Annex to the Government Resolution No.: dated on

**EDUCATION SECTOR MASTER PLAN OF MONGOLIA**

**2009-2015**

**(Updated version)**

**CHAPTER 1**

**INTRODUCTION OF THE UPDATED MASTER PLAN**

**1.1 Main Goal and Purpose of Master Plan**

This plan is the updated version of the Education Sector Master Plan (ESMP) 2006-2015, which was originally developed in 2005 and approved by Government of Mongolia in August 16, 2006. The goal of the ESMP 2006-2015 was to provide a long-term policy and strategic framework for reforming and developing the education sector of Mongolia. As it is a rolling document, the Ministry of Education, Culture and Science (MECS) initiated the revision of this original ESMP in order to update its targets and resource requirements in light of the recent developments in socio-economic conditions, and government policies in the education since its adoption. The updated Master Plan builds on the National Development Strategy (NDS) 2007-2021, based on the Millennium Development Goals (MDGs), and as the original ESMP it continues to focus on:

* Policies and strategies to increase employment opportunities, to reduce poverty and social inequality, to eliminate rural and urban divide, and to close gender disparity through further expansion of education services in rural areas and for vulnerable groups regardless of geographical location; and
* Policies and strategies to reform and upgrade educational services in compliance with social and cultural values and needs, to improve education structure and content in line with international standards, and to establish the education system that provides life-long and relevant learning opportunities for learners to be competitive in society and labour market.

The updated Master Plan takes into account the major government policy initiatives undertaken since the adoption of the original Master Plan such as the transition to 12-year education structure, the launch of a new curriculum with new output-based learning objectives, and new legislation on Pre-School Education and TVET. By reviewing progress of achieving the targets set in the original Master Plan, the updated version provides adjustments in some of the targets in order to make them realistically achievable together with the updated resource requirements to reach those targets.

**1.2 Master Plan Principles**

The updated Master Plan has maintained and reinforced the basic principles underlined in the original Master Plan. These principles are:

* *based on Mongolia’s MDG- based National Development Strategy approved by the Parliament of Mongolia in 2008* in order to improve livelihood of people, reduce unemployment and poverty, ensure social equality and sustainable economic development;
* *aimed at implementation of global objectives in the areas of human development and education* set forth in the ‘United Nations Millennium Development Goals’ adopted in 2000; ‘Dakar Framework for Action: Education for All’ adopted in 2000 at the World Education Forum; ‘United Nations Decade on Education for Sustainable Development’ and ‘The United Nations Literacy Decade’ announced by the UN in 2003;
* *developed under the leadership of Government of Mongolia and based on participation of all education stakeholders* including civil society, service providers, beneficiaries and external partners supporting the Government of Mongolia in education development;
* *in pursuit of a single and sector-wide education development policy* based on the ownership and consensus of all actors, including external partners;
* *applying methodologies for* evidence-based assessment, strategy development and planning in order to define educational needs, to specify policy targets to be achieved by 2015 and to estimate the required resources to meet those needs; and
* *in line with aid effectiveness and donor harmonization spirit* provided by the Monterrey Consensus, approved in 2002, the 2005 Paris Declaration and the 2008 Accra Agenda for Action on aid effectiveness and donor harmonization.

**1.3 Master Plan Development Process**

The original Master Plan 2006-2015 was developed by the initiative and under the direct leadership of MECS. The national experts representing MECS, Ministry of Finance (MOF), Ministry of Social Welfare and Labour (MSWL), universities, research institutions, general secondary schools, non-governmental organizations (NGOs), policy makers, researchers, educational specialists and teachers jointly undertook the assessment of education system and identified key challenges. Line ministries, government agencies, civil society and external partners equally participated in developing both the ESMP strategic framework and the detailed plan of actions to meet those challenges by agreeing on the principles and approaches on which the plan is based.

Development of the updated ESMP was conducted using the same process and mechanisms as for the original Master Plan 2006-2015 under the coordination of Education Donors Consultative Mechanism (EDCM). The review and updating has been also based upon extensive discussions and consultations among key stakeholders and external partners. MECS, MOF, MSWL, other government agencies, universities, schools and bi-lateral and multi-lateral agencies were provided comments open public discussions, consultative meetings and forums. The recommendations from public discussions and meetings have been used to assess the current situation, identify challenges and inform policy and strategy development of the updated Master Plan. The Master Plan review process itself provided a favourable condition for MECS and external partners to improve the information exchange and coordinated implementation of activities around the Plan.

**1.4 Master Plan Framework and Duration**

The review and planning was done by utilizing the same structure initially used by the original ESMP. The original Master Plan covered:

1. Preschool Education;
2. Primary and Secondary Education;
3. Non-formal and Adult Education;
4. Technical Education and Vocational Training (TVET); and
5. Higher Education sub-sectors.

The updated Master Plan will be implemented from 2009 until 2015, with the mid-term plan of action for each sub-sector covering the period from 2009 to 2012.

**1.5 Methodological Basis of the Updated Master Plan**

The following methodology and approach were used in updating the Master Plan:

* Assessment of current situation in terms of educational access, quality and relevance, and management efficiency and impact;
* Identification of critical needs and challenges;
* Stakeholder analysis and system assessment in terms of strengths, weaknesses, opportunities and threats;
* Definition and assessment of strategic goals and objectives according to the Logical Framework approach; and
* Simulation of educational needs to estimate the required financial resources.

The updated Master Plan 2009-2015 was developed using sector-wide, evidence and results-based planning approaches. These were founded upon the government’s commitment to, and ownership of, the process plus the full participation of all stakeholders and government leadership to achieve coordination and harmonization with all education development partners.

The review of the original Master Plan 2009-2015 was done using the following instruments and methods:

* Desk research of all recent reports on every aspects of the Mongolian education system;
* Structured and semi-structured interviews with responsible officers of MECS, MOF, MSWL, universities, schools and pre-schools, TVET schools, non-formal education centres, external partners and non-governmental organizations (NGOs);
* Consultation with parents, teachers, lecturers and managers representing different educational sub-sectors; and
* Surveys and focus group discussions in city centre and *ger* districts, *aimags* and rural remote areas.

Based on the findings, the Master Plan team assessed the current situation related to educational access, quality and relevance, management efficiency and impact. From this assessment key issues and challenges were identified within each sub-sector and under the sectoral cross cutting issues. For each education sub-sector, the achievements have been reviewed and assessed against the original targets. The relevant performance indicators were identified and the actual progress to date has been assessed against the original targets. Where necessary and appropriate, the revised or amended targets were proposed.

Multilateral and bilateral development partners have expressed their appreciation of principles, as well as assessment, planning and resource estimation methodologies used in developing the plan. The fact that the plan was developed based on modern planning methodology creates one of the main conditions to ensure feasibility of the plan implementation.

Figure 1 presents the process and structure of the Master Plan development, based on sector-wide and results-based approach.

Figure 1: Process, structure and content of the Education Sector Master Plan



**1.6 Structure and content of the updated Master Plan**

The updated Education Sector Master Plan of Mongolia 2009-2015 comprises the following six chapters:

* Introduction of the updated Master Plan;
* Current Status and Challenges of Education;
* Policy Provision (2009-2015);
* Mid-term Action Plan (2009-2012);
* Estimates of Educational Needs and required resources; and
* Management, Monitoring and Evaluation.

**Chapter Two** presents the *Current Status and Challenges of Education.* It comprises 2 sections: (i) interrelationship of socio-economic developments with education sector and, (ii) challenges faced by education sector.

The section 1 on the interrelationship of socio-economic developments with education system describes how the changes occurred in demographics, labour market and government policies in recent past have impact on poverty, unemployment, government budget allocation and management.



The assessment of current challenges is done made by subsector in the sector-wide framework (Picture 3). The review of progress and shortcomings was the first step of developing the updated Master Plan.

**Chapter Three** consists of the *Policy and Strategic Framework of Master Plan*, presenting the long-term education policy objectives to be pursued up to 2015 based on the updated education development needs. It comprises vision, mission, priority issues and objectives, key strategies of the education sector and targets for each of its sub-sectors.

The *Mid-Term Action Plan 2009-2012* is the subject of **Chapter Four** comprising two sections: (i) Mid-Term Action Plan of each sub-sector for 2009-2012, and (ii) performance indicators to be used in monitoring and evaluation of the updated Master Plan implementation against the objectives and the targets.



The detailed estimates of educational needs and funding requirements for the updated Master Plan implementation are specified in **Chapter Five**. It presents needs for implementation of the objectives and programmes set forth in the plan based on the current projection of population growth and enrolments at all levels. It estimates the total financing needs by identifying additional financial resources to be mobilized from domestic and foreign sources. In other words, this chapter consists of (i) estimates of educational needs, (ii) required financial resources, (iii) estimates of potential domestic and foreign funding sources, and (iv) estimates of potential financing gap.

**Chapter Six** presents management and institutional settings necessary for implementation of the updated Master Plan in order to create unified management structure and mechanism to ensure effective coordination of national and international partners, monitoring, evaluation and reporting on implementation of the plan with the defined responsibilities of MECS, local administrations and educational professional institutions at all stages and levels.

This chapter also presents the results of assessment of the Master Plan implementation. Management, monitoring and evaluation of the updated Master Plan were developed in compliance with actions and regulations needed in order to manage implementation of policy objectives set forth in the plan. The chapter consists of (i) opportunities and risks in implementation of the Master plan, (ii) management of the plan and institutional responsibilities; and (iii) plan monitoring-evaluation mechanisms.

Annex

This part provides an assessment of the educational targets set forth in 2006 and performance against targets with recommendations for revisions and amendments to the targets.

**1.2 Rationale for the Revised Master Plan**

The decision to review and update the Education Sector Master Plan (ESMP) in 2009 was driven by three major considerations as follows:

* A requirement to review progress against the targets established by the original Master Plan and to adjust targets as required and appropriate in the context of practical experience and changed circumstances.
* The specific impact of the current financial crisis on the Mongolian education system in the short to medium term and the implications of financial crisis on achievement of specified education policies and strategic objectives.
* A requirement to adjust the Master Plan to the MDG-based National Development Strategy (NDS) goals and to establish roles of education system in achieving these goals.

As part of the research into the next phase of the Mongolian Educational SWap, State Secretary, Departmental Directors and senior officers of MECS were asked to complete a questionnaire on their opinion regarding the impact of the original Education Master Plan for 2006 to 2015. While there was a 70% positive response to the beneficial impact of the ESMP there were also a number of criticisms as follows:

* The targets did not always have measurable performance indicators.
* Monitoring mechanisms were sometimes inadequate to enable evaluation as to whether or not – and to what extent – targets were being achieved.
* The lack of an overall vision for the Mongolian education system.
* A lack of prioritization between sub-sectors of the education system and within each sub-sector.
* The lack of clearly defined programs and strategies to establish the mechanisms by which targets would be achieved.

The review of the 2006-2015 ESMP suggested that a significant proportion of the original targets tended to be quantitative; qualitative issues were less developed. Thus, for example, in all sub-sectors of the education system there have been significant gains in roll numbers side by side with the falling real value of operational budgets (fixed and variable costs), which in turn have had a significant impact on the quality of the system and the real practical efficiency of investments. Closely associated with this problem are inequities in budget provision to some sections of the system (mostly small rural schools) resulting from the difficulty in applying norms-based budgeting procedures to schools with a wide variety of needs in widely differing circumstances.

It was also apparent that much of the statistical data were often unreliable, which meant that planning and budgeting procedures and processes were often probably based on inaccurate premises. For example, the reliability of data on school drop-outs and out-of-school children made it difficult for MECS to know whether the targets were being achieved or not. In some cases, for example the quantitative targets for higher education faculty enrolments, there were no obvious mechanisms by which the targets could easily be achieved. As a result by 2009 all of the quantitative higher education targets apart from gross enrolment had been missed and most were moving in the opposite direction to those established in the original Master Plan. Achieving a reliable, relevant and comprehensive EMIS becomes a high priority in order to provide a reliable foundation to assess accurately progress on the sub-sectoral targets and to improve the efficiency of planning, budgeting and progress monitoring. In fact, the problems of achieving effective monitoring and supervision made it difficult to check both on the reliability of system data and on system performance. In Mongolia the great distances between central and *aimag* education offices and between schools makes supervision and monitoring very expensive. System performance is also hindered by the lack of clear and objective performance targets for students, teachers and schools and this issue will become more urgent with the introduction of the new basic school curriculum and the introduction of skills-based student development targets. The introduction, for example, of teacher and head teacher performance contracts is reported not always to have improved school performance but sometimes to have stimulated over-generous marking. Finally, the lack of effective targeting of most of the education social transfers has clearly led to inefficiencies in the use of scarce resources. More effective targeting of social transfers is also an urgent priority.

The immediate impact of the financial crisis on parents, teachers, students and school performance on the one hand and on the operation of the education system on the other has been profound. The following impact issues have been identified and have been incorporated into the analysis on which the updated ESMP has been based:

* Increasing unemployment;
* Significant increases in living costs, particularly in rural and remote areas, leading to a significant reduction in family disposable purchasing power:
* Increasing family indebtedness as many families (including teachers) have been forced to take out bank loans to enable them to cope with the downturn in purchasing power.
* Nutrition problems as a result of escalating costs of living. Focus group discussions undertaken as part of the ESMP review revealed that many families were now taking only one hot meal a day and in this situation there are risks of malnutrition with associated health problems for the poor.
* Increased parental costs of education resulting from budget cuts and reduced school operational funding. Under these circumstances many schools have attempted to pass on some of the operational expense burden to parents by requesting parental contributions. However, in circumstances where parents themselves are short of money the burden of an increase in the costs of sending their children to school has obvious implications for potential drop-outs and increased absenteeism.
* Potential increases in the incidence of child labour as a result of growing poverty, although this is not yet reported to be a major problem.
* Increased migration into urban areas as a result of a widespread perception that the quality of education is better in urban than in rural and remote areas. Urban areas are perceived to provide better schooling, more job opportunities, better health facilities and lower living costs.
* Although social transfer programs to support textbooks and basic school supplies to poor and vulnerable children and school feeding programs are significant and important initiatives. The primary and secondary schools prior to the financial crisis were widely considered to be under-funded in terms of the available operational budget and this situation has clearly worsened since the advent of the financial crisis and the 2009 education budget cuts. Many schools are now routinely requesting parental contributions to fill the operational funding gaps, which further add to the financial burden of parents in sending their children to school; this burden is particularly heavy for the poor and vulnerable parents who are supposed to be protected by the social transfers. Conversely, the funding allocated to support social transfers represents funding that is not available for other sectoral uses, including operational budget support. It is the shortfall in operational budgets which in turn stimulates requests for additional parental contribution to school running costs. Thus in a very real sense, the social transfers are at least partially funded by increased parental contributions to school running costs. If social transfers in the educational sector are not well targeted and efficiently managed on their impact on access and education quality, particularly for the poor, will be reduced.

The major policy initiatives that needed to be taken into account in the updated Master Plan were:

* The introduction of the 12 year basic education structure and the launch of a new curriculum with new output-based learning objectives;
* The 2008 Pre-School legislation and the need to provide free universal pre-school education;
* The 2009 Law on technical and vocational education and training;
* A specified target to provide all students with access to required textbooks.

All of the issues described above have been taken into account in the preparation of the updated Master Plan.

**CHAPTER 2**

**CHALLENGES OF EDUCATION SECTOR**

## 2.1 Socio-Economic Context

Since adoption of the original Master Plan in 2006 the socio-economic conditions have changed considerably. Besides the traditional challenges of scarce population widely scattered around the country with a significant portion leading nomadic lifestyle and a large flow of migration from rural areas to the urban centres (68% of population in 2008) there is a number of new changes occurred in Mongolia during last few years.

Mongolia has predominantly young population with the median age of 21.6 years. About 33% and 75% of its people are under 14 and 35 respectively. The population pyramid (Graph 2.1.) shows that in some 20 years ago, the population started to decrease in Mongolia but has picked up since 2006. This requires a particular attention for the planning and will place extra strain on the education sector.

Graph 2.1: Age pyramid, Mongolia 2008



Mongolia’s Human Development Index (HDI) stands at 0.720 in 2006, ranking 112th out of 179 countries, moving up from 117th in previous years. However, HDI disparities persist across regions. The HDI for urban areas (0.723) was 14.0% higher than the HDI in rural areas in 2002. Over the past decade, Mongolia has recorded gains in many areas of human development. However, the progress has been slow and uneven. The poverty remains stagnant around 36% despite high economic growth in last few years.

Due to high economic growth experienced during last few years the unemployment rate has been decreasing steadily since 2004 from 3.6% to 2.8% in 2007. As of December, 2007, the number of registered unemployed was 29.9 thousand people, which was 9.1 percent lower than a year ago. According to the survey by the NSO, around 50 thousand new jobs were created in 2007. The similar trend was observed throughout 2008. However, due to the crisis impact the unemployment is beginning to rise from early 2009.

### Economy and Public Finance

Economic growth reached 8.6% in 2006 bringing Mongolia’s Gross Domestic Product (GDP) per capita to US$1,037 at the end of the year. Good weather conditions benefited Mongolia’s livestock sector as well as agricultural production. As a result, livestock, which accounts for 21.7% of Mongolia’s GDP, grew by 14.4% and crop production increased by 63.4% in 2006. The mining sector continues to benefit from high international gold and copper prices, which has led to new mine exploitation and increased production.

The agriculture sector, including livestock was the main engine of growth for Mongolia during the second half of the 1990’s although its share in GDP has been declining (from 38% in 1995 to 25% in 2004). The secondary sector, dominated by mining, manufacturing and construction has played a substantial role in generating growth. The mining sector is a major contributor to the economy, accounting for about 12% of GDP, half of industrial output, and 43% of export earnings. The tertiary sector dominated by wholesale trade and retail trade as well as transport and communication has been the other main source of growth and it has grown considerably since 1997 surpassing agriculture as the primary source of growth in Mongolia. The share of the tertiary sector in total GDP has grown from 35% in 1995 to 46% in 2004.

The economy was growing rapidly by 8.6% in 2006 and 9.9% in 2007. The real GDP growth accelerated in the first quarter of 2008 to 10.2%. Although the growth was recorded still higher in the second quarter of 2008 the rate has slowed down due to the early effects of the global crisis. The economic growth projection for 2009 has been revised to 2.9% with further worsening outlook as the crisis hit on the economy hard (through fall of international prices of export commodities but mainly copper).

The government revenue more than tripled in 2008 as compare to 2004 in nominal terms. It is peaked in terms of GDP percentage at 40.2% in 2007 and then 35.4% in 2008. Despite an initially planned budget deficit of 3.9% of GDP, the government fiscal balance for 2007 recorded a surplus for the third consecutive year. However, due to the declined revenue from the mining products, the overall budget deficit reached 5% of GDP in 2008 against the planned 2.5 %. The amended budget for 2009 is expected to have the deficit of 5.8% as agreed under the IMF Stand-by Agreement.

Table 2.1: Government Revenue and Expenditure (MNT ‘000,000,000)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **2006** | **2007** | **2008** | **2009 expected** |
| **Revenue** |  |  |  |  |
| Domestic revenues, excluding grants | 1,354 | 1,856 | 2,151 | 2,031 |
| *of which central government revenues* | 1,270 | 1,779 | 1,464 | 1,621 |
| Grants | 6.3 | 25 | 19 | 24 |
| **Total Revenue** | **1,360** | **1,881** | **2,170** | **2,055** |
| **Actual expenditure by nature** |  |  |  |  |
| Recurrent expenditure | 938 | 1,368 | 1,750 | 1,892 |
| *of which staff costs* | *183* | *296* | *543* | *586* |
| Capital expenditure | 160 | 300 | 625 | 423 |
| **Net lending** | 79 | 80 | 88 | 103 |
| o*f which foreign loans* | *89* | *73* | *69* | *122* |
| **Total expenditure and net lending** | **1,177** | **1,747** | **2,462** | **2,419** |

*Source: the Ministry of Finance, Mongolia, 2007-2009*

**2.2 Current Status and Challenges of Education**

**Significant progress has been achieved in the education sector** including improving school infrastructure, making schools more child friendly and shifting to a competence-based curriculum. The new 12-year education structure was introduced into schools in September 2008. It replaced the previous 11-year structure, which itself was introduced only in 2005. The new 12-year structure (primary: grades 1–6, secondary: grades 7–10, and upper secondary: grades 11–12) will bring Mongolia into line with an increasing number of former socialist countries who are now opting for 12-year systems. In 2008–2009 90.6% of the primary school age group enrolled in primary schools.

