, resources, assets, or opportunities and participation in decision-making process:
 Gender plan Other actions/measures No action/measure

To address the gender gap in school enrollment, the Project attempts to (i) incorporate techniques dealing with presentation of gender roles and issues in the technical assistance for pre-service teacher training; (ii) encourage parents to send their children back to school by providing better school facilities, textbooks, and more qualified teachers, (iii) encourage participation by boys by focusing on upgrading rural education quality; and (iv) reduce the costs of education to parents, which will make it easier to encourage boys to attend school.

III. SOCIAL SAFEGUARD ISSUES AND OTHER SOCIAL RISKS

Issue	Significant/ Limited/ No Impact	Strategy to Address Issue	Plan or Other Measures Included in Design
Involuntary Resettlement	No impact	The Project will carry out minor rehabilitation and repairs within existing teacher training institutes and facilities with no land acquisition required. A resettlement plan is not required.	<input type="checkbox"/> Full Plan <input type="checkbox"/> Short Plan <input type="checkbox"/> Resettlement Framework <input checked="" type="checkbox"/> No Action
Indigenous Peoples	Limited impact	The Project will support (i) translation of textbooks and educational software into Kazakh language and (ii) inclusion of at least one school in Bayan-Olgii <i>aimag</i> for the ICT subcomponent, as reflected in the gender action plan (Appendix 9).	<input type="checkbox"/> Plan <input checked="" type="checkbox"/> Other Action <input type="checkbox"/> Indigenous Peoples Framework <input type="checkbox"/> No Action
Labor <input checked="" type="checkbox"/> Employment opportunities <input type="checkbox"/> Labor retrenchment <input type="checkbox"/> Core labor standards	Significantly positive	The Project is not expected to adversely affect existing labor regulations. It is expected that the Project will help to increase the number of annual secondary school graduates by financing improved access to and quality of education. Under	<input type="checkbox"/> Plan <input checked="" type="checkbox"/> Other Action <input type="checkbox"/> No Action

Issue	Significant/ Limited/ No Impact	Strategy to Address Issue	Plan or Other Measures Included in Design
		the project interventions, students in basic education schools will be taught by better trained and motivated teachers. As a result, repetition and dropout rates will drop, and students will have more relevant and employable attitudes, skills, and knowledge. The Project will directly improve the quality of outcomes and performance of graduates in the labor market. It will raise academic standards and help improve the alignment between graduate skills and the labor market. Increased earning capacity and spending ability of low-income groups will help reduce poverty incidence in Mongolia.	
Affordability	Affordability is a major issue for the poor	Textbook reform will significantly reduce the price of textbooks, the biggest parental cost in sending children to school. The Project will also improve the targeting of educational subsidies toward those who need them most, thereby encouraging attendance.	<input checked="" type="checkbox"/> Action <input type="checkbox"/> No Action
Other Risks and/or Vulnerabilities <input type="checkbox"/> HIV/AIDS <input type="checkbox"/> Human trafficking <input type="checkbox"/> Others	No impact	No other risks and/or vulnerabilities are anticipated as a result of the Project.	<input type="checkbox"/> Plan <input type="checkbox"/> Other Action <input checked="" type="checkbox"/> No Action
IV. MONITORING AND EVALUATION			
Are social indicators included in the design and monitoring framework to facilitate monitoring of social development activities and/or social impacts during project implementation? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			

GENDER ACTION PLAN

1. The gender action plan is designed to level gender imbalances in education, particularly at secondary level and higher. It aims to (i) encourage more men to work as basic education teachers, broadening the role model available for children, taking into account the poorer school attendance and higher dropout rates for boys than for girls in Mongolia; (ii) develop strategies to address gender stereotyping in curriculum and textbook development; (iii) reduce gender disparities by making textbooks cheaper and encouraging good teachers to teach in rural areas; and (iv) assist in reducing the dropout rates of boys in rural areas by targeting dormitory subsidies at poor rural households.

