

Project Administration Manual

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Mongolia: Sustaining Access to and Quality of
Education During Economic Difficulties Project

ABBREVIATIONS

ADB	–	Asian Development Bank
BIS	–	business intelligence system
BOQ	–	bill of quantities
CDC	–	construction development center
CPD	–	continuing professional development
EEC	–	Education Evaluation Center
EMP	–	environmental management plan
FMA	–	financial management assessment
GIS	–	geographic information system
ICB	–	international competitive bidding
IFI	–	international financial institution
IoE	–	Institute of Education
IT	–	information technology
ITPD	–	Institute of Teachers Professional Development
MECSS	–	Ministry of Education, Culture, Science and Sports
MNUE	–	Mongolian National University of Education
NCB	–	national competitive bidding
NUM	–	National University of Mongolia
PAM	–	project administration manual
PIU	–	project implementation unit
PSC	–	project steering committee
RRP	–	report and recommendation of the President
SBM	–	school-based management
SGAP	–	social and gender action plan
SIP	–	school improvement plan
SOE	–	statement of expenditure
SRC	–	school report card
STP	–	simplified technical proposal
TLM	–	teaching and learning materials
UMED	–	Ulaanbaatar Metropolitan Education Department

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Project Administration Manual Purpose and Process

The project administration manual (PAM) describes the essential administrative and management requirements to implement the project on time, within budget, and in accordance with the policies and procedures of the government and Asian Development Bank (ADB). The PAM should include references to all available templates and instructions either through linkages to relevant URLs or directly incorporated in the PAM.

The Ministry of Education, Culture, Science and Sports (MECSS) and Ulaanbaatar Metropolitan Education Department (UMED) are wholly responsible for the implementation of the ADB-financed project, as agreed jointly between the borrower and ADB, and in accordance with the policies and procedures of the government and ADB. ADB staff is responsible for supporting implementation including compliance by MECSS and UMED of their obligations and responsibilities for project implementation in accordance with ADB's policies and procedures.

At loan negotiations, the borrower and ADB shall agree to the PAM and ensure consistency with the loan agreement. Such agreement shall be reflected in the minutes of the loan negotiations. In the event of any discrepancy or contradiction between the PAM and the loan agreement, the provisions of the loan agreement shall prevail.

After ADB Board approval of the project's report and recommendations of the President (RRP), changes in implementation arrangements are subject to agreement and approval pursuant to relevant government and ADB administrative procedures (including the Project Administration Instructions) and upon such approval, they will be subsequently incorporated in the PAM.

I. PROJECT DESCRIPTION

A. Rationale

1. The growth of Mongolia's economy has rapidly decelerated since 2011 because of declining foreign direct investment and falling commodity prices. This slowed growth has caused serious economic difficulties, including large revenue shortfalls and cuts in government investment, which are expected to continue beyond 2017 and require the government to reduce public spending further. The government has cut education spending to a minimum, only enough to keep schools and kindergartens operating. Access to and the quality of pre-primary, primary, and secondary education are likely to deteriorate with the growth of the population of kindergartner and school-age children and unaccomplished curriculum and assessment system reforms, unless some mitigating measures are implemented.

2. Seats in schools and kindergartens have increasingly become unavailable due to the growth in the population of kindergartner and school-age children which has been outpacing the construction and expansion of schools and kindergartens. While enrollments in pre-primary education doubled (105.9%) from SY2009 to SY2015, the number of kindergartens increased by only 58.2%.¹ Similarly, enrollments in primary and secondary education rose by 7.8% during SY2012–SY2015, but only 13 schools were built during the period, an increase of 1.7%. Consequently, the enrollment capacity of schools and kindergartens has been overstretched, with the class size enlarged and 33 schools operating in three shifts in SY2016 (of which 30 are in Ulaanbaatar).² The gap in enrollment capacity has been widening particularly in Ulaanbaatar because of disproportionate population growth caused by internal migration. The average class size at Ulaanbaatar schools is 37 at the primary level, the largest in the country, as enrollments expanded by 18.1% during SY2012–SY2015. With an increase of 41.5% in pre-primary enrollments, the class size at free public kindergartens in Ulaanbaatar is even larger, at 40–50 students, and students are selected for admission by lottery. Although net enrollment rates at pre-primary, primary, and junior secondary levels have been improving steadily, these may be reversed unless schools and kindergartens are built or expanded. The population of kindergartners is projected to grow further until 2019, while the population of primary and secondary school-age children is expected to rise until 2025.

3. The curriculum reform, which started in SY2013 with the pilot test of a new curriculum for primary education, remains incomplete without the pilot test and implementation of a new curriculum for senior secondary education.³ Moreover, the current curriculum still lacks learning outcome standards for students at every grade level, which leaves students and teachers unguided and confused. The current student learning assessment system is not reliable and fails to provide feedback on student learning or education policy. Furthermore, the standards for school performance evaluation have become too outdated to encourage school-based continuing professional development (CPD) of teachers and school leaders, and effective management of school resources to support the implementation of the current curriculum. Likewise, the current standards for teacher evaluation are too general to help teachers develop knowledge and skills.

¹ Students enrolled in pre-primary education totaled 109,479 in SY2009 and jumped to 225,388 in SY2015. There were 814 kindergartens in SY2009, of which 102 were private. The number rose to 1,288 in SY2015, of which 462 were private.

² Although the class size became larger, the student–teacher ratio remained constant at 18:3–18:8 during SY2012–SY2015.

³ The curriculum reform was undertaken in phases. In SY2014, the new curriculum for primary education was implemented nationwide, while a new curriculum for junior secondary education and pre-primary education was pilot tested. In SY2015, the new curriculum for junior secondary and pre-primary education was implemented nationwide. However, the development and pilot test of a new curriculum for senior secondary education were delayed and has not been completed, as of August 2017.

4. The new curriculum was introduced with little accompanying teaching and learning materials (TLM)—including textbooks, teachers' guides, student workbooks, tools, and equipment—provided to implement it, which negatively affected the quality of student learning. There are huge disparities in the distribution of TLM among schools and kindergartens. Schools and kindergartens in rural areas are more disadvantaged than those in urban areas, as the transportation cost is higher. Since a standard set of TLM accompanying the curriculum for each grade does not exist, TLM have been provided on an ad hoc basis, further intensifying disparities.

5. Existing in-service professional development programs do not assist teachers in adopting a child-centered methodology and the formative and summative assessment and evaluation methods required by the new curriculum. The budget allocated for teacher training is generally too limited to cover even the mandatory training for teachers in the first, fifth, and 10th year of service, causing the quality of education to suffer. In addition, little CPD opportunities are provided for school and kindergarten managers who are expected to provide instructional leadership for the implementation of the curriculum.

6. The low population density and harsh winters in Mongolia have caused inefficiency in education expenditures. The cost of providing education services is high because (i) education services need to be provided in sparsely populated rural areas; (ii) school dormitory services are needed for one-quarter of the population engaged in seminomadic herding; (iii) constant heating is required in schools, dormitories, and kindergartens during extremely cold winter months; and (iv) many nonteaching staff are employed to operate and maintain schools, dormitories, and kindergartens. The government lacks effective information gathering, planning, and management systems for schools, dormitories, and kindergartens; and resource-sharing mechanisms between schools and kindergartens.

7. **Strategic fit.** The project will support key priorities set out in the Mongolia Sustainable Development Vision 2030 and Action Program for 2016–2020 for the education sector, including (i) providing equal, inclusive, and practical educational services; (ii) allowing every child in urban areas to enroll in a kindergarten; (iii) alleviating over-enrollment and eliminating three shifts in schools; (iv) introducing a system of evaluation of education quality and results at all levels of education; and (v) building an education system based on standards.⁴ It is in line with the education sector operations plan of the Asian Development Bank (ADB), which emphasizes the importance of improving student learning outcomes.⁵ The project is aligned with ADB's country partnership strategy for Mongolia, 2017–2020, which promotes economic and social stability in a period of economic difficulties.⁶

8. **Lessons.** A review of the curriculum implementation conducted under ADB's technical assistance showed that most teachers accept the curriculum but struggle with implementation because of lack of (i) learning outcome statements in the curriculum; (ii) understanding, knowledge, and skills regarding child-centered methodology and formative and summative student assessment and evaluation methods; and (iii) quality TLM.⁷ These findings have been incorporated into the project design. The project also draws on lessons learned from the experience of ADB and other development partners in supporting school and kindergarten construction and expansion, particularly the importance of (i) reliable enrollment and population

⁴ State Great Khural. 2016. *Mongolia Sustainable Development Vision 2030*. Ulaanbaatar; Government of Mongolia. 2016. *Action Program for 2016–2020*. Ulaanbaatar.

⁵ ADB. 2010. *Education by 2020: A Sector Operations Plan*. Manila.

⁶ ADB. 2017. *Country Partnership Strategy: Mongolia, 2017–2020—Sustaining Inclusive Growth in a Period of Economic Difficulty*. Manila.

⁷ ADB. 2015. *Technical Assistance to Mongolia for Education Sector Development*. Manila (TA-8931-MON).

growth projections in planning capital investments, and (ii) daily construction supervision to ensure the quality of school and kindergarten buildings.

B. Impact and Outcome

9. The project is aligned with the following impact: more accessible, more equitable and better quality education system developed (footnote 4). The project will have the following outcome: access to and quality of pre-primary, primary, and secondary education sustained during economic difficulties.

C. Outputs

10. The project will have five outputs.

11. **Output 1: Gap in enrollment capacity of schools and kindergartens narrowed.** The project will support the construction and expansion of schools and kindergartens in Ulaanbaatar and *aimag*⁸ centers (Altai, Darkhan, Sainshand, and Sumber) to make more seats available, and reduce three-shift schools and class size. Inclusive (age, gender, and special needs), energy efficient (improved insulation and heating systems), and disaster resilient features⁹ will be built into new and expanded schools and kindergartens, using innovative designs introduced by the government and other development partners. The newly constructed or expanded schools and kindergartens will be fully equipped and furnished. To improve the quality of school and kindergarten buildings, detailed specifications will be prepared and daily construction supervision by adequately trained engineers will be provided. Environmental impacts will be mitigated, monitored, and reported, following the environmental management plan (EMP). By 2021, 3 schools and 7 kindergartens will be newly constructed, and 8 schools and 17 kindergartens will be expanded (with more than 5,500 seats created at the schools and 4,500 at the kindergartens) with improved insulation and heating systems; facilities for students with disabilities; disaster resilient features; and age- and gender-inclusive sanitation facilities for students.

12. **Output 2: Unfinished curriculum reform and associated assessment system reforms completed.** The project will support the completion of unfinished curriculum reform and associated assessment system reforms by updating curriculum standards, student learning assessment criteria, methods and system for primary, junior and senior secondary education, and standards for school and teacher evaluation. It will have five sub-outputs.

- (i) **Sub-output 2.1: Curriculum standards reviewed and rewritten to align with expected student learning outcomes.** The curriculum for all grades and subjects will incorporate clearly defined learning outcome standards, while the Mongolian language and literature curriculum for grades 1–12 will comprehensively be reviewed to improve writing, reading, and communication skills of students. The equivalency program curriculum will also be updated based on the statements of expected student learning outcomes incorporated into the grades 1–12 curriculum. By 2020, 60% of teachers will be trained in the updated curriculum standards, assessment criteria, and methods.
- (ii) **Sub-output 2.2: Student learning assessment criteria, methods, and system for primary and secondary education improved.** Based on the updated outcome standards, student learning assessment criteria and methods will be

⁸ An *aimag* is an administrative subdivision in Mongolia.

⁹ Include sound seismic design to withstand earthquakes, winter snow storms, improved flood control and precipitation resistant features.

reviewed, and the system for student learning assessment in basic and secondary education will be upgraded by strengthening the capacity of the Education Evaluation Center (EEC). Additional test items will be developed, validated, and added to the EEC's test item bank. To enhance the quality and reliability of national exams, EEC will be equipped with upgraded information technology (IT) systems which can easily handle real time data transfer from examination centers across Mongolia, database, item bank, and data analysis; and which can assist students, teachers, school leaders, and policy makers in preparing for exams, training teachers, and reviewing and developing curriculum, textbooks, and education policy.

- (iii) **Sub-output 2.3: Standards for school evaluation updated and implemented to strengthen school-based management.** The standards for school evaluation will be updated to strengthen school-based management (SBM) and to better assist schools' self-evaluation, performance improvements, and reporting. In addition to the schools which currently prepare school improvement plans and school report cards, 30 new schools will be selected and school leaders will be trained in the preparation of school improvement plans and school report cards to strengthen SBM using the updated standards. By 2020, 25% of schools will be using the updated standards for schools in their school improvement plans and school report cards.
- (iv) **Sub-output 2.4: Competency-based standards for teachers updated to encourage self-appraisal and continuing professional development.** The existing standards for teacher evaluation will be revised to include differentiated competency levels and encourage self-appraisal and CPD. School principals will be trained in the use of the updated competency-based standards for teachers and provided with handbooks. By 2020, 70% of school principals and other school managers will have received training on the use of the revised competency-based standards for teachers to identify continuing professional development needs.
- (v) **Sub-output 2.5: Pre-service teacher education curriculum aligned with the updated school curriculum.** In line with the updated school curriculum standards, student learning assessment criteria and methods, and competency-based standards for teachers, the curriculum for pre-service teacher education programs will be reviewed.

13. **Output 3: Teaching and learning materials that accompany the new curriculum provided.** The project will update TLM standards, including those for developing, evaluating, and selecting TLM, to improve the quality, and enhance systems for distributing TLM. A profile of TLM accompanying the curriculum for each grade, including pre-primary education and equivalency program, and their layout and physical standards will be developed. By 2019, profiles and standards of TLM for all grades and pre-primary education will be developed with gender and socially inclusive aspects incorporated. Additionally, the quality of textbooks and other TLM translated into Kazakh language for primary education will be improved. The provision of quality TLM for poorly resourced kindergartens will also be supported. By 2020, 30% of kindergartens in rural areas are provided with a standard set of TLM.

14. **Output 4: Teachers and managers' knowledge and skills upgraded for the new curriculum and assessments.** The project will upgrade teachers and school and kindergarten managers' (principals and head teachers) knowledge and skills to implement the updated curriculum standards, assessment, and evaluation. Given budget constraints, the capacity of the

Institute of Teachers Professional Development (ITPD) will be strengthened to develop and deliver CPD programs for pre-primary, primary, and secondary teachers through existing online platforms and workshops.¹⁰ Model science, math, and IT laboratories will be established at ITPD to train secondary teachers in the use of laboratory equipment and facilitating students' experiments emphasized in the curriculum. Moreover, CPD programs for school and kindergarten managers, and Ulaanbaatar and *aimag* education department staff will be developed and delivered to improve leadership during the implementation of the updated curriculum standards, assessment, and evaluation. Additionally, CPD programs for teachers at lifelong learning centers will be developed in line with the updated equivalency program curriculum. By 2019, CPD programs for school and kindergarten managers, and Ulaanbaatar and *aimag* education department staff will be developed using online platforms; and for teachers on assessment, and child-centered and inclusive teaching approaches. By 2020, 30% of secondary science teachers will be trained in science laboratory skills and management, and 60% of pre-primary, primary, and secondary teachers will be regularly participating in CPD programs through online platforms.

15. Output 5: Systems for planning and managing education services strengthened. The project will strengthen systems for planning and managing pre-primary, primary, and secondary education services in the medium term. It will have three sub-outputs.

- (i) **Sub-output 5.1: Centralized real-time information system to identify school and kindergarten construction, expansion, and rehabilitation needs developed.** A geographic information system (GIS)-based real time information system integrated into the existing systems will be developed to collect and analyze information on school and kindergarten construction, expansion, and rehabilitation needs, taking into account population and enrollment growth projections, and trends in internal migration. By 2020, the real time information system will have been developed with gender-sensitive and inclusive design parameters (e.g., gender and age-sensitive sanitation, disabled access).
- (ii) **Sub-output 5.2: Plans to introduce cluster systems for schools with senior secondary grades and kindergartens developed and piloted.** The project will support the review of current allocation of human, financial, and physical resources for schools with senior secondary grades and kindergartens to identify potential use of cluster systems for efficient distribution of resources. Lists of cluster schools and kindergartens and policy frameworks to specify the functions and role of cluster systems will be developed. By 2020, plans to introduce cluster systems for schools and kindergartens will be developed and pilot tested.
- (iii) **Sub-output 5.3: System for school and kindergarten catchment areas reviewed.** The policy and system for school and kindergarten catchment areas will be reviewed to identify causes of non-compliance and ways to rationalize the system, by taking into account newly developed and expanded urban areas and rural-to-urban migration. The updated policy and system will be piloted and measures to strengthen its enforcement will be identified to improve the planning and management of school and kindergarten enrollments, as well as construction, expansion, and rehabilitation.

¹⁰ In 2017, about 30% of primary and secondary teachers participate in CPD programs through online platforms (Design and Monitoring Framework, baseline for indicator 4d).

II. IMPLEMENTATION PLANS

A. Project Readiness Activities

Table 1: Summary Project Readiness Activities

Indicative Activities	2017							Responsible Agency(s)
	8	9	10	11	12	1	2	
Loan negotiations								ADB, MECSS, MOF, UMED
ADB Board approval								ADB
Loan signing								ADB, MOF
Government legal opinions								MOJ
Loan effectiveness								ADB
Establishment of project implementation arrangements								MECSS
Project management training								ADB, MECSS, UMED, PIU

ADB = Asian Development Bank; MECSS = Ministry of Education, Culture, Science and Sports; MOF = Ministry of Finance; MOJ = Ministry of Justice; PIU = project implementation unit; UMED = Ulaanbaatar Metropolitan Education Department.

Source: ADB.