Graph 2.2: New structure of Mongolian formal education system



(According to the ISCED 2007)

The student teacher ratio has decreased from 33.1 in 2005-2006 to 31.1 in 2007-2008. The level of professional skills of primary school teachers has increased. The basic education indicators including net and gross primary enrolment have increased compared to the 2005-2006 school year and school dropout rates have been falling steadily. These will play an important role in achieving the education Millennium Development Goals (MDGs) in Mongolia.

The primary completion rate is estimated to have reached 98.4 % in 2007-2008 against a projected target of 87.0%. The preschool enrolment has increased by the introduction of alternative preschool education services such as summer pre-schools and mobile *ger* preschools for herder children and the introduction of free pre-school feeding programs specified in the new 2008 Pre-school Law. The recent shift to a 12-year education structure and the development of a new curriculum which reflects this change is intended to place more focus on skills-based education. However, much more needs to be done in improving technical and vocational education to make education supply consistent with the economic demand. The new TEVT law was adopted by Parliament in February 2009. As a result budget allocations for the sector have been increased thus making the sector more attractive for high school graduates by providing financial support for students enrolled in TEVT institutions.

Table 2.2: Trends in actual public expenditure by education sub-sector and type of expenditure (MNT Billion)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **2006** | **2007** | **2008** | **2009** |
| **Preschool Education** | | | | |
| Recurrent expenditure | 29.8 | 41.1 | 65.2 | 66.3 |
| of which staff costs | 11.8 | 18.7 | 36.7 | 39.0 |
| **Primary and secondary education** | | | | |
| Recurrent expenditure | 96.4 | 128.0 | 203.6 | 209.4 |
| of which staff costs | 50.1 | 126.5 | 125.7 | 134.1 |
| **Tertiary education** | | | | |
| Recurrent expenditure | 23.8 | - | - | - |
| of which staff costs | - | - | - | - |
| **TEVT** | | | | |
| Recurrent expenditure | 8.8 | 14.2 | 28.7 | 38.7 |
| of which staff costs | 3.4 | 12.2 | 10.7 | 11.7 |
| **Cross-Cutting** | 21.3 | 33.2 | 42.6 | 48.5 |
| Recurrent expenditure | 15.2 | 27.0 | 37.2 | 41.8 |
| of which staff costs | 1.1 | 2.4 | 4.7 | 3.9 |
| **Education Capital Expenditure** | 9.8 | 27.3 | 21 | 33.6 |

*Source: Ministry of Education, Culture and Science of Mongolia, 2007-2009*

Mongolia spends high on education in terms of the share of GDP (6%) and total public expenditure (15.0%) in 2008 as compared with other developing countries. The public expenditure for education more than doubled in nominal terms since 2006. The largest increase was in 2007 for both the recurrent and capital expenditures (Table 2.2).

Despite the achievements in the education sector noted above, **Mongolia continues to face challenges in the provision of quality education** from preschool through to higher education levels. A significant proportion of children in rural areas still do not attend primary or secondary school.[[1]](#footnote-2) In the rural areas, 8% of all children aged 7 to 15 have never enrolled in school, and 19% drop out before completing grade 8. Only 55% of students (45% in rural areas) complete upper secondary education. Improving net enrollment rates in rural areas remains a major challenge. In addition there are significant differentials in examination results, performance on student achievement tests and progression rates between urban and rural areas.[[2]](#footnote-3) Rural–urban migration has brought new challenges in the education sector, as schools in urban centers have seen a substantial increase in demand for services, while some rural schools are now operating below capacity as a result of outflows from their catchment areas. In remote and rural areas, MECS has to contend with falling student numbers and rising per capita costs, while in urban areas, notably in Ulaanbaatar *ger* districts, internal migration places placing increasing pressure on school infrastructure. Many schools now operate in three shifts and student-teacher ratios are deteriorating as a result of school over-crowding.

Many formal and informal costs act as a barrier to access. Poverty has a significant impact on school attendance. Past surveys have showed that textbooks have been the highest expenditure item in household spending on education. For the poorest segment of the population, textbook costs account for over 50% of educational expenditures. The Government of Mongolia (GoM) provides textbooks to 20% of the students who are deemed poor. However, both coverage and targeting are reported to be poor.

There is a need to reform the curriculum and teaching methods. Mongolia began a standards-based curriculum reform in 1998 and began standardized testing a year later. New state education standards were introduced in 2003. These emphasize student-centered learning methodologies and the importance of developing higher order thinking skills - learning to know, learning to do, and learning to live together and learning to be. General subject areas include science and technology and English. While these standards are consistent with the acquisition of skills that are needed for work and life, the current curriculum and teaching practices are not very consistent with these goals. The redesign of the curriculum as the basis for the 12-year system is still in process and in 2009 new syllabuses and new textbooks have been completed for primary grades 1 and 2.

The school curriculum and teaching methods have not kept up with the new demands in the labor market. The curriculum continues to be too theoretical and fact and memory-based and is focused on traditional academic subjects, while teaching continues to be teacher-centered and highly didactic rather than interactive. Much current classroom methodology encourages memorization rather than critical and creative thinking and individual learning rather than teamwork. While information and communication technologies (ICT) and English language subjects are part of the curriculum, teachers are generally not well prepared to teach these subjects. In many cases, the teaching of ICT is limited by the poor availability of computers in schools and inadequate operational budgets, which are widely inadequate to finance ICT consumables, additional electricity costs, and maintenance and servicing charges, and the costs of internet connection. There is also a serious shortage of relevant e-materials developed in the Mongolian language. The teaching of thinking and behavioral skills can be integrated into every aspect of the curriculum through discovery-oriented teaching methods that include interactive learning, applying knowledge to real-life problems, integrating teamwork and peer tutoring into the learning process, and inviting student input into the structure and subject matter of lessons. However, these methodologies require well-trained teachers and adequate classroom facilities to make them effective in terms of delivering new educational outputs.

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

The current economic crisis and budgetary constraints have had a significant direct impact on education. The primary and secondary school sector prior to the current financial crisis was widely considered to be under-funded in terms of its recurrent operational budget and this situation has worsened with the 2009 budget cuts, which have resulted in significant cutbacks in school activities and services, and learning and teaching opportunities for students, which seriously undermine educational quality.

There are a number of **cross-cutting, management issues** that need to be addressed urgently in order to improve the performance of the sector as a whole:

**Budgeting**. In preschools, primary, and secondary schools, (as well as non-formal education and technical and vocational education), norms-based budgeting is used which is not precise enough to cover accurately the diversity of school situations. There is a lack of relationship between school recurrent budgets and investments. There is an urgent need to review the budgeting mechanisms to cope with diverse school situations and particularly the mismatch between investments and supporting operational budgets to utilize the investments. In primary and secondary schools, (as well as non-formal education and technical and vocational education), operational budgets are now frequently reported to be inadequate to maintain effective school operations and activities.

**Inaccurate Data**. There are reports of quite widespread misreporting of enrollment data and in particular the misreporting of boarders, dropouts, persistent absenteeism, and outward migrations. The falsification or misreporting is motivated by a desire to achieve adequate budgets in an effort to continue providing basic school services and activities, which would not be possible if accurate reporting were maintained. The overall impact of this, of course, is that budgeting and planning may be based on unreliable data.

**Performance Monitoring and Evaluation**. There is a lack of adequate monitoring and supervision at all levels of education. Because of the great distances involved in Mongolia, monitoring and supervision are much more expensive activities than in most other education systems and they tend to be more limited in times of financial constraint. In addition, there is a lack of reliable performance evaluation mechanisms to measure student, school and system performance in a consistent and reliable manner and also to measure the impact of the current financial crisis on system outputs. The system currently has no access to international comparative performance testing, although the Trends in International Mathematics and Science Study (TIMSS) will be launched in Mongolia in the near future. The shift to student-centered learning and a skills-based curriculum will only be effective if a national skills-based assessment system is introduced.

**Efficiency and Targeting**. Lack of operational efficiency in a wide variety of areas suggests that the educational system often represents a significant waste of scare resources. There is a need to upgrade the efficiency of financial management is a need for improved targeting and in particular the improved monitoring and supervision of social transfers.

**2.3 Challenges by Education Sub-Sector**

Below are presented, by subsector, the issues and challenges that Mongolia is facing for its educational development and which will have to be addressed in education policies and strategies.

*Preschool Education:*

|  |  |
| --- | --- |
| Access | 1. School preparedness of herder children and children from poor families is low due to unequal access to preschool education 2. Access of disabled children to preschool education is limited 3. The kindergartens in city *ger* districts are overcrowded and seats are limited 4. Private preschools enroll 6.7% of preschool children but are mostly confined to urban areas 5. The introduction of free preschool meals has been a major factor in expanding preschool enrolment but maintaining the free meals program will be a challenge during the current financial crisis 6. The cost of parental contributions for hygiene and sanitary supplies and learning and teaching materials vary quite widely according to location and inhibits enrolments for children from poor families |
| Quality and relevance | 1. Kindergartens need to feed children with healthy, high quality, hygienic and safe food meeting the standards and physiological requirements of the children 2. The quality of alternative preschool education services still does not meet the required standards 3. Overcrowding in city *ger* kindergartens reduces the quality of preschool education 4. Kindergarten hygiene and sanitary conditions are often still substandard to meet required health and safety standards 5. The learning and teaching environment in kindergartens is frequently inadequate to meet preschool education and open curricula requirements 6. There is an urgent need to refine the national preschool performance standards and assessment methods |
| Management | 1. There is need to develop a financing instrument for improving the efficiency and quality of kindergarten education services 2. Capacity development of kindergarten teachers and managers is inadequate to meet new educational standards and needs and a major teacher and management training and upgrading program is required 3. There is need to develop and implement state integrated policies and programs in support of the systematic development of early childhood education 4. Preschool monitoring and evaluation structure needs to be refined 5. An inter-sectoral child-centered database for preschool education should be designed and established as part of the main MECS EMIS |

*Primary and Secondary Education*:

|  |  |
| --- | --- |
| Access | 1. The number of 6-15 years old children, who are out of school, is not decreasing at the desired level due to insufficient registration and inadequate enrolment activities 2. It is estimated that 20% of 6-year olds are currently not enrolled in schools 3. Number of schools are not yet ready in terms of furniture, facilities and teacher training to receive 6-year olds 4. School dropout rates are not decreasing significantly and the constitutional rights of children to be educated are violated 5. There are significant differentials in access to education between rural and urban areas and between city *ger* districts and city centre schools 6. The availability of adequate dormitory facilities is inadequate and living conditions and school meals are widely perceived to be of poor quality 7. Statistics and education indicators suggest continuing gender inequity in access to education at upper secondary level 8. Educational services for disabled children and children with special educational needs are inadequate 9. School mapping is required in order to rationalize school structure, types and location 10. Increasing parental costs of sending children to school significantly inhibits educational access for the children of poor families 11. Monitoring on “Supply of textbooks and learning materials for children from poor families” program is inadequate |
| Quality | 1. There is inadequate progress in the development of standards, curricula and syllabuses for the 12-year education system 2. The current student achievement survey among students of primary grades shows that only 50% meet the required standards 3. There are lack of investments to comprehensively resolve salaries and benefits, and social support for teachers 4. There are inadequate policy regulations and human resource capacity to ensure the effective implementation of new standards and programs 5. There is limited access to internet and lack of ICT and laboratories. 6. Supply of learning and teaching materials required to support the objectives of the new curriculum is insufficient 7. Implementation of new curricula and standards require improvements in both pre- and in-service teacher training 8. There is inadequate access to quality English language (and other foreign language) training 9. Declining school operational budgets are having an adverse impact on the quality of education offered by schools, particularly in small rural schools 10. Construction and infrastructure issues continue to undermine the school and dormitory quality in suburban and rural schools |
| Management | 1. The current lack of a comprehensive and reliable EMIS has an adverse impact on effective planning and budgeting and the delivery of quality education services 2. Monitoring and evaluation system is not meeting current needs and requirements 3. There are insufficient results-based accountability mechanisms operating in the schools. Initial attempts (e.g. the use of school performance contracts) did not produce expected outcomes 4. There is insufficient human resource capacity to resolve the problems and issues raised during policy implementation 5. School management is adversely affected due to weak focus on competence and ethical criteria in the recruitment of the management staff. 6. There is a lack of active parental involvement in school management and decision-making and a lack of school accountability to parents and students |

*Non-formal Education:*

|  |  |
| --- | --- |
| Access | 1. Access to adult literacy education is limited, not well organized, and the financing mechanism is not clear. 2. Opportunities for children and youth to be enrolled in NFE is limited, and NFE monitoring is inadequate; legal environment and monitoring and evaluation mechanism to appraise the learning outcomes has not been fully established. The main cause is the lack of budget allocated on NFE sector. 3. Access to NFE services for the population remote rural regions is limited to literacy education and EP training. 4. Life-long educational services for adults are limited, and the use of ICT and the mass media in life-long education services remain very limited. 5. There is a lack of policies and strategies on establishing life-long education system. 6. Coordination between formal and non-formal education services is poor. |
| Quality and relevance | 1. Capacity, particularly human resources, of NFE institutions at all levels is limited which undermines the life-long education environment. 2. The training and equipment supply in enlightenment centers is inadequate. 3. The quality, efficiency and organization of EP education are insufficient; services for herder children are inadequate due to unresolved issues such as the supply of dormitories and food. 4. Mechanisms to train NFE teachers and undertake results-based teacher evaluation is inadequate; social issues (e.g. salaries and benefits) of NFE teachers are not addressed at the same level as primary and secondary education teachers. |
| Management | 1. National comprehensive policy on non-formal and adult education is missing; there is a need to create a special unit in-charge of the sub-sector within the education structure. 2. The current legislative environment of NFE is not being properly enforced; there is lack of incentives for the population obtain continuous life-long education 3. Involvement of policy makers, schools, and other stakeholders in NFE process is inadequate 4. EMIS in NFE is incomplete 5. The financing mechanism for NFE has not been fully addressed; budget for operating costs is not allocated in any level of NFE. Coordination between GoM, NGOs, enterprises and individuals working in NFE is insufficient and a sound regulatory mechanism is absent 6. A national monitoring and evaluation system in NFE sector is absent. |

*Technical and Vocational Education and Training (TVET):*

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| --- | --- |
| Access | 1. TVET enrolment in 2008 has well surpassed the initial target and now represents an increase of 172% over 2005 roll numbers. 2. The upgrading of premises, workshops, dormitories and facilities and equipment has failed to keep pace with the rapid growth in enrolments |
| Quality and relevance | 1. There is a need to accelerate the progress of the reform of TVET standards, training curricula, and methodologies 2. Student admission criteria for TVET is imprecise. 3. Teachers lack necessary professional skills, methodologies, and new technologies. 4. TVET centers are not adequately provided with equipments, laboratories, and training tools in consistence with the modern technological innovation 5. TVET graduates are not able to meet the quality criteria of the labor market. 6. Proper pre-service and in-service training system – necessary to meet labor market, production and modern technology needs – is not established. |
| Management | 1. In recent years, the policy on TVET was primarily focused on enrollment numbers rather than impact on quality of training. 2. Linkage between TVET and labor market demand is weak. 3. Business enterprises and industrial sectors are not actively involved in development of effective policy and strategy on TVET. 4. There is a need to refine the professional and methodological guidance and planning in TVET institutions. 5. There is a lack of an integrated TVET management information system and comprehensive research on labor market. |

*Higher Education:*

|  |  |
| --- | --- |
| Access | 1. Enrolment is still not correlated with labor market demand and national policies and priorities. 2. There are insufficient graduates in natural science, agriculture, engineering and technology, and teaching. 3. There is an imbalance between student numbers in higher education institutions and those in TVET institutions 4. The ratio of graduate students to total higher education enrolment remains too low. 5. Opportunity to obtain higher education in rural areas is limited |
| Quality and relevance | 1. Number of minor higher education institutions has over-increased; higher education institutions with less than 300 students account for 30% of all institutions. Merely 11% of all students are enrolled to these institutions. 2. Infrastructure, facilities and equipment – particularly buildings, science laboratories, workshops, ICT facilities and libraries – are in urgent need of investment. 3. The standards for training and research in higher education institutions need to be upgraded, and the quality assurance system is not fully effective 4. The supply of teachers and their professional capacity is insufficient 5. The professional levels and skills of graduates do not meet labor market requirements 6. The research capacity of universities and higher education institutions remains weak and uncompetitive in comparison with international standards. Recent figures suggest that research activity represented less than 1.5% of total higher education budgets compared to international levels of 7-10% 7. The quality of Masters and PhD training does not meet the international standards |
| Management | 1. The operation of the State Training Fund is inefficient, and loan returns are inadequate 2. The status of higher education institutions is unclear. 3. A national scholarship system that supports skilled and capable students is lacking. 4. Partnerships between higher education institutions and business entities is weak 5. Salaries of university teachers are insufficient, and their value in the labor market is low 6. There are anomalies concerning the awarding of academic degrees |

**CHAPTER 3**

**POLICY AND STRATEGIC FRAMEWORK OF THE MASTER PLAN**

**(2009-2015)**

**3.1 Education Vision and Mission**

**VALUES**

1. Quality

2. Equity

3. Social Participation

**VISION**

The vision of the education sector is to contribute, by educating Mongolian children, youth and adults, to sustainable development, national sovereignty and security, as well as to further enrichment of the culture of Mongolia.

**MISSION**

The mission of the education sector is:

* to provide accessible, high quality, efficient and sustainable educational services to all citizens of Mongolia,
* to develop their full potential through the acquisition of skills, knowledge, technologies and values as the basis for problem solving and good life choices, and
* to create the condition of equal opportunity for all to live comfortably in a humane and democratic society.

**3.2 Priorities of the Education Sector**

1. Reduce and eliminate unequality situation when people cannot have opportunities for universally accessible and quality education, which meets demands of people, due to disparities in social and cultural status and living conditions, and implement specialized programs aimed at student-children within the framework of social protection and social welfare policy to be pursued by the state to ensure a right of people to learn
2. Renew educational standards and curriculum at levels and renew standards, policy, strategies and regulations systematically to be pursued in order to ensure demands and needs to reveal and develop talents, to learn continuously responsibility and ethics of living independently in society, to work, live quality life and make choices
3. Renew monitoring and information management to raise financial, budget and technological conditions, allocate and spend them adequately in order to improve conditions and possibilities of students, teachers and employees to learn and work in safe and healthy environment in satisfactory manner, which will fulfill educational standards and requirements, and to provide equal opportunities to access quality educational services
4. Make strong investment to human resource development and resolve issues of professional methodological development, salaries, benefits and social issues in conformity with the priority status of the sector, which impact the social development, and with substance of methodological changes to occur in content of work of teachers of general educational schools and kindergartens
5. Connect all educational institutions, schools and kindergartens to Internet, and introduce ICT into training, information exchange, monitoring, evaluation and registration systems.
6. Develop school-based management, support development of organizations, reform educational administrative and professional management systems of unit institutions to have rational distribution, decentralization and transfer of powers to make decision at local and national level, adequate system of powers and responsibilities and transparent monitoring
7. Increase responsibility of the Government of Mongolia through creating funding, technical, budget, financial, human and technological resources needed for implementation of objectives set forth based on needs to renew and upgrate quality, accessibility and equality of education through ensuring active and creative participation of state and non-governmental organizations, enterprises, individuals, governments of foreign countries, international specialized and financial organizations, and improving mechanisms of their cooperation.

**3.3 Objectives and Strategies of Education Sector (2009-2015)**

In pursuit of the vision of the education sector and the Education for All (EFA) goals, as well as in fulfillment of the mission assigned to the Ministry of Education, Culture and Science (MECS), the following objectives will be achieved to address the aforementioned priorities issues of the education sector by 2015, through appropriate and adequate implementation strategies. The objectives and implementation strategies are presented below by subsector and, within each subsector, in terms of access, quality and relevance, and management.