Table A9: Gender Action Plan

Project Component	Tasks
<p>Output 1: Strengthening planning, budgeting, and management of education</p> <ul style="list-style-type: none"> • Strengthening information systems • Improving planning and school-based financial strategies • Ensuring adequate school-based operational budgets that are sufficient to ensure the effective delivery of curriculum objectives and outcomes 	<ul style="list-style-type: none"> • Ensure use of gender-disaggregated data and make sure gender issues are addressed in primary and secondary education through synchronized education management information systems • Include gender, poverty, and indigenous considerations in funding criteria • Ensure that male and female staff of Ministry of Education, Culture, and Science (MECS), district education administrations, and schools have equal opportunities to participate in capacity building training • Develop MECS staff capacity to identify barriers to boys' participation in education • Create conditions in schools to encourage the employment of more men in teaching positions • Prepare inclusive social development plans that incorporate an analysis of gender issues and plans to address them • Study potential policies for targeting dormitory subsidies and cash transfers at poor rural households, and, in particular, for boys • Ensure baseline surveys consider gender specific questions
<p>Output 2: Enhancing quality and relevance of pre-service teacher training</p> <ul style="list-style-type: none"> • Reforming the curricula of teacher training institutes (TTIs) • Developing implementing a comprehensive quality assurance system in TTIs • Improving continuous professional development for teacher educators 	<ul style="list-style-type: none"> • Include components in the pre-service teacher training curricula, to help teachers identify and overcome barriers to boys' participation in school • Develop all teacher training curricula, materials, and courses from a gender perspective • Ensure that selection criteria for TTIs include a focus on gender equity and the encouragement of men as student teachers in TTIs • Deliver gender-sensitive teaching to all student teachers in TTIs • Ensure training in gender-sensitive teaching is

Project Component	Tasks
<ul style="list-style-type: none"> • Reforming teaching practice policy and implementation strategy • Improving teaching and learning resources provision 	<p>provided to all teacher educators</p> <ul style="list-style-type: none"> • Promote men's participation in the teaching workforce • Ensure provision of scholarships for teacher training for rural teachers
<p>Output 3: Better affordability, quality, availability, and effective usage of teaching and learning materials</p> <ul style="list-style-type: none"> • Creating a textbook rental scheme and revolving fund for primary schools • Improving content, teaching, and information access to poor schools in rural areas • Developing a midterm national ICT strategy 	<ul style="list-style-type: none"> • Develop gender-neutral textbooks and supplementary materials (i.e., avoid gender stereotyping) • Develop gender-appropriate information and communication technology (ICT) applications, software, and learning objects • Ensure that free textbooks for poor and vulnerable families reach boys, girls, and members of ethnic minorities • Translate textbooks into the Kazakh language
<p>Output 4: Upgrading facilities in TTIs</p>	<ul style="list-style-type: none"> • Ensure that the selection of schools for the ICT subcomponent includes schools in <i>aimags</i> with a high concentration of ethnic minorities, e.g., Bayan-Olgii • In evaluating bidding proposals for rehabilitation of schools and school facilities, ensure preference is given to construction companies owned or operated by ethnic minorities
<p>Program Management</p>	<ul style="list-style-type: none"> • Create gender sensitivity among all stakeholders • Ensure gender disaggregated data, analysis and reporting on all project activities and components

Source: Asian Development Bank.

LESSONS LEARNED

Lessons	Incorporating Lessons in Project Design
1. Need for close coordination of external assistance	Although the Education Donors' Consultative Mechanism is viewed as a model mechanism for donor coordination in other sectors in Mongolia, at present, the level of harmonization of donor activities in the education sector is relatively low, with parallel funding by various development partners. In 2007, the Asian Development Bank (ADB) supported a technical assistance (TA) project to develop a sector-wide approach (SWAp) in education and the ADB TA support for the SWAp has been extended to 2008–2009. The objective of the SWAp TA is to support a gradual shift to pooled funding and budget support in the education sector. The Project will support the Ministry of Education, Culture, and Science to enhance funding agency coordination by strengthening technical and management capacity to take a phased approach to establishing an advanced alignment mechanism in education.
2. Need for adequate and ongoing operation and maintenance budgets to support investments in equipment and facilities to prevent expensive repairs and to ensure effective usage	Under component 1, the Project will support streamlining of budgetary and financial guidelines to ensure adequate operation and maintenance budgets for facilities. The Information and Communication Technology (ICT) National Strategy will address operation and maintenance of ICT equipment.
3. Need to build on experience gained in previous projects and to scale up successful elements of past projects rather than shifting focus to new areas of activity	The ICT for Innovating Rural Education in Mongolia project provides a model of using ICT to develop content and new teaching approaches and to improve access to information for poor rural schools. It will serve as the starting point for sustainable and cost effective ICT developments under the current Project. The ADB regional TA for ICT in Basic Education has emphasized the potential downstream cost implications of a national ICT policy and has provided important tools in the form of total-cost-of-ownership spreadsheets, which have been used to develop actual total costs of ownership for Mongolian ICT policies.
4. Tracer studies help to provide direction and feedback on textbook provision, pre-service teacher training, and education budgeting and financing	Baseline data will be collected and citizenship report cards will be used as one of the monitoring tools.
5. Reforms need to be carefully planned to ensure successful	Textbook provision under component 3 will involve a comprehensive review of available options to incorporate

