



**Ministry of Education, Culture, Science
and Sports**
Asian Development Bank



EDUCATION DATA ANALYSIS REPORT

Project Title and No: MON 51103-001, TA SUPPORT FOR DEVELOPMENT OF EDUCATION SECTOR MASTER PLAN PROJECT

Report Content: Education data, inter-sectoral data, mid-term simulation outputs, relevant reports, presentations, meeting and distribution materials

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List of abbreviations

ADB – Asian Development Bank

MECSS – Ministry of Education, Culture, Science and Sports

MoLSP – Ministry of Labor and Social Protection

DEC - Department of Education and Culture

Career Counselling – Career counselling

SC – Secondary school

MNUE – Mongolian National University of Education

MIER – Mongolian Institute of Education Research

ITPD – Institute of Teacher`s Professional Development

VTPC – Vocational Training and Production Center

MCUC – Mongolian Consortium of Universities and Colleges

ICT – Information Communication Technology

IO – International Organizations

OS – Official statistics

AS – Administrative statistics

SISS – Social Indicator Sample Survey

PHC – Population and Housing Census

ECE – Early Childhood Education

TMB - Technical and vocational education

HE – Higher Education

EMIS – Education Management Information System

HEMIS - Higher Education Management and Information System

LLEC- Lifelong education center

GPE – Global Partnership for Education

Reference materials

National laws and regulations

- The Constitution of Mongolia
- Mongolian law on Education (2002)
- Mongolian law on Statistics (1997)
- Mongolian law on pre-primary education (2008)
- Mongolian law on primary and secondary education (2002)
- Mongolian law on vocational education and training (2009)
- Mongolian law on higher education (2002)
- Mongolian law on the Rights of people with disabilities (2016)
- Mongolian law on public and local property (1996)
- Mongolian law on Violation (2017)
- Mongolian law on Supporting Teacher development (2018)

Policy documents, national programs

- Mongolia Sustainable Development Vision - 2030
- National program on improving the statistics for the period of 2017- 2020 (2017)
- Comprehensive National Development Policy 2007-2021 (2008)
- State policy on Education sector (2014-2024)
- Mongolian Sustainable Development Goals - 2030 (2016)
- National Program on Sustainable Development of Education (2018)
- State policy on Employment
- National program on "Education" (2010-2021)
- National program on "Developing Technical and Vocational education" (2016-2022)
- National program on "Mongolian citizen with employment and income"
- Program on "Vocational education and training teacher development"
- "Master plan for developing Science and Technology for the period of 2007-2020" (2007)
- Sub-program on supporting the research works by public universities (2007)
- Sub-program on supporting and preparing young researchers and scholars
- National program on Supporting the development of Children with disabilities, their rights and participation (2017)

Resolutions, order and decisions

- NSO chairman`s order to approve "Classification and coding arrangements" with reference number A/153,
- Statistical methodology to estimate education statistics, NSO, 2013
- Government resolution date 2010, with reference number 66, on some measures to improve the quality of Kazakh children`s education service.
- Instruction to support comprehensive development of children with disabilities, Joint order by the Minister of Labor and Social Protection and Minister of Health, 2018
- Relevant resolutions and order

International guidelines and handbook, materials

- International Standard Classification of Education, ISCED-2011, UNESCO-UIS, 2012
- Education Indicators Technical guidelines, UNESCO, 2009
- SDG 4 Data Book Global education indicators, UNESCO, 2019

Education sector analysis methodological guidelines, UNESCO, The World Bank, UNICEF, 2014

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SUMMARY

In this report, current state of the education sector data and information sources, draft policy simulation as well as projection on mid-term expenditure framework for covering the period for 2020-2030 based on education sector data has been presented in detail. Based on the sub-sector study on education sector data analysis, growth of school-age population has been projected until the year of 2030, the current state and demand for teachers and other necessary human resources required for pre-school and primary, secondary education sub-sector has been projected, as well as other financial resources, investment, necessary school buildings, seats, that will be required by the year of 2030 has been projected and simulation models are drafted.

Based on projection up to 2030, the total number of enrollment to the pre-primary education institutions will not be increased significantly, while the total number of enrollment to the primary education institutions will be increased by 18 percent, the total number of lower secondary and upper secondary/high school will be significantly increased by 71 percent, compared to 2018 figures. In this regard, there will be a high demand for teachers and teaching resources for lower and upper secondary students, by 2030, the number of total number of teachers required for primary and secondary education sub-sector will reach to 50, 000.

In regard to school shift coefficient, it varies by each school and in order to keep the school shift coefficient at constant nationwide, the number of school buildings and seats required by 2030, by each aimag and city. For instance, if the school shift coefficient to be 1.5 for each aimag, by 2030, in total 115,000 seats will be needed additionally and details are included in the annex (policy simulation file) of this report.

Moreover, as an attachment, the number of students in relation to the population growth dynamics, the number of teachers and other human resources, education access, GDP growth, mid-term expenditure framework and its projection models have been drafted by each education sub-sector.

CHAPTER ONE: CURRENT STATUS OF DATA FOR EDUCATION SECTOR

1. Social, demographic and macro-economic data

Since 2012, the website on national statistical database www.1212.mn became operational and it has been the key and reliable source for social and demographic, macro economic statistics.

This website not only serves as the key resource of the historical and sector wide information resource but also serve as the main projection tool to estimate future development of statistics of certain sectors. For instance, population growth dynamics up to 2045 by age group can be estimated by using database of this website. Key data and indicators of demographic and macro-economic statistics used in this report was obtained from this website.

- 1.1. Sources of social and demographic data and their advantages and disadvantages
- 1.2. Sources of economic data and their advantages and disadvantages
- 1.1. Basis for estimation and analysis of social, demographic and economic data
- 1.3. Data coherence and reliability
- 1.4. Data completeness

2. Data for education sector

2.1 Legal and policy environment and its coherence

The majority of world countries produce education statistics based on administrative data and results from sample surveys and population censuses. Mongolia annually collects its education data through official and administrative statistical forms and release them officially. Also, it carries out frequent sample surveys and estimates education related indicators and those such as child development and health through the Social Indicator Sample Survey and the Population and Housing Census.

The following laws and regulations are adhered with respect to the collection and the production of education data and statistics. Apart from the National Programme for Development of Statistics for 2017-2020 (2017)

- The statistics on education are governed by the Law on Statistics (1997, 1999, 2004, 2008, 2012, 2015, 2016),
- The Law on Education (2002),
- The Law on Pre-school Education (2008),
- The Law on Primary and Secondary Education (2002),
- The Law on Vocational Education and Training (2009),
- The Law on Tertiary Education (2002),
- The Law on Rights of Disabled Persons (2016),
- The Law on State and Local Properties (1996), and
- The Law on Violations (2017) etc.

Starting from 2013, in order to establish an integrated database on Education Management and Information system, with the financial assistance of the ADB, project on “Education Management and Information System” has started and the project implementation is well underway. Following provisions related to the Education Management and Information system was included in Mongolian law on Teacher’s Development which was approved by the Parliament on June 27, 2018:

- Provision 3.1.6 “Education sector information system” is the integrated database of all information on all levels of education institutions, learning environment, training progress, sector - wide human resources, registration of students which is fully equipped with necessary hardware and software as well as technical supply.
- Provision 9.3. Universities which have graduates from teacher class, shall submit their graduates’ information to EMIS.
- Provision 11.1 Information on teachers’ performance and work results shall be submitted to the EMIS on annual basis by their respective employer/ education institution.
- Provision 11.2. Teachers shall submit their personal planning and its performance to the EMIS base.
- Provision 15.1.3 To establish online database education.

2.2 Management, cooperation and implementation

Up to 2018, the MECSS did not have any independent unit on education statistics and information management system. In 2019, MECSS has established Information Technology and Statistics Division and it has created a favorable environment for integrating policy planning and management of education sector data and statistics.

Data reliability, coverage and completeness of education sector are fully dependent on data entry quality at the grass root level. Data quality assurance is made at teacher, school, soum and district, province and city, nationwide and ministry level.

2.3 Data sources and their advantages and disadvantages

Education statistical indicators are belonged to population and social statistics. They are produced and sent by the Ministry of Education, Culture, Science and Sports (MECSS) and the Ministry of Labour and Social Protection (MLSP) to the National Statistics Office (NSO) according to the Paragraph 6.2 of the Law on Statistics.

The following data sources are used for the estimation of education statistics and indicators.

Table № 1 Number of education statistics and data sources

Source	Name of reporting and survey	Frequency	Indicator
MECSS	Official and administrative statistics	Every year	2217 indicators
	Official statistics		1002 indicators
NSO	Population data, Household based surveys (Labour Force Survey, Household Socio-Economic Survey, Social Indicator Sample Survey)	Every 5 years	Educational attainment, school enrolment, expenditures on education
	Population and Housing Census, Establishment Census	Every 10 years	Educational attainment and literacy rate, establishments engaged in educational activities

Source: 1 MECSS

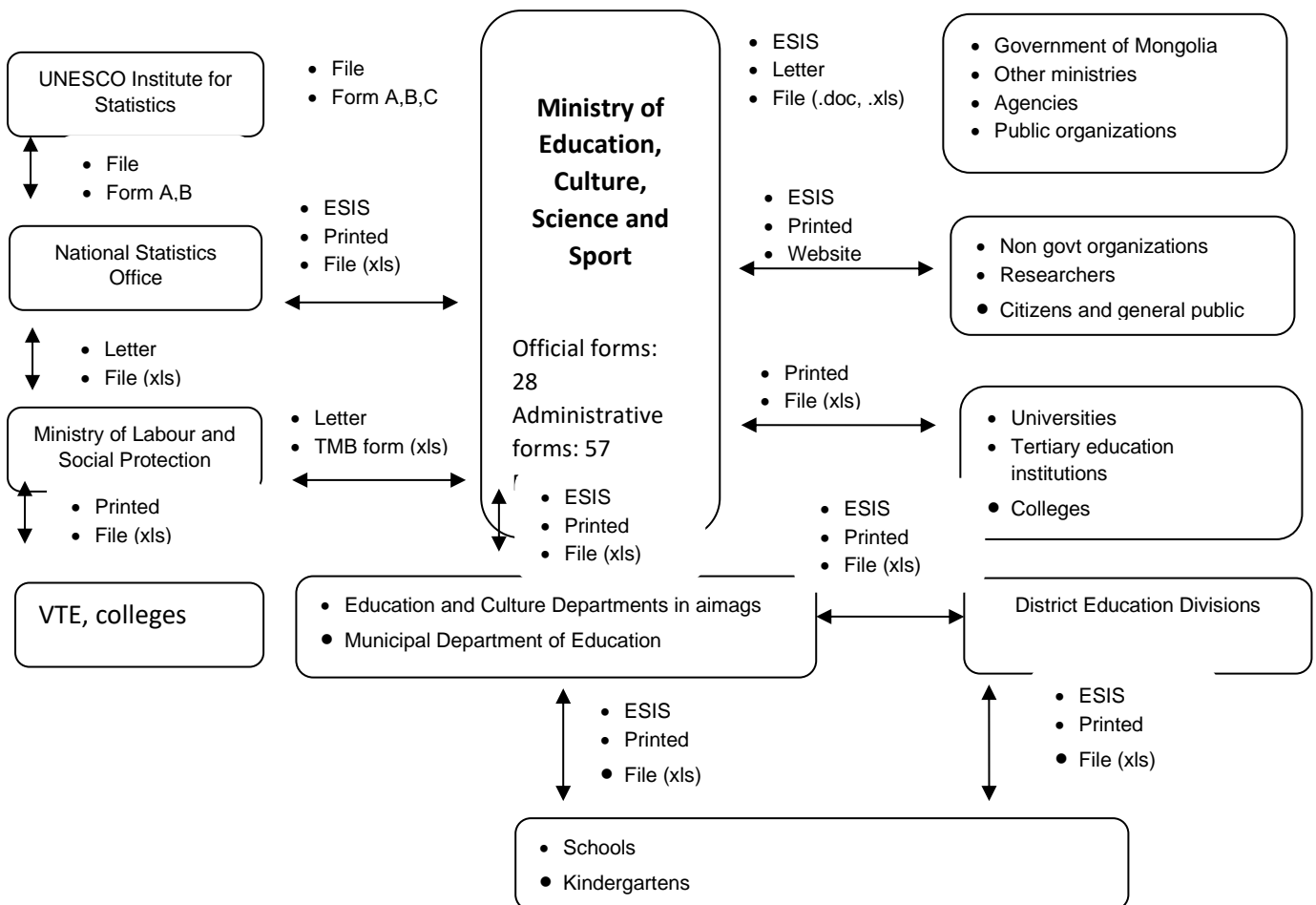
The main data sources of education statistics are the administrative statistics from the MECSS and the MLSP. The Table 1 shows that about 80 percent of the total data are produced using official and administrative statistics on an annual basis.

The education statistics are produced in accordance with the following principles, namely the independent and autonomous statistical activities, use of scientifically justified comprehensive methodology, accuracy, objectivity and timeliness of statistics, public accessibility to and transparency of statistical information within the legal frameworks,

consistency of statistical indicators and methodology with international standards and methodology, cost effective data collection through methods and means of less burden on respondents.

The statistical data is collected through official and administrative forms and processed, validated and disseminated to the general public. Data sources are educational institutions of all levels. The following figure illustrates data flow:

Figure № 1 Data flow



Source: 2 MECSS

2.4 Data completeness (in general)

For the data on education, data coverage is relatively high for the following reasons. As variable costs for pre-schools and primary and secondary schools are financed based on official and administrative statistics, coverage of data for the first half of the year or for pupils, teachers and related activities is good enough. However, data for the second half of the year or for costs and expenses, financing and education environment had been underreported. Nevertheless, the data coverage for the latter has fairly been improved thanks to collection and processing of education data through the Education Sector Information System in the recent years.

Let us take a look at the official and administrative statistical forms and indicators:

Table № 2 Statistical forms and indicators

Domain	Number of forms	Of which:	Number of indicators	Of which:
		Official statistics		Official statistics
Pre-school education	28	6	941	385
Secondary education	53	14	1,225	590
Vocational training and education	15	9	395	254
Tertiary education	15	6	397	212
Total	111	36	2,958	1,441

Source: 3 MECSS

2.5 Basis for estimation and analysis of data

Apart from the said policy documents, forms, classifications, codes and methods for education statistics are followed in the education sector. They are as follows:

Code for education classification:

The Mongolian Code for Classification of Educational Levels, approved in 2014, is presently observed (the NSO Chairperson Order No. A/153 on Adoption of Code for Classification, 2014).

Indicators and methodology for education statistics:

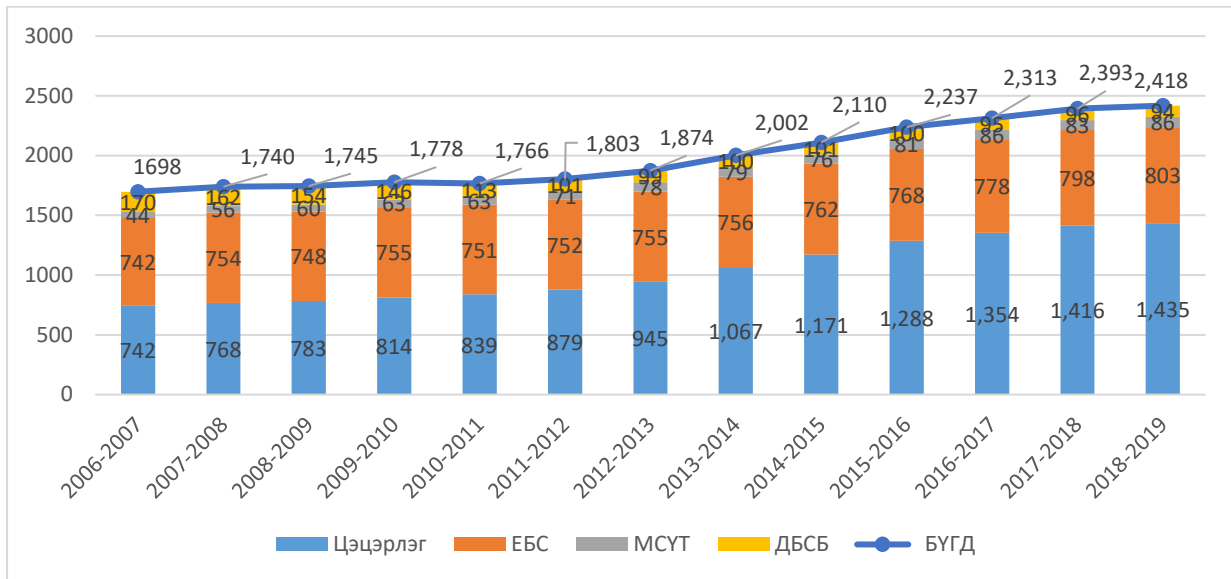
At the national level: Technical Manual on Estimation of Social Indicators (ADB, 1998) and (NSO 2010), and Method for Estimating Educational Statistical Indicators, approved in 2013, are now being followed (NSO Chairperson Order No. 1/145, 2013).

At the international level: Education Indicators Technical Guidelines (2009), developed by the UNESCO Institute for Statistics, Quick Guide to Education Indicators for SDG 4 (2018) and SDG 4 Data Book: Global Education Indicators 2018 (2018), prepared by the UNESCO Institute for Statistics within the framework of the SDGs are available.

2.6 Data coherence and reliability

The advent of the Education Sector Information System (ESIS), introduced in the general education (primary, lower and upper secondary) since 2013 and in the pre-school education since 2018, has paved the way to create register based online database and thereby ensured the reliability and the accuracy of data. There is a lack of indicators and data for tertiary and vocational education and some indicators could not be estimated. The fact that data is collected in paper and electronic formats and processed affects the data coherence and reliability negatively.

The number of entities that are covered in the statistical surveys and reporting is increasing from year to year. In the academic year for 2018-2019 there were a total of 2,418 education institutions, covered in the reporting.



-Kindergartens –Secondary schools –Vocation training centers –Tertiary education institutions –TOTAL

2.7 The current state of education sector data and EMIS

In order to increase education sector data, to reduce manual data collection, to introduce advanced technology, at first, the MECSS has initially introduced EMIS for primary and education sector in 2014 and then introduced EMIS for pre-school education sub-sector in 2018 and introduced EMIS for high education sub-sector since in 2019.

Education Management and Information System (EMIS)

In order to establish the information and data framework and management of education sector, to establish integrated registration of education sector data and indicators, ADB has started implementing the project in following three phases:

1st phase: (2013-2014) The key outcome of the 1st phase was the fully established information online system and finalized information management framework;

2nd phase: (2014-2015) to make EMIS available for information exchange with state database and online platform, to introduce next phases of financial and property management;

3rd phase: (2015-2020) Full introduction of online information system that is designated to automatized training and online management;

The MECSS has been supporting the “system team” that has a specialized duty to collect education data, to transfer education data, to conduct education data analysis, to disseminate the education data and statistics to data users, to establish education sector database, to respond the demand for education data by various data users and organizations, to coordinate and sustainably maintain EMIS by using information technology, to coordinate and harmonize the EMIS with other information databases.