**Preschool Education**

|  |  |  |
| --- | --- | --- |
|  | **Objectives** | **Implementation Strategies** |
| 1. | Achieve 93% gross enrollment rate for preschool education | * Increase kindergarten capacity in needy areas and construct new kindergartens based on school mapping, and responsive to future local demographics, development perspectives and trends * Review parental cost implications for poor families of attending pre-schools and take appropriate action to ensure equity of access * Introduce well organized, family-based kindergarten services in rural and remote areas that meet nomadic life-style requirements * Improve access to kindergartens for poor, disabled and migrant children, as well as for children with special educational needs * Improve access for “out of preschool” children by quality standardization of alternative preschool services * Implement policies and programs to ensure school-preparedness of all preschool children |
| 2. | Develop preschool education service that meets the needs of child development | * Improve the health environment in kindergartens including food, water supply, and sanitary conditions * Provide basis for social services that meet the needs of child development by designing and implementing a comprehensive child development standard * Develop and implement minimum acceptable standards for kindergarten buildings, facilities and the learning and teaching environment * Improve the professional capacity of kindergarten staff through targeted training and make progress in the resolution of issues arising from the terms and conditions of employment * Establish minimum standards for the provision of relevant and appropriate toys, games, reading and counting materials, training manuals, etc. |
| 3. | Improve policies and the legislative and regulatory environment for the provision of preschool education services | * Develop policies and regulations aimed at providing incentives for private sector and community investment in setting up preschool. * Improve coordination between those government ministries involved in the education sector e.g. health, education, social welfare and agencies responsible for preschool feeding programs and other preschool social transfers * Improve cooperation between the private sector, individuals, NGOs and preschools in order to improve access to and quality of preschool services |

**Primary and Secondary Education**

|  |  |  |
| --- | --- | --- |
|  | **Objectives** | **Implementation Strategies** |
| 1. | Improve access to quality educational services to ensure the rights of children to be educated are delivered | * Eliminate differences in access to and quality of educational services resulting from location, employment status of parents, household income and migration * Develop and implement policies aimed at improving access for children whose rights are violated e.g. out-of-school children; children without textbooks or uniforms; children who suffer from hostile attitudes in school because they are poor, migrants or have learning difficulties; children in rural and remote locations where educational access and quality are deficient. * Improve the quality and efficiency of programs for vulnerable children |
| 2. | Set up the learning and teaching environment and conditions to provide quality primary and secondary education | * Develop and implement norms and standards for school facilities and equipment including school buildings, dormitories, furniture, cabinets, labs, and their equipment, computer rooms, school libraries, textbooks, training tools and create favorable teaching and learning environment in the schools * Review and upgrade pre- and in-service teacher training delivery systems based on realistic assessments of needs, costs and effectiveness; improve social policies towards teaching staff * Reform the student assessment system to ensure fair and accurate assessments and national comparability in the interests of students and progress towards the achievement of education objectives and standards |
| 3. | Improve management capacity of the schools and implement school support strategies | * Strengthen school and system accountability * Improve the legislative and regulatory environment for supporting school activities, and enforce the implementation of these policies * Implement planning and management based on a new and effective EMIS * Specify school, parent and community responsibilities in the delivery of education and in school management and encourage and support more parent and community involvement in schools * Actively involve all interested stakeholders in the education development process, improve coordination between them, and Encourage Public-Private Partnerships (PPP) in the education sector |

**Non-Formal and Adult Education**

|  |  |  |
| --- | --- | --- |
|  | **Objectives** | **Implementation Strategies** |
| 1. | Improve access to quality NFE and adult education to meet the education needs of the population | * Increase the types of open educational services flexible enough to meet the educational needs of different population groups * Develop the legislative and regulatory environment for the provision of continuous lifelong education for adults * Improve education opportunities for children and youth left out of mainstream education provision * Provide training services for poor, vulnerable and unemployed groups of the population in order to improve income earning opportunities and to develop employable skills |
| 2. | Improve the NFE teaching and learning condition at all levels and increase resources | * Improve teaching environment by increasing the capacity and resources of Enlightenment Centers * Increase the capacity of national and local level NFE institutions * Expand research opportunities for NFE and develop professional NFE teacher training capacity |
| 3. | Improve NFE policies and strategies and establish management information and sustainable financing systems for NFE | * Expand opportunities for businesses, NGOs and the private sector in the provision of NFE by all available means * Develop an information, monitoring and evaluation system, and establish a management structure for developing, planning, and implementing NFE policies * Clearly define a reliable and sustainable financing mechanism for NFE and establish efficient monitoring and evaluation. |

**Technical and Vocational Education and Training (TVET)**

|  |  |  |
| --- | --- | --- |
|  | **Objectives** | **Implementation Strategies** |
| 1. | Increase the number of students covered by the vocational education and training sub-sector by 30% compared to 2008 | * Increase the number of TVET institutions in based on national development priorities * Expand the types and scope of TVET and continue providing state support for students * Increase the capacity of TVET centers * Align the national and regional development strategy with the need to develop aimags and rural areas, and enable the efficient use of TVET centers by setting them in optimal locations |
| 2. | Improve the training quality of vocational education and training and create the human resources to ensure the demands of the labor market | * Conduct national studies on the effectiveness of TVET outputs in response to labor market demand * Refine education standards, training curricula and methodologies to ensure market demand-based TVET courses services * Develop the professional knowledge, capacity and teaching skills of TVET teachers * Provide state support in the provision of textbooks and training tools for priority professional subjects * Provide practical training units in TVET centers with appropriate equipment and facilities necessary to prepare professionals to meet market demands * Link TVET with industry and business in the identification of needs * Strengthen the accreditation capacity of TVET institutions and their programs and set up a reliable and transparent quality assurance system |
| 3. | Review and upgrade the management of vocational education and training | * Introduce reforms in regulations and procedures to focus on providing TVET oriented to meeting market demand * Refine financing structure of TVET * Enhance Social Partnerships in the TVET sub-sector * Strengthen resources and management of the TVET workforce at the national and institutional level * Establish quality- and output-oriented priorities |

**Higher Education**

|  |  |  |
| --- | --- | --- |
|  | **Objectives** | **Implementation Strategies** |
| 1. | Improve the regulatory mechanism for higher education enrollment | * Expand the services provided by higher education institutions and enable transparency * Align the activities of higher education institutions with national economic structure and market demand * Provide specific targeted support to students studying engineering, technology, natural sciences, and agriculture |
| 2. | Create an effective and transparent higher education quality assurance system | * Review and refine the standards and curricula of higher education * Harmonize the accreditation of training curricula with international standards * Improve the human resources and teaching capacity of higher education institutions * Improve quality assurance monitoring and assessment in higher education institutions and provide a favorable legal environment for open and cost and quality-based competition among institutions * Provide support for the upgrading and modernization of basic training, research and production facilities in higher education institutions * Create a supportive environment to upgrade learning opportunities for skilled and capable students |
| 3. | Provide rational management and financing system for higher education | * Reform the legal environment covering higher education management, funding, institutional governance and the existing government tuition loan and scholarship system * Strengthen the capacity of higher education management * Explore ways and means to reduce the cost inefficiencies and to improve the education quality of multiple small-scale HE institutions |

**3.4 Education Sub-Sector Targets (2009-2015)**

Below are presented the yearly targets to achieve the Government education policy by 2015. The targets are specified by subsector and, within each subsector, in terms of enrolment, quality and relevance, and management. All the targets mentioned below are to be achieved by 2015, unless otherwise specified.

**Preschool Education**

*Enrolment:*

* Increase gross enrolment rate (GER) in pre-school education by 20 percentage points (pp) to reach 93% GER by 2015.

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| --- | --- | --- | --- | --- | --- | --- |
| Preschool Education | Target | 2008-2009 | 2009-2010 | 2010-2011 | 2011-2012 | 2015-2016 |
| Baseline |
| Gross enrolment rate | 93% | 73% | 73% | 74% | 78% | 93% |
| Of which: urban children: |  |  |  |  |  |  |
| In kindergarten | 81% | 69% | 64% | 67% | 68% | 81% |
| In alternative forms | 12% | 7% | 7% | 8% | 9% | 12% |
| Of which: rural children: |  |  |  |  |  |  |
| In kindergarten | 34% | 41% | 42% | 37% | 39% | 34% |
| In alternative form | 59% | 28% | 32% | 37% | 41% | 59% |

*Note:*

* *81% and 12% of city children will be, respectively, enrolled in kindergartens and alternative forms of education.*
* *34% of rural children will be enrolled in kindergartens, and 59% in alternative forms of preschool education.*
* Kindergarten gross enrollment rate will be increased by 12% in urban areas to reach 81%, and reduced by 7% in rural areas to reach 34%
* *Alternative forms of preschool education will be increased by 5% in urban areas to reach 12%, and by 31% in rural areas to reach 59%.*
* Achieve 99% gross enrolment of preschool education for 5 year olds.
* Percentage of children enrolled in private kindergartens will be increased by 13.5% compared to 2009 level to achieve 30%.

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| --- | --- | --- | --- | --- | --- | --- |
|  | Target | 2008-2009  Baseline | 2009-2010 | 2010-2011 | 2011 -2012 | 2015 -2016 |
| % of children enrolled in private kindergartens | 30% | 6.5% | 9.8% | 13.2% | 16.5% | 30.0% |

*Quality and Relevance:*

* Kindergarten feeding costs will be supported based on required calories and nutrition for pre-school children, reflecting a 5% annual inflation rate.
* 28,244 new kindergarten places will be added in the form of the construction of new buildings, the expansion of existing buildings and the development of *ger* kindergartens.

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| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2009-2010 | 2010-2011 | 2011-2012 | 2012-2013 | 2013-2014 | 2014-2015 | 2015-2016 |
| Number of places | 1,115 | 6,169 | 7,304 | 7,077 | 4,588 | 2,437 | 1,356 |

* Preschool student/teacher ratio will be reduced from 12.9 to 11, and class size will be reduced from 28.6 to 25.
* All kindergarten teachers will be certified professional teachers.
* All kindergartens will be provided with full-time teachers and associate teachers.
* No less than 20% of kindergarten teachers will be enrolled in complete in-service module training.
* Each professional kindergarten teacher will be provided with training on the use of ICT in teaching and learning.
* Each classroom will be provided with supplies of 5 types of teaching guides and training materials for children and teachers.
* Funding for kindergarten toys, reading and counting materials, games, tools and equipment will be increased by 51 percentage point compared to 2009.
* Funding for classroom equipment will be increased by 72.5 percentage point compared to 2009.
* Investment for the renovation of kindergarten buildings will be increased by 72 percentage point compared to 2009.

*Management:*

* An integrated cooperative management system will be established in line ministries and organizations, which provide social services for pre-school children.
* Institutional arrangements will be established to ensure healthy and safe kindergartens.
* The participation of parents and the community will be improved in the monitoring and evaluation of the service quality, efficiency and outputs of pre-school education.
* Managerial skills and ethics of kindergarten managers will be improved through systematic training.

**Primary and Secondary Education**

### *Enrolment:*

* Expand the school snack program for primary-level students into a school lunch program.
* Ensure that 100% of students who apply for dormitory are accommodated and increase dormitory enrolment from 31.6% to 36% of those primary and secondary-level students in need of dormitory accommodation.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2008-2009  (Baseline) | 2009  2010 | 2010  2011 | 2011  2012 | 2012  2013 | 2013  2014 | 2014  2015 | 2015  2016 |
| No of students in need of dormitory accommodation | 134,542 | 145,625 | 141,542 | 138,781 | 135,163 | 149,238 | 149,961 | 148,807 |
| From which:  Accommodated (%) | 31.3% | 32.0% | 32.6% | 33.3% | 34.0% | 34.6% | 35.3% | 36.0% |
| Accommodated (#) | 42,086 | 46,529 | 46,172 | 46,202 | 45,902 | 51,683 | 52,938 | 53,527 |
| Students accommodated in dormitory as % of total applicants | 87% | 89% | 91% | 92% | 94% | 96% | 98% | 100% |

* Enroll 100% of students from herders’ families who apply for accommodation and increase dormitory enrolment from herders’ families from 30.6% to 35%.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2008-2009  (Baseline) | 2009  2010 | 2010  2011 | 2011  2012 | 2012  2013 | 2013  2014 | 2014  2015 | 2015  2016 |
| Total No of students from herder families | 120,127 | 130,023 | 126,377 | 123,912 | 120,681 | 133,248 | 133,894 | 132,863 |
| From which:  Accommodated (%) | 30.6% | 31.3% | 31.9% | 32.5% | 33.2% | 33.8% | 34.4% | 35.0% |
| Accommodated (#) | 36,808 | 40,657 | 40,310 | 40,302 | 40,009 | 45,013 | 46,071 | 46,551 |
| Herder students accommodated in dormitory as % of total herders’ children applicants | 87% | 90% | 92% | 94% | 96% | 98% | 99% | 100% |

* The Gross enrolment ratios (GER) by 2015 will be:
* 104% at the primary education level (the annual average GER for 2009-2015 being 100%).
* 116% at the secondary education level (the annual average GER for 2009-2015 being 111%).
* 108% at the basic education (the annual average GER for 2009-2015 being 104%).

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2008-2009  (Baseline) | 2009  2010 | 2010  2011 | 2011  2012 | 2012  2013 | 2013  2014 | 2014  2015 | 2015  2016 | **Annual average** |
| GER in primary | 86% | 97% | 99% | 99% | 97% | 113% | 108% | 104% | **100%** |
| GER in secondary | 127% | 112% | 109% | 107% | 98% | 106% | 113% | 116% | **111%** |
| GER in basic education | 100% | 103% | 102% | 102% | 97% | 111% | 110% | 108% | **104%** |

*Note: The EPSSim simulation model projected the GER using the 6:3:3 structure of the 12-year education system, hence, the GER is shown as non-linear growth due to the shift from the 11 to 12-year primary and secondary education system.*

* Achieve the gender parity in GER (the annual average gross enrolment rate of male and female students for 2009-2015 being 101 percent and 100 percent, respectively).

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Gross Enrolment Rate | 2008-2009  (Baseline) | 2009  2010 | 2010  2011 | 2011  2012 | 2012  2013 | 2013  2014 | 2014  2015 | 2015  2016 | **Annual Average** |
| Male | 87% | 98% | 100% | 101% | 98% | 114% | 109% | 104% | **101%** |
| Female | 86% | 96% | 98% | 98% | 96% | 112% | 108% | 104% | **100%** |

* Enroll 64% and 65% of the total male and female primary-school-aged children, respectively, in urban primary education schools[[3]](#footnote-4).

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2008-2009  (Baseline) | 2009  2010 | 2010  2011 | 2011  2012 | 2012  2013 | 2013  2014 | 2014  2015 | 2015  2016 |
| Proportion of urban male in total male students | 60% | 63% | 64% | 65% | 65% | 65% | 65% | 64% |
| Proportion of urban female in total female students | 61% | 64% | 65% | 66% | 66% | 66% | 66% | 65% |

* Admit all 6 and 7 year-old children in the 2009/10 academic year (Gross intake rate in primary education will be at least 100%).

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Gross intake rate in primary education | 2008-2009  (Baseline) | 2009  2010 | 2010  2011 | 2011  2012 | 2012  2013 | 2013  2014 | 2014  2015 | 2015  2016 |
| Male | 137% | 130% | 123% | 115% | 108% | 100% | 100% | 100% |
| Female | 131% | 126% | 119% | 113% | 106% | 100% | 100% | 100% |

* Increase the secondary school gross and annual average enrolment rate for male students to 118% and 110%, respectively; increase the secondary school gross and annual average enrolment rate for female students to 114% and 112%, respectively.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Gross enrollment rate: | 2008-2009 | 2009-2010 | 2010-2011 | 2011-2012 | 2012-2013 | 2013 | 2014-2015 | 2015-2016 | **Annual Average** |
| Male  Female | 124%  130% | 110%  115% | 107%  111% | 105%  109% | 97%  99% | 106%  106% | 115%  111% | 118%  114% | **110%**  **112%** |

* Improve the involvement of private schools to 6.8% at primary, 7.5% at secondary and 7.9% in upper primary.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2008 2009 | 2009 2010 | 2010 2011 | 2011 2012 | 2012 2013 | 2013 2014 | 2014 2015 | 2015 2016 |
| Enrollment of students in private primary and secondary education schools (%) | | | | | | | | |
| Primary level | 4.4% | 4.9% | 5.3% | 5.6% | 6.0% | 6.3% | 6.6% | 6.8% |
| Secondary level | 4.1% | 4.5% | 5.0% | 5.5% | 6.0% | 6.5% | 7.0% | 7.5% |
| Upper secondary level | 7.8% | 8.1% | 8.2% | 8.4% | 8.5% | 8.8% | 9.1% | 9.5% |

* In urban schools, 68.5% of male children and 69.5% of female children will be enrolled in secondary grades, and 74.3% of male children and 74.8% of female children will be enrolled in upper secondary grades.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Gender balance in secondary grades (in urban areas) | 2008-2009  (baseline) | 2009  2010 | 2010  2011 | 2011  2012 | 2012  2013 | 2013  2014 | 2014  2015 | 2015  2016 |
| Male | 62.9% | 63.0% | 63.5% | 64.9% | 66.3% | 67.2% | 67.6% | 68.5% |
| Female | 63.0% | 63.1% | 64.0% | 65.5% | 66.9% | 67.7% | 68.2% | 69.5% |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Gender balance in upper secondary grades (in urban areas) | *2008-2009*  *(baseline)* | 2009  2010 | 2010  2011 | 2011  2012 | 2012  2013 | 2013  2014 | 2014  2015 | 2015  2016 |
| Male | 73.7% | 74.3% | 74.6% | 74.7% | 74.8% | 75.1% | 73.7% | 74.3% |
| Female | 74.1% | 74.8% | 73.9% | 72.8% | 72.1% | 73.2% | 74.1% | 74.8% |

* Reduce the basic education dropout rate from 1.3% to 0.3% and provide appropriate NFE learning for dropouts.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Students in basic education (6-14 age) | 411,693 | 444,288 | 434,646 | 426,524 | 422,694 | 425,168 | 433,500 | 443,824 |
| Percentage of dropouts in basic education | 1.30% | 1.16% | 1.02% | 0.87% | 0.73% | 0.59% | 0.44% | 0.30% |
| Number of dropout students | 5,360 | 5,154 | 4,433 | 3,711 | 3,086 | 2,508 | 1,907 | 1,331 |
| Of which: |  |  |  |  |  |  |  |  |
| One-year dropouts back to school\* | 3,510 | 2,144 | 2,061 | 1,773 | 1,484 | 1,234 | 1,003 | 763 |
| Two-year dropouts back to school\* |  | 1,755 | 1,031 | 887 | 742 | 617 | 502 | 381 |
| Total dropouts re-enrolled to school |  | 3,899 | 3,092 | 2,660 | 2,226 | 1,851 | 1,505 | 1,144 |
| Students in NFE training programs\*\* |  | 3,510 | 2,144 | 2,061 | 1,773 | 1,484 | 1,234 | 1,003 |

***Note: \**** *Re-enroll 40 percent of one-year dropouts and 20 percent of two-year dropouts back to primary and secondary schools. \*\* Provide formal education and equivalency training for 40 percent of dropout students in primary and secondary education.*

### *Quality and Relevance:*

* Construct new and expand existing primary and secondary school buildings with 4,000 classrooms and dormitories with 2,600 rooms.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|  | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Number of classrooms needed in schools | 11,523 | 11,843 | 11,549 | 11,349 | 11,075 | 12,043 | 12,087 | 11,862 |
| New classrooms to be constructed and expanded | 0 | 1,261 | 248 | 197 | 431 | 1,260 | 349 | 229 |
| Number of rooms needed in dormitories | 7,248 | 6,987 | 6,789 | 6,689 | 6,599 | 7,389 | 7,556 | 7,687 |
| New dormitory rooms to be constructed and expanded | 0 | 465 | 112 | 148 | 266 | 952 | 333 | 341 |