Lessons	Incorporating Lessons in Project Design
implementation	<p>grassroots understanding of the issues that teachers, parents, and students face in textbook provision and governance issues related to publishing and provision of textbooks and learning materials.</p> <p>The experiences of other countries in economic and social transition, such as Armenia, Moldova, Uzbekistan, Kyrgyz Republic, and Tajikistan, have been reviewed and a study tour to Armenia was organized for MECS officials during the project preparatory TA.</p>
6. The need to strengthen implementation capacity of the PIU	<p>Although the PIU is experienced, the Project will make provisions to strengthen its project management, including monitoring and evaluation. A monitoring and evaluation specialist will be recruited from among the national consultants. Training will be provided to the PIU on monitoring and evaluation.</p>

Source: Asian Development Bank.

TEXTBOOK RENTAL SCHEMES AND REVOLVING FUNDS

A. Cost Reduction

1. **Production.** Textbooks are currently produced using expensive four-color printing but inadequate binding. The use of four-color printing for textbooks that are expected to last for only 1 year is wastage of scarce resources and an additional cost to parents. Consideration should be given to using four-color printing on one side of the printed sheet but one-color printing on the reverse side, which would probably reduce printing costs by around 20–25%. However, this requires editorial and design skill to make sure that all the color work is correctly positioned.

2. **Distribution and Durability.** Publishers confirm that textbooks that are not bought by parents represent a considerable waste, which has to be built into textbook costs. Pre-ordering systems would reduce wastage but maintain competition and school-based choice. It would reduce textbook costs, although the biggest textbook cost reduction possibilities would come from extending book life.

B. Parent Purchase and Textbook Rental System and/or Revolving Funds

3. A considerable body of international evidence demonstrates that durable textbooks enable the longest reasonable textbook life consistent with the need to provide regular revision, review, and updating. A target book life of 4 to 5 years was regularly achieved during the central planning period and is also a reasonable period for review and updating of both curriculum requirements and textbook content. A long book life combined with an efficient textbook rental system is the most cost-effective system.

4. If parental contributions are to remain the main source of textbook financing, there are two basic approaches. These are (i) parental purchase of textbooks, and (ii) parental payment of rental fees for books, which are loaned to the student from the school textbook library. Parental purchase, which implies ownership of textbooks, has three fundamental problems: (i) it is not equitable, since rich parents can buy more new textbooks than poor parents; (ii) schools find it difficult to manage the optimum usage of incomplete textbook supplies, since parents who have purchased textbooks may object to a textbook being borrowed or used by a student who has not; and (iii) it is usually more difficult for parents to afford than rental systems.

5. In a rental system, textbooks are owned by the school, so poor and rich students benefit equally. School ownership also allows the equitable distribution of available books if there is less than 100% provision. Under a rental system, parents who can afford to may also buy their own copies of textbooks for use at home. Perhaps the most important advantage of a rental system over a purchase system is that the full costs of provision do not necessarily have to be paid in advance by the parent. They can be spread over a 4- or 5-year period and can even be paid on a quarterly basis. This significantly reduces the periodic investments that parents make in textbooks and makes it possible even for poor parents to support the scheme. Focus group discussions with teachers made it very clear that a most parents find it very hard too afford to buy all the textbooks at one time at the beginning of the school year. They would strongly welcome a system that reduced the size of their financial outlay, and allowed costs to be spread over several quarters rather than paid all at once every September.

C. Setting-up a Textbook Rental Scheme and Revolving Fund

6. A textbook rental scheme is a method of providing textbook sets on loan to students in return for an annual rental fee. Rental fees paid by parents are held and accumulated in a textbook revolving fund which is used to purchase replacement copies when textbooks reach the end of their targeted useful classroom life. The fund “revolves” because expenditures on replacement copies are replaced by continued rental fee contributions from parents. The rental fee income has to be calculated and managed to ensure that there is sufficient funding to guarantee full replacement supplies. Textbook rental schemes and revolving funds work best if working capital can be made available to supply all textbook requirements free of charge to schools on a staggered basis over a period of 4-5 years. In this scenario the Government and/or funding agencies would fund the initial supplies to schools. The accumulated rental fees would fund replacement costs and would provide the basis of a sustainable, parent-funded system. This is the textbook revolving fund.