With the support of Asian Development Bank, under the Higher Education Reform Project, higher education management and information system is being established and full introduction is not yet completed.

2.8 International experiences and recommendation on EMIS and data management:

1. Depending on the country context, in order to understand and distinguish the difference among different groups, there is a growing need for a different data and indicators that can be estimated and projected by various types such as location, gender ratio etc in detail. Countries are facing different challenges to collect and analyze necessary data to measure the implementation of SDGs. According to UNESCO Statistics Division report produced in 2016, Data accessibility on SDG implementation was conducted covering 121 countries including Arabic countries, Asia-Pacific region countries, America and Caribbean countries, Africa and Sub-Saharan countries. "Almost half of the evaluated countries (47%) had sufficient data on 11 general indicators, 63% percent of them had data on 32 thematic indicator, (general indicators are not included). Moreover, only 17 countries (14%) were developed countries, 23 countries (19%) were able to collect data on disability. In order to strengthen the EMIS institutionally and technically at national level, to collect household survey, citizen`s registration, it is more important to improve the management of EMIS and its reliability, efficiency.

2. In regard to EMIS, collecting data on individual student`s surveillance is important for monitoring the social status and academic achievement and capacity of students, and to develop long - term comprehensive information and database of education sector. Individual education need can be easily identified based on personal information. For instance in Fiji island, as a result of EMIS` surveillance data on learner`s condition, school attendance, discipline indicators and academic achievements, bus ticket subsidy was distributed among students. (DFAT 2017).

3. UNESCO SDG 4 Data Book GLOBAL EDUCATION INDICATORS and its availability in Mongolia as of 2019, as following. Namely:
 1. SDG 4.1.1: 2/3 rd grade reading - No information
 2. SDG 4.1.1: 2/3 rd grade mathematics - No information
 3. SDG 4.1.1: Primary education reading - No information
 4. SDG 4.1.1: Primary education mathematics - No information
 5. SDG 4.1.1: Secondary education reading - No information
 6. SDG 4.1.1: Secondary education mathematics - No information
 7. SDG 4.2.1: Proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being, by sex– 76 /2013/
 8. SDG 4.2.2: Participation rate in organized learning (one year before the official primary entry age), by sex– 98 /2010/, 97 /2011/, 89 /2012/, 96 /2013/, 99 /2014/, 93 /2015/, 91 /2016/, 96 /2017 – no information
 9. SDG 4.3.1: Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex– no information
 10. SDG 4.4.1: Percentage of youth/adults with information and communications technology (ICT) skills, by type of skills– no information
 11. SDG 4.4.1b: the rate of youth and adults who can install new software at the computer,– no information
 12. SDG 4.4.1c: the rate of youth and adults who can deliver report, presentation,– no information
 13. SDG 4.5.1: Parity indices (female/male, rural/urban, bottom/top wealth quintile and
 14. others such as disability status, indigenous peoples and conflict-affected, as data become available) for all education indicators on this list that can be disaggregated– no information
 15. SDG 4.6.1: Literacy rate of population in a given age group – no information
 16. SDG 4.6.1: Percentage of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex – no information
 17. SDG 4.a.1.b: (b) the rate of schools with internet for training purpose – 71 /2016/ primary education

18. SDG 4.a.1.b: (b) the rate of schools with internet for training purpose – 78 /2016/ lower secondary education
19. SDG 4.a.1.b: (b) the rate of schools with internet for training purpose– 89 /2016/ upper secondary education
20. SDG 4.b.1: The amount of ODA for scholarship, by sector and type of training – 11.3 /2010/, 18.2 /2011/, 13.1 /2012/, 13.7 /2013/, 15.0 /2014/, 10.6 /2015/, 7.8 /2016/
21. SDG 4.c.1: the rate of teachers who have participated in organized training teacher development courses: (a) at pre-primary education– 90.0 /2010/, 93.0 /2011/, 94.0 /2012/, 100/2015/, 100 /2016/
22. SDG 4.c.1: the rate of teachers who have participated in organized training teacher development courses: (b) primary education– 98 /2010/, 99/2011/, 99 /2012/, 100/2013/, 100 /2014/, 100 /2016/
23. SDG 4.c.1: the rate of teachers who have participated in organized training teacher development courses: (c) lower secondary education– no information is available
24. SDG 4.c.1: the rate of teachers who have participated in organized training teacher development courses: upper secondary education– no information is available

3. Conclusion

3.1 Advantages and disadvantages

Advantages

1. Policy planning has been improved since the establishment of Information Technology and Statistics Division at the MECSS.
2. The implementation of international statistical standards and methodology in the education sector enabled the estimation of education indicators in line with international methodology.
3. Also, the establishment of the children's national ID based database using ICT for the education statistics leads to an integrated database that has created an environment conducive not only to evidence based decision making and planning, but also to result based monitoring and evaluation.

Disadvantages

1. There is no designated policy or strategic plan to strengthen and support education statistics and education management and information system.
2. EMIS is an attempt to collect education sector database at nationwide for monitoring and evaluation purpose and in-depth analysis. However there is no effective sector-wide policy in this regard,
3. Vocational and Technical education and training sector is under the management of Ministry of Labor and Social Protection, therefore information exchange and harmonization between various database is weak, monitoring indicators for policy and legal document implementation is not sufficient.
4. As of 2018, Mongolia is not in a position to estimate all the indicators for SDG 4. With the ESIS, data required for the indicators and targets for SDG 4 is, to some extent, collected and processed. However, there is a need to gather data such as on the disabled, national minority, school enrolment of children from the herders and the poor, and school attendance that are required for making an equality analysis. The data, collected and processed through official and administrative reporting forms for pre-school, secondary and tertiary education using the ESIS, is not adequate enough to estimate all the indicators for SDG 4 and there is some room for improvement.
5. EMIS and education statistics does not cover students studying abroad, children dropped out of school, children with no registration etc is not registered at the EMIS.

6. Schools and local authorities are collecting additional information from student, for instance detailed registration of students, home-school travel information, social status of the household, risk group identification etc). These data is not available at EMIS. There is no registration of children receiving education at monastery and churches.
7. Monitoring and analysis activities are not sufficient.
8. Data and integrated statistical information on Education Sector is open to other public organizations, NGOs, private sector and citizens. However, due to lack of information, the use of EMIS is not widely used as expected.

3.2 Recommendations

There is a need to improve the existing reporting forms, have them approved and increase their usability in order to revise the classification and methodology for education statistics and to estimate those indicators unavailable.

1. To coordinate EMIS and ICT strategy and its implementation (data storage, back-up, safety plan, risk management plan, capacity building long-term planning etc) with other plans and programs being implemented in education sector as well as ICT sector.
2. To further develop current state of EMIS, to solve issues of connecting EMIS with other systems, to establish designated unit to connect EMIS with other sector database
3. To pay attention on the increased use and efficient application of forms used for education data collection which are mentioned at methodology on “Education statistics indicator estimation”, to revise methodology to collect statistics on SDG 3 (43 indicators), to pay more attention on the indicators that has no data.
4. To generate data for SDG 4 indicators through EMIS, to make necessary estimation and configuration at the system and make available the EMIS to generate SDG and SDV of Mongolia data directly.
5. To explore the possibilities to produce data and indicator on implementation of sector policy documents such as Sustainable Development–2030 and Mongolian Sustainable Development Vision, as well as other sector policy /not only focusing on SDG 4 but also other
6. To pay attention to the harmonization of policy document goals and its implementation indicators, to include standard indicators as key implementation indicators
7. To seek possibility to collect statistics and data of other relevant sectors and to establish inter-sectoral database.
8. To use education sector data generated from EMIS when producing national policy on education and planning exercise.
9. To connect EMIS with other information sources and databases (Household information database etc), to improve the registration of Mongolian citizens arriving from foreign countries, population with dual culture and languages, children and population with special needs, registration of indigenous people, the number of population at risk of school drop out and to seek solution to solve school-drop out problem.
10. To conduct regular quality assurance and monitoring on EMIS by MECSS.

Indicators that needs to be developed in the future.

1. To produce measurement indicators for policy documents /Sustainable Development Goals and SDG4 goals, State policy on Education Sector, Mongolian Sustainable Development Vision -2030/
2. To produce indicators to collect data on salary of education sector human resources including teachers, managers, their social condition including housing supply and access
3. How to collect data on literacy and numeracy rate of 15-24 years old
4. To collect data on the rate of youth and adults with ICT skills, by type of skills
5. Education balance index (male/female, urban/ rural, 5 household groups and disability, indigenous people, herder`s children, kazak, tuva and minority population

6. (i) Global citizenship education (ii) gender equality and human rights issues as well as sustainable development education (a) national education policy; (b) curriculum; (c) teacher education; (d) student's learning achievement and its assessment

7. The participation rate of teachers who have participated in organized professional development training courses, i.e. pedagogy methodology: (a) pre-school; (b) primary education; (c) lower secondary education; (d) upper secondary education

8. In regard to climate change (i) World citizens education (ii) sustainable development education (a) education policy; (b) training curriculum (c) teacher education and (d) student's learning achievements etc.

9. Whether the information on disaster prevention, reduction and adaptation is included in primary and secondary education programs.

10. To register the number of children studying abroad, number of children dropped out of school, the number of children who have no access to school at all, the number of children with no ID card

11. Schools and local authorities are collecting additional information from students, for instance detailed registration of students, home-school travel information, social status of the household, risk group identification etc). These data is not available at EMIS. There is no registration of children receiving education at monastery and churches)

12. To register statistics at school level, in particular, the number of day-care service providers, special courses, lunch programs etc

CHAPTER TWO: DATA FOR THE PRE-SCHOOL EDUCATION SUB-SECTOR

1. Sources, basis for compilation, and reliability of data

1.1 Sources of data for the sub-sector and their advantages and disadvantages

Statistics and data for the pre-school education are compiled and submitted to relevant authorities according to the related laws and regulations. Besides, they are provided to policy and decision makers, relevant executing bodies, researchers and the general public. Collection of data for pre-school education and data sources are presented below.

At the national level: Population and Social Statistics Department of the National Statistics Office is responsible for education statistics.

At the sectoral level: the member of the Government, in charge of education, culture and science matters, is liable for education statistics, providing policy and operational guidance and directions.

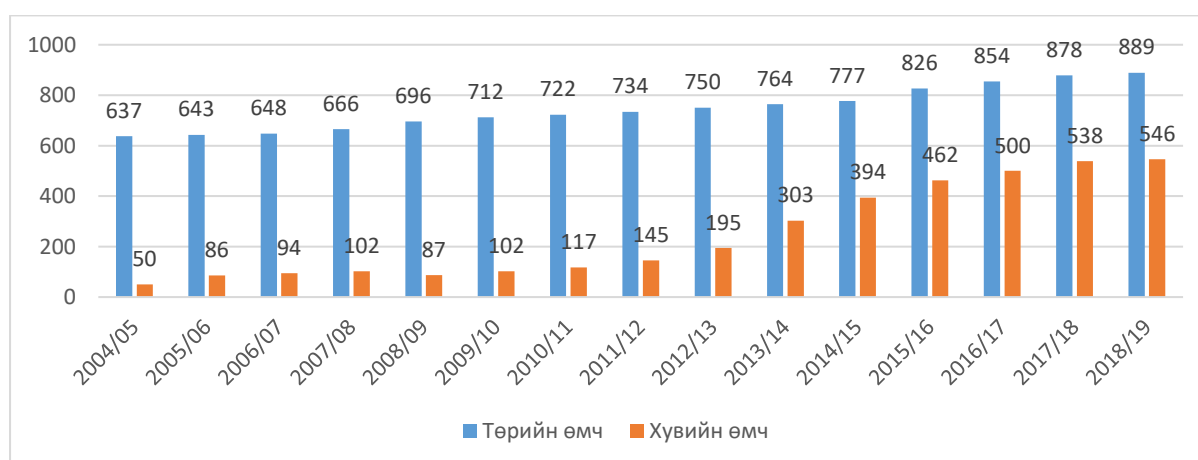
At the local level: Department of Education, Arts and Culture under the Governors of Aimags and the Capital City is responsible for collecting relevant data from kindergartens and processing and disseminating it, and providing kindergartens with technical and methodological management and support according to the Law on Statistics.

At the soum level: Kindergartens in soums are in charge of collecting, processing and providing data in the light of the Law on Statistics and the Law on Education.

At the district level: through Education Divisions, local public and private kindergartens are responsible for collecting, processing and providing data. Since there is no specific staff member in kindergartens, a supervisors or a director of a kindergarten is in charge of data collection, processing, analysis and transmission.

The coverage of units covered in a statistical reporting has increased from year to year. An analysis of the units, covered in the reporting, shows that the number of respondents increased to 1435 in 2018-2019.

Figure № 2 Number of pre-school education institutions covered in the statistical reporting (by type of ownership)



-State owned -Private

1.2 Data coherence and reliability

The statistical form for pre-school education sector, approved in 2003 and revised in connection with the Sustainable Development Goals and changes in policy and legal frameworks, is used by the ESIS to collect and process. With the system, data accuracy and reliability have been improved and it enabled subject matters to make research and analysis. Regarding data sources, data aggregated at the kindergarten level had previously been available. Now data is aggregated at the individual level using the national ID of children involved in the pre-school education.

1.3 Basis for analyses and estimation of the availability, accessibility, quality, coherence, and internal and external efficiency of the pre-school education

Indicators for and analyses of the availability, accessibility, quality, coherence, and internal and external efficiency of the pre-school education are estimated and made according to the Method for Estimating Educational Statistical Indicators (NSO Chairperson Order No. 1/145, 2013), Education Indicators Technical Guidelines (2009), developed by the UNESCO Institute for Statistics, Quick Guide to Education Indicators for SDG 4 (2018) and SDG 4 Data Book: Global Education Indicators 2018 (2018), prepared by the UNESCO Institute for Statistics within the framework of the SDGs. In Mongolia, the following indicators are compiled for the pre-school education sector and used for policy implementation. The policy and programme related indicators are as follows:

Table № 3 Pre-school education policy and programme related monitoring indicators

№	Indicators	Remarks
1	<ul style="list-style-type: none"> Enrolment ratio (gross and net) Increase to 72 percent the kindergarten enrolment of pre-school age children. Increase to 70 percent by 2012 the pre-school enrolment by establishing a ger kindergarten in each bag and expand types and forms of alternative pre-school education. Organize the establishment of a ger kindergarten in rural areas and increase the kindergarten enrolment 	<ul style="list-style-type: none"> “Mongolia Sustainable Development Vision 2030” “National Program for Improving Child Development and Protection (2002)” Action Plan of the Government of Mongolia (2008-2012)
2	Number of children in a class	
3	Number of children per a teacher	
4	Fully involve 6 year old children in school	“Comprehensive National Development Strategy” (2007-2021)
5	Reduce by 4 times, compared with 1990, the under five mortality rate Reduce up to 35 the under five mortality rate per 1000 live births.	“National Millennium Development Goals” (2005) “National Program for Improving Child Development and Protection (2002)”
6	Prevalence of stunting children under 5 Reduce up to 10 the prevalence of underweight (stunting) children under five.	“National Millennium Development Goals” (2005) “National Program for Improving Child

		Development and Protection (2002)”
7	Increase to 90 percent the proportion of breastfeeding for babies until they reach 6 months old	“National Program for Improving Child Development and Protection (2002)”
8	Participation rate in organized learning (one year before the official primary entry age)	“Mongolia Sustainable Development Vision 2030”
9	Share of budget for pre-school education in the education sector	

2. Challenges and recommendations related to data

2.1 Challenges in the processing of data for pre-school education and solution to them

As the Education Sector Information System was introduced in the collection and the processing of pre-school education data in 2018, there is a paucity of information to compare. That the data before 2018 was aggregated by the MS Excel and collected through official and administrative reporting forms made it difficult to make an analysis.

Although we did plan to estimate the following indicators required for the master plan, we could not compile them due to the fact that some of them did not have any data sources and some did not have any data. Looking into the possibility of estimating the pre-school indicators (see Annex 1), it is important that one should consider using new data sources other than official statistics and administrative data.

The indicators, not yet estimated, are as follows:

A. At the MACRO level: Pre-school education sub-sector specific, policy, institutional and financial monitoring indicators

1. Of the total 16 indicators for the sector environment, 13 were not available and 3 could be available after additional efforts or from surveys. In other word, they could be drawn from the Social Indicator Sample Survey from the National Statistics Office and surveys from the Ministry of Health.
2. All of the 3 policy, institutional and organizational indicators could be available. To produce the indicators, the method for reviewing policy documents should be employed.
3. 2 of the cost and financing 4 indicators could be available.

B. At the MESO level: Indicators for mapping of pre-school education services

1. 3 indicators related to pre-school education mapping and definitions could be available;
2. It is necessary to conduct a new survey of pre-school education content and standards and to make calculation;
3. Data integrity has to be ensured and the drawback at this stage is the data integrity. Мэдээллийн нэгдмэл байдлыг бий болгох шаардлагатай байна.

C. At the MICRO level: Children and family

1. Of the 6 indicators for children and family environment, 1 could be estimated, 2 could be available through a new survey, and 3 could not be available;

2. 2 indicators for the availability and the accessibility of pre-school education services could be available.

D. Gap in the availability and the accessibility: supply and demand

1. A new survey is required to identify the gap

E. Quality and efficiency

2. An additional survey is required to measure the quality and the efficiency of pre-school education services.

Those indicators that could be available were estimated for last 10 years based on official statistics and administrative data. Results from a sample survey are attached.

2.2 Recommendations on generation of data required for pre-school education policy and planning and improvement of its quality

It is recommended to further harmonize the indicators for pre-school education sector with targets and monitoring indicators for policy documents and incorporate them into the documents.

2.3 Proposal

Indicators that needs to be generated in the future.

1. To immediatally collect information on indicators related to the SDG-4, to aggregate data in details. /by sex, by location, by property ownership and social status etc./
2. Health and learning skills, and social-psychological development of children under 5 years old, by sex

Following sector policy documents and its goal, objectives and implementation needs to be measured at nationwide, necessary indicators shall be developed, Namely:

State policy on Education Sector

A. Every Mongolian child will be covered by pre-school education services, including basic, hourly, quarterly mobile.

Mongolian Sustainable Development Vision-2030

A. Expand the types and forms of the pre-school education system, improve their quality, and build an environment in which 70 percent of all pre-school age children are enrolled at pre-school education facilities.