B. Overall Project Implementation Plan

Table 2: Project Implementation Plan and Activities

Activities	2017	2018				2019				2020				2021			
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Output 1: Gap in enrolment capacity of schools and kindergartens narrowed																	
1.1 Advertise and recruit five engineering firms packages																	
1.2 Prepare drawings, specifications, and BOQ for schools																	
1.3 Prepare drawings, specifications, and BOQ for kindergartens																	
1.4 Recruit an international procurement specialist to prepare specifications for buildings, machinery, equipment, and furniture																	
1.5 Prepare specifications for buildings, machinery, equipment, and furniture																	
1.6 Prepare and advertise procurement packages of civil works for school construction and expansion (including equipment)																	
1.7 Prepare and advertise procurement packages of civil works for 240 seat kindergartens (including equipment)																	
1.8 Prepare and advertise procurement packages of civil works for other kindergartens (including equipment)																	
1.9 Apply for building, land, and utility permits																	
1.10 Recruit an international construction supervision training specialist																	
1.11 Recruit 10 individual construction supervision specialists																	
1.12 Train construction supervision specialists																	
1.13 Supervise civil works on school and kindergarten sites																	
1.14 Recruit an environment specialist																	
1.15 Implement, monitor, and report on environment management plans																	
1.16 Sign civil works (including equipment) contracts for school construction and expansion																	
1.17 Undertake civil works for school construction and expansion																	
1.18 Conduct civil works completion inspections for the constructed and expanded schools																	
1.19 Sign civil works (including equipment) contracts for 240 seat kindergartens																	
1.20 Start civil works for 240 seat kindergartens																	

[illegible]

Activities	2017	2018				2019				2020				2021			
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
2.1.9 Run training workshops with Mongolian language subject teachers prior to trialing in schools																	
2.1.10 Form a team from national lifelong learning center to update the current equivalency program curriculum to align with the new curriculum standards and rewrite them as outcome statements																	
2.1.11 National curriculum standards specialist conducts workshop with lifelong learning teachers to assist them to implement the new curriculum																	
Sub-output 2.2: Student learning assessment criteria, methods, and system for primary and secondary education improved																	
2.2.1 Recruit student assessment specialists (international and national)																	
2.2.2 Identify a range of learning assessment methods that match the curriculum learning outcomes statements for all grade 1–12 subjects																	
2.2.3 Form a team of assessment specialists from EEC, IoE, ITPD, MNUE, and NUM to match the learning assessment methods with curriculum outcomes across all subjects in the curriculum																	
2.2.4 Run a full day training workshop with the selected assessment specialists from EEC, IoE, ITPD, MNUE, and NUM to match the learning assessment methods with curriculum outcomes across all subjects																	
2.2.5 Provide three additional 1-day training workshops for the same group of assessment specialists for writing appropriate assessment items with accompanying rubrics for standardized assessments																	
2.2.6 Run six training workshops to share the new assessment items with teachers and teacher educators and use this group to validate the items																	
2.2.7 Strengthen the capacity of the EEC to plan, develop, and administer a secure and reliable external assessment system for measuring student achievement levels at key points of schooling (Grades 5, 9, and 12)																	
2.2.7.1 Identify a group of senior assessment specialists (led by EEC) to plan policy details of an external assessment system for measuring student achievement levels at key points of schooling (Grades 5, 9, and 12)																	
2.2.7.2 Conduct three workshops in collaboration with ECC for teams of subject teachers to develop new items for an extended item bank of examination questions across all subjects (initially at grade 12)																	
2.2.7.3 Validate these items so that comprehensive sets of validated multiple-choice questions can be prepared for use in national graduation examinations at the end of senior secondary education and/or for use as general university entrance exams																	
2.2.7.4 Prepare procurement packages and procure an integrated IT system to support database, data analysis, and test item bank																	
2.2.7.5 Recruit two system analysts (national) to conduct business analysis and prepare functional requirements for the IT system compatible with EEC requirements																	

Activities	2017	2018				2019				2020				2021			
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
2.4.6 Finalize the updated competency-based standards for teachers																	
2.4.7 Prepare handbooks on the use of updated competency-based standards for teachers																	
2.4.8 Print 1,000 copies of the handbooks and distribute to schools																	
Sub-output 2.5: Pre-service teacher education curriculum aligned with the updated school curriculum																	
2.5.1 Provide two training workshops for pre-service teacher education curriculum developers to enhance teacher training outcome statements as per school curriculum statements																	
2.5.2 Assist MNUE to integrate child-centered methodology, formative and summative assessment and evaluation methods, career guidance, and self-assessment of teaching competency into the pre-service teacher education curriculum																	
2.5.3 Trial these units and review and update the curriculum and teaching practice requirements of the pre-service program according to feedback																	
Output 3: Teaching and learning materials that accompany the new curriculum provided																	
3.1.1 Recruit TLM specialists (international and national)																	
3.1.2 Conduct a survey on the actual usage of print TLMs in classrooms at all grade levels																	
3.1.3 Prepare a curriculum review/TLM publication plan to rationalize textbook printing and distribution																	
3.1.4 Run workshop to discuss the curriculum review/TLM publication plan with stakeholders																	
3.1.5 Finalize the TLM publication plan and include in MECSS's education policy																	
3.1.6 Develop a profile of TLMs for grades 1–12, equivalency programs, and pre-primary education (including pre-primary education materials, textbooks, teachers' guides, student workbooks, science laboratory and IT equipment, braille textbooks, and other non-textbook materials)																	
3.1.7 Run workshops for reviewing profiles of TLMs for grades 1–12, equivalency programs, and pre-primary education																	
3.1.8 Based on the TLM profiles, develop TLM lay-out and physical standards for grades 1–12, equivalency programs, and pre-primary education as well as standards for school libraries																	
3.1.9 Organize workshops to review the standards for TLM and school libraries																	
3.1.10 Prepare procurement package for TLM for kindergartens using the updated standards and system																	
3.1.11 Deliver TLM to kindergartens in rural areas																	
3.1.14 Recruit two Kazakh (national) language specialists																	
3.1.15 Review and improve the quality of textbooks and other TLM for primary education translated into Kazakh language																	

[illegible]

Activities	2017	2018				2019				2020				2021			
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
national)																	
5.1.3 Review the existing information systems for school and kindergarten buildings and facilities, and prepare the data list and functional requirements for the integrated system with attention to gender, age, disability inclusiveness, and WASH																	
5.1.4 Design and upgrade the existing system in consultation with MECSS, UMED, Ulaanbaatar municipal government, <i>aimag</i> governments, and other relevant government agencies																	
5.1.5 Pilot and test the system with relevant government agencies, schools, and kindergartens, and further upgrade the system																	
5.1.6 Organize training and workshops on the use of the system																	
Sub-output 5.2 Plans to introduce cluster systems for schools with senior secondary grades and kindergartens developed and piloted																	
5.2.1 Review the current allocation of human, financial, and physical resources for schools with senior secondary grades and conduct research to identify potential uses of school cluster system in different geographic areas for efficient use and distribution of resources																	
5.2.2 Develop list of schools with senior secondary grades for inclusion in potential clusters (with a map) within relevant geographic area by using the GIS-based integrated system																	
5.2.3 Develop policy framework to specify the functions and roles of the cluster system for schools with senior secondary grades																	
5.2.4 Hold consultation workshops to review the policy framework for the cluster system for schools with senior secondary grades																	
5.2.5 Pilot test agreed school clusters to assess the efficiency and effectiveness of sharing resources																	
5.2.6 Adjust the list of schools in clusters and policy framework based on the results of the pilot																	
5.2.7 Review the current allocation of human, financial, and physical resources for kindergartens and explore potential use of kindergarten cluster system in different geographic areas for efficient use and distribution of resources for kindergartens																	
5.2.8 Develop list of kindergartens for inclusion in potential clusters (with a map) within relevant geographic area by using the GIS-based integrated system																	
5.2.9 Develop policy framework to specify the functions and roles of the cluster system for kindergartens																	
5.2.10 Hold consultation workshops to review the policy framework for the cluster system for kindergartens																	
5.2.11 Pilot test agreed kindergarten clusters to assess the efficiency and effectiveness of sharing resources																	

Activities	2017	2018				2019				2020				2021			
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
5.2.12 Adjust the list of kindergartens in clusters and policy framework based on the results of the pilot																	
Sub-output 5.3 System for school and kindergarten catchment areas reviewed																	
5.3.1 Review the current system and policy for school and kindergarten catchment areas and investigate causes of non-compliance with school and kindergarten catchment areas and ways to rationalize the system and policy, by taking into account newly developed/expanded urban areas and migration from rural to urban areas																	
5.3.2 Update the system and policy for school and kindergarten catchment areas by using the GIS-based integrated system																	
5.3.3 Hold consultation workshops to review the updated system and policy for school and kindergarten catchment areas																	
5.3.4 Pilot test the updated system and policy for school and kindergarten catchment areas to assess the efficiency and effectiveness of planning and managing student enrolment and school and kindergarten resources																	
5.3.5 Adjust the updated system and policy for school and kindergarten catchment areas based on the results of the pilot																	
Project Management																	
Establish a PIU																	
Recruit PIU staff																	
Train PIU staff in disbursement, procurement, financial management, M&E, and reporting																	
Train MECSS and UMED staff in project management																	
Prepare quarterly and annual reports																	
Conduct inception/annual/midterm review missions																	

BOQ = bill of quantities; CPD = continuing professional development; EEC = Education Evaluation Center; IoE = Institute of Education; IT = information technology; ITPD = Institute of Teachers Professional Development; M&E = monitoring and evaluation; MECSS = Ministry of Education, Culture, Science and Sports; MNUE = Mongolian National University of Education; NUM = National University of Mongolia; PIU = project implementation unit; SBM = school-based management; SIP = school improvement plan; SMART = self-monitoring, analysis, and reporting technology; SRC = school report card; TLM = teaching and learning materials, UMED = Ulaanbaatar Metropolitan Education Department; WASH = water, sanitation and hygiene.

Sources: Asian Development Bank, IoE, MECSS, UMED.

III. PROJECT MANAGEMENT ARRANGEMENTS

A. Project Implementation Organizations: Roles and Responsibilities

Table 3: Project Implementation Organizations: Roles and Responsibilities

Project Implementation Organizations	Management Roles and Responsibilities
Executing agency–Ministry of Education, Culture, Science and Sports (MECSS)	<ul style="list-style-type: none"> (i) Establish project implementation unit (ii) Establish project steering committee (iii) Establish systems, procedures, and mechanisms to ensure effective and efficient project implementation (establishment of bid evaluation committees/consultant selection committees, review and acceptance of consultants' deliverables for payments, etc.) in accordance with relevant government laws and regulations and policies and guidelines of the Asian Development Bank (ADB) (iv) Oversee overall project implementation, coordination, and management activities to ensure smooth and timely implementation and completion of project activities (v) Ensure that project implementation unit upload relevant project documents to the Ministry of Finance's official development assistance (ODA) management information system (vi) Continue to ensure coordination with other ODA-funded projects (vii) Provide coordination between stakeholders involved in project implementation
Project steering committee	<ul style="list-style-type: none"> (i) Approve annual budgets and plans for the project (ii) Oversee progress in project implementation (iii) Guide and support project implementation (iv) Provide coordination between ministries and other stakeholders involved in project implementation
Implementing Agencies – MECSS	<ul style="list-style-type: none"> (i) Provide strategic, policy, and coordination support for the implementation of outputs 1–5 (ii) Supervise all project activities under outputs 1–5
– Ulaanbaatar Metropolitan Education Department (UMED)	<ul style="list-style-type: none"> (i) Provide coordination support for the implementation of output 1 in Ulaanbaatar (ii) Supervise all project activities under output 1 in Ulaanbaatar
Project implementation unit	<ul style="list-style-type: none"> (i) Perform day-to-day management of the project in accordance with relevant government laws and regulations and ADB's policies and guidelines (ii) Coordinate and implement project activities, including procurement, recruitment, disbursement, contract administration, monitoring, and reporting (iii) Prepare, on behalf of the executing and implementing agencies, bidding documents, terms of reference, reports, and other supporting documents and submit them for review and approval (iv) Maintain on behalf of the executing agency the imprest account; and prepare and submit withdrawal applications and supporting documents, quarterly and annual reports, annual audit reports and financial statements (v) Upload relevant project documents to MOF's ODA management information system (vi) Provide coordination between ministries and other stakeholders involved in project implementation
ADB	<ul style="list-style-type: none"> (i) Provide technical support for project implementation (ii) Supervise and ensure compliance by the executing and implementing agencies with ADB's policies and procedures during project implementation

Source: ADB.

16. The Ministry of Education, Culture, Science and Sports (MECSS) will be the executing agency of the project and will oversee overall project implementation and management activities to ensure smooth and timely implementation and completion of project activities. The MECSS and Ulaanbaatar Metropolitan Education Department (UMED) in Ulaanbaatar municipal government will be the implementing agencies.

17. The project steering committee (PSC) will be established by MECSS. The PSC will be chaired by the State Secretary of MECSS and will comprise MECSS directors, representatives of the Ministry of Finance, UMED, Engineering Supply Department of Ulaanbaatar Municipality, EEC, Institute of Education (IoE), and ITPD. The PSC will meet quarterly to (i) approve annual budgets and plans for the project, (ii) review progress in project implementation, (iii) guide and support project implementation, and (iv) provide coordination between ministries and other stakeholders involved in project implementation. The operational costs of the PSC will be funded under the project.

18. A project implementation unit (PIU) will also be established by MECSS. On behalf of the executing and implementing agencies, the PIU will assume day-to-day management of the project and will be responsible for coordinating and implementing project activities, including procurement, consultant recruitment, disbursement, contract administration, monitoring, and reporting. The PIU will also coordinate the implementation of the EMP and social and gender action plan (SGAP). The PIU will be staffed by a project coordinator, procurement specialist, financial management specialist and/or accountant, monitoring and evaluation specialist, civil engineer, cost estimator, environment specialist, curriculum and assessment specialist, TLM specialist, teacher training specialist, project assistant, and driver. The PIU project coordinator should have a minimum of 7 years of professional experience in the education sector, and at least 5 years of demonstrated experience with managing projects funded by ADB or other international financial institutions (IFIs). The procurement specialist should have A3 National Certificate of Public Procurement, and a minimum of 5 years of demonstrated experience with managing all phases of civil works, goods, and service procurement, consultant recruitment, and contract administration under projects funded by ADB or other IFIs. The financial management specialist and/or accountant should have accountant qualifications, and at least 5 years of demonstrated experience with managing financial transactions and project assets, and preparing withdrawal applications, financial reports, and projections under projects funded by ADB or other IFIs. Additionally, they should possess (i) proven understanding and knowledge of the laws and regulations of the Government of Mongolia as well as ADB policies, guidelines, and procedures, including procurement, disbursement, and safeguards; (ii) written and oral English proficiency; (iii) strong communication and interpersonal skills; and (iv) computer skills. ADB will review and approve the terms of reference for all the PIU staff, as well as selection and recruitment processes.

B. Key Persons Involved in Implementation

Executing Agency

Ministry of Education, Culture,
Science and Sports

Officer's Name: D. Erdenechimeg
Position: Director of Education Policy Department
Telephone: +976 11 323158
Email address: erdenechimeg@mecs.gov.mn
Office Address: 14200 Baga Toiruu 44, Zasgiin gazriin III
bair, Sukhbaatar duureg, Ulaanbaatar, Mongolia

Asian Development Bank

Urban and Social Sectors

Division

East Asia Department

Staff Name: Sangay Penjor

Position: Director

Telephone No.: +63 2 632 6148

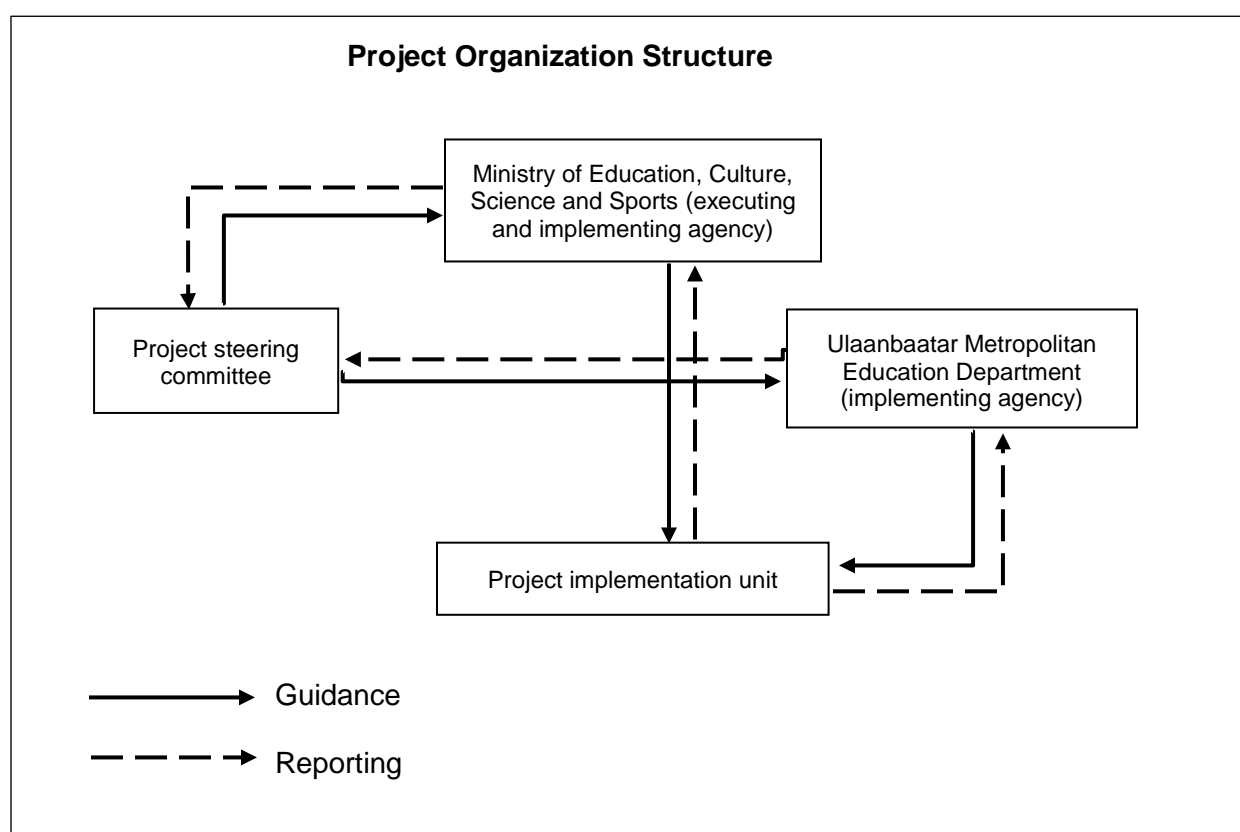
Email address: spenjor@adb.org

Mission Leader

Staff Name: Asako Maruyama

Position: Education Specialist

Telephone No.: +63 2 632 4311

Email address: amaruyama@adb.org**C. Project Organization Structure**

IV. COSTS AND FINANCING

19. The project is estimated to cost \$50.69 million. The base cost will be allocated as follows: civil works (87.23%); consulting services (6.80%); project management (2.59%); equipment and materials (1.91%); and training and workshops (1.47%). Physical and price contingencies total \$5.38 million. Any savings from the project cost, including contingencies, shall be reallocated to civil works (construction and expansion of schools and kindergartens). The interest and other charges during construction will be capitalized in the loan.

20. The total project cost will be financed by a regular loan of \$50 million from ADB's ordinary capital resources. The Government of Mongolia will provide counterpart funding (\$0.69 million). ADB will finance the expenditures on civil works, equipment and materials, training and workshops, consulting services, project management, physical and price contingencies, interest, and other charges during implementation. Taxes and duties of \$3.43 million will be financed from government resources (\$0.69 million, tax exemptions) and ADB (\$2.74 million). The government has assured ADB that it will provide additional funding for any shortfall of funds or cost overruns to ensure the success of the project.

A. Cost Estimates Preparation and Revisions

21. **Preparation.** The mission leader prepared the cost estimates based on unit cost information obtained from the local and international markets, MECSS, UMED, and other development partners.

22. **Revisions.** The cost estimates will be updated by ADB and the PIU during review missions based on unit cost information obtained in the local and international markets.

23. Cost categories are in Table 4.

Table 4: Description of Categories

Category	Description
Civil works	Construction, expansion, and rehabilitation of schools and kindergartens, including improved design features such as disabled access, gender and age-inclusive sanitation, energy efficiency enhancing measures, equipment and furniture, taxes and duties
Equipment and materials	Information technology hardware and software; test scoring machines; science, math, and information technology laboratory equipment; teaching and learning materials; handbooks and other materials; and taxes and duties
Training and workshops	Venue rental; meals and snacks; resource persons; training and workshop materials; and other expenses related to training and continuing professional development programs for school and kindergarten managers and teachers, Ulaanbaatar and <i>aimag</i> education department staff, Education Evaluation Center, Institute of Education, Institute of Teachers Professional Development; as well as workshops to review and discuss standards, plans, policy frameworks, and systems
Consulting services	National and international consulting services
Project management	Project implementation unit (PIU) staff salaries and insurance (PIU staff will not be civil servants receiving salaries from the

Category	Description
	government); PIU office space; PIU furniture and information and communication technology equipment; training on procurement, disbursement, financial management, and project management for PIU; Ministry of Education Culture, Science and Sports; and Ulaanbaatar Metropolitan Education Department; PIU operational costs; and estimated fees of \$20,000 for the audit of the annual project financial statements for the period of 2018–2021

24. Salaries and insurance, per diem, and travel costs for the MECSS and the UMED staff (civil servants) are ineligible under ADB funds and will be funded by the counterpart funds. The vehicle and driver will be provided for the PIU under the project budget.