* Develop and implement national education standards and curricula in alignment with the education standards in developed Asian countries.
* Provide access to free textbooks to 100% of students of 12 year schooling, 40-80% to primary education students and 40% to lower and upper secondary education students of 11 year schooling.
* Provide access to textbooks to all students for every subject (provision of textbooks will reach 100%), as well as teachers’ guides to every teacher for every subject free of charge.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Targeted year** | **Lifespan** | **2008-2009**  **(Baseline )** | **2009**  **2010** | **2010**  **2011** | **2011**  **2012** | **2012**  **2013** | **2015**  **2016** |
| **Textbook provision** | | | | | | | | |
|  | 7 |  | 70% | 73% | 78% | 83% | 88% | 100% |
| **Primary Education** |  |  |  |  |  |  |  |  |
| Textbook per student | 4 | 3 | 1,2 | 2.65 | 4.10 | 5.55 | 7.00 | 7.00 |
| Teaching Guide per teacher | 4 | 3 | 0 | 1.75 | 3.50 | 5.25 | 7.00 | 7.00 |
| **Lower Secondary Education** |  |  |  |  |  |  |  |  |
| Textbook per student | 4 | 3 | 3 | 6.0 | 9.0 | 12.0 | 15.0 | 15.0 |
| Teaching Guide per teacher | 4 | 3 | 0 | 3.8 | 7.5 | 11.3 | 15.0 | 15.0 |
| **Upper Secondary Education** |  |  |  |  |  |  |  |  |
| Textbook per student | 4 | 3 | 2,2 | 4.4 | 6.6 | 8.8 | 11.0 | 11.0 |
| Teaching Guide per teacher | 4 | 3 | 0 | 2.8 | 5.5 | 8.3 | 11.0 | 11.0 |

* Strengthen the ICT-in-education programme

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Target | Targeted years | 2008-2009 | 2009  2010 | 2010  2011 | 2011  2012 | 2012  2013 | 2013  2014 | 2014  2015 | 2015  2016 |
|  | (Baseline) |
| Teacher/computer ratio |  |  |  |  |  |  |  |  |  |  |
| In urban areas | 1 | 7 | 18.5 | 16.0 | 13.5 | 11.0 | 8.5 | 6.0 | 3.5 | 1.0 |
| In rural areas | 1 | 7 | 7.5 | 6.6 | 5.7 | 4.7 | 3.8 | 2.9 | 1.9 | 1.0 |
| Student/computer ratio |  |  |  |  |  |  |  |  |  |  |
| In urban areas | 25 | 7 | 34.2 | 32.9 | 31.5 | 30.2 | 28.9 | 27.6 | 26.3 | 25.0 |
| In rural areas | 25 | 7 | 36.5 | 34.9 | 33.2 | 31.6 | 29.9 | 28.3 | 26.6 | 25.0 |
| Proportion of schools  with internet access | 100% | 7 | 51 | 58 | 65 | 72 | 79 | 86 | 93 | 100 |

*Note:*

* *Every teacher in primary and secondary schools will be provided with access to a computer; teachers’ ICT skills will be improved.*
* *Student/computer ratio will reach 25:1 in primary and secondary education schools.*
* *100% of primary and secondary schools will be connected to the Internet.*
* *It will be ensured that all schools have sufficient ICT-related operational funding to cover consumables, increased power costs, internet costs and maintenance to guarantee that ICT hardware is regularly and effectively used in teaching and learning.*
* Increase funding for training equipments and tools for primary and secondary education schools by 8% annually.
* Ratio of non-teaching staff to total number of school employees will reach 1:3.7 in urban areas and 1:2.4 in rural areas.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2008-2009  (Baseline) | 2009  2010 | 2010  2011 | 2011  2012 | 2012  2013 | 2013  2014 | 2014  2015 | 2015  2016 |
| **Total staff/non-teaching staff ratio** | | | | | | | | |
| In urban areas | 3.4 | 3.4 | 3.4 | 3.5 | 3.5 | 3.6 | 3.7 | 3.7 |
| In rural areas | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | 2.4 |

* Increase financing for in-service teacher training by more than 10% every year.
* Enroll over 50% of school teachers into in-service accredited training programs, annually.
* Enroll approximately 200 school teachers in overseas in-service training and study tour programs annually.
* Involve at least 200 teachers into foreign professional development and experience exchange training, annually.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2009  2010 | 2010  2011 | 2011  2012 | 2012  2013 | 2013  2014 | 2014  2015 | | 2015  2016 | |
| Number of teachers enrolled in overseas in-service training and study tours | 110 | 132 | 158 | 190 | 228 | | 274 | | 328 | |

* All school teachers will be certified professional teachers.
* Sustain teacher utilization rate at 100% for all levels of primary and secondary education: weakly workloads will be 19 teaching hours and 25 student hours in primary grades; weakly workload 19 teaching hours and 36 student hours in secondary and upper secondary grades).

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Target | Targeted  years | 2008-2009 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| (Baseline) | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Teacher utilization ratio in secondary and upper secondary grades: | | | | | | |  |  |  |  |
| In urban areas | 100% | 7 | 97% | 98% | 98% | 98% | 99% | 99% | 100% | 100% |
| In rural areas | 100% | 7 | 104% | 103% | 103% | 102% | 102% | 101% | 101% | 100% |

* Student/teacher ratios: by 2015, 27:1 in urban areas and 25:1 in rural areas at primary education level; 15.3:1 in urban areas and 14.3:1 in rural areas at lower and upper secondary levels.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Targeted  years | 2008-2009 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| (Baseline) | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Student teacher ratio in primary grades: | | |  |  |  |  |  |  |  |
| In urban areas | 7 | 31.9 | 31.2 | 30.5 | 29.8 | 29.1 | 28.4 | 27.7 | 27 |
| In rural areas | 7 | 28.3 | 27.8 | 27.4 | 26.9 | 26.4 | 25.9 | 25.5 | 25 |
| Student teacher ratio in lower and upper secondary grades: | | | | |  |  |  |  |  |
| In urban areas | 7 | 15.8 | 15.7 | 15.6 | 15.6 | 15.5 | 15.4 | 15.4 | 15.3 |
| In rural areas | 7 | 15.8 | 15.6 | 15.4 | 15.1 | 14.9 | 14.7 | 14.5 | 14.3 |

* Reduce primary grade class size down to 30 in urban areas and 26 in rural areas, secondary grade class size to 30 in urban areas and 28 in rural areas and upper secondary grade class size to 28 in urban areas and 26 in rural areas.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Target | 2008-2009 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|  |  | (Baseline) | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Primary grade class size |  |  |  |  |  |  |  |  |  |
| In urban areas | 30 | 31 | 31 | 31 | 31 | 31 | 30 | 30 | 30 |
| In rural areas | 26 | 28 | 27 | 27 | 27 | 27 | 26 | 26 | 26 |
| Secondary grade class size |  |  |  |  |  |  |  |  |  |
| In urban areas | 30 | 31.5 | 31.3 | 31.1 | 30.9 | 30.7 | 30.4 | 30.2 | 30 |
| In rural areas | 28 | 29.4 | 29.2 | 29 | 28.8 | 28.6 | 28.4 | 28.2 | 28 |
| Upper secondary grade class size |  |  |  |  |  |  |  |  |  |
| In urban areas | 28 | 29.6 | 29.4 | 29.2 | 28.9 | 28.7 | 28.5 | 28.2 | 28 |
| In rural areas | 26 | 28.3 | 28 | 27.7 | 27.3 | 27 | 26.7 | 26.3 | 26 |

* Provide distance education for upper secondary schools specializing in mathematics and natural science, in each *aimag* and district.
* Increase learning achievement of primary education graduates by 5% every year through rigorous, transparent and objective assessments of students’ performance in mathematics, Mongolian language and Life science.
* Increase learning achievement of secondary education graduates by 4% every year through rigorous, transparent and objective assessments of students’ performance in mathematics, foreign and Mongolian language.
* Increase learning achievement of upper secondary education graduates by 3% every year through rigorous, transparent and objective assessments of students’ performance in selected subjects.
* Percentage of successful graduates from basic education schools will reach 99.5 percent, from upper secondary grades 99.9 percent.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **2008-** | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** |
| **2009 (Baseline)** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** |
| **Percentage of basic education graduates** | |  |  |  |  |  |  |  |
| In urban areas |  |  |  |  |  |  |  |  |
| Male | 94.5% | 95.2% | 96.0% | 96.7% | 97.4% | 98.1% | 98.8% | 99.5% |
| Female | 86.3% | 88.2% | 90.1% | 92.0% | 93.9% | 95.7% | 97.6% | 99.5% |
| In rural areas |  |  |  |  |  |  |  |  |
| Male | 89.1% | 90.6% | 92.1% | 93.6% | 95.0% | 96.5% | 98.0% | 99.5% |
| Female | 85.7% | 87.7% | 89.7% | 91.6% | 93.6% | 95.6% | 97.5% | 99.5% |
| **Percentage of upper secondary education graduates** | | |  |  |  |  |  |  |
| In urban areas |  |  |  |  |  |  |  |  |
| Male | 97.7% | 98.0% | 98.3% | 98.6% | 98.9% | 99.3% | 99.6% | 99.9% |
| Female | 97.5% | 97.9% | 98.2% | 98.5% | 98.9% | 99.2% | 99.6% | 99.9% |
| In rural areas |  |  |  |  |  |  |  |  |
| Male | 93.2% | 94.2% | 95.1% | 96.1% | 97.0% | 98.0% | 98.9% | 99.9% |
| Female | 93.6% | 94.5% | 95.4% | 96.3% | 97.2% | 98.1% | 99.0% | 99.9% |

### *Management:*

* Establish an effective management information system in primary and secondary education.
* Develop strategic policy and planning based on school mapping in compliance with regional development trends.
* Enhance human resource development planning and conduct capacity building trainings for target groups.
* Increase school self- management and expand the number of child-friendly and open schools.
* Establish a school accountability system.
* Establish the national education quality assessment system by participating in international comparative assessments.
* Promote public-private partnerships (PPP) in the primary and secondary education sector by developing appropriate methodologies for its implementation.

**Non-formal Education**

*Enrollment:*

* Literacy rate of females and males will increase by 1.5 and 1.8 percentage points, respectively, in order to increase the overall adult literacy rate from 97.8% in 2008 to 99.5% by 2015.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Target | Targeted years | Annual growth rate | 2008-2009  (Baseline) | 2010 | 2011 | 2012 | 2015 |
| Literacy rate | 99.5% | 10 | 0.15% | 97.8% | 98.9% | 99.2% | 99.2% | 99.6% |
| Male | 99.5% | 10 | 0.1% | 98% | 98.9% | 99.1% | 99.2% | 99.5% |
| Female | 99.5% | 10 | 0.2% | 97.7% | 98.8% | 99.2% | 99.3% | 99.5% |

* 40% of the out-of-school population will be provided with equivalent NFE, and 10% of the primary and secondary school-aged children will be enrolled back into formal primary and secondary schools.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Target | Targeted years | Annual growth rate | 2008-2009(Baseline) | 2010 | 2011 | 2012 | 2015 |
| % of drop-outs enrolled to schools | 10% | 7 | -1.40% | 19.60% | 16.90% | 15.50% | 14.10% | 10% |

* Access to and forms and quality of NFE services, aimed at providing lifelong education, will be strengthened.

*Quality and Relevance:*

* Funding for NFE will be increased annually by 17.2% and will reach 1% of the education budget by 2015.
* By elevating the labor value of NFE teachers, the legislative environment in support of NFE, which will be aimed at addressing social issues, will be improved
* Develop teacher-training programs in the field of non-formal and adult education, and ensure that annual budgets are sufficient to achieve the agreed priority targets in-service training for teachers.

*Management:*

* The management structure will be established at all levels to provide lifelong education opportunities, the formulation of appropriate policies and strategies in pursuit of agreed objectives and to ensure coordination and effective implementation.
* A national information management system database for NFE will be established as part of a comprehensive education sector EMIS in order to provide the NFE sub-sector with reliable information for planning, budgeting and monitoring and evaluation.
* The state policy on NFE and adult education will be developed and implemented.

**Technical and Vocational Education and Training (TVET)**

*Enrolment:*

* The total number of students studying in TVET institutions will be increased by 30% compared to the 2008 baseline.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 2008-2009 | 2009-  2010 | 2010-  2011 | 2011-  2012 | 2015-2016 |
|  | (Baseline) |  |  |  |  |
| Number of students in TVET institutions | 37,867 | 46,945 | 52,930 | 50,931 | 49,213 |
| Growth rate of students in TVET institutions | 100.00% | 23.90% | 39.80% | 34.50% | 30.00% |
| Proportion of students in private TVET institutions | 15.5% | 15.4% | 15.4% | 15.3% | 15.0% |
| Proportion of TVET students in dormitories | 14.3% | 15.0% | 17.5% | 19.4% | 25.0% |
| % graduates from upper secondary to TVET institutions | 22.0% | 28.5% | 33.1% | 31.8% | 33.2% |
| Number of adults enrolled in TVET | 1,791 | 2,060 | 2,369 | 2,724 | 4,764 |

*Note:*

* *Provide support for private TVET institutions, which provide accredited training in priority professional subjects that meet market demand.*
* *Increase the number of TVET students living in dormitories as a percentage of total TVET students by 10 percentage points to reach 25%.*
* *Average annual growth of adult enrolments in TVET programs will reach 15% to enroll over 4,700 adults in TVET institutions by 2015.*

*Quality and Relevance:*

* New TVET schools providing 3,800 places will be constructed.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 2008-2009 | 2009-2010 | 2010-2011 | 2011-2012 | 2015-2016 |
| Number of seats in newly constructed institutions | 570 | 600 | 800 | 630 | 1200 |

* Funds for laboratory equipment and training tools for TVET institutions will be increased by 10.0% annually until established minimum standards of provision have been achieved.
* Textbooks and teachers’ guides will be produced in all subjects studied in TVET institutions.
* Students from vulnerable groups studying in TVET institutions will be provided with free textbooks and training materials.
* All teachers in TVET institutions will be certified professional teachers.
* The teacher to non-teacher ratio in TVET institutions will be 3:1.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 2008-2009  (Baseline) | 2009-2010 | 2010-2011 | 2011-2012 | 2015-2016 |
| Teacher and non-teacher ratios | 1.9 | 2.1 | 2.2 | 2.4 | 3.0 |

* All teachers will be enrolled in in-service training programs.
* 20 teachers will be enrolled annually in overseas in-service training programs.

*Management:*

* PPPs in the TVET sector will be actively encouraged.
* Comprehensive research on labor market needs and trends will be funded and conducted.
* A specialized reliable TVET EMIS will be developed as part of the comprehensive MECS EMIS as the basis for planning, budgeting, monitoring and evaluation.
* TVET policies, strategies and the legal framework will be reviewed and improved and should aim to attract and stimulate increased foreign investment in the TVET sub-sector.

**Higher Education**

*Enrolment:*

* Increase enrollment of students majoring in engineering, technology, natural sciences, education and agriculture from 32 percent to 41 percent of total student enrollment, whilst reducing the proportion of students majoring in humanities, law and medical sciences from 30 percent to 29 percent of the total student enrollment.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Target | Targeted years | 2008-  2009 | 2010-  2011 | 2012-  2013 | 2015- 2016 |
| Engineering and technology, Agriculture, Natural science, Teaching | 41% | 7 | 32.1% | 33.6 | 34.5% | 35.7 |
| Social science and humanities, Law, Medical Science | 28% | 7 | 29.3% | 29.1 | 28.9% | 28.7 |
| Other professional fields | 31.5% | 7 | 38.5% | 37.6 | 36.6% | 35.6 |

*Quality and Relevance:*

* Provide tuition loans from State Training Fund for 3 out of every 5 students majoring in engineering, technology, natural sciences, education and agriculture, and for 2 out of every 5 students majoring in other subjects.
* Funding will be provided to improve the research capacity and environment in universities and higher institutes:
* Provide financial support equivalent to US$25,000 each, for the National University of Mongolia, the Mongolian University of Science and Technology, the Mongolian State University of Education, the Health Sciences University of Mongolia and the Mongolian State University of Agriculture for purchasing textbooks, training manuals and other publications in foreign languages.
* Ensure that university teachers, students and researchers have free access to inter-library network.
* Register national universities to inter-library network.
* In addition to tuition loans and student grants, introduce a tuition scholarship scheme to be funded by the State Training Fund and set the optimal ratio between tuition loans, scholarships, and student grants.
  + Provide support – in the form of grants, tuition loans and scholarships – to students with high learning achievements, and those from poor and vulnerable families.
  + Improve the operational efficiency and transparency of the State Training Fund (provision of support will be evaluated and authorized by an independent Professional Committee).
* Focus foreign grant and support on in-service training for university teachers.
* Develop the capacity and professionalism of university teachers:
  + Provide systematic trainings to improve the professional skills of teachers and staff working in state universities in rural areas
  + Implement a complex capacity building and in-service training program for teachers from higher education institutions, jointly with International Universities and institutions
* Set up a quality assurance system for higher education institutions.

*Management:*

* Set up a national level policy and management which enables higher education to meet the economic structure and labor market demands.
* Harmonize the quality of national research and training activities with the standards and level of the leading international universities.
* Undertake a comprehensive review of the financing and governance of higher education institutions in Mongolia
* Undertake a comprehensive review of higher education provision in Mongolia aimed at course rationalization and national course and institutional accreditation standards.