7. Textbook rental fees are normally held in dedicated interest-bearing school bank accounts controlled by elected management committees of parents and staff. This means parents can see that the funds are used entirely for the benefit of the children in their own community. Bank statements should be posted on school notice boards to demonstrate that the funds have not been diverted. If the national textbook provision system operates on the basis of a 4-year book life, funds should ideally be accumulated without expenditure over 4 years. At the end of this period, the funds can be used to purchase replacement copies for textbooks that are worn out, or need to be replaced by new approved editions.

8. The Government’s current policy of free textbook allocations to 20% of the students is insufficient given the national poverty level of 32%, is not well targeted, and is reported to be administered inefficiently. If the Government wishes to continue to provide support to the poorest through a rental system it can remit cash payments directly into these school textbook bank accounts, enabling schools to offer the poorest students free books of lower rental charges. Transferring cash directly into school textbook bank accounts is more efficient and cheaper than physically transferring books. It also prevents the diversion of free textbooks away from schools at the *aimag* level and ensures that the free textbooks are those selected by the schools, which is not the case at the moment. In order to ensure the proper and efficient management of the system, it is normal to establish a national trust or nongovernment organization (NGO) to manage the system (this is what is done in Armenia and Uzbekistan). Every school textbook fund would be a voting member of the trust or NGO and would be required to operate according to the rules and regulations it establishes. Legal charters and operational rules and regulations that exist in other countries can be adapted for use in Mongolia. Every school in the *aimag* would vote to appoint an *aimag* representative on the trust or NGO board, which would comprise senior representatives of the Ministry of Education, Culture, and Science (MECS), the Ministry of Finance (MOF), and the *aimag* representatives. There would also be a small group of permanent trust or NGO management staff funded from an agreed percentage of the interest earned on accumulated rental fees in each school account. This would be automatically transferred to the trust or NGO every year.

9. The charter, rules, and regulations would prevent any transfer of funds away from schools (with the exception of the transfers noted above). They would prevent the use of funds for any purpose other than the procurement of textbooks. All decision-making would be made by the school textbook fund committees. The charter would guarantee that the collected rental fees belong to the schools and not to the MECS or MOF. Each school bank account would normally

be established on a “deposit only” basis for the initial 4 years to guarantee that funds accumulate. All school bank account details would automatically be copied to the trust or NGO (for information only, not for withdrawals) and simple software programs would enable school accounts to be monitored so problem schools (e.g., those with unacceptably low rental fee collection rates) would be identified early and helped by the local *aimag* inspectorate.

10. Textbook rental fees should be calculated annually by the trust or NGO and communicated to schools and parents. Simple and cheap *aimag*-based computerized ordering systems would enable schools to place their order requirements early each year using electronic order forms and price lists prepared by the trust or NGO operating on behalf of MECS. The orders would be stored electronically at the *aimag* level and consolidated by the trust or NGO. This means publishers can be provided with accurate print runs and lists of schools to which they should deliver books direct. This avoids waste and publishers’ risk and will ultimately reduce costs. It also means that schools have books delivered direct and that parents are spared the cost of traveling to *aimag* centers to buy books.

11. The system of textbook loans from school textbook stores to students operated successfully in Mongolia for many years. The concept is therefore very familiar. What is needed to move to a rental fee and revolving fund system is the addition of rental fee collections, the opening and management of textbook fund bank accounts, and the establishment of the managing trust or NGO. The development of a rental fee and revolving fund system is not unduly complex, although considerable careful preparation is required. Assurances will be required from the Government to establish the trust or NGO as the management authority for the pilot textbook rental scheme and textbook revolving fund. All Mongolian schools already operate their own bank accounts, so there will be no problem in opening an additional dedicated textbook rental scheme and revolving funds account. Existing NGO legislation in Mongolia can be used to establish a textbook rental scheme and revolving funds trust and new legislation is in preparation that is aimed solely at enabling the operation of charitable trusts.

D. Competing Textbooks

12. MECS policy supports the development of competing textbooks. An effective textbook rental scheme will provide a predictable textbook market, which will support the rapid development of private sector publishing and printing. Armenia, for example, with a population almost identical to that of Mongolia, has competing alternative textbooks for each subject and grade level. The MECS would be responsible for selecting a list of textbooks from competitive submissions by publishers against defined content and methodological requirements. Evaluation and selection will be transparent and according to established criteria. Individual schools may then choose whichever title they wish from the list of approved textbooks. Genuine and significant improvement in textbook content, design, and teaching approach will only develop when there is creative competition between publishers. This will also bring pressure to bear on prices, which in turn will make the system cheaper for parents and the Government.