B. Key Assumptions

25. The following key assumptions underpin the cost estimates and financing plan:

- (i) Exchange rate: MNT2,478.5 = \$1.00 (as of 5 March 2017)
- (ii) Price contingencies based on expected cumulative inflation over the implementation period are as follows:

Table 5: Escalation Rates for Price Contingency Calculation

Item	2017	2018	2019	2020	2021	Average
Foreign rate of price inflation	2.3%	2.6%	2.5%	2.4%	2.4%	2.4%
Domestic rate of price inflation	5.8%	6.4%	6.4%	6.5%	6.5%	6.3%

Source: International Monetary Fund World Economic Outlook.

Table 6: Summary Cost Estimates
(\$ million)

Item	Amount ^a
A. Base Cost^b	
1. Gap in enrollment capacity of schools and kindergartens narrowed	39.76
2. Unfinished curriculum and assessment system reforms completed	1.23
3. Teaching and learning materials accompanying the new curriculum provided	0.36
4. Teachers' and managers' knowledge and skills upgraded	0.38
5. Systems for planning and managing education services strengthened	0.20
6. Project management	1.12
Subtotal (A)	43.05
B. Contingencies^c	5.38
C. Financial Charges During Implementation^d	2.26
Total (A+B+C)	50.69

Note: Numbers may not sum precisely because of rounding.

^a Includes taxes and duties of \$2.74 million. Such amount does not represent an excessive share of the project cost. The government will finance taxes and duties of \$0.69 million as tax exemptions.

^b In mid-2017 prices as of 5 March 2017.

^c Physical contingencies computed at 5% for base investment costs. Price contingencies computed at average of 2.5% on foreign exchange costs and 6.3% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^d Includes interest and commitment charges. Interest during construction for the ADB ordinary capital resources loan has been computed at the 5-year United States dollar fixed swap rate plus an effective contractual spread of 0.5% and maturity premium of 0.10%. Commitment charges for the ordinary capital resources loan are 0.15% per year to be charged on the undisbursed loan amount.

Source: ADB estimates.

Table 7: Summary Financing Plan

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank		
Ordinary capital resources (regular loan)	50.00	98.6
Government	0.69	1.4
Total	50.69	100.0

Source: Asian Development Bank estimates.

C. Detailed Cost Estimates by Expenditure Category

Table 8: Detailed Project Cost Estimates by Expenditure Category
(\$ million)

Item	Foreign Exchange	Local Currency	Total	% of Total Base Cost	% of Total Cost
A. Investment Costs^a					
1. Civil works	26.96	10.59	37.55	87.23	74.08
2. Equipment and materials	0.50	0.32	0.82	1.91	1.62
3. Training and workshops	0.00	0.63	0.63	1.47	1.24
4. Consulting services	0.00	2.93	2.93	6.80	5.77
5. Project management	0.00	1.12	1.12	2.59	2.20
Subtotal (A)	27.46	15.58	43.05	100.00	84.92
B. Contingencies^b					
1. Physical	1.37	0.78	2.15	5.00	4.25
2. Price	0.02	3.21	3.23	7.50	6.37
Subtotal (B)	1.39	3.99	5.38	12.50	10.62
C. Financial Charges During Implementation^c					
1. Interest during construction ^c	2.06	0.00	2.06	4.78	4.06
2. Commitment charges	0.20	0.00	0.20	0.47	0.40
Subtotal (C)	2.26	0.00	2.26	5.25	4.46
Total Project Cost (A+B+C)	31.11	19.57	50.69	117.75	100.00

Note: Numbers may not sum precisely due to rounding.

^a Includes taxes and duties of \$2.74 million. Such amount does not represent an excessive share of the project cost. The government will finance taxes and duties of \$0.69 million as tax exemptions.

^b In mid-2017 prices as of 5 March 2017.

^c Physical contingencies computed at 5% for base investment costs. Price contingencies computed at average of 2.5% on foreign exchange costs and 6.3% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^d Includes interest and commitment charges. Interest during construction for the ADB ordinary capital resources loan has been computed at the 5-year United States dollar fixed swap rate plus an effective contractual spread of 0.5% and maturity premium of 0.10%. Commitment charges for the ordinary capital resources loan are 0.15% per year to be charged on the undisbursed loan amount.

Source: ADB estimates.

D. Allocation and Withdrawal of Loan Proceeds

Table 9: Allocation and Withdrawal of Loan Proceeds

No.	Item	Total Amount Allocated for ADB Financing (\$)	Basis for Withdrawal from the Loan Account
		Category	
1	Project costs*	47,740,000	100% of total expenditure claimed
2	Interest and commitment charges	2,260,000	100% of total amounts due
	Total	50,000,000	

ADB = Asian Development Bank.

* Subject to the condition for withdrawal in Schedule 3, para. 6 of the Loan Agreement.

Source: ADB.

E. Detailed Cost Estimates by Financier

Table 10: Detailed Cost Estimates by Financier
(\$ million)

Item	ADB		Government		Total Cost
	Amount	% of Cost Category	Amount	% of Cost Category	
A. Investment Costs^a					
1. Civil works	36.86	98.17	0.69	1.83	37.55
2. Equipment and materials	0.82	100.00	0.00	0.00	0.82
3. Training and workshops	0.63	100.00	0.00	0.00	0.63
4. Consulting services	2.93	100.00	0.00	0.00	2.93
5. Project management	1.12	100.00	0.00	0.00	1.12
Subtotal (A)	42.36	98.41	0.69	1.83	43.05
B. Contingencies^b					
1. Physical	2.15	100.00	0.00	0.00	2.15
2. Price	3.23	100.00	0.00	0.00	3.23
Subtotal (B)	5.38	100.00	0.00	0.00	5.38
C. Financial Charges During Implementation^c					
1. Interest during construction	2.06	100.00	0.00	0.00	2.06
2. Commitment charges	0.20	100.00	0.00	0.00	0.20
Subtotal (C)	2.26	100.00	0.00	0.00	2.26
Total Project Cost (A+B+C)	50.00	98.65	0.69	1.35	50.69

ADB = Asian Development Bank.

Note: Numbers may not sum precisely because of rounding.

^a Includes taxes and duties of \$2.74 million. Such amount does not represent an excessive share of the project cost. The government will finance taxes and duties of \$0.69 million as tax exemptions.

^b In mid-2017 prices as of 5 March 2017.

^c Physical contingencies computed at 5% for base investment costs. Price contingencies computed at average of 2.5% on foreign exchange costs and 6.3% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^d Includes interest and commitment charges. Interest during construction for the ADB ordinary capital resources loan has been computed at the 5-year United States dollar fixed swap rate plus an effective contractual spread of 0.5% and maturity premium of 0.10%. Commitment charges for the ordinary capital resources loan are 0.15% per year to be charged on the undisbursed loan amount.

Source: ADB estimates.

F. Detailed Cost Estimates by Outputs

22

Table 11: Detailed Cost Estimates by Outputs
(\$ million)

Item	Total Cost	Output 1		Output 2		Output 3		Output 4		Output 5		Project Management	
		% of Cost		% of Cost		% of Cost		% of Cost		% of Cost		% of Cost	
		Amount	Category	Amount	Category	Amount	Category	Amount	Category	Amount	Category	Amount	Category
A. Investment Costs^a													
1. Civil works	37.55	37.50	99.87	0.00	0.00	0.00	0.00	0.05	0.13	0.00	0.00	0.00	0.00
2. Equipment and materials	0.82	0.00	0.00	0.50	60.83	0.25	30.66	0.07	8.52	0.00	0.00	0.00	0.00
3. Training and workshops	0.63	0.02	3.80	0.25	38.83	0.03	4.44	0.26	41.52	0.07	11.41	0.00	0.00
4. Consulting services	2.93	2.24	76.49	0.48	16.51	0.08	2.73	0.00	0.00	0.12	4.26	0.00	0.00
5. Project management	1.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12	100.00
Subtotal (A)	43.05	39.76	92.37	1.23	2.85	0.36	0.84	0.38	0.89	0.19	0.46	1.12	2.59
B. Contingencies^b													
1. Physical	2.15	1.99	92.37	0.06	2.85	0.02	0.84	0.02	0.89	0.01	0.46	0.06	2.59
2. Price	3.23	2.98	92.37	0.09	2.85	0.03	0.84	0.03	0.89	0.01	0.46	0.08	2.59
Subtotal (B)	5.38	4.97	92.37	0.15	2.85	0.04	0.84	0.05	0.89	0.02	0.46	0.14	2.59
C. Financial Charges During Implementation^c													
1. Interest during construction	2.06	1.80	87.38	0.11	5.34	0.03	1.45	0.03	1.46	0.02	0.97	0.07	3.40
2. Commitment charges	0.20	0.20	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subtotal (C)	2.26	2.00	88.50	0.11	4.87	0.03	1.32	0.03	1.33	0.02	0.88	0.07	3.10
Total Project Cost (A+B+C)	50.69	46.73	92.19	1.50	2.95	0.43	0.85	0.46	0.92	0.24	0.47	1.33	2.62

Note: Numbers may not sum precisely because of rounding.

^a Includes taxes and duties of \$2.74 million. Such amount does not represent an excessive share of the project cost. The government will finance taxes and duties of \$0.69 million as tax exemptions.

^b In mid-2017 prices as of 5 March 2017.

^c Physical contingencies computed at 5% for base investment costs. Price contingencies computed at average of 2.5% on foreign exchange costs and 6.3% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^d Includes interest and commitment charges. Interest during construction for the ADB ordinary capital resources loan has been computed at the 5-year United States dollar fixed swap rate plus an effective contractual spread of 0.5% and maturity premium of 0.10%. Commitment charges for the ordinary capital resources loan are 0.15% per year to be charged on the undisbursed loan amount.

Source: ADB estimates.

G. Detailed Cost Estimates by Year

Table 12: Detailed Cost Estimate by Year
(\$ million)

Item	Total Cost	2018	2019	2020	2021
A. Investment Costs^a					
1. Civil works	37.55	0.21	12.64	18.63	6.06
2. Equipment and materials	0.82	0.57	0.25	0.00	0.00
3. Training and workshops	0.63	0.49	0.13	0.01	0.00
4. Consulting services	2.93	1.20	1.23	0.25	0.25
5. Project management	1.12	0.50	0.21	0.21	0.21
Subtotal (A)	43.05	2.98	14.45	19.10	6.51
B. Contingencies^b					
1. Physical	2.15	0.14	0.72	0.96	0.33
2. Price	3.23	0.23	1.08	1.43	0.49
Subtotal (B)	5.38	0.37	1.81	2.39	0.81
C. Financial Charges During Implementation^c					
1. Interest during construction	2.06	0.06	0.27	0.70	1.04
2. Commitment charges	0.20	0.12	0.05	0.02	0.00
Subtotal (C)	2.26	0.18	0.31	0.73	1.04
Total Project Cost (A+B+C)	50.69	3.53	16.57	22.22	8.37

Note: Numbers may not sum precisely because of rounding.

^a Includes taxes and duties of \$2.74 million. Such amount does not represent an excessive share of the project cost. The government will finance taxes and duties of \$0.69 million as tax exemptions.

^b In mid-2017 prices as of 5 March 2017.

^c Physical contingencies computed at 5% for base investment costs. Price contingencies computed at average of 2.5% on foreign exchange costs and 6.3% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^d Includes interest and commitment charges. Interest during construction for the ADB ordinary capital resources loan has been computed at the 5-year United States dollar fixed swap rate plus an effective contractual spread of 0.5% and maturity premium of 0.10%. Commitment charges for the ordinary capital resources loan are 0.15% per year to be charged on the undisbursed loan amount.

Source: ADB estimates.

H. Contract and Disbursement S-Curve

Table 13: Annual Contract and Disbursement S-Curve
(\$ million)

Item	2018	2019	2020	2021
Annual Contract Awards	3.23	16.34	28.94	1.49
Cumulative Contract Awards	3.23	19.57	48.51	50.00
Annual Disbursement	2.58	13.72	26.42	7.28
Cumulative Disbursement	2.58	16.30	42.72	50.00

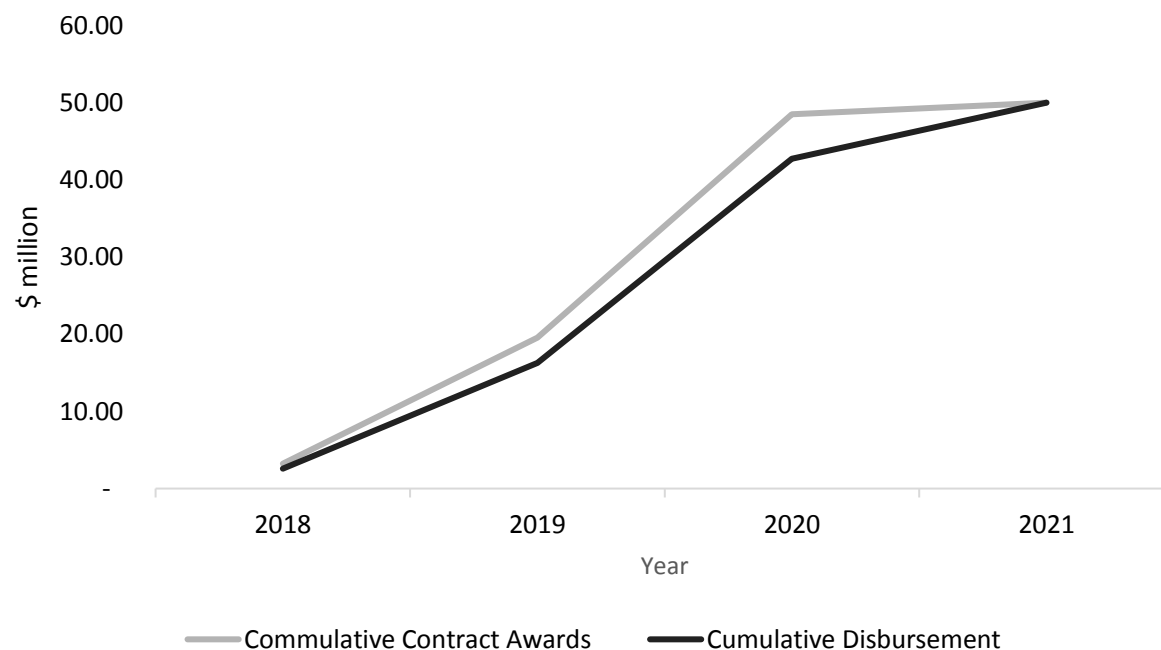
Source: Asian Development Bank estimates.

Table 14: Quarterly Contract Awards and Disbursements
(\$ million)

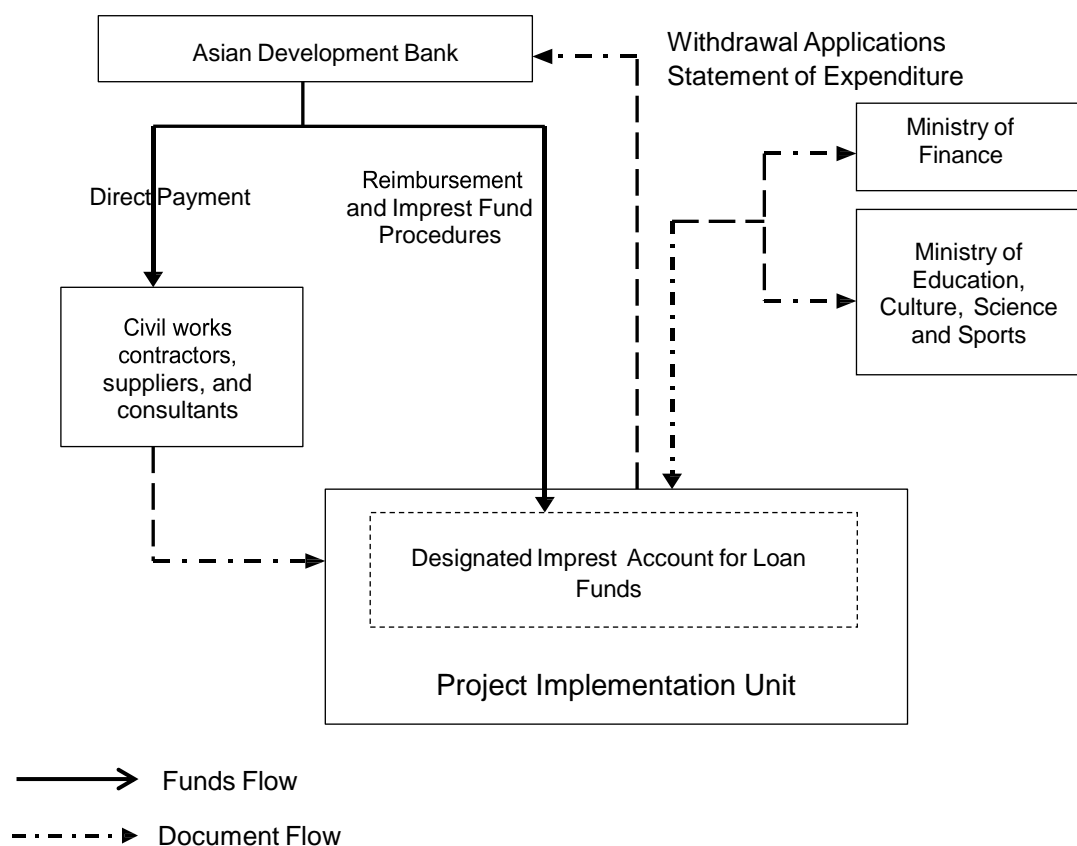
	2018				2019				2020				2021			
Item	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Contract Awards	1.61	0.97	0.32	0.32	8.17	4.90	1.63	1.63	14.47	8.68	2.89	2.89	0.00	0.00	0.00	1.52
Cumulative Contract Awards	1.61	2.58	2.90	3.22	11.39	16.29	17.92	19.55	34.02	42.70	45.59	48.48	48.48	48.48	48.48	50.00
Disbursement	0.52	0.77	1.03	0.26	2.74	4.12	5.49	1.37	5.28	7.93	10.57	2.64	1.93	1.93	1.93	1.49
Cumulative Disbursement	0.52	1.29	2.32	2.58	5.32	9.44	14.93	16.30	21.58	29.51	40.08	42.72	44.65	46.58	48.51	50.00

Source: Asian Development Bank estimates.

Contract Awards and Disbursement S-Curve



I. Fund Flow Diagram



V. FINANCIAL MANAGEMENT

A. Financial Management Assessment

26. The financial management assessment (FMA) was conducted from 13 February 2017 to 21 March 2017 in accordance with ADB's *Guidelines for the Financial Management and Analysis of Projects and the Financial Due Diligence: A Methodology Note*. The FMA considered the capacity of the MECSS (the executing and implementing agency), including funds flow arrangements, staffing, accounting and financial reporting systems, financial information systems, and internal and external auditing arrangements. Based on the assessment, the key financial management risks identified are the limited experience of MECSS finance staff with managing donor-funded projects as well as gaps in internal control policies and asset management procedures. It is concluded that the overall pre-mitigation financial management risk of MECSS is substantial. The MECSS has agreed to implement an action plan as key measures to address the deficiencies, as shown in Table 15.

Table 15: Financial Management Action Plan

Key Risks	Activity to Mitigate Risks	Staff/Personnel Responsible	Timeline
Limited capacity and experience of MECSS staff in managing donor funds	Establish a PIU with a project coordinator and financial management specialist and/or accountant with experience in managing ADB or similar projects and the necessary skills and	MECSS	Immediately after loan effectiveness

Key Risks	Activity to Mitigate Risks	Staff/Personnel Responsible	Timeline
	experience.		
	Train MECSS and PIU staff on ADB disbursement. Approve TORs for the PIU and oversee the process.	ADB	Before and after loan effectiveness
	In addition to the project administration manual, develop detailed accounting procedures to ensure effective management and control of the project funds and assets.	PIU staff	Immediately after loan effectiveness
Donor funds are managed outside the GFMIS	Utilize the government accounting systems and chart of accounts, (IPSAS standards) and procure an accounting software for the PIU.	PIU staff	Immediately after loan effectiveness
Some issues with asset management and goods receipt procedures	Develop procedures to ensure proper control of project assets which will be overseen by the PIU. Track assets in the accounting software for the PIU.	PIU staff	Immediately after loan effectiveness
Not yet fully functioning internal audit function	Provide training for the Internal Audit Committee and develop an internal audit charter. Ensure procedures are developed to comply with regulatory and ADB requirements.	MECSS	Periodically as required
	Train MECSS and PIU staff in ADB's guidelines and procedures. Conduct review missions regularly.	ADB	Periodically as required

ADB = Asian Development Bank; GFMIS = government financial management information system; IPSAS = International Public Sector Accounting Standards; MECSS = Ministry of Education, Culture, Science and Sports; PIU = project implementation unit, TOR = terms of reference.