**CHAPTER 4. MEDIUM-TERM ACTION PLAN**

**(2009 - 2012)**

1. **Preschool Education**

| Program | Strategies | Indicators |
| --- | --- | --- |
| **ACCESS** | | |
| **Objective 1. Achieve 93% Gross Enrollment Rate in Preschool Education.** | | |
| Increase kindergarten enrollment | 1. Construct new buildings and expand capacity of kindergartens in Ulaanbaatar city, Darkhan-Uul, Orkhon and other aimags 2. Expand “alternative forms” of training services of kindergartens 3. Encourage establishment of private, community and institutional kindergartens with state support 4. Improve monitoring and accreditation system to improve quality and services of non-government kindergartens 5. Provide variable cost subsidies to enable poor children to enroll in private kindergartens. | * Number of kindergartens places will be increased by 30,047. * 81% of urban children and 34% of rural children will be enrolled in kindergartens. * The percentage of children enrolled in private kindergartens will be increased to 16.5**%** * The target of teacher/student ratio will be 1:12 and the number of children per section will be 25. |
| Create alternative preschool education services for children of herders’ families | 1. Draft and adopt alternative preschool education service regulations, such as program content, teaching methodologies, teacher training requirements and learning environment for herder’s children in rural areas 2. Increase funding for different types of alternative forms of preschool education services for herder’s children. 3. Develop and implement “ger kindergarten” standards to achieve healthy and safe environment for children enrolled in ger kindergartens 4. Invest in the improvement of conditions in ger kindergartens for water, sanitation, heating and electricity. | * 9% of urban children, 41% of rural children will be enrolled in the alternative forms of preschool education * Alternative class enrollment of children from poor families with income below poverty line will be increased by 30% in comparison with the 2009 baseline. * Alternative preschool content, learning materials, physical environment and the monitoring and evaluation system for pre-school education will have the minimum standards to be enforced by regulations. |
| Increase enrolments in preschool education facilities for children from very poor families | 1. Expand alternative forms of preschool education delivery for children in rural areas and children from poor families from ger districts in urban areas and who are currently not enrolled in the preschool education. 2. Implement a support program to cover the parental costs of toilet and learning materials for children from very poor families enrolled in kindergartens in rural areas and in the urban ger districts. |
| Expand learning opportunities for disabled children in kindergartens | 1. Create conditions in kindergartens for children with disabilities to enable them to participate; improve early diagnosis, rehabilitation, caretaking and other educational services relevant to children with disabilities 2. Implement specialized policies to enroll children with disabilities in the regular kindergartens and supply required facilities and assistance 3. Train kindergarten managers and teachers using individual training methodologies to develop the skills to work with children with disabilities. | * Enrollment of disabled children in preschools to be increased by 30% over the 2009 baseline * Disabled children enrolled in kindergarten will be provided with required special facilities, assistance, tools and learning materials relevant to their needs * Special teacher training modules on the care and support of disabled children in preschools will be developed * Guidelines on the principles and practical implications of inclusive education will be developed and made available for teachers and managers of preschools. |
| **QUALITY** | | |
| **Objective 2. Align Preschool Education to meet needs of child development** | | |
| Improve supply and quality of drinking water and feeding programs in kindergartens | 1. The per capita budget for preschool feeding program in kindergartens will be based on caloric and nutritional norms and food safety standards. 2. The per-capita budget for the feeding will be increased annually in order to maintain the quality and quantity in line with agreed standards 3. A support program for improving health, hygiene and food preparation services in kindergartens will be designed and implemented. 4. The kitchen staff will be trained in the skills needed in the use of appropriate technologies for preparing meals for young children 5. Urban kindergartens without piped water supplies will be connected to the central water supply system 6. Kindergartens will be supplied with kitchen equipment 7. Minimum standards for kindergarten toilets will be developed. | * The per capita budget for preschool feeding in kindergartens will be increased annually to maintain parity with inflation rates * Food safety standards for preschool will be developed by 2010 * Drinking water standards will be developed to meet minimum acceptable quality and safety standards to ensure risk-free conditions in pre-schools. * At least 60% of staff working in the kitchen will be enrolled in the vocational courses. * By 2012 all city kindergartens will have clean water from piped water supplies. * 5% of all kindergartens will be equipped annually with modern kitchen and toilets that meet the required standards. |
| Improve conditions of buildings and supply of training materials and facilities in kindergartens | 1. Ensure healthy and safe environment in kindergartens based on development of physical environment standards 2. Construction and rehabilitation of kindergarten buildings. 3. Renew outdoor toilet facilities and bathrooms of all soum kindergartens to meet required standards 4. Improve supply of toys, equipment and educational tools in kindergartens 5. Increase the number of toilets and bathrooms in the urban kindergartens | * By 2011, the minimum standard for learning environment in kindergartens will be developed * At least 80 kindergarten buildings will be renovated by 2012 * By 2012, the toilets of all kindergartens in soums will be improved to meet required minimum standards * By 2012, the supply of toys and investment in equipment will be increased by 2 times over the 2009 baseline. * All kindergarten classrooms will be supplied with minimum set of specified toys, learning and teaching materials, and equipment. * 40% of all kindergartens will be supplied with the required basic equipment for the classrooms. The number of toilets and bathrooms in kindergartens will be increased by 50% over the 2009 baseline. |
| Improve preschool education content and teaching methods | 1. Develop and implement a new set of early childhood learning and development standards 2. Create and strengthen curriculum planning and development skills in all kindergartens based on new standards 3. Develop and implement national school readiness indicators as a basis for annual evaluation of school readiness in all kindergartens 4. Develop teachers’ and children’s manuals in conformity with new standards, and arrange publication and distribution to all kindergartens funded by the state. 5. Develop e-learning content and a training manual and materials for teachers, parents and children in alternative forms of preschool education | * New preschool education learning and development standards will be researched and made available. * National school readiness indicators and evaluation methodology will be developed * A minimum set of required manuals and learning and teaching materials for teachers, parents and preschool children will be developed * E-learning materials for alternative forms of preschool education will be developed at national and local levels and made available to teachers, parents and students |
| Strengthen human resource capacity of preschool education | 1. Retrain teachers and investment in improving conditions for students in preschool education colleges 2. Supply of full-time professional teachers to all kindergartens; 3. Develop content framework of in-service training for teachers and administrators, and implement comprehensive modular training based on this framework 4. Create electronic professional information resources for teachers 5. Train teachers in ICT skills to support teaching and learning 6. Implement a program to supply ICT to kindergartens and teachers 7. Develop professional certification for the training programs for assistant teachers in kindergartens and organize the training. 8. Develop methodological modules for non-kindergarten early childhood education training and organize the training 9. Organize external training and study tours for selected early childhood education professionals and teachers. | * Every preschool teacher and assistant teacher will be required to undergo some form of professional development training at least once bi-annually * Teacher training budget equivalent to 5% of salary fund will be allocated annually * At least 20% of all preschool teachers will be provided with computers each year * All preschool teachers will have training on ICT use in teaching and learning * Kindergartens will be fully staffed with professionally qualified teachers and assistant teachers * All preschool teachers will be required to complete training modules using e-learning materials * A certification training program for assistant teachers at the preschool education college will be designed and launched * 30 teacher trainers, managers and preschool education policy makers will participate in the external training or study tours every year. |
| **Management** | | |
| **Objective 3. Improve Legal and Policy Framework for Preschool Education** | | |
| Provide policy support and incentives for private sector and other stakeholders in engaging in preschool education service delivery | 1. Create a legal framework for private, community and enterprise-owned preschools to provide early childhood education, development and care. 2. Develop accreditation for providers based on early childhood education, development and care standards 3. Training of early childhood education, development and care professionals in the teacher training colleges. | * Legislation will specify types and quality of preschool education services to be provided, including early childhood education, development, and care and school readiness. * Preschool accreditation and quality assurance mechanisms will be created |
| Improve management of the provision for preschool children | 1. Create an intersectoral management mechanism to provide integrated services from the line ministries and organizations with an interest in, and mandate for, early childhood education 2. Develop training modules for pre-school education managers and organize training 3. Ensure safe, healthy and non-discriminatory preschool environment for all enrolled children protected by appropriate legislation and regulation and an effective monitoring mechanism, which ensures accountability at all management levels 4. Select preschool managers based on managerial skills and experience, and personal ethics. | * A social “child centered” information database to support preschool will be developed * Social intersectoral planning for preschool at national and local levels will be created * Training modules for preschool managers will be developed and pilot-tested by 2010 * Professional and management skills evaluation system for preschool managers will be developed * Improved child right protection and accountability mechanisms will be introduced into kindergartens. |
| Encourage participation and partnership of families and community in the preschool education service | 1. All kindergartens will provide opportunity for parents and community to participate in the decision-making, child care and development by evaluating quality of services provided. 2. Information on learning support will be created for families to improve parenting skills and to provide training to enable them to assist their children learning and development processes. | * Family and community involvement in all aspects of preschool service provision will be actively encouraged. * Parental education will be organized at national and local levels. * TV, radio and web-based school readiness programs, and comprehensive learning and teaching materials will be developed and used in the preschools. |

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| **Outcomes :** | 1. Gross Enrollment Rate (GER) for preschool education will be increased to 93.0%. |
|  | 2. Percentage of children enrolled in the preparatory training for 1st grade will increased to 99% by 2015. |
|  | 3. By ensuring school readiness of children to be enrolled in schools, quality and internal efficiency of primary education will be improved. |
|  | 4. Preschool services for herders’ children will be improved to meet national standards. |
|  | 5. Access to quality services and opportunities for living in healthy and safe environment will be expanded through improved physical conditions of kindergartens. |
|  | 6. Intersectoral management of health, food, nutrition, social welfare and educational services for preschool will be created. |

1. **Primary and Secondary Education**

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| **Program** | | | **Strategies** | **Indicators** |
| Access | | | | |
| **Objective 1. Improve access and quality of educational services to ensure the rights of children to be educated** | | | | |
| Increase enrollment of basic education | | | 1. Enroll all 6 and 7-year old children in schools as part of the process of transferring to the 12 year schooling system 2. Conduct a research study on the location and capacity of schools and dormitories 3. Rationalize the location, type and structure of primary and secondary schools in conformity with regional development strategies and amendments in the administrative and territorial distribution/structure of the country 4. Construct new school building and dormitories, and expand the capacity of existing schools and dormitories 5. Improve the legal environment to support and encourage the development of private and primary secondary schools | * Enrolment in basic education will reach 102% from 100% by 2012, which implies an annual enrollment at 101%. * All 6 and 7 year olds will be enrolled in schools in 2009-2010. * 1706 classrooms and 725 dormitory rooms will be built at the rate of 569 and 242 per year, respectively. * Private school students will increase from 4.4% up to 5.6% in primary, from 4.1% up to 5.5% in secondary and from 7.7% up to 8.4% in upper secondary grades by 2012. |
| Create equal opportunities and improve access to quality education for children in primary grades and herders’ children | | | 1. Enforce standards of school readiness for new entrants, and implement and develop a program on reducing disparities in school readiness 2. Develop the abilities of primary teachers to work effectively with children from different social backgrounds and children with learning difficulties 3. Develop and pilot construction standards suitable for conditions in *bagh* schools 4. Improve dormitory facilities and services of dormitories and make dormitories closer to family environment. Implement the “Home-dormitory” program 5. Carry out systematic social and cultural activities aimed at boarders’ development, behavior, and maturity in dormitories 6. Provide the legal framework for the participation of parents in providing support to children living in dormitories 7. Involve parents, the public, and professional organizations in independent assessments on dormitory services 8. Construct combined kindergarten-primary school complexes and develop a model for integrating kindergartens with primary schools | * The development of different types of services to ensure equal opportunities to access quality education are created * Enhanced average level of school readiness will be achieved in primary education. * Primary teachers’ knowledge, methodologies, ethics and communication skills will be upgraded * The number of dropouts of children with learning difficulties and/or from vulnerable backgrounds will be reduced. * Construction standard, suitable for conditions in bagh schools, will be developed and piloted. * Dormitory boarders’ population will grow from 42,086 in 2008 into 46,202 in 2012, which will increase the percentage of successful boarding applications from 87% up to 92% * Qualified teachers will replace dormitory teachers and children/dormitory teacher ratio will be improved to 50:1. * Per capita budget allocations for dormitory feeding will be increased to acceptable levels and will be maintained in line with inflation by annual increases. |
| Increase enrolment of out-of-school children and drop-outs and take preventive actions to reduce further drop-outs | | | 1. Study reasons for student non-attendance and school dropouts and develop and implement policies and programs on enrolling these children to schools (intended for rural as well as male children) 2. Clearly identify the roles and responsibilities of both formal and non-formal education sub-sectors in relation to drop-outs and out of school children and develop an integrated plan for both sub-sectors to work together to minimize the problem 3. Provide targeted support to children from vulnerable and very poor families in free textbook and school supplies provision, and provide government support in reducing parental costs on their children’s education. | * Realistic and sustainable budgets should be developed to support actions to reduce drop-outs and to bring out-of-school children into school. * Drop-outs in basic education will be reduced from 1.3% to 0.87% * 40% of non-returning drop-outs will be enrolled in non-formal education. * Formal and non-formal teaching and learning methodologies will be developed specifically to meet the needs of students in equivalence programs * Students from vulnerable families will benefit from free textbook provision starting from 2009 |
| Introduce lunch program for primary students and launch measures to improve student health | | | 1. Develop standards for school snack and school lunch programs and create the required legislative environment 2. Expand school snack program to a school lunch program 3. Create the legislation to enable parental contributions to the school snack and school lunch programs 4. Improve the supply of kitchen facilities in rural schools 5. Create school lunch supply centers in UB and *aimag* centers 6. Establish and regularize quality assurance and monitoring systems on the school lunch program 7. Establish systems to ensure the health of children in school and ensure annual medical checkups for all enrolled students | * Standards for school snack and lunch programs will be established with collaboration of professional agencies by 2010. * Free lunches will be supplied to 40% of primary school students targeted to the most vulnerable groups. Parents will be contributing half of of the costs for the remaining 60% * A comprehensive survey of school kitchen facilities will be conducted in 2009, and upgraded kitchen facilities will be provided to rural schools as required by 2012 * Monitoring on school lunch program will be carried out properly on frequent basis. * Student health indicators will be created and the average indicator level will improve |
| Expand educational services for disabled children and their involvement in formal education | | | 1. Enroll disabled children in mainstream education 2. Provide professional and methodological support and orientation to teachers, parents and students in formal education. 3. Study the special educational needs of disabled children and develop variant curricula as required based on their special needs 4. Develop the capacity of teachers, parents and legal guardians in working with disabled children 5. Provide schools with the equipment, facilities and learning and teaching materials needed to support the inclusive education of disabled students in mainstream schools | * The number of disabled children enrolled in mainstream education will be increased. * 3 teachers from each school will be trained in the professional skills, knowledge and techniques of inclusive education for different types of disabilities. * An incentive framework to encourage and support teachers working with disabled children will be established. * Rural-urban disparity will be reduced and increased opportunities will be provided to enable disabled children to be enrolled in mainstream education * Public awareness and parents’ participation will be increased in the provision of inclusive education and enrolment opportunities for disabled children in regular schools. |
| **Quality** | | | | |
| **Objective 2. Set up the environment and conditions to provide quality primary and secondary education** | | | | |
| Implement primary and secondary education standards of 12-year schooling system | 1. Develop and implement new standards and curricula for primary and secondary schools in conformity with the 12- year system 2. Develop and pilot test training programs for each primary and secondary subject to ensure consistency with new education standards and with skills-based objectives 3. Set up school formative and summative self-assessment standards and develop also an independent assessment of the implementation of new standards 4. Establish a national student, school and system monitoring mechanism to assess progress, identify problems and develop remedial strategies for the transition to new education standards. 5. Upgrade classrooms for 6-year old children up to the standards set by MECS 6. Increase annual budget to support development and implementation of new education standards, new curricula and educational objectives 7. Implement a program on enhancing the quality of education in rural schools, and improve bagh teachers’ skills in teaching in multi-grade classes | | | * The competency-based curriculum will be completed and a new teacher training curriculum and syllabus consistent with the 12-year system will be developed and implemented * A variety of curricula, training plans and training materials including a model framework of subject content will be available. * By 2010 new school and external assessment systems will be in place. * Classrooms for 6 year old children will be equipped meeting relevant standards. * Training budget will increase by 10% over 2008 baseline. * Learning achievement of rural students will improve |
| Improve the capacity of teacher pre-service training institutions in line with the 12-year schooling system | 1. Develop and implement new national standards, curricular programs and materials for pre-service teacher training. 2. Improve teaching at the pre-service teacher training institutions in order to upgrade standards for trainer-teachers 3. Expand teacher education research programs 4. Develop and implement standards for facilities, equipment, technology and learning and teaching materials in pre-service teacher training institutions 5. Establish minimum entry qualifications for students enrolling in pre-service teacher training in order to increase the quality of teacher training 6. Provide financial support to suitably qualified students enrolled in pre-teacher training institutions. | | | * Revised pre-service teacher training standards, curricula and materials will be developed, pilot tested and available by the end of 2010 * Pre-service teacher training in conformity with new standards and curricula will be launched by 2010 * Teaching staff of pre-service teacher training institutions are trained in conformity with education standards and competences * Pre-service teacher training programs are qualitatively assessed and accredited, and teaching staff are certified according to new testing standards * State budget funding for the upgrading of facilities, equipment, technology and learning and teaching materials in pre-service teacher training colleges by 2012 * State budget provision of funding to supplementary educational research on high priority projects and development objectives. * Training facilities and technical conditions will be standardized and equipped. * Scholarships will be made available to suitably qualified secondary school graduates to encourage high quality entrants into pre-service training colleges. |
| Develop a sustainable plan for teachers’ continuous professional development based on in-service training | 1. Provide appropriate technology to support in-service, on-the-job training of teachers; make the best use of distance education technology to deliver affordable in-service training suitable for the Mongolian context 2. Increase the capacity of local and national institutions and organizations to provide professional and methodological support on-the-job training for teachers 3. Enhance quality of training through well-coordinated planning and management of training programs, accreditation of in-service training programs and provision of adequate funding for priority training needs. 4. Create incentives based on additional salary increments for teachers to achieve national teacher certification standards through on-the-job training 5. Set up module in-service training system consistent with new education standard and curricula and develop and distribute training manuals and teaching tools. 6. Organize short-term external training and study tours for selected teachers to experience new and advanced teaching methods 7. Establish effective monitoring mechanism to assess progress and efficiency of in-service training. 8. Establish a National Teacher Development Center to lead the in-service teacher training activities in Mongolia. | | | * Opportunities will be provided for teachers to re-train and develop professionally through on-the-job training. * Progress will be made on providing quality teaching and learning environment in all schools in accordance with established national standards. * The teacher development centers will be further established at the remaining 60% of all schools. * Mechanisms to encourage teachers to develop their professional and methodological skills in conformity with new standard and curriculum will be put in place. * All teachers are involved in continuous professional development activities in support of new curriculum. * A national coordination and accreditation system for in-service programs will be set up, and instructors and assessors will be trained. * Sustainable central and school-based funding will be available to support a new in-service teacher training plan. * Government funding will be provided to support the supply of free teachers’ guides to teachers and the development and distribution of an inclusive education toolkit. * Training on CFS modules is established * At least 50% of primary and secondary teachers will be involved in service-training annually. * Approximately 100 teachers and managerial staff will have access to external training and study tours annually. |
| Develop strategies to ensure sustainable access to high quality textbooks, teachers’ guides and other learning and teaching materials | 1. Develop new textbook content and methodological standards for new 12-year schooling system. 2. Develop new generation textbooks based on 12-year standards and develop a system for regularly assessing textbook effectiveness and content, publishing quality and classroom book life. 3. Establish and enforce minimum production specifications to ensure the achievement of minimum book life assumptions. 4. Review current textbook provision to identify opportunities for cost reduction and introduce agreed cost reduction strategies. 5. Review, plan and design an effective and sustainable core textbook revolving fund and textbook rental scheme 6. Review the current textbook distribution system and establish an efficient system for textbook distribution and storage. 7. Ensure well-targeted supply of free textbooks to vulnerable groups and those living below national poverty thresholds. 8. Expand school libraries in support of student reading and improved research skills in conformity with new curricula. 9. Provide special needs learning materials for disabled children, including free special needs manuals for teachers. 10. Provide all teachers with free access to required teachers’ guides. | | | * Primary and secondary students will have all textbooks for all subjects at each grade level. * Free textbooks will be provided to all primary and secondary students from families identified by proxy means testing. * Effective, sustainable and affordable textbook revolving fund and textbook rental scheme will be operational. * Effective and well-targeted textbook distribution system aimed at ensuring that free textbooks reach the poorest and most vulnerable families will be established and regularly monitored. * Pilot- testing and assessment mechanisms for all new learning and teaching materials will be effective. * The textbook provision will be closely monitored annually in terms of targeting and effectiveness. * School library development plan will be implemented at both primary and secondary schools. * Textbook procurement process will be improved by 2012 to achieve best ‘value for money’ * Every teacher will be provided with a teacher’s guidebook on each subject. * Disabled children will receive learning materials developed specifically to meet their needs * Every teacher will be provided with teaching kits on inclusive education. |
| Invest in training equipment needed for implementation of new educational standards | 1. Develop and implement revised standards for the classroom learning and other essential facilities such as school libraries, gymnasia, computer room, laboratories etc 2. Upgrade school furniture (including blackboards, tables and chairs) to meet new standards 3. Establish adequate facilities for physical education in every school through the provision of essential equipment 4. Provide schools with required facilities and instruments for music education 5. Upgrade science labs and ensure consistent consumable supplies according to new standards 6. Supply specified teaching kits and learning and teaching materials at no charge to the teachers 7. Provide schools with teaching and learning tools for technological education 8. Strengthen School Development Fund management, and monitor to ensure efficient and transparent use of the funds | | | * New standards for school learning and teaching environments will be established and enforced * All school will have sports and physical education (PE) facilities and equipment up to basic MECS standards * All schools will have the instruments to be able to offer music education to all students * State budget support for the supply of in-service training equipment, kits and materials for primary and secondary teachers will be increased by 8% over baseline funding. * Every secondary school will be provided with a fully equipped laboratory for natural sciences. * Every school will have workshop facilities for teaching technology subjects equipped up to minimum MECS standards * Every school will develop and promote fundraising activities through school development funds. |
| Ensure construction of buildings and dormitories and infrastructure of schools meet the minimum standards | 1. Develop and implement new building standards for classrooms, specialized facilities and dormitories 2. Renovate school buildings and dormitories in conformity with revised standards and annual planning targets 3. Supply dormitories with furniture, kitchen facilities and utensils, and other essential equipment specified in the new MECS standards 4. Implement energy efficient technology for school buildings and ensure reliable electricity and heating supply to all schools 5. Jointly with other organizations, ensure safe supply of drinking water, sanitary toilets and washroom facilities in all schools, which are conformable with health and safety regulations. 6. Ensure easy access for disabled children through modifications in entrances, stairways, toilets and washrooms in all schools | | | * Minimum standards for the learning and teaching environment will be developed, approved and operational. * The number of dormitory beds will be increased * The number of seats in schools will be increased to meet MECS specified student/classroom and student/teacher ratios * 80 % of schools will achieve adequate learning environments up to MECS standards * Prioritization, management, supervision and monitoring of building upgrades and repairs will be improved * Opportunities for students to live and study in comfortable and healthy dormitory environments will be made available to least 60 % of boarders * The school construction and repair component of the new MECS EMIS will be operational by 2010 * School construction and repair budgets will be increased to achieve priority targets over 2009 baseline budget * By 2012, proportion of schools with acceptable drinking water, toilets and washrooms will increase * Schools will have easy access arrangements to support inclusive education policies. (or Schools will have modified entrances and exits to facilitate disabled children. |
| Increase efficient use of ICT in education | 1. Undertake a comprehensive study to assess the Total Costs of Ownership (TCO) for ICT in basic education. 2. Based on the TCO and available budget, develop a 5-year plan for ICT development and usage in Mongolian education 3. Provide schools with ICT equipment and connect schools to the internet in conformity with the strategies of the national plan 4. Sufficient operational budgets will be made available to all schools to ensure effective utilization of ICT hardware 5. Establish priority ICT training needs and provide in-service training programs to all teachers on the ICT use in core subjects across the curriculum and at different grade levels. 6. Link the primary and secondary education ICT to a wide-range satellite communication network system; develop and implement a strategy to provide affordable equipment maintenance services in collaboration with relevant bodies. 7. Through the satellite network channels, create a network of upper secondary schools and implement international programs. 8. Review the current service and maintenance arrangements for the ICT in schools, taking into full consideration the distances between schools and potential servicing centers, and develop a cost efficient maintenance strategy that meets the needs and realities of Mongolia. 9. Develop software packages and e-training materials in Mongolian language to introduce ICT in primary and secondary education. | | | * A comprehensive study of the TCO for ICT in education will be available as the basis for ICT planning in the medium and long term * Model schools will be established based on good practice of ICT applications in the classroom. * All schools will be connected to the Internet * All schools will have operational budgets which take into full account the costs of maintaining, using and replacing ICT facilities * An effective and affordable ICT maintenance system will be designed and implemented * 1 computer per 25 students will be provided in primary and secondary schools. * By 2012, 1 computer will be available for every 8 teachers. * ICT Maintenance centers will be established at aimags and districts. * A strategy to link to satellite communication network system as well as a strategy to provide cost-effective equipment maintenance services will be developed. * A network of upper secondary schools will be created, and implementation of international programs will be commenced. * Standards on e-learning software will be developed, and consequently, e-training tools will be designed. |
| Improve the quality of English language training | 1. Improve management and organization of English language education; develop standards and curricula for English in consistent with international requirements. 2. Develop and improve the English language capacity of teachers by establishing new curricula, standards, methodologies, training materials at pre-service training colleges and Mongolian State University of Education (MSUE). 3. Develop English language support materials and training programs aimed at in-service distance teacher training for English language teachers 4. Establish cooperation agreements with English speaking countries in order to increase the flow of volunteer teachers. 5. Develop new English language textbooks and teachers’ guides, and increase the number of children’s books and publications in English. 6. Organize national level assessment exams to improve English language performance in primary and secondary schools, and provide in-depth analysis of common problems encountered and strategies to overcome problems based on exam results. | | | * + Revised standards and English language curricula up to international standards will be developed.   + English language standards for pre-service training institutions will be improved, and the distance in-service programs to support English language upgrading among practicing teachers will be prioritized.   + The number of native speaking English volunteer teachers will be doubled.   + At least 50 % of English language teachers in pre-service and in-service training will have internationally accepted and recognized certificates in English-language skills   + All schools will be provided with e-packages for supporting English language skills development via CDs, DVDs and online delivery systems   + The English proficiency level of primary and secondary students will be increased. |
| Support the development of complex schools and schools in regional centers | 1. Implement a program to set up supportive teaching and learning environments in Complex schools 2. Priority will be given to complex and regional schools in linking to national distance learning institutions through internet and satellite network connection. 3. Develop vocational education capacity in complex and regional schools | | | * + - Complex and regional schools will be connected to internet and will be set to provide distance learning     - Complex schools and schools in regional centers will be functioning as supporting units to provide in-service training and consulting services.     - Complex schools and schools in regional centers will be equipped with facilities to provide vocational trainings |
| Management | | | | |
| Objective 3. Improve management capacity of the schools; implement policies to support schools | | | | |
| Refine the management of the primary and secondary education at all levels | | 1. Review and redefine management roles and responsibilities of primary and secondary education agencies and administrative authorities at all levels. 2. Establish a forward program of research into key issues and strengthen the capacity of research institutions as the basis for improved policy making and strategy formation. 3. Strengthen accountability of the education system via upgraded supervision, monitoring and regular performance review and assessment of all aspects related to quality, access, efficiency and effectiveness. 4. Establish conditions and formulate standards that encourage greater parental involvement in school activities 5. Continue progress towards accountable de-centralization | | * + Activity roles and responsibilities of educational organizations and administrative authorities will be redefined.   + Policy and planning will be strengthened through improved quality of research.   + Performance of students, teachers, and schools will be monitored and assessed on a regular basis.   + Standards to be complied by parents will be formulated. |
| Develop Education Management Information System (EMIS) | | 1. Design, implement and operationalize a comprehensive EMIS covering all aspects of management. 2. Ensure accuracy, reliability, regularity and predictability of data collected. 3. Undertake national school mapping exercise as one of the major data sets for the EMIS. 4. Improve monitoring, evaluation, performance and quality assessment systems based on the EMIS | | * + A reliable and effective EMIS will be established.   + All aspects of educational decision-making and management will improve.   + All end-users will have access to those parts of the database that they need.   + Monitoring and assessment system will become simpler, more effective and practical. |
| Improve human resource development planning, upgrade skills and responsibilities of education management staff and teachers | | 1. Improve planning capacity for human resource development and regulate teachers’ and administrative’ supply and workload consistent with new schooling structure 2. Establish guidelines and standards to ensure stable employment of skilled teachers and, particularly, teachers in rural areas. 3. Create legal environment, provide management support and ensure funding for implementation of the national program on “Pre- and in-service teacher training” as approved by GoM in 2009. 4. Develop and implement a management training program for managers at all levels and head teachers emphasizing professional management skills, strategic planning, finance, accountability and motivational and leadership skills. 5. Refine the guidelines and regulations on the selection and appointment of managers, head teachers and senior staff. | | * Human resource development program, in accordance with the new 12 year schooling structure, will be developed. * A suitable promotion and remuneration will set up for all teaching and management staff, particularly for teachers in rural and remote areas * A mechanism to sustain skilled teachers will be introduced. * Selection of management staff will be carried out a in fair, transparent and consistent manner according to specified procedures. * Capacity of management staff will be improved through provision of specialized and practical trainings.   . |
| Develop school-based management and decision-making | | 1. Develop strategy-planning-based management of schools. 2. Facilitate teachers’ self-development, ability to conduct research studies in a team as well as independently, and ability to collaborate with parents. 3. Emphasize health, safety and child development targets within the context of “Child Friendly Schools”, and “Health Supporting Schools” programs 4. Strengthen parent participation in school development within the “Open School” concept. 5. Introduce “Green School” concepts, approaches, and management 6. Enforce schools to regularly report their activity performance and budget execution to parents, students, government and community for review. | | * Number of schools which have met their management capacity indicators will increase. * School activities will be regularly assessed with the involvement of students, teachers, and parents. * The number of students discriminated, harassed, and whose rights were violated in schools will be reduced. * The numbers of schools providing regular, relevant and reliable information to students, parents and the community will be increased. * Best international practices will be piloted in schools |
| Improve education quality evaluation system at the national level | | 1. Introduce international comparative performance testing (e.g. PIRLS, TIMSS, etc) as part of a comprehensive national performance assessment. 2. Create mechanisms to regularly assess the national education performance and the quality of education, and increase the necessary funding. 3. Develop human resource capacity and provide testing methodology training for teachers. | | * By 2010, international performance tests will be adopted to assess performance of primary and secondary schools at each level. * By 2011, quality assurance system (quality assessment) will have been piloted at national and local levels. * Capacity-building in-service trainings will be conducted for assessment specialists and teachers. * Performance assessment indicators will be developed to assess individual students, individual teachers, individual managers, schools and institutions. |
| Promote Public Private Partnerships | | 1. Study stakeholders’ interests and demands in primary and secondary education. 2. Define the scope of schools’ role in PPP contract and estimate the necessary funds. 3. Study particularly the possible opportunities to develop and support PPPs in rural areas and *ger* districts. 4. Define ways to improve the efficiency and impact of current expenditure of state-subsidized private organizations. 5. Improve the productivity level of donor and civil participation in education sector programs. | | * Effective involvement of stakeholders will be enabled, and regulations on ensuring information transparency and eliminating violations will be refined. * Number of executed contracts will increase. * Private sector investment in education will be increased. * Social support and involvement in education will be strengthened. |