B. Further advance the pre-school education system, improve the quality of the system, decrease the number of children per pre-school teacher to 25, and build an environment in which 80 percent of all pre-school age children are enrolled at pre-school education facilities

C. Decrease the number of children per pre-school teacher to 20 and build an environment in which 90 percent of all pre-school age children are enrolled at pre-school education facilities/

CHAPTER THREE: PRIMARY AND SECONDARY EDUCATION DATA

1. Data resource, its origin, accuracy and validity

1.1 Resources of the sub-sector data and its weakness and advantages

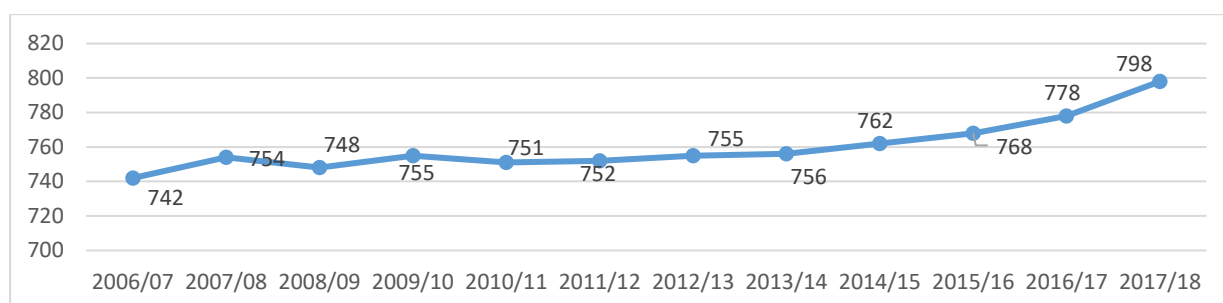
The sub-sector data and statistics are collected under the related regulations; and submitted to the responsible organizations, policy makers, implementers, researchers and public. The following resources are used for the sub-sector data collection:

- At national level: Population and social census department of national Statistical Office,
- Sector level: Ministry of Education, Culture, Science and Sports
- At local level: Local Education Boards
- At soum level: Individual schools
- At district level: District Education divisions
- At school level: Responsible staff for school data and statistics

1.2 Validity and accuracy of the data

A format for data collection for the sub-sector is approved in 2008; and it has not been updated. Since 2014-2015 academic year, the sub-sector data has been registered in ESIS; and it enabled to improve the validity and reliability of the data. Before 2014-2015, the data was collected and consolidated at school level and submitted to the Ministry. Nowadays, all student data is collected and registered in the ESIS based on the student registration numbers; thus, it enables to eliminate overlapping registration of students at different schools, oversee student move from to another school, and control the drop outs. The data has become complete because the ESIS covers all private and public schools in Mongolia.

Figure 3. Numbers of schools involved in data registration during 2006-2018



1.3 Quantitative analysis in access, equity, quality, relevance, internal and external efficiency and rationale of the analysis

All the mentioned indicators are analyzed based on “Education indicator estimation methods” by NSO in 2013 under Order No1/145, UNESCO- Education Indicators Technical guidelines (2009), UNESCO-Quick Guide to Education Indicators for SDG 4 (2018), SDG 4 Data Book: Global Education Indicators 2018 (2018).

2. Challenges and recommendations related to the data

2.1 Challenges in the sub-sector data processing and how it is overcome

The following indicators are chosen to be processed; nevertheless, some of them are not processed because there is no resources to collect the related data, as well as, some of them simply do not exist.

As we investigated possibilities to process the indicators in APPENDIX , it is crucial to link data extracted from other resources than official statistics and administrative statistics.

The indicators are:

A. MACRO LEVEL: Characteristics of the sub-sector and structures of the policy, institutions and financing

1. All 12 indicators related to population, social-economic context can be generated from NSO, Social Indicator Survey and Ministry of Health.

B. Enrollment, internal efficiency and drop outs

1. All 3 indicators in enrollment can be extracted.
2. Indicators except the school attendance can be processed. Estimation needs to be estimated based on international methods and integrated with influential policy decisions.
3. One indicator related to the supply of needs can be estimated; another one indicator needs to be collected through additional study.
4. Within the 10 indicators in internal efficiency, it is impossible to generate data on children with drop-out risk; and additional study is needed.

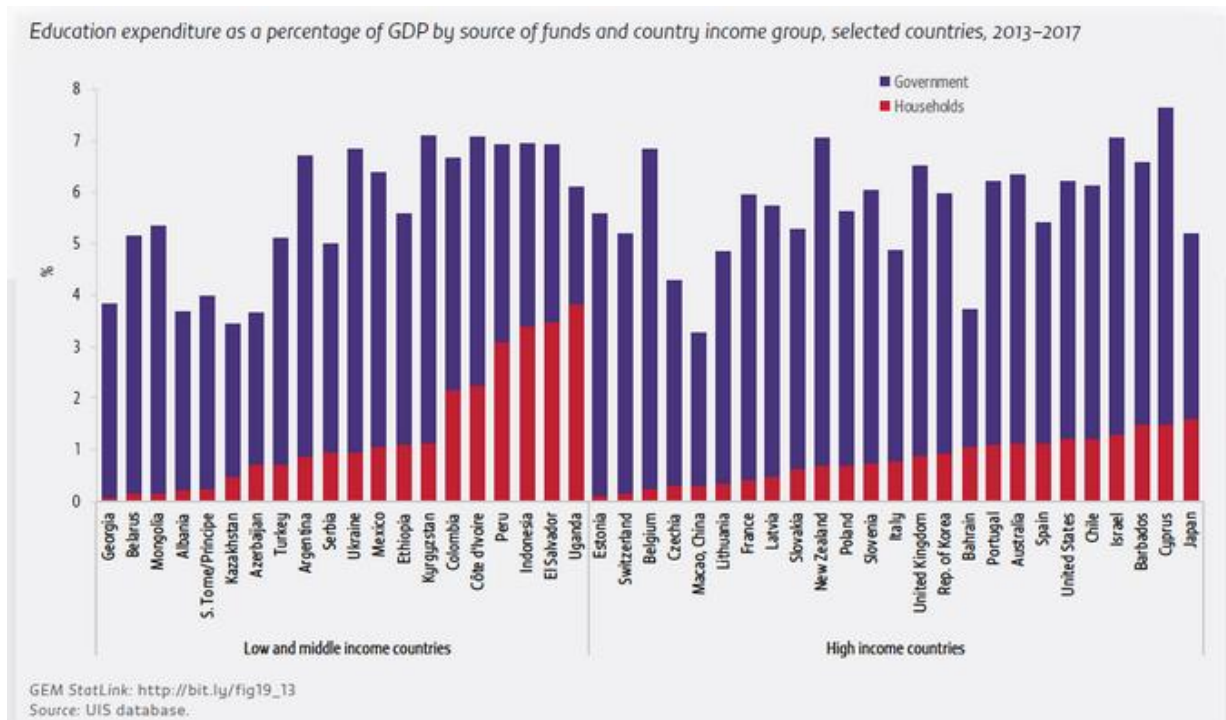
C. Cost and financing

1. There are 6 indicators in education financing and its components. As for the sub-sector, an additional survey is needed to collect data on funding from donor organizations. There is no integrated database for the donor funding.

Budget expenditure can be estimated in 6 indicators by the line and levels, yet. Due to lack of data, it is challenging to estimate national and international investment expenditure

2. There are 5 indicators on unit cost and its component estimation. This data needs to be collected and estimated by additional survey or investigation or extracted from other resources
3. Household spending on education has been estimated using 2 indicators collecting data from Social Indicator Survey. Some data are presented in Global Education Monitoring Report "Migration, displacement and education: Building bridges, not walls" 2019.

One of the challenges in education data is the contribution of households in education, globally, and it is not different in Mongolia. It is found out that as for primary and secondary education, household contribution in total expenditure of education has been enormous in low and middle income countries.



- It is also challenging to collect data in school infrastructure cost indicators due to lack of integrated data base

D. Quality, system capacity and management

- Collection of student achievement data was challenging because all resources belong to the EEC. Therefore, it is necessary to make the EEC data open and enable responsible researchers to easily access the data for use of, for example, sector study.
- Teacher shortage is simulated based on 4, out of 5, indicators related to teacher management.
- There are 7 indicators in other resources and teaching hour management. One indicator on effective teaching hour needs additional survey or study.

E. External efficiency

- Three indicators in school leavers and graduates' employment can be estimated obtaining data from Employment survey of the NSO.

F. Equity

- 3 out of 8 equity indicators in enrollment and learning achievement can be estimated; and the remaining indicators need additional survey.
- Equity in resource allocation in education sector needs additional estimation.

All data available-indicators and results from the survey are estimated resourcing from official statistics and administrative statistics 10 years and submitted to the experts.

2.2 Recommendations for further collection of data and its quality in the sub-sector
It is crucial to link the data indicators with objectives and targets of policy documents. It is also necessary to update the format of data collection.

3. CONCLUSION

3.1 Achievements and weaknesses

- Although it is a good achievement that all data related to policy planning and monitoring have collected and registered in the ESIS, there is not any policy for the ESIS.
- Stakeholders can access the ESIS, MECSS and NSO websites and collect necessary information and data for the planning, research, monitoring and evaluation.
- The ESIS uploads individual information State Registration Office using the registration number of students.

3.2 Challenges

- Classroom teachers collect student data and submit to the ESIS for the registration. In general, they collect data from parents in verbal and written format. Although the ESIS has data on SDG 4.5 indicators, some data and information could be incomplete and not accurate. For example, there is no information on student disability, school attendance due to a fact that irresponsibility of some parents and no civil documents.
- Some data are additionally collected via individual schools and local organizations. For example, descriptive information of student, how students come to schools, social background, risk-group survey, etc. The ESIS can not provide information for these surveys and studies.

3.3 Proposal and recommendations

It is necessary to add criteria related to SDG-4 immediately and issue data as disaggregated as possible /gender, location, ownership type, social status etc /

To collect data related to weather changes and coordinate the indicators

Consist the sickness data with attendance and establish criteria

Data related to crime etc.

Create infrastructure for students with disability and prepared training material data

School supplied with drinking water

Gender classified bathrooms

School supplied with hand washing facility

How to make national assessment of learning success / (i) Reading (ii) percentage of children and youth who acquired minimum level of mathematical lesson: (a) 2/3rd grade; (b) at the end of elementary education; (c) at the end of primary education; by gender/

It is necessary to determine possible indicators to estimate set objectives of following policy documents. It includes:

State education policy

To participate in international quality assessment of learning success in 2021.

Increase the percentage of teachers with master degree who specialized in teaching methodology, training technology in general education schools up to 70 percent.

Environment to study with one shift will be created in general education schools.

Integrated education management and information system will be introduced fully at the national level from 2016-2017 academic year.

Mongolian Sustainable Development Vision-2030

Arrange for the preparations to be evaluated by the Program for International Student Assessment (PISA), build an environment to ensure that all general education schools have two shifts, develop and implement an education program that (also) fits the

traditional nomadic lifestyle, and assure that every child with high school education has a professional orientation /2020/

Have the evaluation carried out by the PISA, decrease the number of general education schools having two shifts by up to 30 percent, and decrease the national average of students in a class to no more than 25 per class. /2025/

Improve the rank in the PISA score by five places, supply all schools with laboratories, equipment and technical facilities, decrease the number of general education schools having two shifts by up to 50 percent, and decrease the national average of students in a class to no more than 20 per class/2030/

CHAPTER FOUR: TECHNICAL AND VOCATIONAL EDUCATION, TRAINING SECTOR DATA

1. Data resource, its origin, accuracy and validity

1.1 Resources of the sector data and its weakness and advantages

The sector data and statistics are collected under the related regulations; and submitted to the responsible organizations, policy makers, implementers, researchers and public. The following resources are used for the sector data collection:

- At national level: Population and social census department of National Statistics Office,
- Sector level: Ministry of labour and Social protection
- At training provider level: According to the Statistics Law and VET Law, the providers are responsible to collect, process, represent data and provide the information to public. Training unit has a responsibility for the data and other responsible staffs provide data on enrollment, graduation, financing, and monitoring.

The training providers those involved in the data and statistics are:

Provider	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019
VTPC	44	56	60	63	63	71	78	79	76	81	86	83	86
Public	38	42	42	44	44	49	50	53	52	49	50	50	51
Private	6	14	18	19	19	22	28	26	24	32	36	33	35

1.2 Data accuracy and validity

A format for collecting VET related data is approved in 2013. MS Excel is used for the data collection and processing; and due to lack of sustainability of leadership and human resource, data accuracy is violated. It is the biggest challenge to use the available data.

1.3 Quantitative analysis in access, equity, quality, relevance, internal and external efficiency and rationale of the analysis

All the mentioned indicators are analyzed based on “Education indicator estimation methods” by NSO in 2013 under Order No1/145, UNESCO- Education Indicators Technical guidelines (2009), UNESCO-Quick Guide to Education Indicators for SDG 4 (2018), SDG 4 Data Book: Global Education Indicators 2018 (2018).

2. Challenges and recommendations related to the data

2.1 Challenges in the sector data processing and how it is overcome

The following indicators are chosen to be processed; nevertheless, some of them are not processed because there is no resources to collect the related data, as well as, some of them simply do not exist.

As we investigated possibilities to process the indicators in APPENDIX 3 , it is crucial to link data extracted from other resources than official and administrative statistics.

The indicators are:

A. MACRO LEVEL: Characteristics of the sub-sector and structures of the policy, institutions and financing

1. 3 indicators related to population, social-economic context can be estimated resourcing from NSO. Every 2-year, the NSO conducts the survey on household soci-economic context.

B. VET Overview

1. Possible data on VET
2. Possible to have data on the VET providers, their structure
3. All indicators can be estimated in the VET Enrollment.
4. As for 4 equity-indicators, female student friendly-environment indicator needs to be collected by additional survey
5. 3 out of 10 external efficiency indicators can be estimated; and the remaining 7 are impossible

C. VET cost and financing

1. VET has 8 finance-related indicators. It is impossible to extract data on VET self-income and social partnership financing.
2. Needed additional survey or investigation for 7 unit cost-related indicators.
3. Data is available for infrastructure cost indicators.

D. VET internal efficiency

1. As for 4 indicators, it is impossible to extract data on a rate of dropped-out students by the level and qualification.
2. As for the quality, 4 out of 11 indicators can be estimated, 2 indicators need additional survey, 4 indicators are not available, 1 indicator needs to be estimated additionally.
3. Within 5 indicators related to teacher management, teacher shortage needs to be additionally estimated.
4. Data on 1 out of 4 indicators in other resources and teaching hour management is available. 2 indicators need additional survey; moreover, effective teaching hour indicator needs to be additionally investigated.

All data available-indicators and results from the survey are estimated resourcing from official and administrative statistics for 10 years and submitted to the experts.

2.2 Proposal, recommendations

Information on student's loan /national/

To have workplaces after graduation, how to link to the data of Social Insurance

Information on students abroad /funding, by sector, loans, grants etc, number of students, sex/

Produce by demanded professions,

Information on school's steering committees/by gender, activities etc/

Improve information on dormitory and training environment

Information on projects and programs implementing at TVET schools

Surveys of teachers and analysis, their employment in projects

Professions of last 12 months as non-formal within the objective of Sustainable Development Goals

It is necessary to determine possible indicators to estimate set objectives of following policy documents. It includes:

State education policy

A. Not less than 20 curricula of top professions in higher education, vocational education will be internationally accredited.

2. Mongolian Sustainable Development Vision-2030

A. Strengthen the teaching capacity of the vocational education and training system on the basis of social partnership, expand its technical capacity, and increase the number of students to 60 thousand/2020/.

B. Improve the vocational education and training system

based on demand and increase the number of students in this line of training. /2025/

C. Meet the national workforce demand fully from the

national pool of skilled and professionally trained persons. /2030/

CHAPTER FIVE: HIGHER EDUCATION SUB-SECTOR DATA

1. Data resource, its origin, accuracy and validity

1.1 Resources of the sub-sector data and its weakness and advantages

The SUB-sector data and statistics are collected under the related regulations; and submitted to the responsible organizations, policy makers, implementers, researchers and public. The following resources are used for the sector data collection:

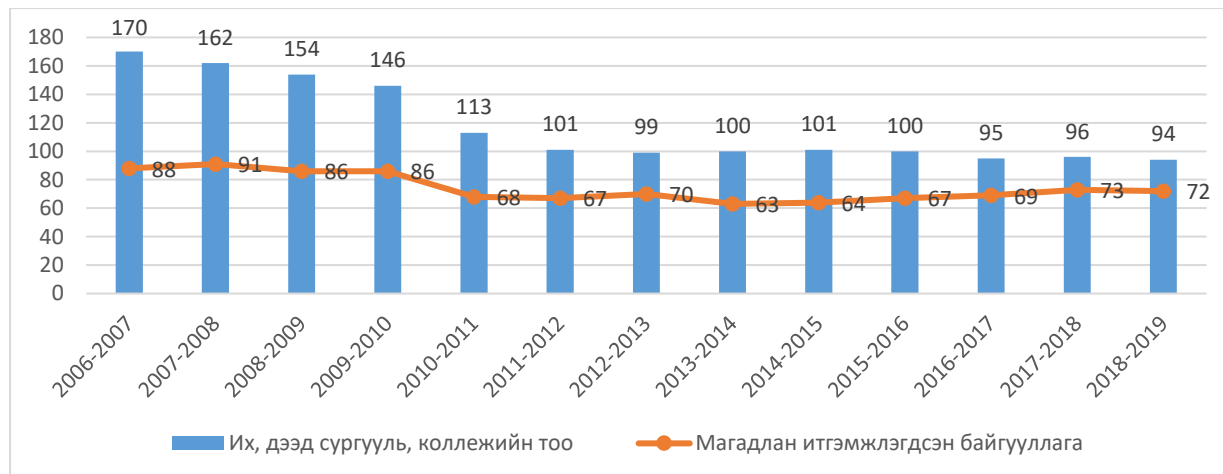
- At national level: Population and social census department of National Statistics Office,
- Sector level: Ministry of Education, Culture, Science and Sports
- At HE institute level: According to the Statistics, Education and HE Laws, the institutes are responsible to collect, process, represent data and provide the information to public. Training units of HE institutes have a responsibility for the data and other responsible staffs provide data on enrollment, graduation, financing, and monitoring.

1.2 Data accuracy and validity

A format for collecting HE data, statistics is approved in 2003; and has not been updated since the approved year. Currently, the database system is not developed. Administrative data has been collected using MS Excel ; and it does not meet the requirements. It is critical to update the format and register data in the ESIS. Issues of data accuracy and validity are very challenging because the HE institutes provide consolidated data.

Institutes covered in the statistical data and informations are:

Figure 4. A number of HE institutes during 2006-2019



Although the HE institutes are involved in the data collection, majority of them are incomplete and not accurate. Some information is limited. The format for the data collection does not have indicators on accreditation, curriculum, and evaluation, most information rely on what individual institute has provided.

1.3 Quantitative analysis in access, equity, quality, relevance, internal and external efficiency and rationale of the analysis

The data analyst team tried to analyze the mentioned indicators based on “Education indicator estimation methods” by NSO in 2013 under Order No1/145, UNESCO- Education Indicators Technical guidelines (2009), UNESCO-Quick Guide to Education Indicators for SDG 4 (2018),

SDG 4 Data Book: Global Education Indicators 2018 (2018); nevertheless, majority of the data are not available. It was the biggest challenge for data processing of HE sub-sector.

2. Challenges and recommendations related to the data

2.1 Challenges in the sector data processing and how it is overcome

Collection and processing of HE data is not automatized; and data is not registered in the ESIS. In addition, the format of the data collection has not updated since 2003. These issues make the HE data analysis very challenging. Moreover, all available data are consolidated in MS Excel.