Source: ADB.

B. Disbursement

1. Disbursement Arrangements for ADB

27. The loan proceeds will be disbursed in accordance with ADB's *Loan Disbursement Handbook* (2017, as amended from time to time),¹¹ and detailed arrangements agreed upon between the government and ADB. Online training for project staff on disbursement policies and procedures is available.¹² The MECSS and PIU staff are encouraged to avail of this training to help ensure efficient disbursement and fiduciary control.

28. Direct payment by ADB and imprest fund procedures, liquidation and replenishment, and statement of expenditures (SOE), will be used to disburse the loan proceeds. The PIU will (i) prepare disbursement projections, (ii) collect supporting documents, and (iii) prepare and submit withdrawal applications to ADB.

29. **Imprest fund procedure.** To facilitate project implementation through timely release of loan proceeds, the executing agency, through the PIU, will establish an imprest account for the loan proceeds at the State Bank of Mongolia promptly after loan effectiveness. The currency of the imprest account will be in US dollars. The imprest account is to be used exclusively for the ADB's share of eligible expenditures. The MECSS, who established the imprest account in its

¹¹ The handbook is available electronically from the ADB website (<https://www.adb.org/sites/default/files/institutional-document/33606/adb-loan-disbursement-handbook-2017.pdf>)

¹² Disbursement eLearning. http://wpqr4.adb.org/disbursement_elearning

name, is accountable and responsible for proper use of advances to the imprest account, including any advances to the operating account.

30. The total outstanding advance to the imprest account should not exceed the estimate of ADB's share of expenditures to be paid through the imprest account for the forthcoming 6 months. The MECSS may request for initial and additional advances to the imprest account based on an Estimate of Expenditure Sheet¹³ setting out the estimated expenditures to be financed through the account for the forthcoming 6 months. Supporting documents should be submitted to ADB or retained by the PIU, on behalf of the MECSS, in accordance with ADB's *Loan Disbursement Handbook* (2017, as amended from time to time) when liquidating or replenishing the imprest account.

31. A separate local currency operating account will be opened at a well-established commercial bank promptly after loan effectiveness and maintained by the PIU. The operating account is to be used exclusively for ADB's share of eligible expenditures, mainly for PIU operational costs. The currency of the operating account will be in Mongolian togrog. The PIU, who established the operating account in its name, is accountable and responsible for proper use and operation of the operating account. The MECSS should ensure that every liquidation and replenishment of the operating account is supported by sufficient documentation in accordance with ADB's *Loan Disbursement Handbook* (2017, as amended from time to time).

32. **Statement of expenditure procedure.**¹⁴ The SOE procedure may be used for reimbursement of eligible expenditures or liquidation of advances to the imprest account and sub-account. The ceiling of the SOE procedure is the equivalent of \$100,000 per individual payment. Supporting documents and records for the expenditures claimed under the SOE should be maintained and made readily available for review by ADB's disbursement and review missions, upon ADB's request for submission of supporting documents on a sampling basis, and for independent audit. Reimbursement and liquidation of individual payments in excess of the SOE ceiling should be supported by full documentation when submitting the withdrawal application to ADB.

33. Before the submission of the first withdrawal application, the borrower should submit to ADB sufficient evidence of the authority of the persons who will sign the withdrawal applications on behalf of the government, together with the authenticated specimen signature of each authorized person. The minimum value per withdrawal application is in accordance with the *Loan Disbursement Handbook* (2017, as amended from time to time). Individual payments below such amount should be paid (i) by the executing agency and subsequently claimed to ADB through reimbursement, or (ii) through the imprest fund procedure, unless otherwise accepted by ADB.

C. Accounting

34. The executing agency, through the PIU, will maintain, or cause to be maintained, separate books and records by funding source for all expenditures incurred on the project following accrual-based accounting system and the Government's financial regulations. The executing agency, through the PIU, will prepare consolidated project financial statements in accordance with the government's accounting laws and regulations which are consistent with international accounting principles and practices.

¹³ Estimate of Expenditure sheet is available in Appendix 8A of ADB's *Loan Disbursement Handbook* (2017, as amended from time to time).

¹⁴ SOE forms are available in Appendix 7B and 7D of ADB's *Loan Disbursement Handbook* (2017, as amended from time to time).

D. Auditing and Public Disclosure

35. The MECSS, through the PIU, will cause the detailed project financial statements to be audited in accordance with International Accounting Standards by an independent auditor acceptable to ADB. The audited project financial statements together with the auditor's opinion will be presented in the English language to ADB within 6 months from the end of the fiscal year by the MECSS, through the PIU.

36. The audit report for the project financial statements will include a management letter and auditor's opinions, which cover (i) whether the project financial statements present an accurate and fair view or are presented fairly, in all material respects, in accordance with the applicable financial reporting standards; (ii) whether the proceeds of the loan were used only for the purpose(s) of the project; and (iii) whether the borrower or executing agency was in compliance with the financial covenants contained in the legal agreements (where applicable).

37. Compliance with financial reporting and auditing requirements will be monitored by review missions and during normal project supervision, and followed up regularly with all concerned, including the external auditor.

38. The government, MECSS, and UMED have been made aware of ADB's approach to delayed submission, and the requirements for satisfactory and acceptable quality of the audited project financial statements.¹⁵ ADB reserves the right to require a change in the auditor (in a manner consistent with the constitution of the borrower), or for additional support to be provided to the auditor, if the audits required are not conducted in a manner satisfactory to ADB, or if the audits are substantially delayed. ADB reserves the right to verify the project's financial accounts to confirm that the share of ADB's financing is used in accordance with ADB's policies and procedures.

39. Public disclosure of the audited project financial statements, including the auditor's opinion on the project financial statements, will be guided by ADB's Public Communications Policy 2011.¹⁶ After the review, ADB will disclose the audited project financial statements and the opinion of the auditors on the project financial statements no later than 14 days of ADB's confirmation of their acceptability by posting them on ADB's website. The management letter, additional auditor's opinions, and audited entity financial statements will not be disclosed.¹⁷

¹⁵ ADB's approach and procedures regarding delayed submission of audited project financial statements:

- (i) When audited project financial statements are not received by the due date, ADB will write to the executing agency advising that (a) the audit documents are overdue; and (b) if they are not received within the next 6 months, requests for new contract awards and disbursement such as new replenishment of imprest accounts, processing of new reimbursement, and issuance of new commitment letters will not be processed.
- (ii) When audited project financial statements are not received within 6 months after the due date, ADB will withhold processing of requests for new contract awards and disbursement such as new replenishment of imprest accounts, processing of new reimbursement, and issuance of new commitment letters. ADB will (a) inform the executing agency of ADB's actions; and (b) advise that the loan may be suspended if the audit documents are not received within the next 6 months.
- (iii) When audited project financial statements are not received within 12 months after the due date, ADB may suspend the loan.

¹⁶ Public Communications Policy: <http://www.adb.org/documents/pcp-2011?ref=site/disclosure/publications>

¹⁷ This type of information would generally fall under public communications policy exceptions to disclosure. ADB. 2011. *Public Communications Policy*. Paragraph 97(iv) and/or 97(v).

VI. PROCUREMENT AND CONSULTING SERVICES

A. Advance Contracting and Retroactive Financing

40. All advance contracting and retroactive financing will be undertaken in conformity with ADB Procurement Guidelines (2015, as amended from time to time) and ADB's Guidelines on the Use of Consultants (2013, as amended from time to time). The issuance of invitations to bid under advance contracting and retroactive financing will be subject to ADB approval. The borrower and MECSS have been advised that approval of advance contracting and retroactive financing does not commit ADB to finance the project.

B. Procurement of Goods, Works, and Consulting Services

41. All procurement of goods and works will be undertaken in accordance with ADB's Procurement Guidelines (2015, as amended from time to time). International competitive bidding (ICB) will be applied to goods contracts estimated to cost \$2 million and more, and works contracts estimated to cost \$5 million and more. Goods contracts worth less than \$2 million and works contracts worth less than \$5 million will follow national competitive bidding (NCB). Shopping will be used for contracts for works and goods valued up to \$100,000 and below. NCB procurement will be carried out in accordance with the Public Procurement Law of Mongolia, subject to modifications agreed with ADB. Eleven civil works contracts for the amount of \$33,790,000 and five goods contracts for the amount of \$4,330,000 will be procured through NCB. Civil works for school and kindergarten construction and expansion have been packaged, taking into account (i) type of facilities (schools or kindergarten); (ii) nature of works (new construction or expansion); and (iii) size of facilities (number of seats) which affect the time required to complete civil works, given the short construction period in Mongolia (March–October). One civil works contract for the amount of \$50,000 and at least seven goods contracts for the total amount of \$116,000 will be procured through shopping.

42. Before the start of any procurement, ADB and the government will review the public procurement laws of the central government to ensure consistency with ADB's Procurement Guidelines (2015, as amended from time to time). An 18-month procurement plan indicating threshold and review procedures, goods, works, and consulting services contract packages and national competitive bidding guidelines are in Section C.

43. All consultants will be recruited according to ADB's Guidelines on the Use of Consultants (2013, as amended from time to time).¹⁸ The terms of reference for all consulting services are detailed in Section D. An estimated 439.5 person-months (23.0 person-months [international] and 416.5 person-months [national]) of consulting services are required to prepare designs, drawings, specifications, and bill of quantities (BOQ) for school and kindergarten construction and expansion, and technical specifications and bidding documents for equipment and furniture; provide construction supervision; monitor and report on environment management, and social and gender actions; and provide technical expertise concerning curriculum standards, student assessment, school management, teacher education and evaluation, teaching and learning materials, IT systems, and physical investment planning. Five engineering firms which will prepare designs, drawings, specifications, and BOQs for school and kindergarten construction and expansion (150 person-months [national]), one IT firm which will customize IT systems for EEC (40 person-months [national]), and one construction supervision firm (150 person-months

¹⁸ Checklists for actions required to contract consultants by method available in e-Handbook on Project Implementation at: <http://www.adb.org/documents/handbooks/project-implementation/>

[national]) will be engaged through QCBS, using the quality- and cost- ratio of 90:10 and simplified technical proposal (STP). One engineering firm which will prepare designs, drawings, specifications, and BOQs for ITPD's science, math, and IT laboratories will be engaged through least cost selection, using STP. In addition, 9 international consultants (23.0 person-months) and 19 national consultants (72.5 person-months) will be recruited through individual consultant selection. The use of individual consultant selection will be closely monitored and supervised by ADB.

44. All procurement and consultant recruitment will be carried out by the MECSS and coordinated by the PIU. National competitive biddings for school and kindergarten construction and expansion will be conducted by the MECSS with the support of UMED. The contract with the construction supervision firm (CS02) will be signed by the MECSS and Construction Development Center (CDC). ADB will conduct prior reviews of all the procurement and consultant recruitment transactions.

C. Procurement Plan

Basic Data

Project Name: Sustaining Access to and Quality of Education During Economic Difficulties	
Project Number: 50091-002	Approval Number: XXX
Country: Mongolia	Executing Agency: Ministry of Education, Culture, Science and Sports
Project Procurement Classification: Category B	Implementing Agencies: Ministry of Education, Culture, Science and Sports Ulaanbaatar Metropolitan Education Department
Project Procurement Risk: Moderate	
Project Financing Amount: \$50,690,000 ADB Financing: \$50,000,000 Cofinancing (ADB Administered): Counterpart Funding: \$690,000 (tax exemptions)	Project Closing Date: 31 December 2021
Date of First Procurement Plan: 23 March 2017	Date of this Procurement Plan: 31 July 2017

1. Methods, Thresholds, Review and 18-Month Procurement Plan

(a) Procurement and Consulting Methods and Thresholds

Except as the ADB may otherwise agree, the following process thresholds shall apply to procurement of goods and works.

Procurement of Goods and Works		
Method	Threshold	Comments
National Competitive Bidding for Goods	Between \$100,001 and \$1,999,999	All NCB packages are subject to ADB prior review.
Shopping for Goods	Up to \$100,000	All shopping packages are subject to ADB prior review.
National Competitive Bidding for Works	Between \$100,001 and \$4,999,999	All NCB packages are subject to ADB prior review.
Shopping for Works	Up to \$100,000	All shopping packages are subject to ADB prior review.

Consulting Services	
Method	Comments
Quality- and Cost-Based Selection	For consulting firm; ADB prior review; STP, 90:10
Least Cost Selection	For consulting firm, ADB prior review; STP
Individual Consultants Selection	For individual consultants; ADB prior review

(b) Goods and Works Contracts Estimated to Cost \$1 Million or More

The following table lists goods and works contracts for which the procurement activity is either ongoing or expected to commence within the next 18 months.

Package Number	General Description	Estimated Value (\$)	Procurement Method	Review (Prior/Post)	Bidding Procedure	Advertisement Date (quarter/year)	Comments
CW-01	Civil works contracts for construction	1,810,000.00	NCB	Prior	1S1E	Q3 / 2018	Prequalification of Bidders: N
	Lot 1: Songinokhairhan District, UB "Ireedui" Primary School	590,000.00					Domestic Preference Applicable: N
	Lot 2: Songinokhairhan District, UB "Ireedui" Secondary School	590,000.00					Bidding Document: Civil Works
	Lot 3: Sukhbaatar District, UB School No.6	630,000.00					
CW-02	Civil works contracts for construction	3,490,000.00	NCB	Prior	1S1E	Q3 / 2018	Prequalification of Bidders: N
	Lot 1: Khan-Uul District, UB School No.18	630,000.00					Domestic Preference Applicable: N
	Lot 2: Songinokhairkhan District, UB (31-r khoroo) Kindergarten No.176	180,000.00					Bidding Document: Civil Works
	Lot 3: Bayanzurkh District, UB (14-r khoroo)	2,680,000.00					
CW-03	Civil works contracts for construction	3,260,000.00	NCB	Prior	1S1E	Q3 / 2018	Prequalification of Bidders: N
	Lot 1: Darkhan Soum, Darkhan (Mangirt, 15-r bag)	2,750,000.00					Domestic Preference Applicable: N
	Lot 2: Altai Soum, Govi-Altai (Khantaishir)	510,000.00					Bidding Document: Civil Works
CW-04	Civil works contracts for construction	4,260,000.00	NCB	Prior	1S1E	Q3 / 2018	Prequalification of Bidders: N
	Lot 1: Songinokhairhan District, UB (7-r khoroo)	1,780,000.00					Domestic Preference

Package Number	General Description	Estimated Value (\$)	Procurement Method	Review (Prior/Post)	Bidding Procedure	Advertisement Date (quarter/year)	Comments
	Lot 2: Songinokhairhan District, UB (22-r khoroo) School No.122 (green school)	2,480,000.00					Applicable: N Bidding Document: Civil Works
CW-05	Civil works contracts for construction	2,230,000.00	NCB	Prior	1S1E	Q3 / 2018	Prequalification of Bidders: N
	Lot 1: Bayangol District, UB School No.51	1,040,000.00					Domestic Preference Applicable: N
	Lot 2: Nalaikh District, UB "Erdmiin Orgil" Complex	1,190,000.00					Bidding Document: Civil Works
CW-06	Civil works contracts for construction	2,820,000.00	NCB	Prior	1S1E	Q3 / 2018	Prequalification of Bidders: N
	Lot 1: Songinokhairkhan District, UB (6-r khoroo) Kindergarten No.84	1,110,000.00					Domestic Preference Applicable: N
	Lot 2: Songinokhairkhan District, UB (24-r khoroo) Kindergarten No.158	1,110,000.00					Bidding Document: Civil Works
	Lot 3: Songinokhairkhan District, UB (25-r khoroo), Kindergarten	600,000.00					
FR-01	School and Kindergarten furniture	1,790,000.00	NCB	Prior	1S1E	Q4 / 2018	Prequalification of Bidders: N Domestic Preference Applicable: N Bidding Document: Goods

(c) Consulting Services Contracts Estimated to Cost \$100,000 or More

The following table lists consulting services contracts for which the recruitment activity is either ongoing or expected to commence within the next 18 months.

Package Number	General Description	Estimated Value (\$)	Recruitment Method	Review (Prior/Post)	Advertisement Date quarter/year	Type of Proposal	Comments
CS-01	IT Firm to develop customized business intelligence system	120,000.00	QCBS	Prior	Q1 / 2018	STP	Assignment: National Quality-Cost Ratio: 90:10 Comments:
EP-01	Engineering Firm to develop detailed designs, specifications and BOQs - 3 education facilities	255,338.00	QCBS	Prior	Q1 / 2018	STP	Assignment: National Quality-Cost Ratio: 90:10 Comments:
EP-02	Engineering Firm to develop detailed designs, specifications and BOQs - 8 education facilities	390,236.00	QCBS	Prior	Q1 / 2018	STP	Assignment: National Quality-Cost Ratio: 90:10 Comments:
EP-03	Engineering Firm to develop detailed designs, specifications and BOQs - 8 education facilities	390,236.00	QCBS	Prior	Q1 / 2018	STP	Assignment: National Quality-Cost Ratio: 90:10 Comments:
EP-04	Engineering Firm to develop detailed designs, specifications and BOQs - 8 education facilities	238,588.00	QCBS	Prior	Q1 / 2018	STP	Assignment: National Quality-Cost Ratio: 90:10 Comments:
EP-05	Engineering Firm to develop detailed designs, specifications and BOQs - 8 education facilities	227,012.00	QCBS	Prior	Q1 / 2018	STP	Assignment: National Quality-Cost Ratio: 90:10 Comments:
CS-02	Construction Supervision Firm	375,000.00	QCBS	Prior	Q3 / 2018	STP	Assignment: National Quality-Cost Ratio: 90:10 Comments:

(d) Goods and Works Contracts Estimated to Cost Less than \$1 Million and Consulting Services Contracts Less than \$100,000 (Smaller Value Contracts)

The following table lists smaller-value goods, works and consulting services contracts for which the activity is either ongoing or expected to commence within the next 18 months.