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| **Outcome:** | 1. Students with limited opportunities to study and whose rights are violated will be given access to educational services. 2. Rural-urban disparity in accessibility and quality of primary and secondary education will be reduced. 3. Enrollment rate will 104% in primary education, 116% in secondary education, and 108% in basic education. 4. Solid progress will be made in professional and methodological development of teachers, and opportunities to implement new standards and curriculum will be created. 5. Impact of social participation in development of education will be increased, and conditions and environment needed for obtaining quality education will be improved. 6. Opportunities of graduates with primary and basic education to obtain quality education of next level, to work independently and live equally will be increased. 7. Conditions of mutual recognition of education diploma and certificates with foreign countries will be created 8. Sector-wide and donor coordinated management will be established to provide accessible and quality education; the role of primary and secondary education in the improvement of citizens living standards will be strengthened. |

**Non-formal and Adult Education**

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| Program | Strategies | Indicators |
| **ACCESS** | | |
| **Objective 1. Improve Access and Quality of Non-formal and Adult Education** | | |
| Increase access to non formal education for illiterate and newly literate people | 1. Develop literacy criteria and indicators and conduct national survey on literacy to define extent and nature of illiteracy in Mongolia 2. Increase range and relevance of adult literacy (below 50 years old) training programs and learning and teaching materials to cover basic literacy and support for new literates 3. Develop *aimag* level programs to increase the training coverage for basic literacy and new literates in all parts of the country | * Practical literacy criteria and indicators will be developed as the basis for a comprehensive national survey which will accurately define the current extent and nature of adult literacy in Mongolia * By 2015, national literacy rate will be 99.9%; female literacy rates will increase by 1.5% and male-literacy rates by 1.8% compared to 2008. * New literacy training programs and tools, suiting the distinct features of rural areas, will be developed and provided on a regular basis, and thus, NFE enrollment rate will be increased. |
| Increase opportunities for out-of-school children and youth and drop-outs to enroll in non formal education | 1. Implement EP training programs for primary, basic and complete secondary education and increase the variety and supply of teaching and learning materials and teachers’ handbooks 2. Convert EP training modules into e-formats and make available online and via disk delivery as appropriate; monitor take-up, cost and effectiveness of e-training delivery as the basis for further strategy development in the use of e-materials. 3. Establish realistic per capita cost basis for EP learners, taking into account regional and local cost; provide sustainable financing for targeted NFE enrolments, which is inflation index-linked. 4. Supply EP learners aged up to 15 with dormitory access to facilitate participation in NFE | * Online EP training pilot programs will be carried out; the effectiveness of the programs will be monitored and evaluated. * 40% of out-of-school children and youths will be enrolled in EP training and more than 10% of school-aged EP learners will be re-enrolled in formal school. * EP learners from vulnerable families, aged up to 12, will be included in the school lunch program. * EP learners up to age 15, studying in rural areas, will be provided with access to dormitory accommodation. * Sufficient funding will be provided for EP learners, by increasing the current expenditure in consistent with the inflation rate. * Teaching guides will be produced specifically for EP teachers. |
| Expand the range of continuing NFE training courses for adults based on living and learning needs assessments | 1. Develop TORs, methodology and desired outcomes for a comprehensive NFE demand and needs assessment survey for adult education. 2. Develop NFE training programs aimed at upgrading general education levels and providing life and work-related courses responsive to identified needs. 3. Provide access to, and support for, lifelong learning via NFE through using mass media and ICT delivery mechanisms. 4. Pilot test different approaches to distance learning in the effective delivery of NFE training aimed at vulnerable groups. 5. Develop curricula and carry out trainings aimed at improving living standards of households and providing orientation on occupation and profession. | * An NFE needs assessment and demand survey will be completed by 2011. * New course programs and learning and teaching materials will be developed and implemented in various formats in conformity with the needs and level of demand established by the survey. * E-training and the use of distance education via both ICT and the mass media will be piloted, and by 2012, will produce results. * At least 20,000 people will be enrolled in training programs aimed at obtaining occupation and profession orientation, and consequently, improving living standards. |
| **QUALITY** | | |
| **Objective 2. Improve the NFE learning and teaching environment at all levels and increase the supply of resources and the quality of the outputs** | | |
| Improve the training content and methodologies of NFE and adult education and the supply and quality of teaching and learning materials | 1. Monitor and evaluate the objectives of the EP curricula for primary, basic and upper-secondary schools and upgrade content and learning and teaching methodologies. 2. Review and improve multi-grade teaching theories, methodologies, and adopt the best practices for use in EP training and teacher in-service training. 3. Develop and organize a new range of NFE training programs based on the needs assessment (see above); increase the variety and improve the quality of training and teaching materials. | * EP programs for primary, basic and complete-secondary education will be reviewed and upgraded, and 10 model centers will be established to pilot the EP models. * NFE teachers will be trained in multi-grade teaching methodologies and issued certificates. * There will be a new range of NFE training programs with accompanying learning and teaching materials covering (among other things) education on sustainable development, health, law, and the environment. |
| Improve the physical and human resource capacity of NFE providers | 1. Provide pre-service and in-service training, and improve the employment stability for NFE personnel at local and national levels. 2. Improve the supply of learning and teaching materials and access to ICT services and hardware NFE organizations at all levels. 3. Improve capacity of national NFE staff and harmonize with the level of Asia-Pacific Region. 4. Develop NFE staff capacity to develop e-training and distance learning materials. 5. Develop training modules and handbooks on EP training methodologies for NFE teacher/facilitators and formal school teachers. | * New courses, curricula and training materials will be developed and exercised. * NFE teachers and facilitators will be trained in Teacher Colleges and institutions in the techniques and methodologies of non-formal and adult education, and will receive credit hours for an accredited qualification * NFE management capacity and human resource supply will be upgraded at all levels. * There will be improved terms and conditions, remuneration and incentives for NFE teachers and facilitators. * The evaluation of local and education organizations and management staff will be based on a single indicator which will measure performance progress. * Measures will be taken to employ mobile teachers as full-time staff in NFE centers of soums. * Training facilities and human resources will be available for independent NFE unit to experiment with online training and television-based distance education. |
| Improve the quality of non-formal and adult education at all levels and strengthen the training environment and resources | 1. Increase the capacity and resources of national and local NFE institutions and Enlightenment Centers, and improve the learning and teaching environments. 2. Evaluate the content, methodology, delivery, learning and teaching materials and available resources and assess their quality in EP training centers for primary, basic and complete-secondary education in collaboration with formal education schools. 3. Review the potential for effective delivery of distance education to remote and rural communities and investigate and test other methodologies for delivering NFE, and provide funding support. 4. Provide technologies for delivering nation-wide NFE services through distance learning, and create a distance learning network using satellite communication technologies and television broadcasting. | * Rules and regulations of NFE Enlightenment Centers will be reviewed and revamped. Model NFE Enlightenment Centers will be established in *aimag* centers. * Online training materials will be developed and applied in pilot training courses. * Adequate human and material resources to support distance learning will be made available at national and local levels. * By 2010, broadband television network intended for distance learning will be established and functioning; technological innovation will be adopted in NFE Distance Learning Centers, and distance learning services will be provided in collaboration with ICT companies. * Mobile NFE learning services will be launched for remote and rural communities. |
| **MANAGEMENT** | | |
| **Objective 3. Improve policies and strategies of NFE services and set up information and financing system for the sector** | | |
| Renew and develop strategies and policies for non formal and adult education | 1. Establish the mechanism for institutionalizing EP education. 2. Develop and implement NFE and adult education policies and strategies as the basis for the creation of effective lifelong and continuous education. 3. Strengthen national and local NFE institutions and structures and redefine their roles and responsibilities. 4. Provide state support in improving the participation of, and cooperation with the private sector, NGOs and civil society. 5. Develop and implement legislation governing the role, structure, funding and operations of a successful lifelong and continuous learning system in Mongolia. | * Legal environment will be established for obtaining primary, basic and complete secondary education through EP training. * Non formal/adult education policies, strategies and structure will be reviewed and re-stated, and will be exercised from 2011. * Legislation governing the provision of lifelong learning in Mongolia will be approved and put into effect. * There will be increased participation of the private sector and civil society in NFE activities. |
| Refine the state budget funding mechanism for non formal education | 1. Increase funding for NFE service up to 1.0% of the state budget on education. 2. Funding for NFE operational costs at national, regional and local levels will come from the state budget. 3. Ensure continuous funding source for providing pre-service and in-service training for NFE teachers, and for strengthening capacity of NFE institutions. 4. Achieve optimum and effective NFE funding mechanism and allocation. | * 1.0% of the state educational budget will be allocated to the NFE sub-sector by 2015 * Funding will be provided for literacy and life-long education services and teacher in-service training. * The state budget will support the operational costs of national and local NFE Enlightenment Centers and the NFDE Center. * State funding for NFE Enlightenment Centers will be based on accreditation and certification. |
| Improve management, planning and information of NFE at all levels and create information, monitoring and evaluation system | 1. Create a management structure to support and expand lifelong learning at all levels. 2. Develop concrete methodology on information collection, processing, sharing and utilization required for NFE EMIS. 3. Refine and apply information, monitoring and evaluation indicators. 4. Work closely with the management of the local and other relevant authorities in the expansion of NFE/adult education services. | * Within the structure of educational organizations, a unit in charge of NFE and adult education will be established.. * By 2010, government policy on non formal and adult education will be developed and put into effect. * There will be improved inter-sectoral synergy and linkages on NFE and adult education. * Performance of schools directors and governors at all levels will be closely monitored and evaluated for effectiveness, particularly in relation to the number of out-of-school and drop-out students returned to formal education and enrolled in ECs and progress towards universal literacy. |

|  |  |
| --- | --- |
| Outcomes | 1. Management structure to support and expand the non-formal and adult education will be established. 2. Policies, strategies and a legal environment will be created for non-formal and adult education, and its activities will be regularized and made part of the education mainstream within Mongolia. 3. Sufficient finance will be made available to enable NFE and adult education to achieve its activities and targets 4. Policy-making, planning, budgeting, implementation, monitoring and evaluation will be based on realistic data provided by the national EMIS, and management capacity will be upgraded to achieve efficiencies in operations and target output objectives. |