The following indicators are planned to be analyzed; yet, due to lack of resource and data, majority of them are not analyzed. It is crucial to link data extracted from other resources than official and administrative statistics.

The indicators are:

A. Latest trends and overview of current situation

1. History of Higher Education development
2. Descriptives of Higher Education institutions
3. Data on current situation related indicators are available

B. Management, training arrangement, internal efficiency, equity indicators

1. There are 4 indicators on type of operation, variances among and characteristics of the institutes. Teaching quality data needs to be collected by additional survey.
2. Need additional information on governance
3. Needed in detail information on 4 internal quality indicators
4. Data on equity in enrollment is available

C. Cost and financing

1. Needed additional survey on institute budget and its spending
2. Out of 2 indicators in learner financing and social service, the last one needed additional survey.
3. Needed additional survey on a structure of unit cost and graduation expenses
4. Data is not available for equity in resource allocation

D. Outcome, performance and quality

1. No sufficient information and data on external efficiency, thus, needed additional survey.
2. Investigate a possibility to estimate quality indicators taking into account of estimation methods and methodology.

All data available-indicators and results from the survey are estimated resourcing from official and administrative statistics for 10 years and submitted to the experts.

2.2 Recommendations for further collection of data and its quality in the sub-sector

It is crucial to link the data indicators with objectives and targets of policy documents. It is also necessary to update the format of data collection. HEMIS needs to be sustainably developed. There is a need to investigate resources other than the institutes and present the flow of information.

2.3 Proposal and recommendations

1. Information on student's loan /national/
2. To have workplaces after graduation, how to link to the data of Social Insurance
3. Information on students abroad /funding, by sector, loans, grants etc, number of students, sex/
4. Produce by demanded professions,
5. Information on school's steering committees/by gender, activities etc/
6. Improve information on dormitory and training environment
7. Information on projects and programs implementing in higher education institution
8. Surveys of teachers and analysis, their employment in projects
9. Registration of master and doctoral works, creation of dataset
10. Official development assistance amount for scholarship, by sectors and training types

It is necessary to determine possible indicators to estimate set objectives of following policy documents at the national level. It includes:

1. State education policy

- A. Not less than 20 curricula of top professions in higher education, vocational education will be internationally accredited.
- B. Not less than 4 Mongolian Universities will be ranked at the same level as Asian top 100 universities.
- C. Information technology, open content, curricula will be developed within education.

2. Mongolian Sustainable Development Vision-2030

- A. Establish a tertiary education system matching international standards built on a 'training-research-industry' cooperation model, which would provide equal, inclusive and quality educational services. /2020/
- Б. Build a science and technology cluster and park in accordance with priority development areas, and ensure that no less than four Mongolian universities are ranked among Asian top universities /2025/
- B. Establish a tertiary education system capable of turning out educated and skilled graduates, capable of competing in the international labor markets./2030/

CHAPTER SIX: DATA FOR LIFELONG EDUCATION SUB-SECTOR

1. Sources, basis for compilation, and reliability of data

1. Data sources of the sub-sector, their advantages and disadvantages

Statistics for lifelong education are compiled through five forms approved in 2008 according to relevant regulations and procedures and sent to related authorities and provided to policy and decision makers, executing bodies, researchers and the general public. Collection of data for lifelong education and data sources are presented below:

At the national level: Population and Social Statistics Department, the National Statistics Office, is responsible for education statistics,

At the sectoral level: the member of the Government, in charge of education, culture and science matters, is liable for education statistics, providing policy and operational guidance and directions.

At the local level: Department of Education, Arts and Culture under the Governors of Aimags and the Capital City is responsible for collecting relevant data from schools and centers for lifelong education and processing and disseminating it, and providing schools with technical and methodological management and support according to the Law on Statistics.

At the soum level: Schools in soums are in charge of collecting, processing and providing data in the light of the Law on Statistics and the Law on Education (in case of school based lifelong education institutions)

At the district level: through Education Divisions, local public and private centers for lifelong education are responsible for collecting, processing and providing data.

1.2 Data and its coherence and reliability

Statistics for lifelong education are compiled through five forms, and processed and disseminated. These forms were approved in 2008 and have not yet been revised. In the academic year of 2018-2019, data for 17 independent and 303 school based institutions was collected and processed. The Education Sector Information System has not yet been introduced in this sector. Collection of data through established official and administrative reporting forms and use of it for policy and operational purposes do not meet the current requirements. Hence, it is necessary to have these forms revised and approved and the ESIS should be introduced in the sector. Data available is not adequate in terms of data coherence and reliability since there is only aggregated data that makes any analysis difficult.

Of the total 16 indicators for the lifelong education, 70 percent could not be estimated. Thus, there is a need to increase the number of indicators for this sector, identify data sources and expand situation analysis further.

Indicators for and analyses of the availability, accessibility, quality, coherence, and internal and external efficiency cannot be compiled and made due to a paucity of data and information.

1.3 Advantages and disadvantages

That official data on lifelong education is collected by the Departments of Education, Arts and Culture in aimags and the capital city and compiled the by Ministry of Education, Culture, Science and Sports leads to some challenges such as a data gap and a time lag in relation to that from the National Center for Lifelong Education. The collection of the data through only five forms is not adequate enough to estimate the indicators for the sector.

1.4 Proposal

1. How to estimate the literacy and numeracy skills of 15-24 age group
2. To issue data on percentage of youth and adults with information, communication and technology skills by skills type.
3. Percentage of youth and adults participated in the non-formal education and training in past 12 months, by sex.

CHAPTER SEVEN: EDUCATION FINANCING AND INVESTMENT DATA

1. Data resource, its origin, accuracy and validity

1.1 Resources of the sub-sector data and its weakness and advantages

All sub-sectors have the approved format for collecting data on financing and investment. Sector financing has the following process as:

- Recurrent or Operational budget and
- Investment budget
 - o Constructing and building
 - o Furniture and equipment
 - o Maintenance

The above information and data can be obtained from Ministry of Finance and the NSO.

Although resource of the data on financing and investment is mainly individual instates, data and information collection is varied in terms of academic and financial years. It causes some difficulties to use the available data. Construction work is usually completed over years; then, it make the data collection difficult. Therefore, it is crucial to develop database linking financing with indicators of training equipment and buildings.

1.2 Data accuracy and validity

When collecting the data on financing and investment form individual organizations, private organizations usually provide incomplete and wrong information (for example information of tuition fee, donations, projects and programmes). It affects the accuracy and validity of the data. Other hand, there is a lack of financial information of private organizations.

2. Quantitative analysis in financing and investment and rationale of the analysis

Please refer to the sub-sector study report on education financing and investment for detailed information.

3. Challenges and recommendations related to the data

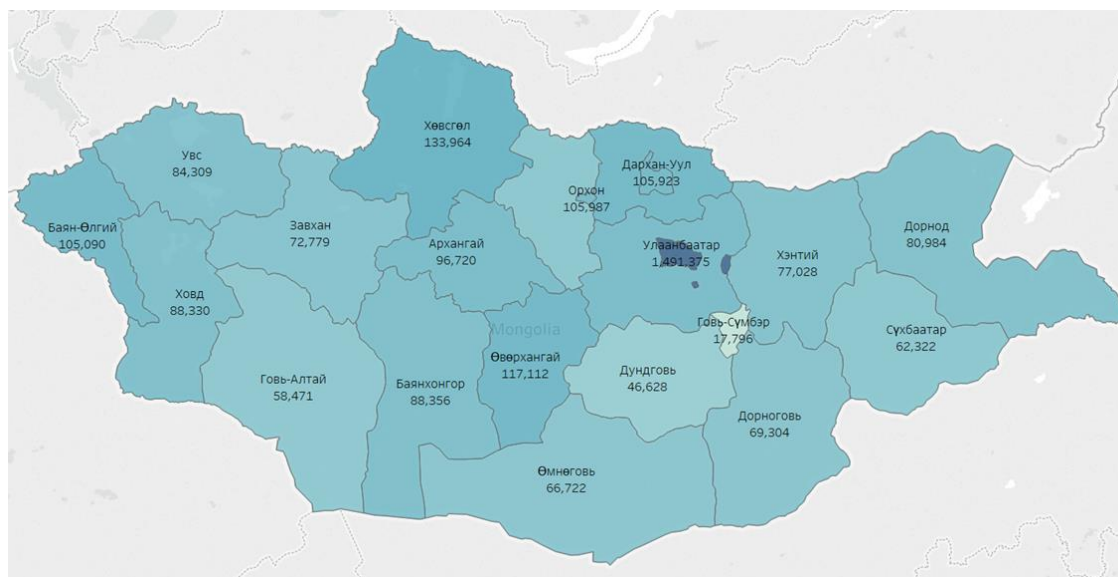
- 3.1 Challenges in the sector data processing and how it is overcome
- 3.2 Recommendations for further collection of data and its quality in the sub-sector

CHAPTER EIGHT: POLICY PRIORITIES AND MID-TERM EXPENDITURE FRAMEWORK

1. Projections of the education subsectors

Population data is uploaded from NSO www.1212.mn website. It is mapped at aimag level as shown in Figure ... Total population of Mongolia is estimated as 3238479; and 46% of them (1491375) reside in Ulaanbaatar, a capital city of Mongolia.

Figure... Population mapping by aimags



Population growth until 2030 is projected by age groups based on historical data of the NSO. The projection school-aged population growth is presented in APPENDIX 1. Based on this projection, expected population during 2019-2030 is presented in the following Table... by the education levels.

Table ... School-aged population

Level	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Pre-primary	318 422	312 447	308 213	312 052	315 128	322 460	326 240	324 655	322 659	319 721	317 055	314 949	313 729
Primary and Secondary	662 795	697 205	734 991	770 085	805 629	835 460	865 749	891 865	910 630	923 468	939 660	949 353	954 476
HE	190 539	189 219	185 184	179 695	174 471	173 074	176 312	189 079	208 872	233 129	250 939	265 730	277 345

Population growth compared to 2018 data is shown in the following Table in numbers and percentage:

Table ... Population growth, compared to 2018

	Level	2018	2019	2020	2025	2030
1	Pre-primary	318422	312447	308213	324655	313729
		Growth %	-2%	-3%	2%	-1%
2	Primary	341257	358321	371142	389702	403922

	Primary and secondary		Growth %	5%	9%	14%	18%
		Secondary	321538	338884	363849	502163	550554
			Growth %	5%	13%	56%	71%
3	HE		190539	189219	185184	189079	277345
			Growth %	-1%	-3%	-1%	46%
4	Vocational and technical education		38526	38257	38497	45438	54527
			Growth %	-1%	0%	18%	42%

By the above projection, it is predicted that by 2025, secondary school students are likely to be increased by 56% from the present situation, by 2030, the figure will be rise up by 71%. However, a number of pre-school students looks quite stable. 18-22 aged population, those are considered as HE age group, is likely to increase as 46%, TVET students to be increased by 42 % by 2030.

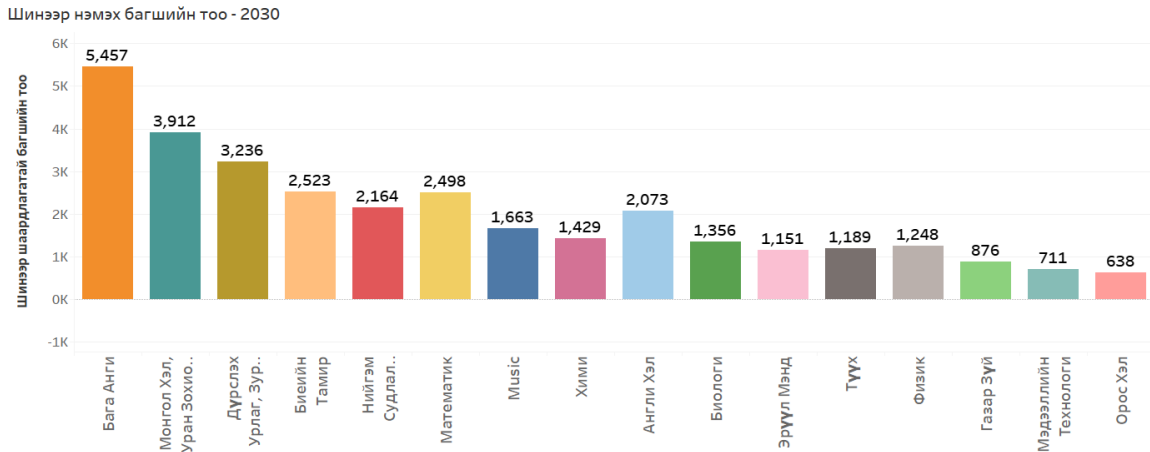
In relation to growth of the student numbers, demanded supply of subject teachers in schools is estimated as follow:

№	Subject	2018			2020		2025		2030	
		Present	Total	Demanded	Total	Demanded	Total	Demanded	Total	Demanded
1	Primary	10397	10759	362	11727	1590	12265	3428	12696	5158
2	Mongolian language, literature and Mongolian scripts	2654	3370	716	3808	1220	5257	3001	5762	3838
3	Mathematics	2363	2425	62	2740	436	3783	1774	4147	2433
4	IT	705	703	-2	795	107	1097	498	1203	691
5	Physics	998	1137	139	1285	312	1774	925	1944	1221
6	Biology	844	1137	293	1285	462	1774	1056	1944	1332
7	Chemistry	739	1137	398	1285	564	1774	1145	1944	1408
8	Geography	602	758	156	856	269	1182	671	1296	860
9	History	634	954	320	1078	460	1488	949	1631	1171
10	Social study and civil education	1106	1716	610	1939	861	2677	1737	2934	2133
11	Fine art, Зурагзүй, Technology	1943	2684	741	3033	1139	4187	2536	4590	3181
12	Music	1080	1413	333	1597	544	2204	1286	2416	1633
13	Physical education	2042	2308	266	2608	617	3601	1865	3947	2467
14	Health education	345	813	468	919	583	1269	976	1391	1141
15	English	2766	2341	-425	2646	-51	3653	1301	4004	1998
16	Russian language	720	667	-53	754	52	1041	429	1141	619
	Total	29940	34323	4383	38355	9163	49025	23576	52990	31284

By Table..., till 2025, the sector needs to recruit 23576 subjects teachers; and demand of individual subject teachers are presented respectively. By 2030, a total number of school teachers is estimated as 52990; within, 31284 teachers need to be recruited.

In addition, growth of school-aged population and demanded seats are simulated based of school shift coefficients. Can be seen from APPENDIX 1.

Tendency show that the number of teachers in general education schools is likely to reach at 53000 in 2030 and of which 31284 need to be recruited newly. Number of teachers need to be hired newly is identified by each profession and reflect in following graph.

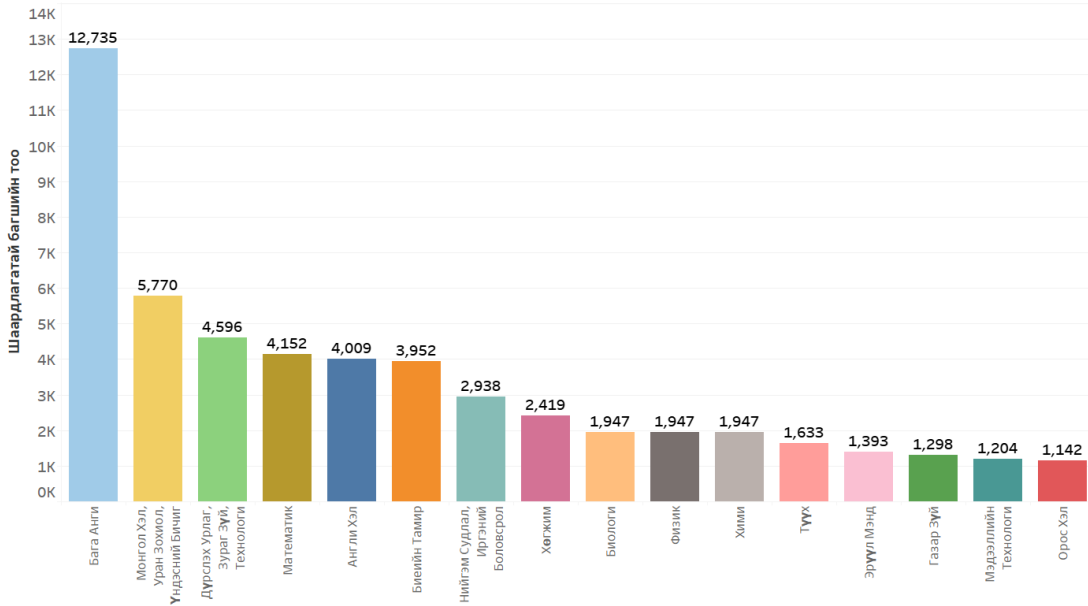


Moreover, the simulation of school-age population growth and school buildings, facilities, number of seats are estimated based on the school's shift coefficients and the simulation file is included in the annex. Average coefficient of the general schools shifts at the aimag and city level is reflected in below figure.

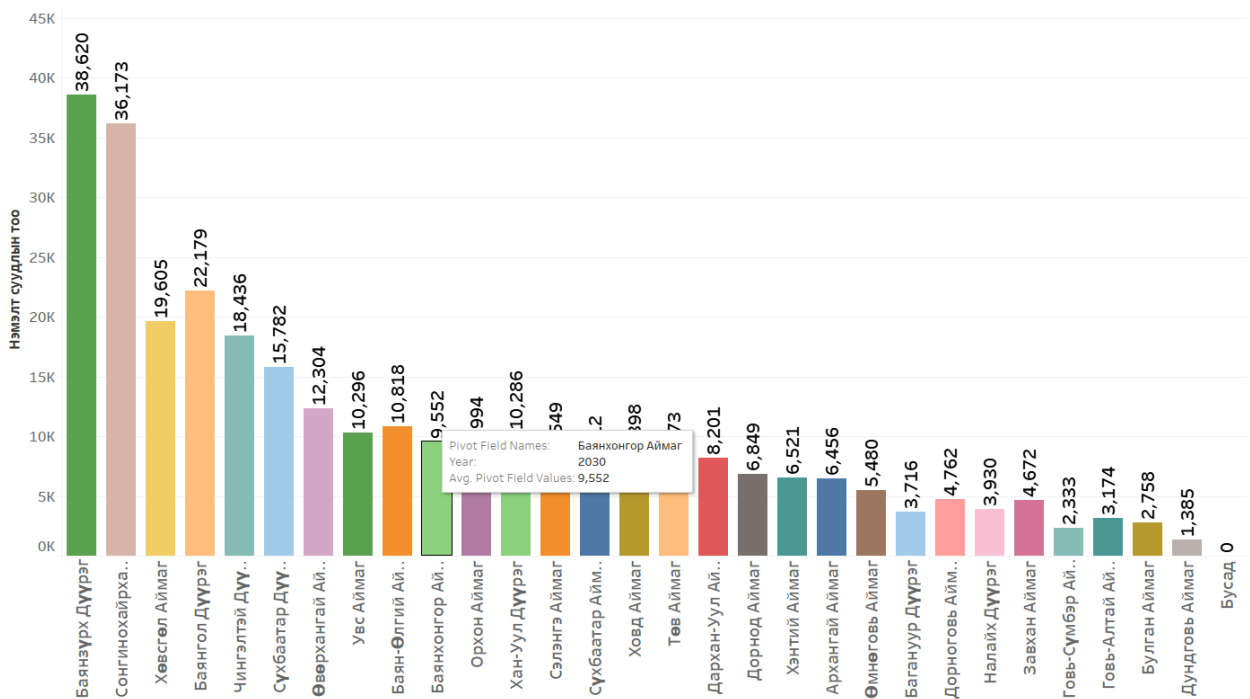


The number of seats need to be added was calculated by each year, by corresponding when the shift coefficient at certain level or in particular at 1.5 in the aimag and district level with the population growth dynamics, and its shows following tendency in 2030. There are 38620 and 36173 seats need to be built in Bayanzurkh and songino districts respectively before 2030 which is equal to build over 60 schools with 1200 seats. On the other hand, in terms of aimags, Khuvsgul aimag is leading with the need of 19605 seats which is needed 15 news schools. Similar hypothetical analysis were conducted in pre-school and VET sectors which were submitted by the relevant expert and included in the annexes as well.