Goods and Works

Package Number	General Description	Estimated Value (\$)	Number of Contracts	Procurement Method	Review (Prior/Post)	Bidding Procedure	Advertisement Date (quarter/year)	Comments
CW-12	ITPD model science lab and retrofitting civil works	50,000.00	1	SHOPPING	Prior		Q2 / 2018	
GW-01	PIU Car	7,000.00	1	SHOPPING	Prior		Q1 / 2018	
GW-02	PIU furniture	10,000.00	1	SHOPPING	Prior		Q1 / 2018	
GW-03	PIU ICT equipment	22,000.00	1	SHOPPING	Prior		Q1 / 2018	
GW-04	Science lab equipment	20,000.00	1	SHOPPING	Prior		Q1 / 2018	
GW-05	Paper testing equipment	2,000.00	1	SHOPPING	Prior		Q2 / 2018	
GW-06	EEC IT equipment	250,000.00	1	NCB	Prior	1S1E	Q2 / 2018	Prequalification of Bidders: N Domestic Preference Applicable: N Bidding Document: Goods
GW-07	50 scanning machines for distribution to examination centers	250,000.00	1	NCB	Prior	1S1E	Q2 / 2018	Prequalification of Bidders: N Domestic Preference Applicable: N Bidding Document: Goods

Consulting Services

Package Number	General Description	Estimated Value (\$)	Number of Contracts	Recruitment Method	Review (Prior/Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments
EP-06	Engineering firm to develop design drawings, specifications, and BOQs ITPD model science lab	10,000.00	1	LCS	Post	Q3 / 2018	STP	Assignment: National Expertise: engineering
IC-01	Procurement Specialist (International)	60,000.00	1	ICS	Prior	Q1 / 2018		Assignment: International Expertise: procurement
IC-02	Construction Supervision Training Specialist (International)	60,000.00	1	ICS	Prior	Q3 / 2018		Assignment: International Expertise: construction supervision
IC-03	Environment specialist (National)	20,000.00	1	ICS	Prior	Q3 / 2018		Assignment: National Expertise: environment
IC-04	Curriculum Standards Specialist (International)	40,000.00	1	ICS	Prior	Q1 / 2018		Assignment: International Expertise: curriculum standards
IC-05	Curriculum Standards Specialist (National)	7,500.00	1	ICS	Prior	Q1 / 2018		Assignment: National Expertise: curriculum standards
IC-06	Mongolian language specialists (National)	22,500.00	3	ICS	Prior	Q3 / 2018		Assignment: National Expertise: Mongolian language
IC-07	Student assessment specialist	40,000.00	1	ICS	Prior	Q1 / 2018		Assignment: International

Consulting Services

Package Number	General Description	Estimated Value (\$)	Number of Contracts	Recruitment Method	Review (Prior/Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments
	(International)							Expertise: student assessment
IC-08	Student assessment specialist (National)	7,500.00	1	ICS	Prior	Q1 / 2018		Assignment: National
								Expertise: student assessment
IC-09	Assessment specialist (International)	40,000.00	1	ICS	Prior	Q1 / 2018		Assignment: International
								Expertise: assessment
IC-10	Assessment specialist (National)	7,500.00	1	ICS	Prior	Q1 / 2018		Assignment: National
								Expertise: assessment
IC-11	IT system analyst (EEC) (National)	15,500.00	2	ICS	Prior	Q2 / 2018		Assignment: National
								Expertise: IT systems analysis
IC-12	School Management Specialist (International)	40,000.00	1	ICS	Prior	Q1 / 2018		Assignment: International
								Expertise: school management
IC-13	School Management Specialist (National)	7,500.00	1	ICS	Prior	Q1 / 2018		Assignment: National
								Expertise: school management
IC-14	Teacher education and Evaluation Specialist	80,000.00	1	ICS	Prior	Q1 / 2018		Assignment: International

Consulting Services

Package Number	General Description	Estimated Value (\$)	Number of Contracts	Recruitment Method	Review (Prior/Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments
	(International)							Expertise: Teacher education and Evaluation
IC-15	Teacher education and Evaluation Specialist (National)	15,000.00	1	ICS	Prior	Q1 / 2018		Assignment: National Expertise: Teacher education and Evaluation
IC-16	Teaching and learning materials Specialist (International)	40,000.00	1	ICS	Prior	Q1 / 2018		Assignment: International Expertise: Teaching-learning materials
IC-17	Teaching and learning materials Specialist (National)	7,500.00	1	ICS	Prior	Q1 / 2018		Assignment: National Expertise: Teaching-learning materials
IC-18	Kazakh language specialists (National)	15,500.00	2	ICS	Prior	Q3 / 2018		Assignment: National Expertise: Kazakh language
IC-19	IT specialist (GIS based real-time system) (National)	45,000.00	3	ICS	Prior	Q2 / 2018		Assignment: National Expertise: IT
IC-20	Physical investment planning specialist (International)	40,000.00	1	ICS	Prior	Q2 / 2018		Assignment: International Expertise: investment planning
IC-21	Physical	7,500.00	1	ICS	Prior	Q2 / 2018		Assignment:

Consulting Services

Package Number	General Description	Estimated Value (\$)	Number of Contracts	Recruitment Method	Review (Prior/Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments
	investment planning specialist (National)							National Expertise: investment planning
IC-22	Social development and gender specialist (International)	60,000.00	1	ICS	Prior	Q1 / 2018		Assignment: International Expertise: social and gender
IC-23	Social development and gender specialist (National)	15,000.00	1	ICS	Prior	Q1 / 2018		Assignment: National Expertise: social and gender

B. Indicative List of Packages Required Under the Project

The following table provides an indicative list of goods, works and consulting services contracts over the life of the project, other than those mentioned in previous sections (i.e., those expected beyond the current period).

Goods and Works

Package Number	General Description	Estimated Value (\$) (cumulative)	Estimated Number of Contracts	Procurement Method	Review (Prior/Post)	Bidding Procedure	Comments
CW-07	Civil works contracts for construction	3,570,000.00	4	NCB	Prior	1S1E	Prequalification of Bidders: N
	Lot 1: Bayangol District, UB (2-r khoroo) Kindergarten No.66	892,500.00					Domestic Preference Applicable: N
	Lot 2: Bayangol District, UB (4-r khoroo) Kindergarten No.164	892,500.00					Bidding Document: Civil Works Comments: Q1 2019
	Lot 3: Sukhbaatar District, UB (3-r khoroo) Kindergarten No.68	892,500.00					

Goods and Works

Package Number	General Description	Estimated Value (\$) (cumulative)	Estimated Number of Contracts	Procurement Method	Review (Prior/Post)	Bidding Procedure	Comments
	Lot 4: Sukhbaatar District, UB (10-r khoroo) Kindergarten No.17	892,500.00					
CW-08	Civil works contracts for construction	4,250,000.00	5	NCB	Prior	1S1E	Prequalification of Bidders: N
	Lot 1: Bayanzurkh District, UB (1-r khoroo) Kindergarten No.22	670,000.00					Domestic Preference Applicable: N
	Lot 2: Bayanzurkh District, UB (16-r khoroo) Kindergarten No.82	670,000.00					Bidding Document: Civil Works
	Lot 3: Bayanzurkh District, UB (25-r khoroo), Kindergarten	670,000.00					Comments: Q1 2019
	Lot 4: Bayanzurkh District, UB (16-r khoroo) Kindergarten No.8	1,120,000.00					
	Lot 5: Bayanzurkh District, UB (24-r khoroo), Kindergarten	1,120,000.00					
CW-09	Civil works contracts for construction	2,810,000.00	4	NCB	Prior	1S1E	Prequalification of Bidders: N
	Lot 1: Chingeltei District, UB (6-r khoroo) Kindergarten No.108	702,500.00					Domestic Preference Applicable: N
	Lot 2: Khan-Uul District, UB (2-r khoroo) Kindergarten No.65	702,500.00					Bidding Document: Civil Works
							Comments: Q1 2019

Goods and Works

Package Number	General Description	Estimated Value (\$) (cumulative)	Estimated Number of Contracts	Procurement Method	Review (Prior/Post)	Bidding Procedure	Comments
	Lot 3: Khan-Uul District, UB (2-r khoroo) Kindergarten No.72	702,500.00					
	Lot 4: Khan-Uul District, UB (4-r khoroo) Kindergarten No.12	702,500.00					
CW-10	Civil works contracts for construction	1,220,000.00	2	NCB	Prior	1S1E	Prequalification of Bidders: N
	Lot 1: Sumber Soum, Gobisumber, Kindergarten	610,000.00					Domestic Preference Applicable: N
	Lot 2: Sainshand Soum, Dornogobi (7-r bag), Kindergarten	610,000.00					Bidding Document: Civil Works
							Comments: Q1 2019
CW-11	Civil works contracts for construction	4,070,000.00	5	NCB	Prior	1S1E	Prequalification of Bidders: N
	Lot 1: Nalaikh District, UB (1-r khoroo), Kindergarten	1,110,000.00					Domestic Preference Applicable: N
	Lot 2: Nalaikh District, UB (7-r khoroo), Kindergarten	1,110,000.00					Bidding Document: Civil Works
							Comments: Q1 2019
	Lot 3: Songinokhairkhan District, UB (12-r khoroo) Kindergarten No.104	616,667.00					
	Lot 4: Songinokhairkhan District, UB (14-r khoroo) Kindergarten No.107	616,667.00					

Goods and Works

Package Number	General Description	Estimated Value (\$) (cumulative)	Estimated Number of Contracts	Procurement Method	Review (Prior/Post)	Bidding Procedure	Comments
	Lot 5: Songinokhairkhan District, UB (15-r khoroo) Kindergarten No.110	616,666.00					
FR-02	School and Kindergarten furniture	1,790,000.00	1	NCB	Prior	1S1E	Prequalification of Bidders: N Domestic Preference Applicable: N Bidding Document: Goods Comments: Q2 2019 Comments: Q4 2018
GW-08	Printing of Handbooks on Competency-based standards - 1,000 copies	5,000.00	1	SHOPPING	Post		
GW-09	ITPD IT equipment	50,000.00	1	SHOPPING	Post		Comments: Q4 2018
GW-10	TLM for kindergartens	250,000.00	1	NCB	Prior	1S1E	Prequalification of Bidders: N Domestic Preference Applicable: N Bidding Document: Goods Comments: Q1 2019

Consulting Services

Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Recruitment Method	Review (Prior/Post)	Type of Proposal	Comments
None							

C. National Competitive Bidding

A. Regulation and Reference Documents

45. 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 1 February 2006, as amended in February 2007; July 2009; and February, June and December 2011 (hereinafter referred to as PPLM), with the clarifications and modifications described in the following paragraphs required for compliance with the provisions of the ADB Procurement Guidelines.

B. Procurement Procedures

1. Eligibility

46. **Eligibility.** 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. Bidders or potential bidders shall not be required to register with the taxation and other registration authorities of the government as a condition or requirement of bidding or award, leaving these requirements for after award and before signing of contract.

47. The eligibility of bidders shall be as defined under section I of the Procurement Guidelines; accordingly, no bidder or potential bidder should be declared ineligible for reasons other than those provided in section I of the Guidelines, **as amended from time to time.**

48. Government-owned enterprises in Mongolia shall be eligible for projects only if they can establish that they: (i) are legally and financially autonomous; (ii) operate under the principles of commercial law; and (iii) are not dependent agencies of the Borrower, Beneficiary, Recipient Executing Agency and/or the Implementing Agency.

2. Participation of Foreign Bidders

49. International bidders from eligible countries of ADB shall be allowed to participate in local procurement and may not be denied participation due to nationality.

3. Preferences

50. No domestic preference shall be given for domestic bidders and for domestically manufactured goods.

4. Prequalification and Registration

51. Prequalification is discouraged for procurement contracts using NCB. When used, particularly for works contracts, an individual prequalification exercise is acceptable for each contract as is the use of a registration system (or approved standing list) of contractors based on criteria such as experience, financial capacity, and technical capacity. Foreign bidders from eligible countries must, however, be allowed to register and to bid without unreasonable cost or additional requirements.

5. Rejection of All Bids and Rebidding

52. All bids shall not be rejected or new bids invited without ADB's prior written concurrence.

53. No bid shall be rejected merely on the basis of a comparison with the estimated cost or budget ceiling without ADB's prior written concurrence (with specific reference to Article 30 of the PPLM).

C. Bidding Documents

6. Use of Bidding Documents

54. National Standard Bidding Documents Goods and Works that have been approved for procurement in ADB-financed projects shall be used.

7. Language

55. Bidding documents may be prepared in other languages, but a copy of the bidding documents must be made available in English and submitted to ADB for review.

8. Bid Validity

56. Bidders shall be requested to extend the validity of their bids only under exceptional circumstances and the Executing or Implementing Agency, as the case may be, shall communicate such request for extension to all bidders before the date of expiry of their bids. When the procurement is subject to ADB's prior review, the Executing or Implementing Agency, as the case may be, shall obtain in a timely manner the prior written concurrence of ADB for the extension of the bid validity period.

9. Bid Evaluation

57. Evaluation and qualification criteria, and submission requirements, to be used in each bidding activity shall be clearly specified in the bidding documents. The evaluation of bids shall be done in strict adherence to the criteria specified in the bidding documents.

58. Negotiations with bidders shall not be undertaken before award of contract, except as provided in Paragraph 2.63 of ADB's Procurement Guidelines 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.

59. At the same time that notification on award of contract is given to the successful bidder, the results of the bid evaluation shall be posted on a well-known freely accessible website (namely Mongolia's Ministry of Finance e-procurement website: www.e-procurement.mn) identifying the bid and lot numbers and providing information on the: (i) name of each bidder that submitted a bid; (ii) bid prices as read out at bid opening; (iii) names of bidders whose bids were rejected and the reasons for their rejection; and (iv) name of the winning bidder, and the price it offered, as well as the duration and summary scope of the contract awarded. The Executing Agency or Implementing Agency, as the case may be, shall respond in writing to unsuccessful bidders who seek explanations on the grounds on which their bids were not selected.

10. ADB Policy Clauses

60. A provision shall be included in all NCB works and goods contracts financed by ADB requiring suppliers and contractors to permit ADB to inspect their accounts and records and

other documents relating to the bid submission and the performance of the contract, and to have them audited by auditors appointed by ADB.

61. A provision shall be included in all bidding documents for NCB works and goods contracts financed by ADB stating that the Borrower shall reject a proposal for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for the contract in question.

62. A provision shall be included in all bidding documents for NCB works and goods contracts financed by ADB stating that ADB will declare a firm or individual ineligible, either indefinitely or for a stated period, to be awarded a contract financed by ADB, if it at any time determines that the firm or individual has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices or any integrity violation in competing for, or in executing, ADB-financed contract.

D. Consultant's Terms of Reference

63. The summary of consulting services for which terms of reference are outlined is shown below.

Table 16: Overall Summary of Consulting Services

Name of Position	International	International (Person-Month)	National	National (Person-Month)
Consultants engaged through firms				
Engineering firm for ITPD's science, math, and IT laboratories			2	4.0
Engineering firms for school and kindergarten designs			60	150.0
IT firm for EEC's IT systems			5	40.0
Construction supervision firm			10	150.0
Consultants engaged through firms subtotal			77	344.0
Individual consultants				
Construction supervision training specialist	1	3.0		
Curriculum standard specialists	1	2.0	1	3.0
Environment specialist			1	8.0
IT specialists (GIS-based real time system)			3	18.0
IT system analyst (EEC)			2	6.0
Kazakh language specialist			2	6.0
Mongolian language specialists			3	9.0
Paper testing specialist			1	0.5
Physical investment planning specialists	1	2.0	1	3.0
Procurement specialist	1	3.0		
School management specialists	1	2.0	1	3.0
Social development and gender specialists	1	3.0	1	4.0
Student assessment specialists	1	2.0	1	3.0
Teacher education and evaluation specialists	1	4.0	1	6.0
Teaching and learning materials specialists	1	2.0	1	3.0
Individual consultants subtotal	9	23.0	19	72.5
TOTAL	9	23.0	96	416.5

EEC = Education Evaluation Center, GIS = geographic information system, IT = information technology, ITPD = Institute of Teachers Professional Development.

Source: Asian Development Bank estimates.

(i) **Engineering firm for ITPD's science, math, and IT laboratories**

64. A total of 4 person-months (national) consulting services will be engaged through a firm which will be selected using the least cost selection method and simplified technical proposal procedure (STP). The engineering firm will have at least completed two similar projects. It should provide sufficient information on the number of staff available to undertake this task and work schedule for completion of works. The firm will undertake the following tasks:

65. **Detailed engineering design.** Detailed designs shall take into account results of consultation with ITPD sharing possible options and international best practices in terms of science laboratory designs and equipment. The consulting firm shall ensure, among other things, the provision of energy efficiency measures; safety measures (including fire, physical, and external); disaster resilient features; and appropriate laboratory equipment.

66. **Approval of design.** The consulting engineering firm will ensure that all designs are completed to a standard that meets the official approval of the CDC upon agreement with MECSS and school administration.

67. **Production of procurement documents.** The consulting firm will prepare thorough and accurate technical and detailed drawings for the ITPD science laboratory, cost estimates at technical and detailed drawing stage, and accurate bills of quantities.

68. **Development of technical specifications.** The consulting firm will contribute to the development of a technical specification for ITPD science laboratory, including equipment and furniture.

69. **Construction supervision.** The firm will do the following:

- (i) Supervise the works, approve materials, equipment, and workmanship to ensure that the contract is executed in accordance with the requirements of the design.
- (ii) Monitor and check quality control and quantity measurements of the works carried out under the contract.
- (iii) Check all quantity measurements and calculations required for payment purposes and ensure that all measurements and calculations are carried out in a manner and at the frequencies/milestones as required by the contract.
- (iv) Check and countersign the milestone payment certificates after having established that the quality of the works is satisfactory and the quantities are correct.
- (v) Inspect all works to ensure conformity of the implemented works to the approved design requirements and solutions and compliance with the drawings and other documents comprising the contract and identify any deviations from the original design.
- (vi) Clarify and approve all updates to the original designs or propose new solutions as necessary to reflect changed conditions on the field.
- (vii) Review materials and works done by the contractor to ensure compliance with the contract specifications, and/or instruct the contractor to remove and substitute the improper materials and/or work as required to meet contract specifications and drawings.
- (viii) Verify compliance of materials and structures brought to the construction site during the day (name, quantity, quality certificate or laboratory testing results) with design requirements.

- (ix) Check all working drawings and as-built drawings prepared by the contractor and approve when satisfied.

(ii) Engineering firms for school and kindergarten designs

70. A total of 150 person-months (national) consulting services will be engaged through five firms which will be selected using QCBS method (90:10, STP). The firms will undertake the following tasks:

71. **Field surveys.** Field surveys will be conducted to gather the necessary data to undertake the detailed design. These shall include, but not be limited to, a site investigation to determine soil strength and geological parameters. Topographical surveys shall include all features including buildings, access ways, nearest waterways, existing services and details of trees (forest, non-forest, fruit and non-fruit) that could be affected by construction.

72. **Detailed engineering design.** Detailed designs shall take into account the findings from the field surveys. The consulting firms shall ensure, among other things, the provision of the following:

- (i) Equitable access, sanitation, and signage including
 - (a) safe access to all buildings from the public highway;
 - (b) wheelchair access ramps to be included above ground floor level, where deemed appropriate by MECSS;
 - (c) one toilet cubicle suitable for wheelchair access to be provided on each floor in newly constructed structures complete with appropriate handrails, sanitary furniture, and light switches;
 - (d) dual-height handrails on stairs suitable for small children and adults;
 - (e) brightly colored and braille signage to be included throughout the school including the corridor floors; and
 - (f) appropriately-sized sanitation facilities for small children in all kindergartens and primary schools.
- (ii) Energy efficiency measures for
 - (a) new and expanded school and kindergarten buildings to be provided with heat meters (where indicated by MECSS);
 - (b) new and expanded school and kindergarten buildings to be provided with heat insulation that meets the requirements of Mongolian Energy Efficiency Regulations (particular scrutiny will be given to insulation below the ground floor and on all sides of basements);
 - (c) electric boilers for the production of hot water and heating to be installed on all kindergartens and on schools of 320 pupils or less which do not have access to centralized heating networks;
 - (d) automated, low smoke emission, coal-fired boilers that will be installed on larger schools where there is no access to centralized heating;
 - (e) all radiators that will be fitted with thermostatic valves;
 - (f) LED lighting to be included throughout all new facilities; and
 - (g) all windows (triple glazed with low-E glass, argon-filled gaps, and uPVC frames at least 80 millimeters thick with at least 5 chambers and 12 millimeters between panes).

- (iii) Other design improvements including
 - (a) appropriately-sized furniture which contains no sharp corners;
 - (b) a secure room 3 meter x 3 meter for the storage and charging of e-learning equipment (usually within the library) together with a server, necessary network, and a high-speed internet connectivity;
 - (c) adequate spaces and benches for pupils to meet and talk outside of classrooms;
 - (d) septic systems that will be designed to reduce the requirement for vacuum truck clearance to a minimum, where access to the municipal sanitation system is not possible;
 - (e) deep water wells that will be designed and included in cost estimation of construction, where access to the municipal water supply system is not possible; and
 - (f) all sewerage pipes to be buried well below the depth of expected ground frost.