1. **Technical and Vocational Education and Training (TVET)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Program** | | **Strategies** | **Indicators** | | |
| **Access** | | | | | |
| **Objective 1: Increase TVET enrolment by 30 % compared to 2008** | | | | | |
| Expand the services of TVET | | 1. Make investments aimed at increasing number of seats in TVET schools. 2. Construct new TVET buildings in line with TVET structure, type, and location mapping and in conjunction with regional development national strategy and local needs. 3. Create new building, equipment and enforce learning environment standards for TVET institutions. 4. Undertake repairs and renovations to TVET dormitories and increase funding sources. 5. Supply poor and vulnerable TVET students with textbooks and training manuals and materials free of charge. 6. Increase the percentage of adults enrolled in TVET. 7. Organize vocational orientation training in formal primary and secondary education schools. 8. Design and implement a program aimed specifically at improving the education standards of male students. 9. Implement special programs for those interested in animal husbandry and cropping industries. | * By 2012, number of TVET students will reach 50,931. * The current ratio of students covered by higher education and TVET will improve from 4:1 to 3:1. * Training will be developed in compliance with labor market demand and supply and employers’ needs. * TVET curricula and methodology will be renewed, and learning outcome and student skills and capacity will improve. * New buildings with 3,800 seats for vocational education and training will be constructed. * By 2012, 19.4% of students in vocational and production centers will be accommodated in dormitories. * Polytechnics (e.g. for geology, mining etc) will be established. * The number of primary and secondary schools with additional vocational training stream will be increased. * A list of vocational professions to be provided in complete secondary schools will be approved. * At least one person in every herder’s family will be trained to earn income. | | |
| Provide support to private vocational and production centers that train national specialists in priority areas in compliance with labor market demand | | 1. State to be responsible for variable costs per student in private vocational and production centers. 2. Create a mechanism for sharing practical training facilities between private and public sector VTPC (МСA). 3. Improve policy and conditions for establishing VTPC by enterprises and factories (МСA). 4. Provide support for strengthening human resource capacity of private VTPCs (МСA). | * Private Vocational and Production Centers that train national specialists in priority areas in compliance with labor market demand will receive financial support from the state budget (МСA). * Trainers or teachers will be involved in trainings of trainers (MCA).Number of VTPCs established under enterprises and factories will be increased. | | |
| **Quality** | | | | | |
| **Objective 2: Improve quality of vocational education and training, supply human resources to ensure demands of labor market** | | | | | |
| Harmonize TVET with labor market demand | | 1. Conduct nation-wide comprehensive survey on number, quality and social efficiency of labor market needs and demands (МСA). 2. Develop vocational training content and standards in accordance with labor market needs and demands. 3. Increase participation of production and service companies in management, planning and training processes of TVET. 4. Expand information database on training modules. | | * Database on labor market demand will be created. * Information on employment status of graduates of vocational and production centers will be created and continuously updated. * Detailed criteria for education standards based on scientific and technological achievements will be identified (МСA). Contents and standards of common professions will be developed and approved. * Curricula will be developed in accordance with international education standards (МСA). | |
|
| Improve technical support base and supplies of training equipment and tools of TVET schools | | 1. Resolve state funding issues to enable repair and construction works of VTPC buildings. 2. Upgrade the numbers of practical training units in VTPCs and increase investments on equipments and tools of the latest technological innovation. 3. Harmonize the development and publication of priority vocational textbooks for TVET with the overall education policy on textbooks. 4. Increase participation of employers in the development of textbooks, training contents and module programs for vocational orientation training, which can be provided to students in upper secondary grades. 5. Supply primary and secondary education schools, which provide vocational orientation training, with practical and laboratory equipments and training tools (МСA) | | * Module programs for vocational orientation training for primary and secondary schools will be developed. * TVET policy on textbooks will be harmonized with the national education policy on textbooks; the funds will be committed for development and publication of TVET textbooks. * Expenditure for laboratory equipment and training tools for vocational education and training will be increased by 10% and maintained annually. * 28 practical training units will be renewed, inter-school practical centers will be established, 26 schools will be renovated. | |
| Train and retrain teachers and teacher trainers (МСA) | | 1. Create national system of competency-based in-service training of TVET teachers. (МСA) 2. Increase funding for in-service training for TVET teachers. 3. Develop modern training program with reformed methodologies and content for in-service training of TVET teachers. (МСA) 4. Establish a training center with advanced technologies for in-service training of vocational teachers. 5. Increase the number of skilled vocational teachers to provide theoretical and practical training in TVET sector. | | * System of pre- and in-service training of teachers will be improved with increased participation of the specialists from non-government organizations. * VTPCs will be provided with 100% professional trained and qualified teachers * 100% of TVET teachers will be enrolled in in-service training, domestically. * 20 teachers will be trained abroad in high priority professions, annually. * Advanced Training Center for teacher’s in-service training will be established. | |
| **Management** | | | | | |
| **Objective 3. Renew Management of technical and vocational education and training** | | | | | |
| Implement policy reforms aimed at creating an environment for developing vocational education and training, which meets market requirements | | 1. Ensure Government commitment in improving vocational education and training and bringing it up to internationally accepted standards. 2. Ensure the active involvement of all stakeholders in the formulation of national policy and strategies on enhancement of vocational education and training. | | * Advanced management system of foreign countries will be adopted in VTPCs. * Devolved school-based management will be developed. | |
| Improve the management and funding of vocational education and training | | 1. Renew and pursue funding norms based on realistic assessments of the costs of training workers in priority professions that meet labor market demands. 2. Implement policy and programs to improve the management capacity of TVET institutions at all levels. 3. Strengthen the accreditation capacity of TVET organizations and programs and create a reliable quality assurance system. 4. Create a favorable environment to support foreign investment in the TVET sub-sector. | | * Funding norms of TVET will be reviewed and upgraded. * National level and school’s management capacity will be improved * Quality assurance system will be established. * Integrated statistical and other information system and database on vocational education and training will be established as a component of a national EMIS. * Social protection will be secured through creation of evaluation criteria to assess the performance of teachers and management personnel and to establish a proper mechanism that sets their salaries and benefits. | |
| Ensure and sustain equal involvement of the public and private sector | | 1. Ensure participation of employers, Chamber of Commerce, NGOs and professional associations in developing and implementing national TVET policy and planning. 2. Ensure interrelationship of training, manufacturing and services based on the creation social partnership, in order to provide graduates with jobs. | | * Partnership between VTPCs and employers will be sustained. * Social partnerships will be created at national and school level. | |
| **Outcomes:** | 1. Improvement of TVET will make an impact on increasing employment and reducing poverty and unemployment. | | | |
|  | 1. Improvement of capacity of workers will provide support to the development of manufacturing and services industries thus supporting the economic growth. | | | |

1. **Higher Education**

|  |  |  |
| --- | --- | --- |
| Program | Strategies | Indicators |
| Access | | |
| **Objective 1. Improve coordination of enrollment in higher education** | | |
| Support students majoring in engineering,  technology, natural science, teaching and  agriculture | 1. Increase foreign and domestic investment, loans and assistance in improving training environment of schools training professionals in engineering, technology, natural sciences, education and agriculture. 2. Increase the number of students majoring in engineering and technology among students studying abroad within the framework of inter-governmental agreements and annual grant allocations. 3. Increase the number of students majoring in engineering, technology, natural sciences, education and agriculture through the priority allocation of soft loans and grants to students in these disciplines from the State Training Fund. | * Percentage of students majoring in engineering, technology, natural sciences, education and agriculture will reach 41% of total HE students. * 60% of students majoring in engineering, technology, natural sciences, education and agriculture will receive soft loans and grants from the State Training Fund. |
| Expand educational  services of universities and higher institutions | 1. Adopt education programs of of prestigious foreign universities and colleges. 2. Expand vocational and distance learning opportunities. 3. Expand opportunities for lifelong learning to higher education (HE) graduates. 4. Provide state-owned HEIs (e.g. NUM, MUST, MSUE, HSU, and UA) with annual grant funding to ensure up-to-date textbooks and other learning and teaching materials and to upgrade library services. | * Education programs of prestigious foreign universities and colleges will be introduced. * Universities and other HE institutions will develop e-based distance education capability. * Provide US$25,000-40,000 per year to NUM, MUST, MSUE, HSU, and UA to purchase modern books and textbooks. * Member university teachers and students will be provided with free access to main electronic services (e.g. JSTORE, Springer etc.) of the global electronic library network. * Scholarship programs for students studying in local universities will be launched. * Online education curricula will be accredited and quality assured and the qualifications will be accepted. * Students in state-owned HEIs will have access to textbooks and other learning and teaching materials. |
| Increase access to Master’s and Doctorate programs by improving the quality | 1. Establish an accreditation of Master’s and Doctorate programs. 2. Create scholarship system for graduate students. | * By 2015, all graduate degree programs will be accredited. * A Scholarship scheme for graduate students will be established and operational from 2010-2011. |
| **Quality** | | |
| **Objective 2. Create favorable conditions to ensure the quality of higher education training** | | |
| Strengthen  professional  capacity of academic staff working in the higher education sector | 1. Implement joint in-service training programs for university teachers with universities and professional organizations from developed countries. 2. Provide additional opportunities for selected academics to train abroad in prestigious HEIs. 3. Increase financial allocations to support in-service training for HE teachers, including teachers from rural regions. 4. Apply ICT-based methodologies in in-service training of teachers and make necessary investments. | * National integrated network of distance learning will be established and will be used for in-service teacher training. * Implement joint in-service training programs for university teachers with universities and professional organizations from developed countries from 2010. * Comprehensive measures will be undertaken to improve the professional capacities of faculty working in rural HEIs. |
| Improve the quality of HEI operations,  standards and  accreditation | 1. Develop and implement training and research standards of higher education institutions. 2. Upgrade and enforce the requirements and criteria for accrediting training programs. 3. Upgrade content of training programs of accredited institutions to reach international standards; involve HEIs in international rating systems. 4. Create standardization and accreditation system for performance and services of HEI staff. 5. Develop and implement ethical Codes of Conduct for training and research in HEIs. 6. Agree recognition of qualifications with foreign countries. | * Quality assurance system will be established. * Quality assurance standards both for internal and external audits on HEIs will be set up and implemented. * Rating of higher educational institutions will be established and publicized. * Accreditation of study programs will comply with international standards. * HEI staff terms and conditions of service will be negotiated and established by 2011. * Mongolia will join the Bologna Process and Asia Pacific Quality Network (APQN) by 2012. |
| Strengthen the training,  research and  production base of  universities | 1. Increase investment in establishing modern laboratories and advanced technologies at HEIs. 2. Provide financial support to strengthen academic research and production base of state universities. 3. Provide support to increase foreign investment in strengthening the research and production base of universities. 4. Create a favorable environment for bilateral and multilateral relations to conduct joint academic and production research in cooperation with foreign universities and research institutions. | * Advanced technologies will be introduced in Mongolian universities. * University-industry collaboration on training and research will be improved. * Fixed costs of state universities will funded by the state budget. |
| Introduce competition-, efficiency- and results- based financing system for HEIs | 1. Increase funding on scientific and research projects which contribute to national and global development. 2. Create a research grant system based on open and transparent competition. 3. Current institutions of the Academy of Sciences should be merged into a new university and perform teaching and research activities. | * Funding resources of institutions under the Academy of Sciences will increase and, consequently, the expenditure on research will increase. * There will be an increase in research funding that will stimulate research activities in HEIs. * A fully competitive and transparent system for the allocation of research funding will be operational. |
| **Management** | | |
| **Objective 3. Improve management and financing of higher education** | | |
| Optimize  management and  coordination of higher  education | 1. Optimize the study programs of HEIs, eliminate the duplication of courses, increase economic efficiency, and reduce current expenditures. 2. Review the governance of the HE sector and aim to achieve independent status for HEIs. 3. Upgrade the management strategies of HEIs; create opportunities for retraining the management staff of HEIs. 4. Develop and implement policy and strategy to involve state universities in privatization of social sector. | * The number of HEIs and course duplications will be reduced thus enabling resources to be concentrated, quality to be improved and costs to be reduced. * Changes in governance will result in autonomy, and academic and management freedom in universities. * Management capacity of universities will be improved. |
| Improve the state policy and management  on social welfare of  students studying in  universities | 1. Review and reform the regulation of the State Training Fund. 2. Implement a student loan scheme based on future income of students. 3. Develop and implement guidelines for providing support to vulnerable students (e.g. the poor, orphans and the disabled). 4. Support initiatives of universities to provide comprehensive range of services, including establishment of students’ campuses with dormitories. 5. Implement policy to expand framework of services to be provided to students on discounted prices. | * Student loans and grants will be closely linked with priority disciplines and to vulnerable groups. * Grant programs, aimed at students in rural universities, will be implemented. * The discounted loans through the banks system will be available. * Social welfare policy for students will be created. * Students will have a possibility to get assistance not only for tuition payment but also for living expenses. * Tuition loans and grants provided by the State Training Fund will be based on student’s achievement and aimed for students with low living standards. Dormitory conditions and support for students will be improved. |

|  |  |
| --- | --- |
| Outcomes | 1. Competitiveness and quality of Mongolian higher education will be improved. |
| 2. With strengthened HE capacity and human resources and improved standards and accreditation, the public will be provided with quality higher education services. |
| 3. Improved capacity of professional workforce will contribute to the national economic growth. |
| 4. Higher education will be aligned with labor market demand. |
| 5. Quality of training and research in higher education institutions will be improved. |

**CHAPTER 5**

**ESTIMATION OF EDUCATIONAL NEEDS AND FINANCIAL RESOURCES**

1. **ESTIMATION OF EDUCATIONAL NEEDS**
2. **Strategic and Regulatory Framework of the Plan**

The following goals and strategy documents shall guide the implementation of the updated Education Sector Master Plan for 2009-2015, both in the medium and long-term:

* Millennium Development Goals (MDGs);
* Education for All (EFA) goals;
* MDGs-based Comprehensive National Development Strategy of Mongolia; and
* Government Action Plan for 2008-2012.

The following conditions and regulations shall be put in place and have been used for estimating the educational needs and the funding requirements in order to implement the Education Sector Master Plan:

* Enrolment age in preschool education will be 2-5 years old from 2008/09 school year and onwards;
* Legal age of entrance to general education schools will be 6 starting from 2008/09 school year;
* General education schools will have a 12 year structure (6+3+3) starting from 2008-2009 onwards;
* Age of children in primary education level will be 6-11 from 2008/09 school year onwards;
* Age of children in lower secondary level will be 12-14 from 2008/09 school year onwards; and
* Age of children in upper secondary level will be 15-17 in 2008/09 school year onwards.
* Teaching load for a primary teacher is 19 hours per week and average study hours for

students is 25 hours per week.

* Teaching load for a secondary teacher is 19 hours per week and average study hours for students is 36 hours per week.
* Number of subjects in pre-schools, primary and secondary schools and TVET institutions will be determined by education standards, training programs, national curricula and subject and grade level syllabus.

1. **Enrolment Projections**

Enrollment in **preschool education** will rapidly increase from 73% GER in 2008/09 school year to 82% and 93% in 2012/13 and 2015/16 respectively. Alternative forms of preschool education shall play a determining role in this regard.

***Table 5.1: Preschool Education Enrolment***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline** | **Medium Term Framework** | | | | **Average** |
| **Academic year** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013-2015** |
| **Total Enrolment** | **116,449** | **137,745** | **150,822** | **171,308** | **192,660** | **221,201** |
| **Kindergarten:** | | | | | | |
| Urban | 71,425 | 73,572 | 83,964 | 92,828 | 102,647 | 119,097 |
| Rural | 31,097 | 30,017 | 28,542 | 32,049 | 34,849 | 31,365 |
| **Alternative forms:** | | | | | | |
| Urban | 7,202 | 9,194 | 11,191 | 13,397 | 15,690 | 19,368 |
| Rural | 20,986 | 24,961 | 27,125 | 33,033 | 39,474 | 51,371 |
| Private enrolment | 5,157 | 7,847 | 11,752 | 16,230 | 21,495 | 33,003 |

Gross enrolment ratios in **primary education** are expected to improve from 86% in 2008 to 92% and 104% in 2012 and 2015 respectively. The sudden increase in enrolment between 2008/09 and 2009/2010 and the following decrease through 2012/2013 are attributable to the consequences of the shift in the duration of primary education from 5 to 6 years.

***Table 5.2: Primary Education Enrolment***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline** | **Medium Term Framework** | | | | **Average** |
| **Academic year** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013-2015** |
| **Total Enrolment** | **252,604** | **280,951** | **279,659** | **274,594** | **265,714** | **315,858** |
| Urban | 153,181 | 177,495 | 180,723 | 179,177 | 174,263 | 206,097 |
| Rural | 99,423 | 103,456 | 98,936 | 95,417 | 91,451 | 109,761 |
| Private enrolment | 11,066 | 13,648 | 14,738 | 15,454 | 15,852 | 20,721 |
| Dormitory students | 20,936 | 23,678 | 23,960 | 23,909 | 23,508 | 28,827 |

In **secondary education**, gross enrolment ratios are projected to evolve both at lower (from 127% in 2008 to 98% in 2012/13 and 116% in 2015/16) and upper levels (from 45% in 2008 to 73% in 2012/13 and 66% in 2015/16). The decrease of lower secondary enrolment from its peak in 2008/09 reflects the change in the duration of study from 4 to 3 years, and the subsequent progressive reduction of double cohort at this level.

***Table 5.3: Lower and Upper Secondary Education Enrolment***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline** | **Medium Term Framework** | | | | **Average** |
| **Academic year** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013-2015** |
| **Lower Secondary Enrollment** | | | | | | |
| Urban | 127,706 | 110,482 | 105,580 | 104,299 | 96,741 | 108,602 |
| Rural | 75,151 | 64,700 | 60,088 | 55,665 | 48,541 | 50,793 |
| Private enrolment | 8,338 | 7,946 | 8,281 | 8,831 | 8,782 | 11,201 |
| Dormitory students | 14,363 | 12,951 | 12,764 | 12,825 | 12,101 | 14,280 |
| **Upper Secondary Enrolment** | | | | | | |
| Urban | 56,619 | 81,392 | 77,288 | 76,843 | 83,497 | 78,841 |
| Rural | 19,978 | 27,790 | 26,851 | 27,346 | 30,207 | 25,625 |
| Private enrolment | 6,004 | 8,596 | 8,138 | 8,068 | 8,740 | 8,170 |
| Dormitory students | 6,787 | 9,738 | 9,348 | 9,413 | 10,338 | 9,618 |

***Table 5.4: T VET Enrolment***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline** | **Medium Term Framework** | | | | **Average** |
| **Academic year** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013-2015** |
| **Total Enrolment** | **37,867** | **46,945** | **52,939** | **50,960** | **56,363** | **52,290** |
| Urban | 10,229 | 8,796 | 10,131 | 9,922 | 12,671 | 30,374 |
| Rural | 17,843 | 21,989 | 23,861 | 22,158 | 23,697 | 21,916 |
| Private enrolment | 5,878 | 7,252 | 8,139 | 7,796 | 8,581 | 7,884 |

Enrolment in **TVET institutions** will rapidly increase along with the increasing share of dormitory students (close to 20% by 2012/13 and up to 25% by 2015/16).

***Table 5.5: TVET Students in Dormitory***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Baseline** |  |  | **Target** |
| **Academic year** | **2008** | **2009** | **2012** | **2015** |
| TVET students in dormitory | 14.1% | 15.0% | 19.4% | 25.0% |

**Literacy programs** will be organized at regular intervals to cater for 5,400 students yearly. Slightly higher number of women will be encouraged to enroll in literacy teaching. **Equivalency program** will also be strengthened at all education levels.

***Table 5.6: Enrolment in Literacy and Equivalency Programmes***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline** | **Medium Term Framework** | | | | **Average** |
| **Academic year** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013-2015** |
| **Literacy Enrolment** | | | | | | |
| Basic Literacy | 2,400 | 2,400 | 2,400 | 2,400 | 2,400 | 2,400 |
| Post Literacy | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 |
| **Equivalency Enrolment** |  |  |  |  |  |  |
| Primary | 6,254 | 6,285 | 6,317 | 6,348 | 6,380 | 6,444 |
| Lower Secondary | 4,977 | 5,002 | 5,027 | 5,052 | 5,077 | 5,128 |
| Upper Secondary | 1,105 | 1,127 | 1,150 | 1,173 | 1,196 | 1,245 |

Efforts will be made to rationalize the enrolment at **higher education** level which is projected to decrease (except in priority fields) from 54.4% GER in 2008/09 to 51.2% and 48.9% in 2012/13 and 2015/16 respectively. Measures are to be taken to encourage enrolment in priority fields, such as: Natural Science, Teacher Education, Engineering and Agriculture.

***Table 5.7: Higher Education Students***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline** | **Medium Term Framework** | | | | **Average** |
| **Academic year** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013-2015** |
| Social and Human Sciences | 22,369 | 21,779 | 20,972 | 20,061 | 19,707 | 18,588 |
| Law | 7,381 | 7,448 | 7,433 | 7,362 | 7,489 | 7,573 |
| Natural Science | 3,666 | 4,021 | 4,330 | 4,599 | 4,992 | 5,677 |
| Teacher Education | 19,332 | 19,764 | 19,974 | 20,053 | 20,667 | 21,408 |
| Engineering | 21,119 | 22,052 | 22,734 | 23,205 | 24,306 | 25,983 |
| Medical Sciences | 14,065 | 14,022 | 13,831 | 13,563 | 13,664 | 13,559 |
| Agriculture | 3,880 | 4,229 | 4,528 | 4,786 | 5,172 | 5,831 |
| Other | 57,587 | 54,414 | 50,672 | 46,650 | 43,918 | 37,411 |

1. **Teaching and Non-Teaching Staff Projection**

On a par with the rapid increase of enrolment projected for **preschool education**, the number of teaching and non-teaching staff is expected to considerably increase, to double by 2015/16.