Шаардлагатай багшийн тоо - 2030 (Нийт 53082 багш)



Нэмэлт суудал - 2030



2. Education sector Master Plan and its mid-term expenditure data analysis

Mid-term expenditure data analysis on Lifelong education sub-sector and primary and secondary sub-sector has been conducted based on the national experts of these sub-sectors. Estimations are based on population growth dynamics and basic axiom formula. The cost estimation currency unit is USD, since the exchange rate fluctuation of USD is less than MNT.

At first, life-long sub-education expenditure assumption is demonstrated below. In order to show this, realistic financial estimation is expressed in USD and GDP per per capita, For instance, key financial expenditures are based on figures from the following table.

1	Teacher	Annual salary as GDP per capita	91%
2	Other staff	Annual salary as GDP per capita	99%
3	GDP Annual Growth Rate		8.60%
4	Cost for an equipped 25-classrooms NFE center		2264000
5	Annual student support cost		110.0

An estimation of the Lifelong education sub-sector expenditure is made as following:

		2018	2019	2020	2025	2030
Popu tion	Population age between 0-18	1182138	1215817	1251954	1431940	1506029
	Population age 19 -	2056341	2088124	2118237	2239653	2464341
	Total	3238479	3303942	3370191	3671593	3970370
Enroll ment	Adults to enroll at literacy centres	2597	2637	2675	2828	3112
	Enrolments at Reintegration NFE programmes	8609	8854	9117	10428	10967
	Enrollments in other programs	312090	316913	321484	339911	374012
Sta ff	Teachers	499	509	519	565	611
	Other staffs	131	133	136	148	160
GD P	GDP (in USD)	13038000000	14159268000	15376965048	23228424462	35088829384
	GDP per capita (in USD)	4025.9	4285.5	4562.6	6326.5	8837.6

Construction and	Number of new NFE centers to build	0	1	1	1	1
	Cost					
	Student support cost (in USD)	946990	973970.0012	1002918.617	1147102.331	1206453.754
	Total Salary Cost (in USD)	2350277.2	2552401.1	2771907.6	4187240.2	6325239.9
	Construction and Investments	0	2264000	2264000	2264000	2264000
	Total Cost (in USD)	3297267.2	5790371.1	6038826.2	7598342.5	9795693.7

Based on above estimation, the total cost will be likely to be increased by 3 times.

On the other hand, mid-term cost estimation of primary and secondary education sub-sector was based on following financial data which are converted to the USD amount.

1	Annual salary as GDP per capita	Elementary Teacher	95%
2		Secondary Teacher	91%
3		Other staff	90%
4	GDP Annual Growth Rate		8.60%
5	Teaching related cost per teacher		101.5
6	Teacher development cost per teacher		11.3
7	Book printing cost for a student		2.3
8	Cost for a classroom seat		1965
9	Annual student support cost		230.0

By taking into account of these assumptions and population growth dynamics, the draft mid-term expenditure framework of primary and secondary education sub-sector can be estimated as below:

		2018	2019	2020	2025	2030
Population, age between 6-10		341257	358321	371141	389702	403921

	Population, age between 11 -14	189645	209490	233818	306316	311459
	Population, age between 15-17	131893	129393	130030	195846	239094
	Total Population	3238479	3303942	3370191	3671593	3970370
Enrollme	Elementary	341257	358321	371141	389702	403921
	Secondary 1	189645	209490	233818	306316	311459
	Secondary 2	105514.4	103514	104024	156677	191275
Staff	Teachers in Elementary School	10397	11297	11701	12286	12734
	Teachers in Secondary School	19542	24835	26664	36801	40347
	Other staffs	18749	24088	25577	32725	35388
GDP	GDP (in USD)	130380000 00	141592680 00	153769650 48	232284244 62	350888293 84
	GDP per capita (in USD)	4025	4285	4562	6326	8837
Cost	The number of new seats required to keep the regional school shift coefficient at 1.5	12488	6398	8270	12798	2847
	Total Salary Cost (in USD)	179092622. 1	235504033. 8	266179725	471579347. 2	712184337. 2
	Teaching related cost	3038883.2	3667421.3	3894153.1	4982389.8	5387850.8
	Teacher development cost	339622.6	408294.203 2	433536.257 7	554689.704 1	599829.702 4
	Book printing cost	1456079.7	1535951.51 6	1622111.75 5	1950913.10 4	2074373.00 2
	Construction and Investments cost	24540230	12572928.4	16250943.4	25149804.4	5596044.9
Total Cost (in USD)		208467437. 7	253688629. 3	288380469. 5	504217144. 2	725842435. 7

Other statistics of education sector, simulation models are drafted based on the software “Tableau” and attached to this report.

APPENDIX 1.1: DATA RESOURCES AND AVAILABILITY

I. PRE-PRIMARY EDUCATION

Indicator	Data resource	Estimation method	Interpretation	Availability
MACRO LEVEL: PRE-PRIMARY FEATURES, POLICY AND INSTITUTION AND FINANCIAL CONTEXT				
1. Sub-sector context				
Pre-primary population (3-5 age), share in total population	NSO	Education sector analysis methodological guidelines. Vol. 1: Sector-wide analysis, with emphasis on primary and secondary education		Available
ü GDP	NSO			Available
ü Birth rate	NSO			Available
ü Annual birth rate	NSO			Available
ü Child nutrition	SOCIAL INDICATOR SURVEY, MINISTRY OF HEALTH		The survey is conducted every 4 years	Available
ü Mortality rate	NSO			Available
ü Main reasons for child mortality	SOCIAL INDICATOR SURVEY, MINISTRY OF HEALTH		The survey is conducted every 4 years	Re-check the resource; need additional survey
ü The share of the population living below the poverty line	HOUSEHOLD SOCIO-ECONOMIC SURVEY, NSO		The survey is done every 2 years	Available
ü The share of the urban population	NSO			Available
ü The demographic density rate	NSO			Available
ü Share of children registered at birth	NSO, MINISTRY OF HEALTH, NATIONAL			Available

		REGISTRATION OFFICE			
	Share of vulnerable children and orphans	SOCIAL INDICATORS, NSO		Data can be extracted from the NSO	Re-check the resource; need additional survey
	Share of children living in a poor household	HOUSEHOLD SOCIO-ECONOMIC SURVEY, NSO		The survey is done every 2 years	Available
	Share of children whose household head is illiterate	NATIONAL CENSUS DATA , NSO		The data is collected every 10 years	Re-check the resource; need additional survey
	Share of children with acute respiratory diseases	SOCIAL INDICATOR SURVEY, MINISTRY OF HEALTH		Data is collected every 4 years and can be obtained from the NSO.	Available
	Share of children with diarrhea who are given ORT	SOCIAL INDICATOR SURVEY, MINISTRY OF HEALTH			Available
	Vitamin A supplementation,	SOCIAL INDICATOR SURVEY, MINISTRY OF HEALTH			Available
	Child malnutrition	SOCIAL INDICATOR SURVEY, MINISTRY OF HEALTH			Available
2. Policy and institutional context					
	ü Legal context	MECSS			Available

	ü Sub-sector management and institutions	MECSS			Available
	ü Financing, monitoring & Evaluation, quality assurance mechanism	MECSS			Available
3. Cost and financing					
	ü Funding resources and mechanism	MECSS			Available
	ü Public budget analysis, evolution, recurrent expenditure comparison, and share of recurrent expenditure t	MECSS			Available
	ü Unit cost estimation			Need additional estimation	Re-estimate, re-stimulate
	Total cost estimation			Need additional estimation	Re-estimate, re-stimulate
MESO LEVEL: PRE*PRIMARY EDUCATION SERVICE MAPPING					
1. Pre-primary education mapping and definition					
	ü Classifications	MECSS			Available
	ü Types in terms of the service provision	MECSS			Available
	ü Classifications as location	MECSS			Available
2. Pre-primary education content, standards and descriptions					
	ü Aim, content, type, target group, arrangement, financing, quality assurance mechanism			Need additional estimation	Re-estimate, re-stimulate
3. Data integration					
MICRO LEVEL: CHILD AND FAMILY					
1. Хүүхэд, гэр бүлийн орчин					
	ü Health, nutrition, safety			Need additional survey	Not available
	ü Access to training service	MECSS			Available
	ü Child protection			Need additional survey	Not available
	ü Family socio-economic background	SOCIAL INDICATOR SURVEY, MINISTRY OF HEALTH		Data is collected every 4 years and can be obtained from the NSO.	

	ü Family health, nutrition, Гэр бүлийн эрүүл мэнд, хоол тэжээл, sanitation	SOCIAL INDICATOR SURVEY, MINISTRY OF HEALTH			
	ü Child play and development at home environment			Need additional survey	Not available
2. Pre-primary education access and use					
	ü Percentage of children who accessed pre-primary education by type, ownership	MECSS			Available
	Pre-primary GER and NER	MECSS			Available
DISPARITIES IN ACCESS AND USE: DEMAND AND SUPPLY					
1. Identification of disparities					
	Disparities in age, gender, family income, parent education level, mother education level, family head education level, urban, rural, geographical context			Need additional survey	Not available
1. Disparity analysis					
	The underlying causes of weak access and usage rates			Need additional survey	Not available
QUALITY AND EFFICIENCY					
1. Quality of pre-primary education services				Need additional survey	Not available
2. Efficiency of pre-primary education services				Need additional survey	Not available

II. PRIMARY AND SECONDARY EDUCATION

Indicator	Data resource	Data estimation	Interpretation	Availability
MACRO LEVEL: PSE POLICY, INSTITUTIONAL AND FINANCIAL CONTEXT				
1. Population and socio-economic context				
<input type="checkbox"/> Population	NSO			Available

<input type="checkbox"/> School aged population (2- 22 years old)	NSO	Education sector analysis methodological guidelines. Vol. 1: Sector-wide analysis, with emphasis on primary and secondary education		Available	
<input type="checkbox"/> Birth rate, average annual growth rate	NSO			Available	
<input type="checkbox"/> The underlying causes of child mortality	SOCIAL INDICATOR SURVEY, MINISTRY OF HEALTH			Available	
<input type="checkbox"/> The share of the population below the poverty line	NSO			Available	
The share of vulnerable and orphan children	SOCIAL INDICATORS, NSO			Can be obtained from the NSO	Available
<input type="checkbox"/> The share of the working children	SOCIAL INDICATOR SURVEY, XXC, NSO			Data can be obtained from the survey which is done every 4 years	Available
<input type="checkbox"/> The share of children living in a poor household	HOUSEHOLD SOCIO-ECONOMIC SURVEY, NSO			Data can be obtained from the survey which is done every 2 years	Available
Share of children whose household head is illiterate	NATIONAL CENSUS DATA , NSO			Data can be obtained from the census which is done every 10 years	Available
Share of children with acute respiratory diseases	SOCIAL INDICATOR SURVEY, MINISTRY OF HEALTH		Data can be obtained from the survey which is done every 4 years	Available	
Share of children with diarrhea who are given ORT	SOCIAL INDICATOR SURVEY, MINISTRY OF HEALTH			Available	

	Vitamin A supplementation,	SOCIAL INDICATOR SURVEY, MINISTRY OF HEALTH			Available
ENROLLMENT, INTERNAL EFFICIENCY AND SCHOOL DROP OUT					
1. Enrollment indicators					Available
	<input type="checkbox"/> Number of children who accessed primary education by gender, school ownership	MECSS		Can be obtained from administrative data	Available
	<input type="checkbox"/> GER by location	MECSS			Available
	<input type="checkbox"/> NER by location	MECSS			Available
	<input type="checkbox"/> The share of private school students in public school students	MECSS			Available
2. School coverage indicators					Available
	<input type="checkbox"/> primary and secondary education access rate	MECSS			Available
	<input type="checkbox"/> Primary and secondary education gross intake rate	MECSS			Available
	<input type="checkbox"/> Primary completion rate	MECSS			Available
	<input type="checkbox"/> Effective promotion rate	MECSS			Available
	<input type="checkbox"/> Effective transition rate to next level of education	MECSS			Available
	<input type="checkbox"/> School life expectancy	MECSS			Available
3. Demand and supply related indicators					Available
	<input type="checkbox"/> Distribution of different level of schools			Need to be clarified and additional survey	Re-check the resource; and need additional survey
	<input type="checkbox"/> Repeated grades and retention	MECSS			Not available

	<input type="checkbox"/> Nearest distance from home to school	MECSS			Available
4. Internal efficiency indicators					Available
	<input type="checkbox"/> The share of repeaters by grade and level	MECSS			Available
	<input type="checkbox"/> The rate of repeaters at all grades	MECSS			Available
	<input type="checkbox"/> Student/teacher ratio by level and location	MECSS		Re-estimation	Available
	<input type="checkbox"/> Student/non-teaching staff ratio by level and location	MECSS		Re-estimation	Available
	<input type="checkbox"/> Percentage of fulltime teacher by level and location	MECSS			Available
	<input type="checkbox"/> Human resource (teaching and non-teaching staffs) distribution in private and public schools	MECSS			Available
	<input type="checkbox"/> Retention rate by level and location	MECSS			Available
	<input type="checkbox"/> Number of out-of school children by grade	SOCIAL INDICATOR SURVEY, NSO		Data can be obtained from the survey which is done every 4 years	Available
	<input type="checkbox"/> Number of dropout children	MECSS, BCMC			Available
	Number of children at risk of drop out			Need to be clarified and additional survey	Not available
COST AND FINANCING					
1. Public education expenditure and its components					Available
	<input type="checkbox"/> PSE financing level	MECSS			Available
	<input type="checkbox"/> Recurrent expenditure of PSE	MECSS			Available
	Public recurrent education expenditure as a share of public recurrent expenditure, excluding debt service	MECSS			Available
	Share of total government recurrent expenditure	MECSS			Available

	Donor financing as a share of the total education budget			Re-check the resource; need additional survey
	Public expenditure by type of spending at all levels <ul style="list-style-type: none"> ○ Equipment expenditure 			Available
	Personal expenditure (wages and salary as of teaching and non-teaching staffs)	MECSS		Available
	Goods and service expenditure	MECSS		Available
	Transfer expenditure	MECSS		Available
	Equipment expenditure	MECSS		Available
	National and international capital expenditure	MECSS		Re-check the resource; need additional survey
	Distribution of expenditure by functions (operational, administrative, teaching and learning materials, etc)	MECSS		Available
2. Unit cost				Available
	Public unit costs by levels and field of study	MECSS		Re-check the resource; need additional survey
	Salary unit cost	MECSS		Re-check the resource; need additional survey
	Administrative unit cost	MECSS		Re-check the resource; need additional survey
	Social spending unit cost	MECSS		Re-check the resource; need additional survey
	Distribution of Personnel and Average Remuneration, by Status and Level			New estimation Re-estimate
3. Household education spending indicators				Available

	Household education spending by level	SOCIAL INDICATOR SURVEY, NSO		Data can be obtained from the survey which is done every 4 years	Available
	Distribution of household education spending (registration and school fees, uniforms, textbooks, exam fees, transportation, private tutoring, etc)	SOCIAL INDICATOR SURVEY, NSO		Data can be obtained from the survey which is done every 4 years	Available
4. School infrastructure cost indicators					Available
	Maintenance cost of school building, dormitory, classrooms, laboratories, etc	MECSS		Re-check the resource; need additional survey	
QUALITY, SYSTEM CAPACITY AND MANAGEMENT					
1. Learning outcome assessment results by gender, grades and subjects					Partially available
2. Teacher management indicators					Available
	Number of teachers by gender, age, work experience, education level, grade, subject, qualification, professional rank, public and private institution,	MECSS			Available
	<input type="checkbox"/> Annual growth rate of teachers	MECSS			Available
	<input type="checkbox"/> Percentage of trained teachers by level, subject	MECSS		Хичээлээр нэмж тооцох	Available
	<input type="checkbox"/> Share of private school teachers in public teachers	MECSS			Available
	<input type="checkbox"/> Teacher attrition				Re-estimation
3. Other resource and teaching hour management indicators					Available
	Number of schools centres by level, ownership, and location	MECSS			Available
	Number of schools with more than 2 shifts	MECSS			Available
	<input type="checkbox"/> Number of textbooks used by students by level and subject	MECSS			Available
	<input type="checkbox"/> Textbook-student ratio	MECSS			Available
	<input type="checkbox"/> Teaching hour by level	MECSS			Available

	<input type="checkbox"/> Effective teaching and learning hour			New estimation	Шинээр тооцоолох
	Student-classroom ratio	MECSS			Available
EXTERNAL EFFICIENCY					
1. Employment of school leavers and graduates indicators					Available
	<input type="checkbox"/> Number of school leavers who employed and unemployed by level qualification and industry area	WORK FORCE SURVEY, NSO	12000 household	Data can be obtained from the survey which covers 12000 household	Available
	<input type="checkbox"/> Number of graduates who employed and unemployed by level, qualification and industry area	WORK FORCE SURVEY, NSO	12000 household		Available
	Levels of income of employed leavers and graduates by qualification and industry areas	WORK FORCE SURVEY, NSO	12000 household		Available
EQUITY					
1. Equity in enrollment and learning assessment					
	<input type="checkbox"/> Disparity in female and male student learning assessment	MECSS			Available
	Parity index			Re-check the resource; need additional survey	
	Parity line			Re-check the resource; need additional survey	
	Scatter chart				Available
	<input type="checkbox"/> Odds ratio				Available
	<input type="checkbox"/> Marginal effects of odds ratio				Available
	<input type="checkbox"/> Gender gap in access	MECSS			Available
	<input type="checkbox"/> Children social status distribution by level			Re-check the resource; need additional survey	
2. Equity in education resource allocation					
	Equity in education budget expenditure			New estimation	Need to estimate