73. **Approval of design.** The engineering firm will ensure that all designs are completed to a standard that meets the official approval of the CDC.

74. **Production of procurement documents.** The engineering firm will prepare thorough and accurate technical and detailed drawings, cost estimates at technical and detailed drawing stage, and accurate BOQs.

75. **Development of technical specifications.** The engineering firm will contribute to the development of a technical specification for kindergarten and school construction, including plant, equipment, and furniture, through the sharing of knowledge during workshops held by the international procurement specialist.

76. **Construction supervision.** Each engineering firm will have completed at least three similar projects. They should provide sufficient information on the number of staff available to undertake this task (varies for each package) and the work schedule for completion of works. The consulting firm is responsible for the following:

- (i) Supervise the works, approve materials, equipment, and workmanship to ensure that the contract is executed in accordance with the requirements of the design.
- (ii) Monitor and check quality control and quantity measurements of the works carried out under the contract.
- (iii) Check all quantity measurements and calculations required for payment purposes and ensure that all measurements and calculations are carried out in a manner and at the frequencies/milestones as required by the contract.
- (iv) Check and countersign the milestone payment certificates after establishing that the quality of the works is satisfactory and the quantities are correct.
- (v) Inspect all works to (a) ensure conformity of the implemented works to the approved design requirements and solutions and compliance with the drawings and other documents comprising the contract and (b) identify any deviations from the original design.
- (vi) Clarify and approve all updates to the original designs or propose new solutions as necessary to reflect changed conditions on the field.
- (vii) Assist in interpreting and applying the requirements of the contract and advise the PIU on all matters relating to claims from the contractors, in particular, with respect to claims for time extensions or extra payments and make recommendations thereon, including the possible recourses.

- (viii) Verify the detailed recommendations for contract variations prepared by the supervisor for the review and approval by the PIU.
- (ix) Review materials and works done by the contractor to ensure compliance with the contract specifications, and/or instruct the contractor to remove and substitute the improper materials and/or work as required to meet contract specifications and drawings.
- (x) Verify compliance of materials and structures brought to the construction site during the day (name, quantity, quality certificate or laboratory testing results) with design requirements.
- (xi) Check all working drawings and as-built drawings prepared by the contractor and approve when satisfied.
- (xii) Participate in the execution of the Taking Over (Technical and State Commissioning) from the contractor of the Contract, in particular, by verifying documentation.

(iii) IT firm for EEC's IT systems

77. A total of 40 person-months (national) consulting services will be engaged through a firm which will be selected using QCBS method (90:10, STP). The firm will be required to install and implement the business intelligence system (BIS) and undertake the following tasks.

78. **Detailed design.** Detailed designs shall take into account results of consultation with EEC.

79. **Production of procurement documents.** The IT firm will prepare thorough and accurate details with specifications for the BIS and cost estimates.

80. **Development of technical specifications.** The IT firm will contribute to the development of technical specifications for the (i) EEC BIS; (ii) hardware which includes servers, storage, firewalls, and archives; and (iii) software which includes server operating system, database management system, and data integration system.

81. **Installation supervision.** The firm will supervise the procurement of all parts of the system to ensure that the contract is executed in accordance with the requirements of the design; and monitoring and check the quality control of the system supplied under the contract.

(iv) Construction supervision firm

82. A total of 150 person-months (national) consulting services will be engaged through a firm which will be selected using QCBS method (90:10, STP). The firm will be required to provide daily supervision of school and kindergarten construction and expansion sites. The firm will engage the construction supervision specialists.

83. **Construction supervision specialists** (10 nationals, 150 person-months). The national construction supervisors should have (i) at least 5 years of experience in construction supervision, including at least 2 years of experience in the construction supervision of schools or kindergartens; (ii) a university degree in Engineering/Architecture or relevant field; (iii) knowledge in national construction standards and norms; (iv) a professional license (professional engineer or consultant engineer); and (v) shall be fully conversant in the use of MS Excel, Word, and Project. The specialists will do the following tasks.

- (i) Supervise the works on each site, allocated on a daily basis, while the contractor is working.
- (ii) Consult with the national senior civil engineer to ensure that technical support is received in a timely manner.
- (iii) Inspect all works to ensure conformity of the implemented works with the approved design requirements and solutions and compliance with the drawings, technical specifications, and other documents comprising the contract and identifying any deviations from the original design.
- (iv) Check all drawings and contract documents to ensure that any mistakes or ambiguities are rectified before works commence.
- (v) Approve materials, equipment, and workmanship to ensure that the contract is executed in accordance with the requirements of the contract.
- (vi) Liaise between the PIU and contractor and prepare and submit monthly progress reports for submission to the financing agencies. The format and content of these reports shall be agreed on with the agencies.
- (vii) Monitor and check the day-to-day quality control and quantity measurements of the works carried out under the contract.
- (viii) Check all quantity measurements and calculations required for payment purposes and ensure that all measurements and calculations are carried out in a manner and at the frequencies as required by the contract.
- (ix) Check and countersign the milestone payment certificates after having established that the quality of the works is satisfactory and the quantities are correct.
- (x) At no cost to the PIU, update the original designs or propose new solutions as necessary to reflect changed conditions on the field in consultation with designers.
- (xi) Interpret and apply the requirements of the contract and advise the PIU on all matters relating to claims from the contractors, in particular, with respect to claims for time extensions or extra payments and making recommendations thereon, including the possible recourses.
- (xii) Prepare detailed recommendations for contract variations for the review and approval by the PIU.
- (xiii) Maintain a day-by-day contract diary which shall record all events (including environmental and social) pertaining to the administration of the contract, request forms, and orders given to the contractors, and any other information which may at a later date be of assistance in resolving queries which may arise concerning execution of the works.
- (xiv) Supervise the contractor in all matters concerning safety and care of the works and workers (including the erection of temporary signs at road works) and, if required, to instruct the contractor to provide any necessary lights, guards, fencing, and watchmen in accordance with the requirements of the contracts.
- (xv) Review, approve, and monitor the contractor's work program and the sources of materials.
- (xvi) Review, approve, and monitor the implementation of the contractors' environmental management plan (EMP), and ensuring that the contractor complies with its reporting requirements.
- (xvii) Explain and/or recommend the PIU to resolve (adjust) ambiguities, discrepancies or disputes arising from the contracts.
- (xviii) Inspect and test materials and works done by the contractor to ensure compliance with the contract specifications, and/or instruct the contractor to remove and substitute the improper materials and/or works as required to meet contract specifications.

- (xix) Ensure implementation of particular requirements from inspection organizations, such as the Specialized Inspection Department and Emergency Management Department of Ulaanbaatar/*aimag*, etc.
- (xx) Keep a log book throughout the construction period which records daily work quantities, tests, and other activities to serve as a basis for monthly reporting and contains, at a minimum, information concerning
 - (a) work day start and end;
 - (b) contractor's capability to execute works (availability of required equipment and labor force, technical condition, safety provision for works execution);
 - (c) materials and structures brought to the construction site during the day (name, quantity, quality certificate or laboratory testing results);
 - (d) works accomplished by the contractor during the day, i.e., name, place, volume, etc. (appropriate documents to be attached);
 - (e) deviations from the design documents and appropriate measures undertaken;
 - (f) emergencies, accidents, and unplanned suspension of works (indicating the reasons);
 - (g) monthly reports on the contracts supervision and checking of monthly billings;
 - (h) control and appraisal of the progress of works and recommend the client to order suspension of works and consumer extensions of the period for completion of the works;
 - (i) inspection for approval all working drawings and as-built drawings prepared by the contractor; and
 - (j) assistance to the client with regards to the execution of the taking over (commissioning) from the contractor of the contract, in particular, the preparation of lists of deficiencies which need to be corrected.

(v) Construction supervision training specialist

84. **Construction supervision training specialist** (1 international, 3 person-months). S/he should have (i) a recognized trade qualification in civil or building construction supervision and a license or certification in supervision of construction health and safety, (ii) at least 10 years of experience in construction supervision (experience in a country of the former Soviet Union is an advantage), (iii) thorough knowledge of the implementation of quality assurance processes on site through the effective utilization of detailed technical specifications alongside drawings and BOQs, and (iv) experience on at least three projects in a training capacity including the development of training programs. The specialist will do the following tasks.

- (i) Develop a comprehensive training program to ensure that construction supervisors can provide adequate fulltime supervision of all construction and installation of equipment and furniture required under this project. The training shall include:
 - (a) the use of the newly developed technical specification for schools and kindergartens developed at the start of this project;
 - (b) implementation of quality assurance systems currently used by relevant authorities together with any improvements considered necessary by the expert to ensure thorough quality assurance on site;
 - (c) supervision of materials testing; and
 - (d) compilation and submission of daily reports, defective work notices, progress reports, reports of serious omissions, errors, breaches of contract by the building contractors.

- (ii) Provide initial training to all PIU supervisors with follow up review and refresher training during implementation.
- (iii) Inspect and evaluate all records and reports compiled by each supervisor and report on their progress after cross-checking findings with the quality of construction found on each project construction site.
- (iv) Train at least one senior PIU supervisor or suitable counterpart to ensure sustainability of processes on new constructions.

(vi) Curriculum standard specialists

85. **Curriculum standard specialists** (1 international, 2 person-months; 1 national, 3 person-months). The international curriculum specialist should have (i) at least a master's degree in education or another related discipline and 10 years of experience working in curriculum development; and (ii) knowledge of curriculum standards, especially across K–12 levels. An experience in organizing teaching–learning environment within schools is preferred. The national specialist should have (i) a graduate degree in education and at least 5 years of experience working in curriculum development; and (ii) knowledge of curriculum standards, especially across K–12 levels. Experience in organizing teaching–learning environment within schools along with consultant assignments under education projects financed by international financial institutions (IFI) will be an advantage. The specialists will do the following tasks.

- (i) Prepare a plan for the progressive rewriting of all curricula into outcome statements using standards criteria and including objective observable indicators while retaining existing curriculum structure.
- (ii) Form selected teams of subject specialists (led by IoE) and provide assistance to rewrite curriculum outcome statements for all subjects at all levels.
- (iii) Assist teams in rewriting all curriculum statements as outcome statements, ensuring that they are inclusive for all learners and reflective of diversity of gender, ethnicity, and social background.
- (iv) Trial the revised curriculum statements to an entire school (primary, lower, and upper secondary teachers) to ensure clarity and continuity between year groups.
- (v) Work with a team from the national lifelong learning center to update the current equivalency programs and align with the new curriculum standards, and rewrite them as outcome statements.
- (vi) Conduct workshops with lifelong learning teachers to assist them to implement the new language curriculum.

(vii) Environment specialist

86. **Environment specialist** (1 national, 8 person-months). The environment specialist should have (i) a degree and 10 years of recent experience in environmental management and monitoring; (ii) proven expertise in designing and reviewing environmental monitoring and evaluation systems for construction projects; (iii) experience in evaluation techniques, such as designing and conducting field-based monitoring, organizing focus group discussions, and semi-structured interviews; (iv) strong ability to conduct both quantitative and qualitative analyses; (v) experience in working in environmental and construction areas at project sites in Mongolia; (vi) good communication skills, including strong English writing ability; (vii) computer skills; and (viii) should have previous experience on similar projects financed by IFIs. The specialist will (i) review and clear site specific environmental management plans prepared by the civil contractors on behalf of the PIU; (ii) undertake analysis and use qualitative and quantitative data/information

collected by the PIU's monitoring and evaluation specialist, construction supervision specialist, and construction company; and (iii) report all data to ADB.

(viii) IT Specialists (GIS-based real time system)

87. **IT specialists (GIS-based real time system)** (3 nationals; 6 person-months each). The IT specialists should have (i) a degree in IT, (ii) at least 5 years of experience working with integrated data information systems, and (iii) experience working with educational planners and GIS systems. Previous consulting assignments under education projects financed by IFIs would be an advantage. The specialists will do the following tasks.

- (i) Assist with the technical review of the existing information systems for school and kindergarten buildings and facilities.
- (ii) Design and upgrade the existing IT system according to requirements of MECSS, UMED, Ulaanbaatar and *aimag* governments, and other relevant government agencies.
- (iii) Pilot test and demonstrate usage of the upgraded system with relevant government agencies, as well as schools and kindergarten.
- (iv) Conduct training on the usage and implementation of the new IT system for government officials and school and kindergarten management/staff.
- (v) Apply the GIS-integrated system to develop a list of schools with senior secondary grades for inclusion in potential clusters (with a map) within relevant geographic area.

(ix) IT system analysts (EEC)

88. **IT system analysts (EEC)** (2 nationals, 6 person-months). The IT analysts should have (i) a degree in IT, and (ii) at least 5 years of experience working with integrated data information systems. Previous consulting assignments under education projects financed by IFIs would be an advantage. The specialists will (i) customize newly purchased data analytic software adjusting to EEC features; (ii) develop software for data transformation into data warehouse; (iii) prepare user guides, handbooks, and brochures; (iv) customize EEC item bank for national access; and (v) customize scanning machines to provide real time scoring of examinations response papers.

(x) Kazakh language specialists

89. **Kazakh language specialists** (2 nationals, 3 person-months each). The specialists should (i) be fluent in Kazakh and Mongolian languages at professional level, (ii) have teaching experience in a school, (iii) have specific experience on textbook development and translation, and (iv) be familiar with the culture within Kazakh language. The specialists will do the following.

- (i) Review the translation of the textbooks in Table 17.

Table 17: Textbooks for Translation

Grade	Textbooks	Quantity
Pre-primary	Child learning book	1
Grade 1	Mathematics, Human and environment, Fine arts and technology, Music, and Civil education	5
Grade 2	Mathematics, Human and environment, Fine arts and technology, Music, and Civil education	5
Grade 3	Mathematics, Human and nature, Human and society, Fine arts and technology, Music, and Civil education	6

Grade	Textbooks	Quantity
Grade 4	Mathematics, Human and nature, Human and society, Fine arts and technology, Music, and Civil education	6
Grade 5	Mathematics, Human and nature, Human and society, Fine arts and technology, Music, and Civil education	6
Total		29

- (ii) Assess the content validity of the translated textbooks in Kazakh.
- (iii) Grasp the textbook concept, plot, and theme, and ponder any problematic translation areas and solutions.
- (iv) Review the content, illustrations, and presentations from culturally responsive teaching point of view.
- (v) Conduct textbook-user (Kazakh students, teachers, and parents) survey to ensure the accuracy of the modification of the translation.
- (vi) Provide effective recommendations to improve the quality of textbooks in Kazakh considering the translation and cultural aspects of Kazakh ethnic minority.

(xi) Mongolian language specialists

90. **Mongolian language specialists** (3 nationals, 3 person-months each). The specialists should have (i) a master's degree in education or higher, (ii) at least 5 years of experience as a language educator, (iii) fluency in Mongolian language at a professional level (understanding of Mongolian literature and culture is essential), and (iv) at least 10 years of teaching experience at primary or secondary level. An understanding of the language curriculum in schools is preferred. The specialists will (i) update Mongolian language and literature curriculum for Grades 1–12 so that the curriculum is better able to improve reading, writing, listening and speaking skills of all students; (ii) organize a consultative workshop with Mongolian language teachers to share updated curriculum; and (iii) run training workshops with Mongolian language classroom teachers prior to trialing updated curriculum in schools.

(xii) Paper testing specialist

91. **Paper testing specialist** (1 national, 0.5 person-month). The paper-testing specialist should have at least 5 years of experience as a practicing professional in the Mongolian printing industry, with experience in the fabrication, finishing, and binding of books. Experience in training other printing industry personnel is essential. The specialist will undertake the following tasks.

- (i) Train counterparts appointed by IoE and MECSS, in the techniques of technical evaluation of submitted textbooks, guides, and supplementary materials against the specifications in the tender documents.
- (ii) Train counterparts in the use of the specialized testing kit, purchased by the project for the use of IoE.
- (iii) Supervise and assist the counterparts in the full technical evaluation of all samples submitted by participating publishers, with respect to materials and binding methods.
- (iv) Prepare a report on the results of the technical evaluation with recommendations for future evaluations.

(xiii) Physical investment planning specialists

92. **Physical investment planning specialists** (1 international, 2 person-months; 1 national, 3 person-months). The international physical investment planning specialist should have (i) a

degree in economics or in a related financial analysis field, (ii) at least 10 years of experience working as an educational planner, (iii) experiences with GIS methodologies, and (iv) experience working from a gender perspective (essential). The national specialist should have (i) a degree in economics, (ii) at least 5 years of experience working as an educational planner, and (iii) experience with consultant assignments under education projects financed by IFIs. The specialists will do the following tasks.

- (i) Review the existing information systems for school and kindergarten buildings and facilities, and prepare the data list and functional requirements for the integrated system with attention to gender, age, and disability inclusiveness and water, sanitation, and hygiene.
- (ii) Design and upgrade the existing system in consultation with MECSS, UMED, Ulaanbaatar municipality, *aimag* governments, and other relevant government agencies.
- (iii) Pilot test and demonstrate usage of the upgraded system with relevant government agencies as well as schools and kindergarten.
- (iv) Conduct training on the usage and implementation of the new IT system for government officials and school and kindergarten management and staff.
- (v) Review the current allocation of human, financial, and physical resources for schools with senior secondary grades, and conduct the research and necessary studies to identify the potential use of school cluster system in different geographic areas for efficient use and distribution of resources for senior secondary education.
- (vi) Develop a list of schools with senior secondary grades for inclusion in potential clusters (with a map) within relevant geographic area by using the GIS-based integrated system and share with the central/*aimag* governments and schools.
- (vii) Develop a policy framework for the functions and roles of the cluster system for schools with senior secondary grades.
- (viii) Hold consultation workshops to review the policy framework for the functions and roles of the cluster system for schools with senior secondary grades.
- (ix) Pilot test agreed school clusters to determine the efficiency and effectiveness of sharing resources through a cluster system.
- (x) Make necessary adjustments to the schools in a single cluster as well as policies based on the results of the pilot.

(xiv) Procurement specialist

93. **Procurement specialist** (1 international, 3 person-months). The international procurement specialist should have (i) a degree in civil engineering, building engineering or architecture or a professional certificate from an appropriate recognized institution; (ii) at least 15 years of procurement experience; (iii) at least 5 years of experience in the development and publication of technical specifications for public buildings, preferably including schools and kindergartens; and (iv) demonstrated knowledge of procurement systems and processes and knowledge of ADB procurement guidelines. Experience in the implementation of at least one construction project in a country of the former Soviet Union is an advantage. The specialist will do the following.

- (i) Develop and deliver a comprehensive technical specification for the construction and equipping of schools and kindergartens that covers all building materials and workmanship involved in school and kindergarten construction including equipment (boilers, utility meters, cooking equipment, e-learning facilities, and improved furniture) and environmental and social safeguards.

- (ii) Liaise closely with MECSS and UMED to agree on a plan by which this specification can be developed.
- (iii) Conduct at least three workshops with the following objectives:
 - (a) **Inception workshop.** To explain the objectives, duration, and methodology of the exercise to MECSS, UMED, and selected design consulting firms and solicit volunteer organizations for further consultation during the process of specification development.
 - (b) **Technical workshop.** To gather all currently available specifications on school and kindergarten construction, with specific regard to energy efficiency; disabled and early grade access, sanitation, and signage; improved furniture; and environmental and social safeguards.
 - (c) **Final workshop.** Present the technical specification to PIU, MECSS, and UMED to ensure universal acceptance for use in tender documents for the project and make recommendations on how this should be promoted as a national specification for schools and kindergartens in Mongolia.
- (iv) Deliver the final technical specification to the PIU and ensure that it is used in all procurement documents under this project.
- (v) Assist in the preparation of bid documents, particularly in relation to the conditions for bidding and the conditions of contract.
- (vi) Assist in the bidding process including preparation and dissemination of invitations to bid (in accordance with ADB procurement guidelines).
- (vii) Assist in addressing bid queries.
- (viii) Assist in the evaluation of bids.
- (ix) Assist in the preparation of bid evaluation reports for consideration by the bid evaluation committee (in accordance with Mongolia's statutory public procurement requirements and ADB procurement guidelines).
- (x) Assess the procurement and contract management capacity within MECSS, UMED, and CDC.
- (xi) Design and implement comprehensive and short procurement and contract management training programs for PIU, MECSS, and UMED (where possible, draw upon existing training programs).

(xv) School management specialists

94. **School management specialists** (1 international, 2 person-months; 1 national, 3 person-months). The international specialist should have (i) a master's degree in education, educational administration, business administration, or another relevant discipline; (ii) at least 10 years of experience working as a school manager or conducting school management training for school leaders or aspiring school leaders; and (iii) experience in organizing teaching-learning environment within schools. Experience working from a gender perspective is essential. The national specialist should have (i) a graduate degree in education, (ii) at least 5 years of experience working as a school manager or conducting school management training for school leaders or aspiring school leaders, and (iii) experience in organizing teaching-learning environment within schools and previous assignments under education projects financed by IFIs. The specialists will do the following tasks.

- (i) Review progress of school-based management (SBM) in all schools currently preparing their own school improvement plans (SIP) and school report cards (SRC).
- (ii) Identify a new group of 30 schools for introduction of SBM to increase the number of schools in Mongolia that will prepare their own mission, vision, goals, and

- objectives of the school, and develop their own SIPs and SRCs.
- (iii) Provide two training programs for 30 school leaders in the selected schools to build capacity to develop annual SIPs and SRCs to allow for self-evaluation and self-reporting of school performance annually.
- (iv) Provide two refresher trainings in SBM for schools currently implementing SBM.
- (v) Monitor SIP and SRC preparation in all schools and provide feedback.
- (vi) Evaluate the effect of SBM on individual school quality assessments based on measured student learning outcomes.

(xvi) Social development and gender specialists

95. **Social development and gender specialists** (1 international, 3 person-months; 1 national, 4 person-months). The international specialist should (i) have a university degree in sociology, anthropology, or social sciences with minimum of 8 years experience in gender and social impact assessment, preferably within the context of education and training projects; and (ii) be fully familiar with the requirements of ADB's social dimensions policies (gender, poverty, labor, and indigenous peoples) and be able to demonstrate experience in successful practical application of these policies during previous project assignments. The national specialist should have a university degree in sociology, anthropology, or social sciences with minimum of 5 years experience in gender and social impact assessment, preferably within the context of education and training projects. Experience with consultant assignments under education projects financed by IFIs will be an advantage. The specialists will do the following.

- (i) Provide cross-cutting support to the curriculum, TLM development, capacity building teams as well as the project implementation team in ensuring adherence to the principles of gender equality and social inclusion in all project related actions, particularly with regards to ADB gender mainstreaming requirements and social safeguards policies.
- (ii) Be responsible for implementing the social and gender action plan (SGAP), monitoring and regularly reporting the progress made in SGAP implementation, and assessing and documenting gender equality results of the project.
- (iii) Review the project SGAP prepared during project design together with the implementing agencies, and other key stakeholders to understand and explain the objectives behind each action.
- (iv) Develop a detailed SGAP implementation schedule and establish an implementation and reporting mechanism.
- (v) Conduct training on gender awareness, social inclusiveness, and the project SGAP to all PIU staff and other relevant stakeholders at the outset of the project implementation.
- (vi) Collect sex and ethnicity disaggregate data as per the SGAP.
- (vii) Develop gender responsive information, education, and communication materials and assist the executing and implementing agencies to design and conduct public consultation campaigns identified under SGAP.
- (viii) Prepare a semiannual monitoring report for SGAP. Provide social and gender inputs to progress reports, midterm report, project completion report, and other project required documents.
- (ix) Working with resource persons, review competency-based curriculum and standards, TLM, including e-textbooks, etc. to ensure adherence to principles of gender equality and social inclusion.
- (x) Review all policies and guidelines for teacher training and education reform from social, ethnicity, and gender perspective and provide concrete recommendations.

- (xi) Support the development of a module covering gender equality and social inclusion (gender responsive, inclusive, culturally responsive teaching techniques and strategies).
- (xii) Review construction, expansion, and rehabilitation designs of schools and kindergartens and make regular site visits to ensure gender, age, and disability sensitive living and working conditions are implemented.
- (xiii) Provide support for carrying out capacity building training, and provide management support to the capacity development activities. Provide training on proper implementation of SGAP and related ADB requirements.

(xvii) Student assessment specialists

96. **Student assessment specialists** (1 international, 2 person-months; 1 national, 3 person-months). The international student assessment specialists should have (i) at least a master's degree in education, education evaluation or another related discipline; (ii) at least 10 years of experience (a) in student assessment methods and assessing student achievement through standardized tests as a teacher and/or teacher educator, (b) in the preparation of test items for inclusion in examination papers, and (c) training of examiners in preparing valid and reliable test questions. The national specialist should have a graduate degree in education and at least 5 years of experience working as a teacher and/or teacher educator with experience in assessment methods and assessing student achievement through standardized tests. Some knowledge of the various laws and regulations on assessment of student learning in Mongolia would be an advantage. The specialists will do the following.

- (i) Identify a range of learning assessment methods that match the curriculum learning outcomes statements.
- (ii) Assist the MECSS EEC to form a team of assessment specialists mostly from IoE, ITPD, MNUE, and NUM for matching the learning assessment methods with curriculum outcomes across all subjects in the curriculum.
- (iii) Run a fullday training workshop with the selected assessment specialists from EEC, IoE, ITPD, MNUE, and NUM to match the learning assessment methods with curriculum outcomes across all subjects.
- (iv) Provide additional training workshops for the same group of assessment specialists for writing appropriate assessment items with accompanying rubrics for standardizing assessments.
- (v) Conduct training workshops to share the new assessment items with teachers and teacher educators and use this group to validate the items.
- (vi) Assist EEC to plan, develop, and administer a secure and reliable external assessment system for measuring student achievement levels at key points of schooling (Grades 5, 9, and 12). Detailed tasks include:
 - (a) identify a group of senior assessment specialists (lead by EEC) to plan an external assessment system for measuring student achievement levels at key points of schooling (Grades 5, 9, and 12);
 - (b) hold workshops in collaboration with ECC for teams of subject teachers to develop new items for an extended item bank of examination questions across all subjects (mainly at senior secondary level); and
 - (c) assist EEC to validate these items so that comprehensive sets of validated multiple-choice questions can be prepared for use in national examinations at end of senior secondary school and/or for use as tertiary entry scores.
- (vii) Work with MECSS working group on assessment to develop a plan for the introduction of a new senior secondary assessment system (that includes a school

internal assessment component to be combined with an external component) for implementation by end of SY2019.

- (viii) Provide examples of other assessment methods (extended answer questions and essay questions) as possible inclusions in the internal school-based assessments to be included as a proportion of the final grade.
- (ix) Organize a consultative workshop on internal and external assessment components and how they can be aggregated for a final examination score and rating.

(xviii) Teacher education and evaluation specialists

97. **Teacher education and evaluation specialists** (1 international, 4 person-months; 1 national, 6 person-months). The international specialist will have (i) at least a master's degree in education, education evaluation or another related discipline; (ii) at least 10 years of experience working as a teacher and/or teacher educator with experience in continuing professional development (in-service) education for teachers across K–12 levels; and (iii) experience with e-learning strategies and preparation of e-materials along with experience using hands-on teaching approaches in laboratory spaces typically reserved for science, math, and geography. Experience with using teacher appraisal systems and the monitoring and evaluation of teaching performance will be an advantage. The national specialist should have (i) a graduate degree in education and at least 5 years of experience working as a teacher and/or teacher educator with experience in continuing professional development (in-service) education for teachers across K–12 levels, and (ii) some experience with developing teacher appraisal systems and the monitoring and evaluation of teaching performance. Some knowledge of the various laws and regulations on assessment of teaching performance in Mongolia would be an advantage. The specialists will do the following tasks.

- (i) Provide capacity development of ITPD staff through training programs on latest methods of developing e-learning materials, creative teaching methodology for participatory classroom teaching and learning, child-centered and inclusive methodology, and gender-sensitive career guidance.
- (ii) Assist ITPD to assess CPD needs of pre-primary, primary, and secondary school managers (principals, training managers).
- (iii) Work with ITPD to prepare online learning training programs for school managers of pre-primary, primary, and secondary schools, and for managers of Ulaanbaatar and *aimag* education department staff.
- (iv) Assist ITPD to fit out a model multipurpose laboratory for use in hands-on learning in science, math, and geography and to develop online training programs that illustrate (a) how to use school laboratories effectively; and (b) improve the methodological skills of teachers in the use of laboratory equipment and tools for chemistry, physics, biology, geography, and math.
- (v) Conduct blended training programs for school principals and kindergarten directors through classroom training, followed by e-learning training.
- (vi) Review all current MECSS regulations related to the assessment of teachers for career advancement and professional development, evaluate their appropriateness and relevance for today's teachers, and propose amendments for updating of them.
- (vii) Gather examples of teacher appraisal systems from some selected countries (e.g., Australia, Philippines, Singapore, and Scotland) and form a working group of representatives of EEC, MNUE, NUM, principals and teachers' groups to consider their relevance for the Mongolian system.

- (viii) Organize six workshops with relevant stakeholders to develop a revised Mongolian system of teacher appraisal that is competency-based and can be used by teachers to self-appraise their own teaching level and discern areas that need more professional development.
- (ix) Organize a training workshop for school administrators to inform them about competency-based standards.
- (x) Trial the competency-based standards for teachers in schools.
- (xi) Finalize the competency-based teacher standards.
- (xii) Prepare handbooks providing guidelines for teachers and school principals in the use of competency-based teacher standards.
- (xiii) Arrange for printing and distribution of 1,000 copies of the handbooks and distribute to schools.

(xix) Teaching and learning materials specialists

98. **Teaching and learning materials specialists** (1 international, 2 person-months; 1 national, 3 person-months). The international TLM specialist should have (i) a master's degree in education; (ii) 5 years of experience in education sector policy formulation and analysis and/or education sector curriculum policy in developing countries; and (iii) 10 years of experience in any or all of curriculum and materials development, quantitative analysis of programs, monitoring and evaluation, or related work. The national specialist should have (i) a good command of English; (ii) a graduate degree in education; (iii) 5 years of experience in curriculum and materials development, quantitative analysis of programs, monitoring and evaluation, or related work; and (iv) at least 5 years of consulting assignments under education projects financed by IFIs. The specialists will do the following tasks.

- (i) Strengthen the first stage of the supply chain, namely the selection of good quality, relevant, and cost effective TLMs that will support the implementation of the curriculum, thereby improving learning outcomes.
- (ii) Develop the policy on the curriculum review cycle and revise the policy on the evaluation of TLMs.
- (iii) Work closely with the IoE to develop a curriculum review cycle policy, and its articulation with the timetable for the development, publication, and distribution of TLMs, TLMs' Evaluation and Selection Policy and Training Manual, and to assist in the process of evaluation and selection of TLMs.
- (iv) Provide training on the evaluation and selection processes for TLMs and provide technical assistance during the evaluation and selection of TLMs for SY2018/19.
- (v) Review the status of the present textbook rental scheme and textbook revolving fund.
- (vi) Develop a pilot program of textbook rental scheme and textbook revolving fund for basic education levels for SY2018/19 and assist with relaunch.
- (vii) Develop training modules for the implementation of approved policies, including management training at school level.

VII. SAFEGUARDS

99. **Environment.** The project is classified as category B for environment. An initial environmental examination and public consultations were conducted on 49 potential school and kindergarten construction and expansion sites. All potential impacts have been identified, including dust, noise, vibration from machinery and casting, temporary traffic disturbance; associated risks to the community; and occupational health and safety on site. Related mitigation

measures, construction supervision, monitoring, grievance redress, and reporting have been defined in an environmental management plan (EMP). The initial environmental examination has been disclosed on the ADB website.

100. The Government of Mongolia, through the MECSS, will be responsible for ensuring selected schools and kindergartens to be constructed, expanded, and rehabilitated in accordance with (i) the national environmental, health and safety laws, regulations, procedures, and guidelines; and (ii) the EMP. The PIU, with the support of an environment specialist and in collaboration with the engineering firms which will prepare designs, drawings, specifications, and BOQs for school and kindergarten construction, expansion, and rehabilitation; construction supervision firm, the schools and kindergartens, UMED, and MECSS will be responsible for overseeing the implementation of the EMP, including preparation of bidding documents, supervision of civil works contractors, sustainable operations and management, and monitoring and reporting of the EMP implementation, including complaints received, if any.

101. Assessment of climate change impact was also conducted, leading to low climate risk categorization, as increases in precipitation and temperatures are unlikely to affect the project outputs.¹⁹ Nevertheless, the facilities will be designed to minimize risks from increased precipitation, temperature, snowfall, and storm. The project will also introduce increased energy efficiency measures to reduce heat loss and indirectly reduce greenhouse gas emissions.

102. **Involuntary resettlement.** The project is categorized as C for involuntary resettlement as it will not require any permanent and/or temporary land acquisition or resettlement. Due diligence²⁰ had been conducted on potential school and kindergarten sites, which confirmed that no physical or economic displacement will ensue as a result of the project. The construction, expansion, and rehabilitation of schools and kindergartens will be accommodated within the existing premises and compounds. With no planned land acquisition, the project is unlikely to trigger requirements of ADB's Safeguard Policy Statement (2009) for involuntary resettlement.

103. **Indigenous peoples.** The project is categorized as C for indigenous peoples, as it seeks to sustain access to and quality of education for all kindergartner and school-age children, regardless of ethnicity. The poverty and social analysis confirmed that ethnic groups will not be negatively impacted. Measures to enhance inclusiveness and sensitivity, and maximize project benefits for all vulnerable groups, including ethnic groups have been incorporated into the SGAP. These include the (i) improvement of textbook and other TLM in Kazakh language; (ii) development of standards and criteria sensitive to gender and ethnic diversity; and (iii) development and delivery of CPD programs for school and kindergarten managers and teachers, and *aimag* education department staff on child-centered and culturally responsive teaching approaches, including teachers from ethnic areas (Bayan-Ulgii, Dornod, Khovd, Khuvsgul, Sukhbaatar and Uvs).

104. **Prohibited investment activities.** Pursuant to ADB's Safeguard Policy Statement (2009), ADB funds may not be applied to the activities described on the ADB Prohibited Investment Activities List set forth at Appendix 5 of the Safeguard Policy Statement (2009).

¹⁹ Rapid Environmental Assessment checklist.

²⁰ The involuntary resettlement due diligence report has been prepared during the PPTA and is available upon request.

VIII. GENDER AND SOCIAL DIMENSIONS

105. A social, poverty, and gender analysis was undertaken to address potential issues related to ADB operational requirements for social dimensions.²¹ The analysis assisted the development of the design and implementation measures of the project.

A. Poverty and Social Issues

106. Supported by the strong economic growth during 2011–2014, the poverty headcount ratio (the percentage of households living below the national poverty line) declined by 11%. In 2014, 21.6% of the Mongolian population lived below the national poverty line, with more poor households residing in rural areas (27%) than in urban areas (18%). Due to disparities in basic infrastructure, services, and employment opportunities between rural and urban areas, there has been constant rural-to-urban migration in quest of better living conditions and jobs, especially among rural herder families who lost their livestock. On this account, it was slower to reduce the number of poor households in urban areas, especially in Ulaanbaatar (16%) where poverty was reduced only by 3% during 2012–2014, compared to 9% in rural remote areas. Rural-to-urban migration, particularly to Ulaanbaatar, causes a rapid growth of population and expansion of low income, poorly serviced *ger* (traditional tents) areas (the main destinations of rural migrants) in the city. The poverty headcount ratio among households living in *ger* was higher (33%) than those who resided in other types of dwelling (11%) in 2014. Of the population in Ulaanbaatar, 56% are in *ger* areas particularly in Bayanzurkh and Songinokhairkhan, two of Ulaanbaatar's nine districts which have the largest number of low-income, poorly serviced *ger khoroos* (sub-districts). With the rapid population growth, the number of kindergartner and school-age children rose much faster than the increase of schools and kindergartens. Consequently, available seats have increasingly become scarce and existing schools and kindergartens have become overcrowded. The average class size in Ulaanbaatar is higher than the national average, with more than 30 and sometimes 40–50 students. Of the 33 three-shift schools, 30 are located in Ulaanbaatar, of which nearly two-thirds are in Bayanzurkh and Songinokhairkhan districts. As seats are unavailable at schools and kindergartens near home, students often have to commute long distances between home and school and/or kindergarten, exposing themselves to a higher risk of accidents and assaults. The dropout rate at free public kindergartens is high, as students cannot get sufficient care and attention in large classes. Due to shortages of available seats, students are selected into public kindergartens by lottery. Those who are not selected end up either going to private kindergartens for a fee (which puts extra burdens on poor families) or staying at home.

107. The project will directly benefit about 11,000 primary and secondary students and 4,500 pre-primary students enrolled in the newly constructed or expanded schools and kindergartens with inclusive features (disabled access and age- and gender-inclusive sanitation) in Ulaanbaatar and some *aimag* centers. Five schools and 12 kindergartens supported under the project will be in low-income, poorly serviced districts of Ulaanbaatar (Bayanzurkh and Songinokhairkhan) which are the main destinations of rural migrants. The other schools and kindergartens will be in the districts (Bayangol, Chingeltei, Khan-Uul, Nalaikh, and Sukhbaatar) and *aimag* centers (Altai, Darkhan, Sainshand, and Sumber) which have large classes with 35–50 students, and three-shift classes (Altai). Due to lack of seats, public kindergartens in Ulaanbaatar have to select students for admission by lottery, leaving those who are not selected with the option of either going to a private kindergarten for a fee or staying at home. Even if students are selected into public kindergartens, some drop out as attention and care provided to students in large classes are

²¹ ADB. 2003. *Operations Manual*. Manila.

insufficient. The project will also support the provision of quality TLM for poorly resourced kindergartens in rural areas.

B. Gender Impact

108. The project is designed to mainstream gender effectively. Eliminating three-shift schools will reduce the risk of accidents and assaults on the way home for students in the third shift, especially females, as the third shift class finishes at 8 or 9 p.m. The poverty and social analysis conducted for the project revealed that women are concerned with the lack of seats in kindergartens and schools close to home, as they often have to look for kindergartens and schools elsewhere, and spend more time on dropping off and picking up children at kindergartens and schools. In addition, since children need to walk long distances to kindergartens and schools, women worry about potential accidents. Boys remain less likely to enroll in schools than girls especially in rural areas where they need look after animals. Although the gender parity index improved in favor of boys from 1.0 in 2008 to 0.94 in 2014 at the primary and secondary levels, this was largely to school-aged boys outnumbering school-aged girls. Whereas school and kindergarten staff are predominantly women (about 80%), the proportion of women is smaller among school management (about 70%), which shows that women are underrepresented in decision-making.

109. A SGAP has been developed to ensure social inclusion and gender mainstreaming in all the outputs of the project. The SGAP includes actions and targets related to (i) gender-sensitive and inclusive features in school and kindergarten designs; (ii) gender-sensitive criteria and standards for TLM; (iii) women's participation in training for school and kindergarten managers and teachers; and (iv) collection of sex-disaggregated data for planning, monitoring, and evaluation, including in the GIS-based real time information system. The MECSS, through the PIU, will oversee the implementation of the SGAP. The agencies responsible and the resources needed to implement the SGAP are detailed in the SGAP. The PIU, assisted by international and national social development and gender specialists, will be responsible for overall implementation and monitoring of the SGAP. Consultants' outline terms of reference include tasks identified in the SGAP. The actions and indicators specified in the SGAP will be monitored in the project performance management system and reported in quarterly and annual reports, and will be reviewed during ADB review missions.