III. TECHNICAL AND VOCATIONAL EDUCATION, TRAINING

Indicators	Data resource	Data estimation	Interpretation	Availability
MACRO LEVEL: TVET POLICY, INSTITUTIONAL AND FINANCIAL CONTEXT				
1. Population and socio-economic context				
<input type="checkbox"/> Total Population	NSO	Education sector analysis methodological guidelines. Vol. 1: Sector-wide analysis, with emphasis on primary and secondary education		Available
TVET aged population (15 and above)	NSO			Available
The share of population living under the poverty line	HOUSEHOLD SOCIO-ECONOMIC SURVEY, NSO	Data can be obtained from the survey which is done every 2 years		Available
Socio-cultural context			Need additional survey	
TVET OVERVIEW				
TVET introduction				
<input type="checkbox"/> Official definition of the TVET				Available
Historical development of TVET				Available
TVET institutions and their structures				
<input type="checkbox"/> Ownership of TVET providers	MOLSP			Available
<input type="checkbox"/> Type of TVET provider	MOLSP			Available
TVET levels	MOLSP			Available
TVET PERFORMANCE				
Enrollment indicators				
<input type="checkbox"/> Number of students enrolled in TVET by gender, ownership, level, type, qualification	MOLSP			Available
<input type="checkbox"/> The share of private TVET students in public TVET peers by gender, ownership, level, type and qualification	MOLSP			Available

	<input type="checkbox"/> Rate of students who progressed to next level by gender, ownership, type, qualification	MOLSP			Available
	<input type="checkbox"/> Promoted student rate by gender, ownership, type, level and qualification	MOLSP			Available
	The share of TVET students in PSE students	MOLSP			Available
	<input type="checkbox"/> The share of private TVET students in public TVET students by gender, level, type and qualification	MOLSP			Available
	<input type="checkbox"/> Annual growth rate of TVET students	MOLSP			Available
EQUITY					
	<input type="checkbox"/> Gender equity (participation rate of female students)	MOLSP			Available
	Student qualification by gender and level	MOLSP			Available
	The percentage of female and male trainers	MOLSP			Available
	Female student-friendly training environment			Need additional survey	
EXTERNAL EFFICIENCY					
	The percentage of student in dual training	MOLSP			Available
	The percentage of apprenticeship students	MOLSP			Available
	Status of TVET qualification in labour market			Need additional survey	
	The percentage of students who employed after certain period of graduation by qualification, level, gender and employed perio	MOLSP, MLSPRI			Available
	<input type="checkbox"/> Training and employment rate	MOLSP, MLSPRI			Available

	<input type="checkbox"/> Labour market information and service access	MOLSP, MLSPRI		Need additional survey
	<input type="checkbox"/> Match with labour market	MOLSP, MLSPRI		Need additional survey
	<input type="checkbox"/> Interpreneurs	MOLSP, MLSPRI		Need additional survey
	<input type="checkbox"/> Number of unemployed and employed people who left or graduated from school	MOLSP, MLSPRI		Not available
	Income level of employed-graduaters or school leavers by qualification and industry areas	MOLSP, MLSPRI		Not available
UNIT COST AND FINANCING				
TVET budget indicators				
	<input type="checkbox"/> Level of TVET funding	MOLSP		Available
	<input type="checkbox"/> Recurrent public TVET expenditure	MOLSP		Available
	<input type="checkbox"/> Public recurrent TVET expenditure as a share of public recurrent expenditure, excluding debt service	MOLSP		Available
	<input type="checkbox"/> Public recurrent TVET expenditure as a share of GDP	MOLSP		Available
	<input type="checkbox"/> Share of TVET expenditure in education total government recurrent expenditure	MOLSP		Available
	<input type="checkbox"/> Donor financing as a share of the total education budget	MOLSP		Available
	<input type="checkbox"/> Percentage of TVET self-income and social partnership			Not available
	<input type="checkbox"/> Public expenditure by type of spending at all levels	MOLSP		Available
	Personal expenditure (wages and salary as of teaching and non-teaching staffs)	MOLSP		Available
	Goods and service expenditure	MOLSP		Available
	Transfer expenditure	MOLSP		Available
	Equipment expenditure	MOLSP		Available
	National and international capital expenditure	MOLSP		Available

	Distribution of expenditure by functions (operational, administrative,	MOLSP			Available
Unit cost indicators					
	<input checked="" type="checkbox"/> Public unit cost and unit recurrent	MOLSP			Need additional survey
	<input type="checkbox"/> Comparison with international experiences	MOLSP			Need additional survey
	<input type="checkbox"/> Unit costs (level, program)	MOLSP			Need additional survey
	<input type="checkbox"/> Salary unit cost	MOLSP			Need additional survey
	<input checked="" type="checkbox"/> <input type="checkbox"/> Administrative unit cost	MOLSP			Need additional survey
	<input checked="" type="checkbox"/> <input type="checkbox"/> Social spending unit cost	MOLSP			Need additional survey
	<input type="checkbox"/> Distribution of Personnel and Average Remuneration, by Status and Level	MOLSP			Need additional survey
Infrastructure cost indicators					
	Maintenance cost of school building, dormitory, classrooms, laboratories, etc	MOLSP			Available
TVET INTERNAL EFFICIENCY AND QUALITY					
Internal efficiency analysis					
	<input type="checkbox"/> School dropped*out students by level and qualification	MOLSP			Not available
	<input type="checkbox"/> students who successfully graduated from the study by level, qualificationS	MOLSP			Available
	<input type="checkbox"/> Internal efficiency coefficient	MOLSP			Available
Training quality analysis					
	<input type="checkbox"/> Qualified teachers and trainers and their competences	MOLSP			Need additional survey
	<input type="checkbox"/> Program match with labour market and capacity of the training provider	MOLSP			Not available
	<input type="checkbox"/> Fit of training material	MOLSP			Not available
	<input type="checkbox"/> Мэргэшсэн багшийн түвшин	MOLSP			Available
	<input type="checkbox"/> Satisfactory level of TVET infrastructure				Not available

<input type="checkbox"/>	Percentage of teachers who accessed professional development training	MOLSP			Available
<input type="checkbox"/>	Class size	MOLSP			Available
<input type="checkbox"/>	Accreditation	MNCEA			Available
<input type="checkbox"/>	Status of Quality Assurance Management system			Need additional survey	
<input type="checkbox"/>	Verification of the training outcome	TVETAC			Available
	Program quality assurance	TVET RMC			Need additional survey
Teacher management indicators					
<input type="checkbox"/>	Number of teachers by gender, age, work experience, qualification, training, level, private and public ownership	MOLSP			Available
<input type="checkbox"/>	Teacher annual growth rate	MOLSP			Available
<input type="checkbox"/>	Percentage of qualified teachers by qualification	MOLSP			Available
<input type="checkbox"/>	The share of private school teacher in public peers	MOLSP			Available
<input type="checkbox"/>	Teacher attrition				Not available
Other resources and teaching hour management indicators					
<input type="checkbox"/>	Numbers of textbooks and training materials by level and qualification			Need additional survey	
<input type="checkbox"/>	Textbook/students ratio by level and qualification			Need additional survey	
<input type="checkbox"/>	Training hours by level and qualification	MOLSP			Available
	Effective learning hours			New estimation	

IV. HIGHER EDUCATION

Indicators	Data resource	Data estimation	Interpretation	Availability
OVERVIEW OF LATEST TRENDS AND SITUATION				

1. Historical development of HE				
<input type="checkbox"/>	Reforms, successes and declines	MECSS		Available
2. Narratives of HE institutions				
<input type="checkbox"/>	Types and program of the institutions	MECSS		Available
<input type="checkbox"/>	Qualifications	MECSS		Available
3. Curret situation				
<input type="checkbox"/>	Enrollment by gender, qualification, entrant education background	MECSS	Education sector analysis methodological guidelines. Vol. 1: Sector-wide analysis, with emphasis on primary and secondary education	Available
	Global access rate of HE			Not available
MANAGEMENT, TRAINING ARRANGEMENT, INTERNAL EFFICIENCY INDICATORS				
4. Operation types, discrepancies among the providers and characteristics				
<input type="checkbox"/>	Hysical resource, infrastructure, facilities	MECSS		Available
<input type="checkbox"/>	Supply of teaching staffs	MECSS		Available
<input type="checkbox"/>	Quality of teaching staffs	MECSS		Need additional survey
<input type="checkbox"/>	Further demands of teaching resource			New estimation
5. Governance				
6. Internal efficiency				
<input type="checkbox"/>	Learning hours by qualification and level			Need additional survey
<input type="checkbox"/>	Enrollment, drop put, repetition	MECSS		Available
<input type="checkbox"/>	Internal efficiency coefficient	MECSS		Available
<input type="checkbox"/>	Financial issues			Not available
7. Equity				
<input type="checkbox"/>	Gender equity	MECSS		Available

	Social disparity	HOUSEHOLD SOCIO-ECONOMIC SURVEY, NSO		The data can be obtained from the survey which is done every 2 years	Available
UNIT COST AND FINANCING					
1. Budget and expenditure					Available
2. Student funding and social service					Available
	<input type="checkbox"/> Social service (infrastructure, transportation, accommodation, restaurant etc)				Not available
	<input type="checkbox"/> Direct financial support (grant, scholarship, loan etc)	Foundation for Education Loan, MECSS			Available
2. Structure of unit cost, graduation cost by institution and program streams					Available
3. Equity in resource allocation					Not available
OUTCOME, PERFORMANCE AND QUALITY					
1. External efficiency					Available
	<input type="checkbox"/> Employment of the graduated students by qualification, gender, position, industry sectors	MOLSPRI			Need additional survey
	<input type="checkbox"/> Annual income of the graduated employees by qualification, gender and industry sectors	MOLSPRI			Need additional survey
2. Quality Assurance					Available
	Accreditation etc	MNCEA			Available

V. LIFE-LONG EDUCATION

Indicators	Data resource	Data estimation	Interpretation	Availability
DEFINITION FOR LIFE-LONG EDUCATION				
1. National and international definition	MECSS			Available

2. Supply and structure				
3. Training and content				
	<input type="checkbox"/> Aim and certification	MECSS		Нэмэлт судалгаагаар
	<input type="checkbox"/> Access – context and incentives			Нэмэлт судалгаагаар
	Operations and training content			Нэмэлт судалгаагаар
NEEDS AND PARTICIPATION				
	1. Identification of further need			New estimation
	2. Enrollment, training and internal efficiency	MECSS		Available
	3. Teacher, staffs, leaders and management	MECSS		Available
COST AND FINANCING				
	1. Financing situation and future view			New estimation
	1. Students expenditure by training	MECSS		Available
	Cost structure of the centre by budget lines	MECSS		Available
OUTCOME, QUALITY AND RELEVANCE				
	Outcome assessment			Need additional survey
	Education impacts on social behavior and practice			Need additional survey
	Integration of society and economics			Need additional survey

Хавсралт № 1 СӨБ-ын салбарын шалгуур үзүүлэлт

Шалгуур үзүүлэлт	Мэдээллийн эх үүсвэр	Тооцох аргачлал	Тайлбар	Тооцох боломжтой эсэх
МАКРО ТҮВШИНД: СУРГУУЛИЙН ӨМНӨХ БОЛОВСРОЛЫН ДЭД САЛБАРЫН ОНЦЛОГ, БОДЛОГЫН, ИНСТИТУЦИЙН БОЛОН САНХҮҮГИЙН БҮТЭЦ				

1. Салбарын орчин				
	ü СӨБ насны хүн ам (3-5 насны), нийт хүн амд эзлэх жин	ҮСХ	Education sector analysis methodological guidelines. Vol. 1: Sector-wide analysis, with emphasis on primary and secondary education	Боломжтой
	ü ДНБ түвшин	ҮСХ		Боломжтой
	ü Төрөлтийн түвшин	ҮСХ		Боломжтой
	ü Жилийн дундаж өсөлтийн түвшин	ҮСХ		Боломжтой
	ü Хүүхдийн хоол тэжээл	НҮТС, ЭМЯ	Энэхүү үзүүлэлт Нийгмийн үзүүлэлтийн түүвэр судалгаагаар гарах бөгөөд энэхүү судалгаа нь 4 жил тутам нэг хийгддэг болно.	Боломжтой
	ü Нас баралтын түвшин	ҮСХ		Боломжтой
	ü Хүүхдийн эндэгдлийн үндсэн шалтгаан	НҮТС, ЭМЯ	Энэхүү үзүүлэлт Нийгмийн үзүүлэлтийн түүвэр судалгаагаар гарах бөгөөд энэхүү судалгаа нь 4 жил тутам нэг хийгддэг болно.	Эх үүсвэрийг дахин нягтлах нэмэлт судалгаа, шинжилгээ шаардлагатай
	ü Ядуурлын шугамаас доош амьжиргааны түвшин бүхий хүн амын эзлэх жин	ӨНЭЗС, ҮСХ	Өрхийн нийгэм, эдийн засгийн судалгаагаар гарах бөгөөд тус судалгаа нь 2 жил тутам хийгддэг болно.	Боломжтой
	ü Хотын хүн амын эзлэх жин	ҮСХ		Боломжтой
	ü Газарзүйн нягтралын түвшин	ҮСХ		Боломжтой
	ü Төрөөд бүртгүүлсэн хүүхдийн эзлэх жин	ҮСХ, ЭМЯ, УБЕГ		Боломжтой
	ü Эмзэг бүлгийн болон өнчин хүүхдийн эзлэх жин	НЗҮ, ҮСХ	Нийгмийн зарим үзүүлэлт мэдээнээс гаргана.	Эх үүсвэрийг дахин нягтлах нэмэлт судалгаа, шинжилгээ шаардлагатай

	ÿ Ядуу өрхийн хүүхдийн эзлэх жин	ӨНЭЗС, ҮСХ		Өрхийн нийгэм, эдийн засгийн судалгаагаар гарах бөгөөд тус судалгаа нь 2 жил тутам хийгддэг болно.	Боломжтой
	ÿ Өрхийн тэргүүн нь бичиг үсэггүй өрхөд байдаг хүүхдийн эзлэх жин	ХАОСТ, ҮСХ		Хүн ам орон сууцны тооллогын дүнгээс гардаг үзүүлэлт бөгөөд тус тооллого нь 10 жил тутам хийгддэг болно.	Эх үүсвэрийг дахин нягтлах нэмэлт судалгаа, шинжилгээ шаардлагатай
	ÿ Хурц хэлбэрийн амьсгалын замын өвчнөөр өвчилсөн хүүхдийн эзлэх жин /хатгалгаа/	НҮТС, ЭМЯ		Энэхүү үзүүлэлт Нийгмийн үзүүлэлтийн түүвэр судалгаагаар гарах бөгөөд энэхүү судалгаа нь 4 жил тутам нэг хийгддэг болно.	Боломжтой
	ÿ Гэдэсний суулгалт өвчнөөр өвчилсөн хүүхдийн эзлэх жин	НҮТС, ЭМЯ			Боломжтой
	ÿ А аминдэмийн хангалт	НҮТС, ЭМЯ			Боломжтой
	ÿ Хоол тэжээлийн дутагдал	НҮТС, ЭМЯ			Боломжтой
2. Бодлогын, институцийн зохион байгуулалт					
	ÿ Эрх зүйн орчин	БСШУСЯ			Боломжтой
	ÿ Дэд салбарын зохицуулалт, институцууд	БСШУСЯ			Боломжтой
	ÿ Санхүүжилт, хяналт үнэлгээ, чанарын баталгаажилтын механизм	БСШУСЯ			Боломжтой
3. Өртөг зардал, санхүүжилт					
	ÿ Санхүүжилтийн эх үүсвэр, механизм	БСШУСЯ			Боломжтой
	ÿ Төсвийн санхүүжилтийн дүн шинжилгээ, төсвийн зардлын хувьсал, урсгал зардлын харьцуулалт, урсгал зардлын эзлэх жин	БСШУСЯ			Боломжтой
	ÿ Төсвийн нэгж өртгийн тооцоо			Шинэ тооцоолол	Шинээр тооцоолол хийх загвар хийх
	Нийт өртгийн тооцоо			Шинэ тооцоолол	Шинээр тооцоолох загвар хийх
МЕСО ТҮВШИНД: СӨБ-ЫН БОЛОВСРОЛЫН ҮЙЛЧИЛГЭЭНИЙ ЗУРАГЛАЛ					

1.СӨБ-ын зураглал, тодорхойлолт				
	ï Хэлбэр ба хэв шинжээр нь тодорхойлох	БСШУСЯ		Боломжтой
	ï Боловсрол, сургалтын үйл ажиллагаа явуулж буй хэв шинжээр нь тодорхойлох	БСШУСЯ		Боломжтой
	ï Байршлаар тодорхойлох	БСШУСЯ		Боломжтой
2. СӨБ-ийн агуулга, стандартын онцлогийн дэлгэрэнгүй танилцуулга				
	ï Зорилго, агуулга, төрөл, зорилтот бүлэг, зохион байгуулалт, санхүүжилт, чанарын хяналтын механизмээр		Шинэ тооцоолол	Шинээр тооцоолох загвар хийх
3. Мэдээллийн нэгдмэл байдал				
МИКРО ТҮВШИН: ХҮҮХЭД, ГЭР БҮЛ				
1. Хүүхэд, гэр бүлийн орчин				
	ï Эрүүл мэнд, хоол тэжээл, ахуйн ариун цэврийн байдал		Нэмэлт судалгаа шаардлагатай	Боломжгүй
	ï Сургалтын үйл ажиллагаанд хамрагддаг байдал	БСШУСЯ		Боломжтой
	ï Хүүхэд хамгаалал		Нэмэлт судалгаа шаардлагатай	Боломжгүй
	ï Гэр бүлийн нийгэм, эдийн засгийн байдал	НҮТС, ЭМЯ		Энэхүү үзүүлэлт Нийгмийн үзүүлэлтийн түүвэр судалгаагаар гарах бөгөөд энэхүү судалгаа нь 4 жил тутам нэг хийгддэг болно.
	ï Гэр бүлийн эрүүл мэнд, хоол тэжээл, ахуйн ариун цэврийн байдал	НҮТС, ЭМЯ		
	ï Хүүхэд гэрийн орчинд тоглох болон хөгжих байдал		Нэмэлт судалгаа шаардлагатай	Боломжгүй
2. СӨБ-ын үйлчилгээний хүртээмж, ашиглалт				
	ï СӨБ-д хамрагдаж байгаа хүүхдийн хувь, төрөл, хэв шинжээр, өмчийн хэлбэрээр	БСШУСЯ		Боломжтой
	СӨБ суралцагчдын бохир, цэвэр жин	БСШУСЯ		Боломжтой
ХҮРТЭЭМЖ БОЛОН АШИГЛАЛТ ДАХЬ ЯЛГААТАЙ БАЙДАЛ: НИЙЛҮҮЛЭЛТ, ЭРЭЛТ				
1. Ялгаатай байдлыг тодорхойлох				
	ï Насны, хүйсийн, гэр бүлийн орлого, эцэг эхийн боловсролын түвшин, эхийн боловсролын түвшин, өрхийн тэргүүн, хот, хөдөө, газарзүйн байршил дахь ялгаа		Нэмэлт судалгаа шаардлагатай	Боломжгүй