Social and Gender Action Plan

Output	Objective	Activity	Indicator/Target	Responsible Agency(s)	Budget
1: Gap in enrollment capacity of schools and kindergartens narrowed	Disclose information on the project and school and kindergartens' design to teachers, students, and parents	Public awareness campaign, information disclosure, and consultations on the project and detailed design of schools and kindergartens	Number and type of awareness campaign and disclosure activities 17,000 participants (of which 70% are female and 3% are from ethnic backgrounds)	1. Engineering firms 2. PIU 3. SDG specialists	Included in the budgets for the consultants, workshops and training, and PIU
	Ensure inclusion of gender, age, and disability responsive features in school and kindergarten designs and WASH facilities	Review and revise design drawings and specifications of civil works to include gender, age, and disability responsive features	3 schools and 7 kindergartens newly constructed, and 8 schools and 17 kindergartens expanded with (i) improved insulation and heating systems, (ii) facilities for students with disabilities, and (iii) age and gender inclusive sanitation by 2021 (2017 baseline = 0)	1. Engineering firms 2. PIU 3. SDG specialists 4. Schools and kindergartens 5. UMED and MECSS	
2: Unfinished curriculum reform and associated assessment system reforms completed	Ensure that the curriculum outcome statements are inclusive for all learners and is reflective of diversity, gender, ethnicity, and social backgrounds	Incorporate gender, ^a ethnicity, and socially inclusive elements in curriculum outcome statements	Gender, ethnicity, and socially inclusive student learning outcome statements incorporated into the curriculum 60% of teachers trained in the updated curriculum standards, assessment criteria, and methods by 2020, of which more than 85% are female (2017 baseline = 0) 70% of school principals and other school managers trained in the use of the revised competency-based standards for teachers (of which 55% are female) to mentor staff and identify CPD needs by 2020 (2017 baseline = 0)	1. Curriculum standard specialists 2. ITPD 3. MECSS 4. Mongolian language specialists 5. PIU 6. Student assessment specialists	Included in the budgets for the consultants, workshops and training, and PIU
3: Teaching and learning materials that accompany the new curriculum provided	Improve the quality of TLM to meet diverse learners' needs	Develop profiles and standards of TLM for all grades and pre-primary education reflecting gender and ethnic diversity	Profiles and standards of TLM for all grades and pre-primary education developed with gender and socially inclusive aspects incorporated by 2019 (2017 baseline = not developed)	1. IoE 2. MECSS 3. PIU 4. Teaching and learning material specialists	Included in the budgets for the consultants, workshops and training, and PIU
	Ensure the quality of translated TLM for ethnic students	Review and improve the quality and availability of translated TLM for primary grades in Kazakh language	Number and types of improved TLM for primary grades in Kazakh language 30% of kindergartens in rural areas provided with a standard set of TLM by 2020 (2017 baseline: not provided)	1. IoE 2. Kazakh language specialists 3. MECSS 4. PIU 5. SDG specialists	

Output	Objective	Activity	Indicator/Target	Responsible Agency(s)	Budget
4: Teachers and managers' knowledge and skills upgraded for the new curriculum and assessments	Ensure inclusiveness of ITPD's CPD programs	Conduct training workshops for ITPD staff to prepare, deliver, and assess updated CPD programs for school and kindergarten leaders and pre-primary, primary, and secondary teachers on child-centered, inclusive, and culturally responsive teaching approaches, including teachers from ethnic areas (Bayan-Ulgii, Dornod, Khovd, Khuvsgul, Sukhbaatar, and Uvs)	<p>CPD programs for school and kindergarten managers, and Ulaanbaatar and <i>aimag</i> education department staff developed using online platforms by 2019 (2017 baseline = not developed)</p> <p>CPD programs for teachers on assessment, and child-centered and inclusive teaching approaches developed by 2019 (2017 baseline = not developed)</p> <p>30% of secondary science teachers trained in science laboratory skills and management by 2020 (of whom more than 80% are female) (2017 baseline = not supplied)</p> <p>60% of pre-primary, primary, and secondary teachers (of whom more than 85% are female) regularly participating in CPD programs through online platforms by 2020 (2017 baseline = 30%)</p> <p>Sex and location (ethnicity) disaggregated monitoring and evaluation reports on CPD programs available through ITPD's online platforms</p>	<ol style="list-style-type: none"> 1. Curriculum standards specialists 2. ITPD 3. MECSS 4. PIU 5. SDG specialists 6. Teacher education and evaluation specialists 	Included in the budgets for the consultants, workshops and training, and PIU
5: Systems for planning and managing education services strengthened	Ensure the collection of sex-disaggregated data in the real time information system	Develop gender-sensitive and inclusive design parameters to be included in the real time information system	Real time information system to identify school and kindergarten construction, expansion, and rehabilitation needs developed with gender-sensitive and inclusive design parameters by 2020 (2017 baseline = not developed)	<ol style="list-style-type: none"> 1. Physical investment planning specialists 2. IT specialists 3. MECSS 4. PIU 5. SDG specialists 	Included in the budgets for the consultants, workshops and training, and PIU

CPD = continuing professional development, GIS = geographic information system, IoE = Institute of Education, IT = information technology, ITPD = Institute of Teachers Professional Development, MECSS = Ministry of Education, Culture, Science and Sports, PIU = project implementation unit, SDG = social development and gender, TLM = teaching and learning material, UMED = Ulaanbaatar Metropolitan Education Department, WASH = water, sanitation and hygiene.

^a Gender inclusiveness and gender-sensitiveness also include gender-based violence free TLMs, and training and teaching approaches.

Source: Asian Development Bank.

IX. PERFORMANCE MONITORING, EVALUATION, REPORTING, AND COMMUNICATION

A. Project Design and Monitoring Framework

Impact the Project is Aligned with More accessible, more equitable, and better quality education system developed (Mongolia Sustainable Development Vision 2030 and Action Plan for 2016–2020) ^a			
Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
Outcome Access to and quality of pre-primary, primary and secondary education sustained during economic difficulties	By 2021: a. Net enrollment ratio for pre-primary education improved by 2% (2.5% for boys), primary education by 1% (1.5% for boys), and junior secondary education by 0.5% (1.0% for boys) (2015 baselines: 74.4% for pre-primary, 96.3% for primary, 94.1% for junior secondary education) b. Primary and junior secondary education completion rates improved by 0.1% for primary (0.2% for boys) and 3.0% for junior secondary (3.5% for boys) (2015 baselines: 99.7% for primary, 49.0% for junior secondary education) c. Grades 5, 9, and 12 student learning assessment average scores improved by three points (2015 baselines: 68.9 for grade 5, 72.6 for grade 9, 78.3 for grade 12)	a. Data generated from the MECSS's education sector information system at the beginning of the school year b. Data generated from the MECSS's education sector information system at the end of the school year c. Data provided by the Education Evaluation Center at the end of the school year	Delays in procurement and late application for construction permits reduce the time available for construction because of the short construction period in Mongolia, failing to create additional seats on time
Outputs 1. Gap in enrollment capacity of schools and kindergartens narrowed 2. Unfinished curriculum reform and associated assessment system reforms completed	By 2020: 1. 3 schools and 7 kindergartens constructed, and 8 schools and 17 kindergartens expanded, with more than 5,500 additional seats created at schools and 4,500 at kindergartens; improved insulation and heating systems; facilities for students with disabilities; disaster resilient features; and age- and gender-inclusive sanitation by 2021 (2017 baseline: 0) 2a. 60% of teachers trained in the updated curriculum standards, assessment criteria, and methods by 2020, of whom more than 85% are female (2017 baseline: 0) 2b. 25% of schools using the updated standards in their school improvement plans and school report cards by 2020 (2017 baseline: 5%) 2c. 70% of school principals and other school managers trained in the use of the revised competency-based standards for teachers (of whom 55% are female) to mentor staff and identify CPD needs by 2020 (2017 baseline: 0)	1. PIU's annual progress monitoring reports 2a–c. PIU's annual progress monitoring reports	MECSS lacks enough qualified staff to monitor all phases of school and kindergarten construction, expansion, and rehabilitation, and critical decisions to resolve issues are not made on time

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
3. TLM that accompany the new curriculum provided	3a. Profiles and standards of TLM for all grades and pre-primary education developed with gender and socially inclusive aspects incorporated by 2019 (2017 baseline: not developed)	3a. MECSS's orders and PIU's annual progress monitoring reports	
	3b. 30% of kindergartens in rural areas provided with a standard set of TLM by 2020 (2017 baseline: not provided)	3b. Data generated from MECSS's education sector information system at the beginning of the school year	
4. Teachers' and managers' knowledge and skills upgraded for the new curriculum and assessments	4a. CPD programs developed for school and kindergarten managers, and Ulaanbaatar and <i>aimag</i> (administrative subdivision) education department staff using online platforms by 2019 (2017 baseline: not developed)	4a–d. PIU's annual progress monitoring reports	
	4b. CPD programs developed for teachers on assessment, and child-centered and inclusive teaching approaches by 2019 (2017 baseline: not developed)		
	4c. 30% of secondary science teachers (of whom more than 80% are female) trained in science laboratory skills and management by 2020 (2017 baseline: not trained)		
	4d. 60% of pre-primary, primary, and secondary education teachers (of whom more than 85% are female) regularly participating in CPD programs through online platforms by 2020 (2017 baseline: 30%)		
5. Systems for planning and managing education services strengthened	5a. Real-time information system to identify school and kindergarten construction, expansion, and rehabilitation needs developed with gender-sensitive and inclusive design parameters by 2020 (2017 baseline: not developed)	5a. MECSS's information system operating at the beginning of 2020	
	5b. Plan to introduce cluster systems for schools and kindergartens developed and pilot tested by 2020 (2017 baseline: not pilot tested)	5b. MECSS's orders and PIU's annual progress monitoring reports	

Key Activities with Milestones

1. Gap in enrollment capacity of schools and kindergartens narrowed

- 1.1 Prepare designs, drawings, and specifications and procurement packages for schools and kindergartens, at the latest 3 months before the start of the first construction season (Q1–Q3 2018)
- 1.2 Apply for building, land, and utility permits for schools and kindergartens (Q3 2018)
- 1.3 Recruit and train construction supervision specialists 1 month before the start of the first construction season (Q4 2018–Q1 2019)
- 1.4 Conduct daily supervision of construction and expansion sites (Q2 2019–Q3 2021)
- 1.5 Implement, monitor, and report on environmental management plans (Q3 2018–Q2 2021)
- 1.6 Conduct civil works completion inspections for schools and kindergartens (Q4 2019–Q4 2021)

Key Activities with Milestones	
2. Unfinished curriculum reform and associated assessment system reforms completed	
2.1	Review and rewrite curriculum standards to be aligned with expected student learning outcomes (Q2 2018–Q1 2019)
2.2	Update Mongolian language and literature curriculum for grades 1–12 (Q3–Q4 2018)
2.3	Review pre-service teacher education curriculum and equivalency program curriculum in line with the updated curriculum standards (Q3 2018–Q2 2019)
2.4	Develop appropriate learning assessment methods and items in line with the updated curriculum standards (Q2 2018–Q3 2019)
2.5	Strengthen the capacity of the Education Evaluation Center to plan, develop, and administer a secure and reliable assessment system (Q2 2018–Q3 2019)
2.6	Review progress of school-based management and provide training programs for school leaders to develop annual school improvement plans and school report cards (Q2 2018–Q4 2020)
2.7	Review, test, and finalize competency-based standards for teachers and prepare handbooks on the use of competency-based standards for teachers (Q2 2018–Q1 2020)
3. TLM that accompany the new curriculum provided	
3.1	Develop a profile of TLM for each grade; a TLM publication plan; and criteria and standards for reviewing, developing, evaluating, and selecting TLM (Q1–Q2 2018)
3.2	Prepare procurement packages for TLM for kindergartens (Q4 2018)
4. Teachers' and managers' knowledge and skills upgraded for the new curriculum and assessments	
4.1	Review, develop, and upgrade CPD programs for school and kindergarten leaders, teachers, and Ulaanbaatar and <i>aimag</i> education department staff (Q2–Q4 2018)
4.2	Deliver CPD programs for school and kindergarten leaders, teachers, and Ulaanbaatar and <i>aimag</i> education department staff through online platforms and workshops (Q1–Q2 2019)
4.3	Strengthen the capacity of the Institute of Teachers Professional Development to develop and deliver CPD programs for school and kindergarten leaders, teachers, and Ulaanbaatar and <i>aimag</i> education department staff (Q2 2018–Q1 2020)
4.4	Establish model science, math, and information technology laboratories at the Institute of Teachers Professional Development (Q4 2018–Q2 2020)
5. Systems for planning and managing education services strengthened	
5.1	Review existing information systems for school and kindergarten buildings and facilities, and prepare data list and functional requirements for a real-time information system for identifying school and kindergarten construction, expansion, and rehabilitation needs (Q3–Q4 2018)
5.2	Review the current allocation of human, financial, and physical resources for schools with senior secondary grades and kindergartens; and develop policy frameworks for introducing cluster systems for schools and kindergartens (Q2 2018–Q4 2019)
5.3	Review the current system and policy for school and kindergarten catchment areas, update the system and policy, and pilot test the updated system (Q2 2018–Q4 2019)
Project Management Activities	
Establish and fully staff the PIU (Q1 2018)	
Prepare documents for consultant recruitment and procurement of goods and civil works (Q1 2018–Q4 2020)	
Monitor and report on the social and gender action plan (Q1 2018–Q4 2021)	
Prepare quarterly and annual reports (Q1 2018–Q4 2021)	
Inputs	
ADB: \$50.00 million (loan)	
Government: \$0.69 million	

ADB = Asian Development Bank; CPD = continuing professional development; MECSS = Ministry of Education, Culture, Science and Sports; PIU = project implementation unit; Q = quarter; TLM = teaching and learning materials.

^a State Great Khural. 2016. *Mongolia Sustainable Development Vision 2030*. Ulaanbaatar; Government of Mongolia. 2016. *Action Program for 2016–2020*. Ulaanbaatar.

Source: ADB.

B. Monitoring

110. Project performance monitoring. Promptly after loan effectiveness, the PIU, in collaboration with the MECSS and ADB, will develop the project performance management system (PPMS) by reviewing quarterly and annual performance targets and indicators; data sources and reporting mechanisms; collecting baseline data disaggregated by gender, by grade, by family background (ethnic groups, herder families), by poverty status, and by school; and planning monitoring and evaluation activities, to generate quarterly and annual reports. The basis

for performance monitoring will be the design and monitoring framework which identifies the key performance targets and indicators of the project.

111. **Compliance monitoring.** The compliance status of loan covenants will be reported and assessed through the quarterly reports and verified by ADB review missions.

112. **Safeguards monitoring.** Environmental, health, and safety impacts of the project will be monitored in accordance with the EMP which specifies inspection and monitoring procedures. Each civil works site will be inspected by the environment specialist in collaboration with the engineering firms which prepare designs, drawings, specifications, and BOQ for school and kindergarten construction and expansion, construction supervision firm, the school or kindergarten, UMED, PIU, and MECSS against the inspection and monitoring checklist included in the EMP. The environment specialist will synthesize status of civil works and generic EMP implementation in the annual progress report to ADB (including compliance of contractors with obligations, problems encountered during construction and operation, and the relevant corrective actions undertaken). At the end of the construction and expansion works, the regularity and safety of each building and facility will be confirmed through completion inspections conducted by the environment specialist, construction supervision firm, PIU environment specialist, and *aimag* environment protection agencies, and agency for specialized inspection inspectors. The environment specialist will compile, on behalf of the MECSS, an EMP implementation completion report, no later than 6 months after completion of all civil works related to the project. All civil works will be accommodated within existing premises and compounds and no resettlement impacts are anticipated.

113. **Gender and social dimensions monitoring.** The PIU, assisted by the international and national social development and gender specialists, will monitor and report quarterly on the actions and the indicators specified in the SGAP and the design and monitoring framework. The actions and indicators specified in the SGAP will be monitored in the PPMS and reported in quarterly and annual reports, and will be reviewed during ADB review missions. Compliance with core labor standards will also be monitored during the project implementation.

C. Evaluation

114. 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 actions and adjustments. A midterm review will be conducted during the second year of implementation. The midterm review will (i) review the scope, design, and implementation arrangements and identify adjustments required; (ii) assess the progress of project implementation against the performance indicators; and (iii) recommend changes in the design or implementation arrangements, if necessary. Within 6 months of physical completion of the project, the MECSS will submit a project completion report to ADB.²²

D. Reporting

115. The MECSS, through the PIU, will provide ADB with (i) quarterly reports in a format consistent with ADB's PPMS; (ii) consolidated annual reports including (a) progress achieved by output as measured against the performance targets/indicators; (b) key implementation issues and solutions; (c) annual EMP implementation progress and completion (as defined in para. 114

²² Project completion report format is available at: <http://www.adb.org/Consulting/consultants-toolkits/PCR-Public-Sector-Landscape.rar>

above, including grievance redress mechanism) and confirmation that construction works did not cause any involuntary resettlement impacts; (d) updated procurement plan; and (e) updated implementation plan for the next 12 months; and (iii) a project completion report within 6 months of physical completion of the project.

E. Stakeholder Communication Strategy

116. Key stakeholders who are essential to achieve the project outcomes and outputs, and to reduce major risks include (i) MECSS; (ii) UMED; (iii) EEC, IoE, and ITPD; (iv) *aimag* education departments; (iv) schools, kindergartens, and lifelong learning centers; (v) school and kindergarten managers and teachers; and (vi) students and their parents. Through the project steering committee which will meet quarterly, the project's annual budgets and plans, quarterly and annual reports will be reviewed and discussed by the central and Ulaanbaatar municipal governments. Information on school and kindergarten construction and expansion will be communicated to school and kindergarten managers, teachers, students and their parents, and the community at the beginning of and during the school year. Public consultations will be conducted during construction period as per environment monitoring plan for civil works contractors (Annexure 3 of the Initial Environmental Examination, Environmental Site Inspection and Monitoring Checklist, item 9). Through training, workshops, and materials, relevant stakeholders, including civil society organizations, will be consulted and involved, where relevant.

X. ANTICORRUPTION POLICY

117. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the project.²³ All contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of the executing agency and all project contractors, suppliers, consultants, and other service providers. Individuals and/or entities on ADB's anticorruption debarment list are ineligible to participate in ADB-financed activity and may not be awarded any contracts under the project.²⁴

118. To support these efforts, relevant provisions are included in the loan agreement and the bidding documents for the project.

XI. ACCOUNTABILITY MECHANISM

119. People who are, or may in the future be, adversely affected by the project may submit complaints to ADB's Accountability Mechanism. The Accountability Mechanism provides an independent forum and process whereby people adversely affected by ADB-assisted projects can voice, and seek a resolution of their problems, as well as report alleged violations of ADB's operational policies and procedures. Before submitting a complaint to the Accountability Mechanism, affected people should make an effort in good faith to solve their problems by working with the concerned ADB operations department. Only after doing that, and if they are still dissatisfied, should they approach the Accountability Mechanism.²⁵

²³ Anticorruption Policy: <http://www.adb.org/Documents/Policies/Anticorruption-Integrity/Policies-Strategies.pdf>

²⁴ ADB's Integrity Office web site: <http://www.adb.org/integrity/unit.asp>

²⁵ Accountability Mechanism: <http://www.adb.org/Accountability-Mechanism/default.asp>.

XII. RECORD OF CHANGES TO THE PROJECT ADMINISTRATION MANUAL

120. All revisions and/or updates during the course of implementation should be retained in this section to provide a chronological history of changes to implemented arrangements recorded in the PAM, including revision to contract awards and disbursement s-curves.