1. Ялгаатай байдлын дүн шинжилгээ					
	Хүртээмж болон ашиглалтын түвшин бага байгаагийн шалтгаан			Нэмэлт судалгаа шаардлагатай	Боломжгүй
ЧАНАР, ҮР АШИГ					
1. СӨБ үйлчилгээний чанар Нэмэлт судалгаа шаардлагатай					Боломжгүй
2. СӨБ үйлчилгээний үр ашиг				Нэмэлт судалгаа шаардлагатай	Боломжгүй

ХАВСРАЛТ 2.1: БАГА, ДУНД БОЛОВСРОЛ

Хавсралт № 2 Бага, дунд боловсролын салбарын шалгуур үзүүлэлт

Шалгуур үзүүлэлт	Эх сурвалж	Тооцох аргачлал	Тайлбар	Тооцох боломжтой эсэх	
МАКРО ТҮВШИНД: СУРГУУЛИЙН ӨМНӨХ БОЛОВСРОЛЫН ДЭД САЛБАРЫН ОНЦЛОГ, БОДЛОГЫН, ИНСТИТУЦИЙН БОЛОН САНХҮҮГИЙН БҮТЭЦ					
1. Хүн ам зүй болон нийгэм эдийн засгийн нөхцөл байдлын шалгуур үзүүлэлт					
<input type="checkbox"/> Нийт хүн ам	ҮСХ	Education sector analysis methodological guidelines. Vol. 1: Sector-wide analysis, with emphasis on primary and secondary education		Боломжтой	
<input type="checkbox"/> Сургуулийн насны хүн ам (2- 22 насны)	ҮСХ			Боломжтой	
<input type="checkbox"/> Төрөлтийн түвшин, жилийн дундаж өсөлтийн түвшин	ҮСХ			Боломжтой	
<input type="checkbox"/> Хүүхдийн эндэгдлийн үндсэн шалтгаан	НҮТС, ЭМЯ			Боломжтой	
<input type="checkbox"/> Ядуурлын шугамаас доош амьжиргааны түвшин бүхий хүн амын эзлэх жин	ҮСХ			Боломжтой	
<input type="checkbox"/> Эмзэг бүлгийн болон өнчин хүүхдийн эзлэх жин	НЗҮ, ҮСХ			Нийгмийн зарим үзүүлэлт мэдээнээс гаргана.	Боломжтой
<input type="checkbox"/> Хөдөлмөр эрхэлдэг хүүхдийн эзлэх жин	НҮТС, ХХС, ҮСХ			Энэхүү үзүүлэлт Нийгмийн үзүүлэлтийн түүвэр судалгаагаар гарах бөгөөд энэхүү судалгаа нь 4 жил тутам нэг хийгддэг болно.	Боломжтой

	<input type="checkbox"/> Ядуу өрхийн хүүхдийн эзлэх жин	ӨНЭЗС, ҮСХ		Өрхийн нийгэм, эдийн засгийн судалгаагаар гарах бөгөөд тус судалгаа нь 2 жил тутам хийгддэг болно.	Боломжтой
	<input type="checkbox"/> Өрхийн тэргүүн нь бичиг үсэггүй өрхөд байдаг хүүхдийн эзлэх жин	ХАОСТ, ҮСХ		Хүн ам орон сууцны тооллогын дүнгээс гардаг үзүүлэлт бөгөөд тус тооллого нь 10 жил тутам хийгддэг болно.	Боломжтой
	<input type="checkbox"/> Хурц хэлбэрийн амьсгалын замын өвчнөөр өвчилсөн хүүхдийн эзлэх жин	НҮТС, ЭМЯ		Энэхүү үзүүлэлт Нийгмийн үзүүлэлтийн түүвэр судалгаагаар гарах бөгөөд энэхүү судалгаа нь 4 жил тутам нэг хийгддэг болно.	Боломжтой
	<input type="checkbox"/> Гэдэсний суулгалт өвчнөөр өвчилсөн хүүхдийн эзлэх жин	НҮТС, ЭМЯ			Боломжтой
	А аминдэмийн хангалт	НҮТС, ЭМЯ			Боломжтой
ЭЛСЭЛТ, ДОТООД ҮР АШИГ БОЛОН СУРГУУЛЬ ЗАВСАРДАЛТ					
1. Элсэлтийн шалгуур үзүүлэлт					Боломжтой
	<input type="checkbox"/> Бага боловсролд хамрагдсан хүүхдийн тоо (хүйс, улсын, хувийн гэх мэт)	БСШУСЯ		Албан ёсны болон захиргааны мэдээнээс гарна.	Боломжтой
	<input type="checkbox"/> Бага, дунд боловсролын элсэлтийн бохир жин, байршлаар	БСШУСЯ			Боломжтой
	<input type="checkbox"/> Сургуульд орох албан ёсны насандаа сургуульд элсэн орсон хүүхдийн эзлэх жин	БСШУСЯ			Боломжтой
	<input type="checkbox"/> Хувийн сургуульд суралцагчдын улсын сургуульд суралцагчдад эзлэх жин	БСШУСЯ			Боломжтой
2. Сургуульд хамрагдалтын шалгуур үзүүлэлт					Боломжтой
	<input type="checkbox"/> Бага, дунд боловсролын хамрагдалтын түвшин	БСШУСЯ			Боломжтой
	<input type="checkbox"/> Бага, дунд боловсролын хамрагдалтын нийт түвшин	БСШУСЯ			Боломжтой
	<input type="checkbox"/> Бага боловсрол төгсөгчдийн түвшин	БСШУСЯ			Боломжтой
	<input type="checkbox"/> 1-12 анги амжилттай дэвшин суралцагчдын түвшин	БСШУСЯ			Боломжтой

<input type="checkbox"/>	Дараагийн түвшний боловсролд амжилттай дэвшин суралцсан түвшин	БСШУСЯ			Боломжтой
<input type="checkbox"/>	Сургуульд хамрагдсан хугацаа	БСШУСЯ			Боломжтой
3. Эрэлт, нийлүүлэлтийг хангахтай холбоотой шалгуур үзүүлэлт					Боломжтой
<input type="checkbox"/>	Ялгаатай түвшний сургуулийн тархалт			Тодруулах шаардлагатай нэмэлт судалгаа	Эх үүсвэрийг нягтлах нэмэлт судалгаа, шаардлагатай
<input type="checkbox"/>	Тасралтгүй суралцсан болон улирч сурсан анги	БСШУСЯ			Боломжгүй
<input type="checkbox"/>	Гэрээс хамгийн ойр орших ЕБС хүртэлх зай	БСШУСЯ			Боломжтой
4. Дотоод үр ашгийн шалгуур, үзүүлэлтүүд					Боломжтой
<input type="checkbox"/>	Бүх ангид, түвшинд улирч сурсан суралцагчдын эзлэх жин	БСШУСЯ			Боломжтой
<input type="checkbox"/>	Бүх түвшин улиран суралцагчдын түвшин	БСШУСЯ			Боломжтой
<input type="checkbox"/>	Сурагч, багшийн харьцаа, бүх түвшин, байршлаар	БСШУСЯ		Нэмэлт тооцоо хийгдэнэ. Байршил	Боломжтой
<input type="checkbox"/>	Сурагч, багш бус ажилтны харьцаа, бүх түвшин, байршлаар	БСШУСЯ		Нэмэлт тооцоо хийгдэнэ. Байршил	Боломжтой
<input type="checkbox"/>	Үндсэн багшийн хувь, түвшин болон байршлаар	БСШУСЯ			Боломжтой
<input type="checkbox"/>	Улсын болон хувийн сургуулийн хүний нөөцийн (багш болон багш бус) тархалт	БСШУСЯ			Боломжтой
<input type="checkbox"/>	Суралцагчдын сургуульд тасалдалгүй суралцсан түвшин, боловсролын түвшин болон байршлаар	БСШУСЯ			Боломжтой
<input type="checkbox"/>	Сургуулиас гадуур байгаа хүүхдийн тоо, анги бүрээр	НҮТС, ҮСХ		Энэ үзүүлэлт Нийгмийн үзүүлэлтийн түүвэр судалгаагаар гарах бөгөөд 4 жил тутам нэг хийгддэг болно.	Боломжтой
<input type="checkbox"/>	Сургууль завсардсан хүүхдийн тоо	БСШУСЯ, БСМС			Боломжтой

Сургууль завсардах эрсдэлтэй хүүхдийн тоо				ТОдруулах шаардлагатай нэмэлт судалгаа	Боломжгүй
ӨРТӨГ ЗАРДАЛ, САНХҮҮЖИЛТ					
1. Боловсролын төсвийн зардал, түүний бүрэлдэхүүний шалгуур үзүүлэлт					Боломжтой
<input type="checkbox"/>	Бага, дунд боловсролын санхүүжилтийн түвшин	БСШУСЯ			Боломжтой
<input type="checkbox"/>	Бага, дунд боловсролын төсвийн урсгал зардал	БСШУСЯ			Боломжтой
<input type="checkbox"/>	Бага, дунд боловсролын төсвийн урсгал зардлын улсын төсвийн урсгал зардалд эзлэх жин, ингэхдээ өрийг хасаад	БСШУСЯ			Боломжтой
<input type="checkbox"/>	Боловсролын төсөв бага, дунд боловсролын төсвийн урсгал зардалд эзлэх жин	БСШУСЯ			Боломжтой
<input type="checkbox"/>	Бага, дунд боловсролын төсөвт донор байгууллагуудаас хийсэн санхүүжилтийн эзлэх жин			Эх үүсвэрийг дахин нягтлах нэмэлт судалгаа, шинжилгээ шаардлагатай	
<input type="checkbox"/>	Төсвийн зардал, зүйл ангиар, түвшнээр				Боломжтой
<input type="checkbox"/>	Цалин хөлсний зардал	БСШУСЯ			Боломжтой
<input type="checkbox"/>	Бараа материал, үйлчилгээний зардал	БСШУСЯ			Боломжтой
<input type="checkbox"/>	Шилжүүлгийн зардал	БСШУСЯ			Боломжтой
<input type="checkbox"/>	Тоног төхөөрөмжийн зардал	БСШУСЯ			Боломжтой
<input type="checkbox"/>	Үндэсний болон олон улсын хөрөнгө оруулалтын зардал	БСШУСЯ		Эх үүсвэрийг дахин нягтлах нэмэлт судалгаа, шинжилгээ шаардлагатай	
<input type="checkbox"/>	Зардлын тархалт, зориулалтаар (үйл ажиллагааны, захиргааны, сургалтын хэрэглэгдэхүүн гэх мэт)	БСШУСЯ			Боломжтой
2. Нэгж өртөг, түүний бүрэлдэхүүний шалгуур үзүүлэлт					Боломжтой
<input type="checkbox"/>	Төсвийн нэгж өртөг, түвшин, сургалтын чиглэлээр	БСШУСЯ		Эх үүсвэрийг дахин нягтлах нэмэлт судалгаа, шинжилгээ шаардлагатай	
<input type="checkbox"/>	Цалингийн нэгж өртөг	БСШУСЯ		Эх үүсвэрийг дахин нягтлах нэмэлт судалгаа, шинжилгээ шаардлагатай	
<input type="checkbox"/>	Захиргааны нэгж өртөг	БСШУСЯ		Эх үүсвэрийг дахин нягтлах нэмэлт судалгаа, шинжилгээ шаардлагатай	
<input type="checkbox"/>	НД, ЭМД-ын нэгж өртөг	БСШУСЯ		Эх үүсвэрийг дахин нягтлах нэмэлт судалгаа, шинжилгээ шаардлагатай	

	<input type="checkbox"/> Хувь хүний болон урамшууллын дунджийн тархалт, статус болон түвшингээр			Шинэ тооцоолол	Шинээр тооцоолох
3. Өрхийн боловсролд зориулсан зарцуулалтын шалгуур үзүүлэлт					Боломжтой
	<input type="checkbox"/> Өрхийн боловсролд зориулсан зарцуулалт, түвшингээр	НҮТС, ҮСХ		Энэ үзүүлэлт Нийгмийн үзүүлэлтийн түүвэр судалгаагаар гарах бөгөөд 4 жил тутам нэг хийгддэг.	Боломжтой
	<input type="checkbox"/> Өрхийн боловсролд зориулсан зарцуулалтын тархалт (сургуультай холбоотой төлбөр, дүрэмж хувцас, тээвэр, хувийн багш гэх мэт)	НҮТС, ҮСХ		Энэ үзүүлэлт Нийгмийн үзүүлэлтийн түүвэр судалгаагаар гарах бөгөөд 4 жил тутам нэг хийгддэг.	Боломжтой
4. Сургуулийн дэд бүтцийн өртгийн шалгуур үзүүлэлт					Боломжтой
	Сургуулийн барилга, дотуур байр, анги танхим, лабораторийн болон бусад тоног төхөөрөмжийн өртөг	БСШУСЯ		Эх үүсвэрийг дахин нягтлах нэмэлт судалгаа, шинжилгээ шаардлагатай	
ЧАНАР, ТОГТОЛЦООНЫ ЧАДАВХИ, МЕНЕЖМЕНТ					
1. Сурлагын үнэлгээ хүйсээр, ангиар, хичээлээр					Боломжтой
2. Багшийн менежментийн шалгуур үзүүлэлт					Боломжтой
	<input type="checkbox"/> Багшийн тоо, хүйсээр, насаар, ажлын туршлага, мэргэжил, хичээл, мэргэжлийн зэрэг, улсын болон хувийн сургуулиар	БСШУСЯ			Боломжтой
	<input type="checkbox"/> Багшийн жилийн өсөлтийн түвшин	БСШУСЯ			Боломжтой
	<input type="checkbox"/> Мэргэжлийн багшийн хувь, түвшин, хичээлээр	БСШУСЯ		Хичээлээр нэмж тооцох	Боломжтой
	<input type="checkbox"/> Улсын сургуулийн багшид хувийн сургуулийн багшийн эзлэх жин	БСШУСЯ			Боломжтой
	<input type="checkbox"/> Багшийн хомсдол			Шинэ тооцоолол	Шинээр тооцоолох
3. Бусад нөөц болон багшлах цагийн менежментийн шалгуур үзүүлэлт					Боломжтой
	<input type="checkbox"/> Сургуулийн тоо, түвшин, өмчийн хэлбэр, байршлаар	БСШУСЯ			Боломжтой
	<input type="checkbox"/> 2-оос дээш ээлжтэй сургуулийн тоо	БСШУСЯ			Боломжтой

<input type="checkbox"/> Сурагчдын хэрэглэдэг сурах бичгийн тоо, түвшин, хичээлээр	БСШУСЯ			Боломжтой
<input type="checkbox"/> Сурах бичиг, сурагчийн харьцаа	БСШУСЯ			Боломжтой
<input type="checkbox"/> Сургалтын цаг, түвшин	БСШУСЯ			Боломжтой
<input type="checkbox"/> Сургалтын бодит/хамгийн үр дүнтэй цаг			Шинэ тооцоолол	Шинээр тооцоолох
Сурагч, анги танхимын харьцаа	БСШУСЯ			Боломжтой
ГАДААД ҮР АШИГ				
1. ЕБС-ийг хараахан төгсөөгүй орхисон суралцагч болон төгсөгчдийн хөдөлмөр эрхлэлтийн шалгуур үзүүлэлт				Боломжтой
<input type="checkbox"/> ЕБС-иа орхиод хөдөлмөр эрхлэж байгаа болон ажилгүй байгаа хүмүүсийн тоо, түвшин, мэргэжил, хөдөлмөрийн салбараар	АХС, ҮСХ	12000 өрх	Ажиллах хүчний судалгаанаас гарах боломжтой. Тус судалгаанд 12000 өрх хамрагддаг түүвэр судалгаа болно.	Боломжтой
<input type="checkbox"/> Сургуулиа төгсөөд хөдөлмөр эрхэлж байгаа болон ажилгүй байгаа хүмүүсийн тоо, түвшин, мэргэжил болон хөдөлмөрийн түвшингээр	АХС, ҮСХ	12000 өрх		Боломжтой
Хөдөлмөр эрхэлж буй төгсөгч болон сургуулиа орхисон хүмүүсийн орлогын түвшин, мэргэжлээр болон хөдөлмөрийн салбараар	АХС, ҮСХ	12000 өрх		Боломжтой
ТЭГШ БАЙДАЛ				
1. Элсэлт болон сурлагын амжилтын тэгш байдал				
<input type="checkbox"/> Эрэгтэй, эмэгтэй суралцагчдын сурлагын амжилтын ялгаа	БСШУСЯ			Боломжтой
<input type="checkbox"/> Эрх тэгш байдлын индекс			Эх үүсвэрийг дахин нягтлах нэмэлт судалгаа, шинжилгээ шаардлагатай	
<input type="checkbox"/> Эрх тэгш байдлын шугам			Эх үүсвэрийг дахин нягтлах нэмэлт судалгаа, шинжилгээ шаардлагатай	
<input type="checkbox"/> Тэгш байдлын зураглал				Боломжтой
<input type="checkbox"/> Odds харьцаа				Боломжтой
<input type="checkbox"/> Odds харьцааны эрэгтэй, эмэгтэй суралцагчдын бүлгүүдэд үзүүлэх нөлөө				Боломжтой
<input type="checkbox"/> Сургуульд хамрагдалт дахь хүйсийн ялгаа	БСШУСЯ			Боломжтой
<input type="checkbox"/> Хүүхдийн нийгмийн статусын тархалт, боловсролын түвшингээр			Эх үүсвэрийг дахин нягтлах нэмэлт судалгаа, шинжилгээ шаардлагатай	

2. Боловсролын салбар дахь нөөцийн хуваарилалт дахь тэгш байдал					
	Боловсролын төсвийн зардлын тэгш байдал			Шинэ тооцоолол	Шинээр тооцоолох

ХАВСРАЛТ 3.1: ТЕХНИКИЙН БОЛОН МЭРГЭЖЛИЙН БОЛОВСРОЛ

Шалгуур үзүүлэлт	Эх сурвалж	Тооцох аргачлал	Тайлбар	Тооцох боломжтой эсэх
МАКРО ТҮВШИНД: СУРГУУЛИЙН ӨМНӨХ БОЛОВСРОЛЫН ДЭД САЛБАРЫН ОНЦЛОГ, БОДЛОГЫН, ИНСТИТУЦИЙН БОЛОН САНХҮҮГИЙН БҮТЭЦ				
Хүн ам зүй болон нийгэм эдийн засгийн нөхцөл байдлын шалгуур үзүүлэлт				
<input type="checkbox"/> Нийт хүн ам	ҮСХ		Education sector analysis methodological guidelines. Vol. 1: Sector-wide analysis, with emphasis on primary and secondary education	Боломжтой
МБС-ын байгууллагын насны хүн ам (15-аас дээш)	ҮСХ			Боломжтой
Ядуурлын шугамаас доош амьжиргааны түвшин бүхий хүн амын эзлэх жин	ӨНЭЗС, ҮСХ		Өрхийн нийгэм, эдийн засгийн судалгаагаар гарах бөгөөд тус судалгаа нь 2 жил тутам хийгддэг болно.	Боломжтой
Нийгэм соёлын байдал			Нэмэлт судалгаа шаардлагатай	
МБС-ЫН ТОЙМ				
МБС-ийн тухай				
<input type="checkbox"/> МБС-ын албан ёсны тодорхойлолт				Боломжтой
<input type="checkbox"/> МБС-ын түүхэн хөгжлийн тойм				Боломжтой
МБС-ын байгууллагууд, тэдгээрийн бүтэц				Боломжтой
<input type="checkbox"/> МБС-ын байгууллагын өмчийн хэлбэр	ХНХЯ			Боломжтой
<input type="checkbox"/> МБС-ын байгууллагын төрөл	ХНХЯ			Боломжтой
МБС-ын байгууллагын түвшин	ХНХЯ			Боломжтой
МБС-ЫН ГҮЙЦЭТГЭЛ				Боломжтой

	<input type="checkbox"/> Элсэлтийн шалгуур үзүүлэлт				Боломжтой
	<input type="checkbox"/> МБС-д хамрагдсан суралцагчийн тоо (хүйс, өмчийн хэлбэр, түвшин, төрөл, мэргэжлийн чиглэл)	ХНХЯ			Боломжтой
	<input type="checkbox"/> Хувийн МБС-ийн суралцагчдын улсын МБС-ын байгууллагын суралцагчдад эзлэх жин (хүйс, өмчийн хэлбэр, түвшин, төрөл, мэргэжлийн чиглэл)	ХНХЯ			Боломжтой
	<input type="checkbox"/> МБС-ын суралцагчдын дараагийн түвшний боловсролд элссэн суралцагчдын түвшин (хүйс, өмчийн хэлбэр, түвшин, төрөл, мэргэжлийн чиглэл)	ХНХЯ			Боломжтой
	<input type="checkbox"/> МБС-ын суралцагчдын дараагийн түвшний сургалтад элссэн суралцагчдын түвшин (хүйс, өмчийн хэлбэр, түвшин, төрөл, мэргэжлийн чиглэл)	ХНХЯ			Боломжтой
	<input type="checkbox"/> МБС-ын суралцагчдын дунд боловсролын суралцагчдад эзлэх жин	ХНХЯ			Боломжтой
	<input type="checkbox"/> Хувийн МБС-ын байгууллагад элсэгчдийн түвшин (хүйс, түвшин, төрөл, мэргэжлийн чиглэл)	ХНХЯ			Боломжтой
	<input type="checkbox"/> МБС-ын суралцагчдын нэг жилийн өсөлтийн түвшин	ХНХЯ			Боломжтой
Тэгш байдал					
	<input type="checkbox"/> Хүйсийн тэгш байдал (эмэгтэй суралцагчдын оролцооны түвшин)	ХНХЯ			Боломжтой
	<input type="checkbox"/> Эрэгтэй, эмэгтэй суралцагчдын мэргэжлийн чиглэл, түвшин	ХНХЯ			Боломжтой
	<input type="checkbox"/> МБС-ын байгууллагын эрэгтэй, эмэгтэй сургагч, багшийн эзлэх жин	ХНХЯ			Боломжтой
	<input type="checkbox"/> Эмэгтэй суралцагчдад ээлтэй сургалтын орчны бүрдэл			Нэмэлт судалгаа шаардлагатай	
Гадаад үр ашиг					
	<input type="checkbox"/> Хосолмол сургалтын суралцагчийн эзлэх жин	ХНХЯ			Боломжтой
	<input type="checkbox"/> Ажлын байрны сургалтад хамрагддаг суралцагчдын эзлэх жин	ХНХЯ			Боломжтой
	<input type="checkbox"/> Хөдөлмөрийн зах зээлд МБС-ын мэргэшлийн үнэ цэнэ			Нэмэлт судалгаа шаардлагатай	
	<input type="checkbox"/> Сургалтын тодорхой түвшнийг төгссөний дараа ажилтай болсон төгсөгчийн эзлэх жин, мэргэшлийн чиглэл, түвшин, хүйсээр, түүнчлэн ажилтай болсон жилийн тоо	ХНХЯ			Боломжтой
	<input type="checkbox"/> Сургалт болон хөдөлмөр эрхлэлтийн түвшин				Боломжтой

<input type="checkbox"/>	Хөдөлмөрийн зах зээлийн мэдээлэл болон үйлчилгээ			Нэмэлт судалгаа шаардлагатай
<input type="checkbox"/>	Хөдөлмөрийн зах зээлтэй нийцтэй байдал			Нэмэлт судалгаа шаардлагатай
<input type="checkbox"/>	Бие дааж ажил хөдөлмөр эрхэлсэн байдал болон бизнес хөгжлийн үйлчилгээ			Нэмэлт судалгаа шаардлагатай
<input type="checkbox"/>	ЕБС төгсөлгүйгээр орхиод хөдөлмөр эрхлэж байгаа болон ажилгүй байгаа хүмүүсийн тоо, түвшин, мэргэжил, хөдөлмөрийн салбараар			Боломжгүй
	Хөдөлмөр эрхэлж буй төгсөгч болон сургуулиа орхисон хүмүүсийн орлогын түвшин, мэргэжлээр болон хөдөлмөрийн салбараар			Боломжгүй
МБС-ЫН ӨРТӨГ ЗАРДАЛ, САНХҮҮЖИЛТ				
МБС-ын төсвийн шалгуур үзүүлэлт				
<input type="checkbox"/>	МБС-ын санхүүжилтийн түвшин	ХНХЯ		Боломжтой
<input type="checkbox"/>	МБС-ын төсвийн урсгал зардал	ХНХЯ		Боломжтой
<input type="checkbox"/>	МБС-ын төсвийн урсгал зардлын улсын төсвийн урсгал зардалд эзлэх жин	ХНХЯ		Боломжтой
<input type="checkbox"/>	МБС-ын нэг суралцагчид ноогдох төсвийн зардлын ДНБ-д эзлэх жин	ХНХЯ		Боломжтой
<input type="checkbox"/>	МБС-ын төсвийн боловсролын төсвийн урсгал зардалд эзлэх жин	ХНХЯ		Боломжтой
<input type="checkbox"/>	МБС-ын төсөвт донор байгууллагуудаас хийсэн санхүүжилтийн эзлэх жин	ХНХЯ		Боломжтой
<input type="checkbox"/>	МБС-ын өөрийн орлого, нийгмийн түншлэлийн санхүүжилтийн эзлэх жин			Боломжгүй
<input type="checkbox"/>	Төсвийн зардал, зүйл ангиар, түвшнээр			Боломжтой
	o Цалин хөлсний зардал	ХНХЯ		Боломжтой
	o Бараа материал, үйлчилгээний зардал	ХНХЯ		Боломжтой
	o Шилжүүлгийн зардал	ХНХЯ		Боломжтой
	o Тоног төхөөрөмжийн зардал	ХНХЯ		Боломжтой
	o Үндэсний болон олон улсын хөрөнгө оруулалтын зардал	ХНХЯ		Боломжтой
	o Зардлын тархалт, зориулалтаар (үйл ажиллагааны, захиргааны, сургалтын хэрэглэгдэхүүн гэх мэт)	ХНХЯ		Боломжтой

Нэгж зардал болон нэгж өртгийн шалгуур үзүүлэлт				
	<input type="checkbox"/> Төсвийн нэгж зардал, төсвийн урсгал зардлын нэгж зарцуулалт	ХНХЯ		Нэмэлт судалгаа шаардлагатай
	<input type="checkbox"/> Нэгж өртгийн олон улсын туршлагатай харьцуулсан байдал	ХНХЯ		Нэмэлт судалгаа шаардлагатай
	<input type="checkbox"/> Нэгж өртгүүд (түвшин, сургалтын чиглэлээр)	ХНХЯ		Нэмэлт судалгаа шаардлагатай
	<input type="checkbox"/> Цалингийн нэгж өртөг	ХНХЯ		Нэмэлт судалгаа шаардлагатай
	<input type="checkbox"/> Захиргааны нэгж өртөг	ХНХЯ		Нэмэлт судалгаа шаардлагатай
	<input type="checkbox"/> НД, ЭМД-ын нэгж өртөг	ХНХЯ		Нэмэлт судалгаа шаардлагатай
	<input type="checkbox"/> Хувь хүний болон дундаж урамшууллын тархалт, статус болон түвшингээр			Шинэ тооцоолол
Дэд бүтцийн өртгийн шалгуур үзүүлэлт				
	Сургуулийн барилга, дотуур байр, анги танхим, дадлагын газар болон бусад тоног төхөөрөмж, материал түүхий эдийн өртөг	ХНХЯ		Боломжтой
МБС-ЫН ДОТООД ҮР АШИГ БА ЧАНАР				
Дотоод үр ашгийн дүн шинжилгээ				
	<input type="checkbox"/> Бүх түвшинд сургалт завсардсан суралцагчдын түвшин, мэргэжлийн чиглэлээр			Боломжгүй
	<input type="checkbox"/> Төгсөлтийн шалгалт амжилттай өгсөн суралцагчийн түвшин, мэргэжлийн чиглэл, түвшнээр	ХНХЯ		Боломжтой
	<input type="checkbox"/> Амжилттай төгссөн түвшин, мэргэжлийн чиглэл, түвшнээр	ХНХЯ		Боломжтой
	<input type="checkbox"/> Дотоод үр ашгийн коэффициент эзлэх жин	ХНХЯ		Боломжтой
Сургалтын чанарын дүн шинжилгээ				
	<input type="checkbox"/> Мэргэжлийн багш, сургагчийн мэргэшил, чадамж			Нэмэлт судалгаа шаардлагатай
	<input type="checkbox"/> Хөтөлбөрийн хөдөлмөрийн зах зээл болон тухайн сургалтын байгууллагын чадавхитай нийцтэй байдал			Боломжгүй
	<input type="checkbox"/> Сургалтын нөөц материалын тохиромжтой байдал			Боломжгүй
	<input type="checkbox"/> Мэргэшсэн багшийн түвшин	ХНХЯ		Боломжтой
	<input type="checkbox"/> Дэд бүтцийн сэтгэл ханамжийн дундаж түвшин			Боломжгүй

<input type="checkbox"/>	Ур чадвараа дээшлүүлсэн багшийн эзлэх жин	ХНХЯ			Боломжтой
<input type="checkbox"/>	Анги дүүргэлт	ХНХЯ			Боломжтой
<input type="checkbox"/>	Магадлан итгэмжлүүлсэн байдал				Боломжтой
<input type="checkbox"/>	Чанарын удирдлагын менежментийг хэрэгжүүлдэг байдал				Нэмэлт судалгаа шаардлагатай
<input type="checkbox"/>	Сургалтын үр дүнгийн чанарын баталгаажуулалт				Шинэ тооцоолол
	Хөтөлбөрийн чанарын баталгаажуулалт				Нэмэлт судалгаа шаардлагатай
Багшийн менежментийн шалгуур үзүүлэлт					
<input type="checkbox"/>	Багшийн тоо, хүйсээр, насаар, ажлын туршлага, мэргэжил, хичээл, мэргэжлийн зэрэг, улсын болон хувийн сургуулиар	ХНХЯ			Боломжтой
<input type="checkbox"/>	Багшийн жилийн өсөлтийн түвшин	ХНХЯ			Боломжтой
<input type="checkbox"/>	Мэргэжлийн багшийн хувь, түвшин, хичээлээр	ХНХЯ			Боломжтой
<input type="checkbox"/>	Улсын сургуулийн багшид хувийн сургуулийн багшийн эзлэх жин	ХНХЯ			Боломжтой
<input type="checkbox"/>	Багшийн хомсдол				Боломжгүй
Бусад нөөц болон багшлах цагийн менежментийн шалгуур үзүүлэлт					
<input type="checkbox"/>	Суралцагчдын хэрэглэдэг сурах бичгийн тоо, түвшин, хичээлээр				Нэмэлт судалгаа шаардлагатай
<input type="checkbox"/>	Сурах бичиг, сурагчийн харьцаа				Нэмэлт судалгаа шаардлагатай
<input type="checkbox"/>	Сургалтын цаг, түвшин	ХНХЯ			Боломжтой
	Сургалтын бодит/хамгийн үр дүнтэй цаг				Шинэ тооцоолол

ХАВСРАЛТ 4.1: ДЭЭД БОЛОВСРОЛ

Шалгуур үзүүлэлт	Эх сурвалж	Тооцох аргачлал	Тайлбар	Тооцох боломжтой эсэх
СҮҮЛИЙН ҮЕИЙН ХАНДЛАГА, ОДООГИЙН НӨХЦӨЛ БАЙДЛЫН ТОЙМ ҮЗҮҮЛЭЛТ				
1. Дээд боловсролын салбарын түүхэн хөгжил				
<input type="checkbox"/>	Шинэчлэлүүд, амжилт, бууралт гэх мэт	БСШУСЯ		Боломжтой

1. Дээд боловсролын байгууллагын дэлгэрэнгүй танилцуулга					
	<input type="checkbox"/>	Дээд боловсролын байгууллагын төрөл, сургалтын чиглэл,	БСШУСЯ		Боломжтой
	<input type="checkbox"/>	Мэргэжлийн хөтөлбөрийн чиглэл	БСШУСЯ		Боломжтой
1. Өнөөгийн нөхцөл байдал					
	<input type="checkbox"/>	Элсэлт, хүйсээр, мэргэжлийн чиглэлээр, зэргээр, элсэгчдийн боловсролын түвшингээр	БСШУСЯ	Education sector analysis methodological guidelines. Vol. 1: Sector-wide analysis, with emphasis on primary and secondary education	Боломжтой
		Дээд боловсролын глобал хүртээмжийн түвшин			Боломжгүй
УДИРДЛАГА, СУРГАЛТЫН ЗОХИОН БАЙГУУЛАЛТ, ДОТООД ҮР АШИГ, ТЭГШ БАЙДЛЫН ШАЛГУУР ҮЗҮҮЛЭЛТ					
1. Үйл ажиллагааны хэлбэр, байгууллага хоорондын ялгаа, онцлог					
	<input type="checkbox"/>	Материаллаг эх үүсвэр: дэд бүтэц, тоног төхөөрөмж	БСШУСЯ		Боломжтой
	<input type="checkbox"/>	Багшлах боловсон хүчний нийлүүлэлт	БСШУСЯ		Боломжтой
	<input type="checkbox"/>	Багшлах боловсон хүчний чанар	БСШУСЯ	Нэмэлт судалгаа	Нэмэлт судалгаа
	<input type="checkbox"/>	Цаашид шаардагдах багшлах боловсон хүчний хэрэгцээ		Шинэ тооцоолол	
2. Засаглал					
3. Дотоод үр ашиг					
	<input type="checkbox"/>	Тодорхой мэргэжлийн чиглэлээр, тодорхой түвшний сургалтыг дүүргэх хугацаа			Нэмэлт судалгаа
	<input type="checkbox"/>	Элсэлт, завсардалт, улиран сурах	БСШУСЯ		Боломжтой
	<input type="checkbox"/>	Дотоод үр ашгийн коэффициент	БСШУСЯ		Боломжтой
	<input type="checkbox"/>	Санхүүгийн асуудлууд			Боломжгүй
4. Хүртээмжийн тэгш байдал					
	<input type="checkbox"/>	Жендэрийн тэгш байдал	БСШУСЯ		Боломжтой
		Нийгмийн ялгаатай байдал	ӨНЭЗС, ҮСХ	ӨНЭЗ-ийн судалгаагаар гарах бөгөөд тус судалгаа нь 2 жил тутам хийгддэг.	Боломжтой

ӨРТӨГ ЗАРДАЛ, САНХҮҮЖИЛТ						
1. Байгууллагын төсөв, түүний зарцуулалт					Шинэ тооцоолол	Боломжтой
2. Суралцагчдын санхүүжилт, нийгмийн үйлчилгээ						Боломжтой
		<input type="checkbox"/> Нийгмийн үйлчилгээ (дэд бүтэц, байр, тээвэр, зоогийн газар гэх мэт)				Боломжгүй
		<input type="checkbox"/> Санхүүгийн шууд дэмжлэг (буцалтгүй тусламж, тэтгэлэг, зээл гэх мэт)	БЗС, БСШУСЯ			Боломжтой
2. Нэгж зардлын бүтэц, төгсөлтийн зардал, байгууллагаар, хөтөлбөрөөр /streams/						Боломжтой
3. Нөөцийн хуваарилалтын тэгш байдал						Боломжгүй
ҮР ДҮН, ГҮЙЦЭТГЭЛ, ЧАНАР						
1. Гадаад үр ашиг						Боломжтой
		<input type="checkbox"/> Төгсөгчийн хөдөлмөр эрхлэлт, мэргэжил, хүйс, албан тушаал, хөдөлмөрийн салбараар	ХНХЯ-ны Хөдөлмөрийн институт			Нэмэлт судалгаа
		<input type="checkbox"/> Хөдөлмөр эрхэлж буй төгсөгчийн жилийн орлого мэргэжлээр, хүйсээр, хөдөлмөрийн салбараар	ХНХЯ-ны Хөдөлмөрийн институт			Нэмэлт судалгаа
2. Чанарын хяналт						Боломжтой
		Магадлан итгэмжлэл гэх мэт	МИҮТ			Боломжтой

ХАВСРАЛТ 5.1: НАСАН ТҮРШИЙН БОЛОВСРОЛ

Шалгуур үзүүлэлт	Эх сурвалж	Тооцох аргачлал	Тайлбар	Тооцох боломжтой эсэх
НАСАН ТҮРШИЙН БОЛОВСРОЛЫН ТОДОРХОЙЛОЛТ				
1. Үндэсний болон олон улсын тодорхойлолт	БСШУСЯ			Боломжтой
2. Нийлүүлэлт ба бүтэц				
3. Сургалтын үйл ажиллагаа болон агуулга				
<input type="checkbox"/> Зорилт ба гэрчилгээжүүлэлт	БСШУСЯ		Нэмэлт судалгаагаар	
<input type="checkbox"/> Хүртээмж – орчин нөхцөл ба урамшуулал			Нэмэлт судалгаагаар	
Үйл ажиллагаа болон сургалтын агуулга			Нэмэлт судалгаагаар	

ХЭРЭГЦЭЭ БА ОРОЛЦОО				
	1. Цаашдын хэрэгцээний тооцоолол			Шинэ тооцоолол
	2. Элсэлт, сургалт, дотоод үр ашиг	БСШУСЯ		Боломжтой
	3. Багш, ажилтан, удирдлага зохион байгуулалт	БСШУСЯ		Боломжтой
ӨРТӨГ, САНХҮҮЖИЛТ				
	1. Санхүүжилтийн нөхцөл байдал болон цаашдын төлөв			Шинэ тооцоолол
	1. Суралцагчдын зарцуулалт, сургалтаар	БСШУСЯ		Боломжтой
	Төвийн өртгийн бүтэц зүйл ангиар	БСШУСЯ		Боломжтой
ҮР ДҮН, ЧАНАР, НИЙЦТЭЙ БАЙДАЛ				
	Сургалтын үр дүнгийн үнэлгээ			Нэмэлт судалгаагаар
	Боловсролын нийгмийн зан үйл болон практикт үзүүлсэн нөлөө			Нэмэлт судалгаагаар
	Нийгэм, эдийн засгийн интеграци			Нэмэлт судалгаагаар