***Table 5.8: Preschool Teachers and Non-teaching staff***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline** | **Medium Term Framework** | | | | **Average** |
| **Academic year** | **2008** | **2009** | **2010** | **2011** | **2012** | **2015** |
| Total Teaching Staff | 5,535 | 5,807 | 6,751 | 7,606 | 8,581 | 10,408 |
| Of which: Teachers | 2,960 | 3,110 | 3,620 | 4.085 | 4,615 | 5,613 |
| Assistant Teachers | 2,575 | 2,697 | 3,131 | 3,522 | 3,967 | 4,795 |
| Of which: New teachers | 0 | 446 | 1,147 | 1,083 | 1,233 | 1,151 |
| Total Non-Teaching Staff | 4,475 | 4,612 | 5,270 | 5,838 | 6,478 | 7,603 |
| Of which: New non-teaching staff | 0 | 276 | 816 | 743 | 834 | 731 |

The number of teaching and non-teaching staff at **primary and secondary education** level will steadily increase throughout the plan period.

***Table 5.9: Primary and Secondary Education Teachers and Non- Teaching Staff***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline** | **Medium Term Framework** | | | | **Average** |
| **Academic year** | **2008** | **2009** | **2010** | **2011** | **2012** | **2015** |
| ***Urban*** | | | | | | |
| Total Teaching Staff | 4,808 | 5,695 | 5,931 | 6,017 | 5,992 | 7,444 |
| Of which: Teachers | 164 | 207 | 229 | 246 | 259 | 355 |
| Assistant Teachers | 4,644 | 5,488 | 5,702 | 5,771 | 5,733 | 7,088 |
| Of which: New teachers | 0 | 1,058 | 414 | 267 | 154 | 751 |
| Total Non-Teaching Staff | 2,649 | 3,138 | 3,267 | 3,315 | 3,301 | 4,100 |
| Of which: New non-teaching staff | 0 | 583 | 228 | 147 | 85 | 414 |
| ***Rural*** | | | | | | |
| Total Teaching Staff | 3,512 | 3,717 | 3,616 | 3,548 | 3,462 | 4,311 |
| Of which: Teachers | 217 | 229 | 222 | 217 | 210 | 260 |
| Assistant Teachers | 3,295 | 3,488 | 3,394 | 3,332 | 3,251 | 4,051 |
| Of which: New teachers | 0 | 316 | 7 | 39 | 17 | 474 |
| Total Non-Teaching Staff | 3,187 | 3,373 | 3,281 | 3,220 | 3,141 | 3,912 |
| Of which: New non-teaching staff | 0 | 287 | 7 | 36 | 16 | 430 |

TVET teaching staff will be nearly doubled and TVET non-teaching staff will be substantially increased by 2015 by corresponding to the increased number of TVET students.

***Table 5.10: TVET Teachers and Non-Teaching staff***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline** | **Medium Term Framework** | | | | **Average** |
| **Academic year** | **2008** | **2009** | **2010** | **2011** | **2012** | **2015** |
| Total Teaching Staff | 1,667 | 2,123 | 2,461 | 2,436 | 2,772 | 2,723 |
| Of which: New teachers | 0 | 520 | 412 | 48 | 419 | 57 |
| Total Non-Teaching Staff | 1,073 | 1,309 | 1,467 | 1,415 | 1,585 | 1,565 |
| Of which: New non-teaching staff | 0 | 275 | 201 | 0 | 217 | 33 |

The number of NFE teachers and supporting non-teaching staff will increase incrementally along with the targeted number of enrolments.

***Table 5.11: Non-Formal Teachers and Non-Teaching Staff***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline** | **Medium Term Framework** | | | | **Average** |
| **Academic year** | **2008** | **2009** | **2010** | **2011** | **2012** | **2015** |
| ***Literacy Programme*** | | | | | | |
| Total teachers | 160 | 162 | 164 | 166 | 167 | 171 |
| Of which: New teachers | 0 | 7 | 7 | 7 | 7 | 7 |
| Total non-teaching staff | 16 | 16 | 16 | 17 | 17 | 17 |
| Of which: New non-teaching staff | 0 | 1 | 1 | 1 | 1 | 1 |
| **Equivalency Programme** | | | | | | |
| Total teachers | 294 | 295 | 297 | 298 | 300 | 303 |
| Of which: New teachers | 0 | 10 | 10 | 10 | 10 | 11 |

1. **Projection of Instructional Materials and Construction Needs**

5 books/learning materials will be provided to each child in kindergartens and alternative forms of preschools by 2015/2016. Each preschool teacher will have 2-5 teaching guides to be used in classrooms by 2015/16.

***Table 5.12: Preschool Education Textbooks and Teaching Guides***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline** | **Medium Term Framework** | | | | **Average** |
| **Academic year** | **2008** | **2009** | **2010** | **2011** | **2012** | **2015** |
| **Kindergartens** | | | | | | |
| Textbooks, learning and teaching materials | 354,113 | 346,778 | 358,913 | 382,594 | 413,060 | 425,252 |
| Teachers’ guides | 27,505 | 28,018 | 30,292 | 33,650 | 37,946 | 43,598 |
| **Alternative Forms of Preschool Education** | | | | | | |
| Textbooks, learning and teaching materials | 140,940 | 166,404 | 182,908 | 218,193 | 255,996 | 322,176 |
| Teachers’ guides | 4,000 | 4,533 | 4,790 | 5,501 | 6,222 | 7,298 |

3 core and 3 non-core subject textbooks will be available for each primary and secondary grade student by 2015/16. Similarly, all teachers will have 3 core and 3 non-core subject teaching guides by 2015/16. Free textbooks will be provided to the students from vulnerable groups, which constitute 35%-40% of all primary and secondary students.

***Table 5.13: Primary Education Textbooks and Teachers’ Guides***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline** | **Medium Term Framework** | | | | **Average** |
| **Academic year** | **2008** | **2009** | **2010** | **2011** | **2012** | **2015** |
| **Textbooks** | | | | | | |
| Of which: core textbooks | 0 | 66,826 | 132,461 | 194,355 | 249,862 | 295,137 |
| Non-core textbooks | 0 | 66,826 | 132,461 | 194,355 | 249,862 | 295,137 |
| **Teachers’ guides** | | | | | | |
| Of which: core textbooks | 0 | 2,184 | 4,404 | 6,584 | 8,633 | 10,642 |
| Non-core textbooks | 0 | 2,184 | 4,404 | 6,584 | 8,633 | 10,642 |

***Table 5.14: Lower Secondary Textbooks and Teachers’ Guides***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline** | **Medium Term Framework** | | | | **Average** |
| **Academic year** | **2008** | **2009** | **2010** | **2011** | **2012** | **2015** |
| **Textbooks** | | | | | | |
| Of which: core textbooks | 0 | 83,619 | 157,387 | 226,700 | 273,000 | 296,386 |
| Non-core textbooks | 0 | 69,682 | 131,156 | 188,917 | 227,500 | 246,988 |
| **Teachers’ guides** | | | | | | |
| Of which: core textbooks | 0 | 4,575 | 8,792 | 12,928 | 15,899 | 18,056 |
| Non-core textbooks | 0 | 3,812 | 7,327 | 10,774 | 13,249 | 15,046 |

***Table 5.15: Upper Secondary Textbooks and Teachers’ Guides***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline** | **Medium Term Framework** | | | | **Average** |
| **Academic year** | **2008** | **2009** | **2010** | **2011** | **2012** | **2015** |
| **Textbooks** | | | | | | |
| Of which: core textbooks | 0 | 66,902 | 127,413 | 190,927 | 277,358 | 253,199 |
| Non-core textbooks | 0 | 16,726 | 31,853 | 47,732 | 69,340 | 63,300 |
| **Teachers’ guides** | | | | | | |
| Of which: core textbooks | 0 | 7,410 | 14,085 | 21,118 | 30,650 | 26,910 |
| Non-core textbooks | 0 | 1,853 | 3,521 | 5,279 | 7,663 | 6,728 |

Each TVET student will have 5 core textbooks and 2 non-core textbooks by 2012/13, and 10 core and 5 non-core textbooks by 2015/2016. Each TVET teacher will have 5 core and 5 non-core textbooks by 2012/2013, and 10 core and 10 non-core textbooks by 2015/16.

***Table 5.16: T VET Textbooks and Teachers’ Guides***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline** | **Medium Term Framework** | | | | **Average** |
| **Academic year** | **2008** | **2009** | **2010** | **2011** | **2012** | **2015** |
| **Textbooks** | | | | | | |
| Of which: core textbooks | 95,967 | 138,926 | 179,203 | 194,238 | 238,910 | 284,496 |
| Non-core textbooks | 63,978 | 79,387 | 89,601 | 86,328 | 95,564 | 126,291 |
| **Teachers’ guides** | | | | | | |
| Of which: core textbooks | 4,320 | 6,405 | 8,465 | 9,404 | 11,861 | 14,893 |
| Non-core textbooks | 4,320 | 6,405 | 8,465 | 9,404 | 11,861 | 14,893 |

The student/computer ratio in primary, lower secondary and upper secondary levels will be reduced to 50 in 2015/16.

***Table 5.17: Computers for Primary and Secondary Education***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline** | **Medium Term Framework** | | | | **Average** |
| **Academic year** | **2008** | **2009** | **2010** | **2011** | **2012** | **2015** |
| Computers to primary | 839 | 1,055 | 1,208 | 1,397 | 1,649 | 3,976 |
| Computers to lower secondary | 2,120 | 1,854 | 1,791 | 1,790 | 1,679 | 1,932 |
| Computers to upper secondary | 9,399 | 13,620 | 13,039 | 13,071 | 14,322 | 13,755 |

The need for new seats will increase at all education levels during 2008-2015. Particularly, the need for new seats and dormitory beds in primary and secondary is to be increased substantially due to the structural shift from 11 to 12-year system.

***Table 5.18: Number of Seats and Beds for Preschool, Primary and Secondary Education and TVET***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline** | **Medium Term Framework** | | | | **Average** |
| **Academic year** | **2008** | **2009** | **2010** | **2011** | **2012** | **2015** |
| Number of seats and beds newly required for preschool | 0 | 1,400 | 7,700 | 9,125 | 8,850 | 3,492 |
| Number of seats newly required for Primary and Secondary | 0 | 45,120 | 8,640 | 7,530 | 14,160 | 31,590 |
| Number of dormitory beds newly required | 0 | 2,790 | 672 | 894 | 1,596 | 3,264 |
| Number seats newly required in TVET | 0 | 300 | 3,180 | 330 | 3,000 | 350 |

1. **ESTIMATION OF FUNDING REQUIREMENTS**
2. **Preschool Education**

In estimating preschool meal funding requirements the annual expenditure per child is projected to be MNT228,000 based on early childhood nutritional and calory norms. The preschool meal expenditure will be adjusted annually to inflation, and is projected to be MNT 29.2 billion during 2009-2012 and MNT 42 billion in 2013-2015. In addition, the preschool meal expenditure for alternative forms of preschool education is estimated to be MNT72,400 per child per year. The average total expenditure each year is MNT4 billion during 2009-2012 and MNT8.2 billion in 2013-2015.

The salaries of teachers and assistant teachers are indexed to GDP per capita growth, and therefore are projected to increase by 10% annually following the same rate of GDP growth. The average salary fund for preschool teachers is estimated to be MNT29.1 billion per year in 2009-2012 and MNT49.3 billion per year during 2013-2015.

In addition, the annual salary fund for non-teaching staff is projected to be MNT22.8 billion in 2009-2012 and MNT 37.2 billion during 2013-2015.

The variable costs (other than salaries) comprising other recurrent and fixed costs and investments are projected to increase by 8% per year.

***Table 5.19: Preschool Education Expenditure (MNT ‘000)***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline** | **Mid Term Framework** | | | | **Average** |
| **Academic year** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013-2015** |
| ***Recurrent costs:*** |  |  |  |  |  |  |
| Teachers’ salary | 19,689,412 | 21,763,128 | 25,707,053 | 31,308,739 | 37,708,412 | 49,317,484 |
| Non-teaching staff salary | 15,950,011 | 17,450,196 | 20,298,197 | 24,468,930 | 29,162,952 | 37,173,809 |
| Textbooks and Teachers’ Guides: | 2,325,601 | 2,460,434 | 2,756,668 | 3,178,486 | 3,698,181 | 4,432,506 |
| Other Recurrent Costs: | 42,675,364 | 47,162,811 | 54,948,258 | 65,918,474 | 78,392,923 | 100,731,001 |
| Insurance | 3,870,837 | 4,259,016 | 5,000,683 | 6,069,659 | 7,283,377 | 9,426,084 |
| Staff development & in-service training | 1,781,971 |  |  |  |  |  |
| Kindergarten meals | 22,199,220 | 23,525,971 | 26,673,732 | 30,993,154 | 35,671,874 | 42,044,118 |
| Alternative classes (Variable costs) | 1,518,000 | 1,935,647 | 2,297,831 | 2,960,396 | 3,751,163 | 5,542,149 |
| Alternative classes (Meals) | 2,232,490 | 2,846,713 | 3,379,370 | 4,353,790 | 5,516,754 | 8,150,718 |
| Other variable costs support | 690,014 | 788,736 | 956,277 | 1,173,661 | 690,014 | 1,962,792 |
| Fixed costs | 10,115,513 | 11,562,767 | 14,018,902 | 17,205,716 | 20,966,440 | 28,774,286 |
| Current renovation | 214,488 | 227,307 | 257,720 | 299,454 | 344,660 | 406,228 |
| ***Capital costs:*** |  |  |  |  |  |  |
| New construction | 2,031,435 | 12,143,186 | 15,526,796 | 16,248,023 | 11,376,668 | 5,809,619 |
| New equipment (incl. furniture) | 217,355 | 1,299,271 | 1,661,303 | 1,738,472 | 1,217,257 | 621,605 |
| Toys and other related equipment | 1,887,238 | 2,006,355 | 2,287,829 | 2,660,968 | 3,068,529 | 3,641,829 |
| Reconstruction | 1,114,642 | 1,271,016 | 1,478,315 | 1,704,738 | 1,889,342 | 2,175,468 |
| **Total Preschool Public Costs** | 85,891,058 | 105,556,397 | 124,664,421 | 147,226,830 | 166,514,263 | 203,903,323 |

During the projection period (2008-2015) a total of 28,244 new preschool places will be required with new and upgraded kindergarten buildings and an expansion of alternative and mobile (*ger*) preschools. For this purpose, an average of MNT13.8 billion per year will be needed during 2008-2012, and an average of MNT5.8 billion per year in 2013-2015.

In order to provide 5 different types of preschool learning and teaching materials to each preschool section for both teachers and children an average of MNT3 billion is required annually during 2008-2012 and an average of MNT4.4 billion per year in 2013-2015.

For the funding of preschool toys and other related equipment an average of MNT2.5 billion per year is required 2008-2012 and an average of MNT3.6 billion per year in 2013-2015.

20% of all preschool teachers are required to participate in in-service modular training each year during 2008-2015 and for this purpose MNT23.4 billion will be required. In addition, all teachers will be trained in ICT usage skills within the scope of the financing.

1. **Primary and Secondary Education**

The school snack program will be expanded into a school lunch program at primary level. For this purpose, an average of MNT30.5 billion per year will be allocated annually during 2008-2012 and MNT47.6 billion 2013-2015. Through this funding 50% of total primary students will get annual per capita funding equal to MNT868, and the remaining 50% of students will receive 50% partial funding to parental contribution equal to MNT468 per child per year.

The salary fund for primary and secondary teachers is estimated to be an average of MNT105.5 billion per year during 2008-2012 and MNT157.1 billion during 2013-2015. The salary fund for non-teaching staff in the primary and secondary education system is projected to be an average of MNT48 billion per year during 2008-2012 and MNT74.1 billion during 2013-2015.

The variable costs other than salary, other recurrent and fixed costs, and investments are projected to increase annually by 8%.

***Table 5.20: Primary and Secondary Education Expenditure (MNT ‘000)***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline** | **Mid Term Framework** | | | | **Average** |
| **Academic year** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013-2015** |
| **Recurrent costs** | | | | | | |
| Teachers salary | 85,939,429 | 100,353,543 | 106,022,119 | 113,736,444 | 121,636,939 | 157,098,757 |
| Non-teaching staff salary | 36,296,737 | 43,822,033 | 48,962,111 | 53,061,177 | 57,920,606 | 74,051,554 |
| Textbooks and teachers’ guides: | 4,681,824 | 7,490,955 | 10,385,082 | 13,517,788 | 15,391,286 | 18,326,197 |
| Other recurrent costs: | 114,250,784 | 133,684,239 | 142,068,799 | 151,411,280 | 160,331,410 | 212,157,300 |
| Insurance | 12,703,478 | 15,042,563 | 16,149,840 | 17,359,471 | 18,664,236 | 24,107,164 |
| Staff development & in-service training | 6,111,808 | 7,208,779 | 7,749,212 | 8,339,881 | 8,977,877 | 11,557,516 |
| Dormitory meals | 10,967,611 | 12,975,201 | 13,862,413 | 14,940,517 | 16,012,760 | 21,280,402 |
| School snack (50% of beneficiaries) | 7,729,216 | 9,237,978 | 9,888,141 | 10,446,147 | 10,877,921 | 15,015,616 |
| School meals (50% of beneficiaries) | 16,772,399 | 20,046,413 | 21,457,267 | 22,668,140 | 23,605,089 | 32,583,887 |
| Other support to variable costs | 3,990,920 | 4,569,037 | 4,799,014 | 5,088,012 | 5,365,663 | 6,984,106 |
| Fixed costs | 23,993,364 | 27,090,566 | 28,606,409 | 30,229,481 | 32,799,994 | 38,581,129 |
| Current renovation | 741,900 | 845,918 | 884,514 | 932,898 | 976,918 | 1,252,956 |
| **Capital Costs:** | | | | | | |
| New construction | 92,025,072 | 18,881,729 | 21,588,030 | 41,464,448 | 154,789,030 | 66,179,397 |
| New equipment (incl. furniture) | 16,982,937 | 5,701,582 | 6,544,457 | 9,537,500 | 37,367,681 | 20,704,924 |
| Computers | 3,093,535 | 1,459,182 | 1,697,365 | 2,630,319 | 2,437,068 | 3,388,506 |
| Other equipment | 4,000,000 | 4,320,000 | 4,665,600 | 5,038,848 | 5,441,956 | 6,360,035 |
| Reconstruction | 6,310,924 | 6,620,207 | 7,031,075 | 7,455,350 | 8,951,973 | 10,787,017 |
| **Total Primary and Secondary Education** | 364,672,527 | 327,648,578 | 354,734,642 | 404,137,766 | 571,383,244 | 571,299,737 |

4,000 new school classrooms and 2,600 dormitory rooms will be created during 2008-2015 in the form of new buildings and the expansion of existing facilities. For this purpose, an average of MNT65.7 billion per year will be required during 2008-2012 and MNT66,2 billion in 2013-2015.

For the distribution of primary and secondary textbooks and teachers’ guides an average of MNT10.3 billion per year will be needed every year during 2008-2012 and an average of MNT18.3 billion per year in 2013-2015.

For computers to schools, an average of MNT2.3 billion per year will be needed during 2008-2012 and MNT3.4 billion per year during 2013-2015. The target computer student ratio over all levels will be 50:1 by 2015.

One laptop per teacher (OLPT) will be implemented and this will require funding of an average of MNT214.1 million per year during 2008-2012 and MNT2.5 billion annually during 2013-2015.

The funding for new equipment and other teaching aids is projected to be an average of MNT15.2 billion per year during 2008-2012 and MNT20.7 billion per year during 2013-2015.

An average of MNT7.3 billion per year is projected for in-service training of teachers and non-teaching staff during 2008-2012 and MNT11.6 billion in 2013-2015.

1. **TVET**

The salary fund for TVET teachers is estimated to be an average of MNT14.1 billion per year during 2008-2012 and MNT 22.4 billion in 2013-2015. The average salary fund for TVET non-teaching staff will be an average of MNT9.2 billion per year for 2008-2012 and MNT15.3 billion in 2013-2015.

TVET textbooks and teaching guides are projected to cost an average of around MNT4.5 billion per year in 2008-2012 and MNT8.3 billion in 2013-2015.

In-service training of teaching and non-teaching staff is estimated to cost an average of MNT1.9 billion per year during 2008-2012 and MNT3 billion in 2013-2015.

***Table 5.21: T VET Expenditure (MNT ‘000)***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline** | **Mid Term Framework** | | | | **Average** |
| **Academic year** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013-2015** |
| **Recurrent costs:** | | | | | | |
| Teachers’ salary | 8,568,814 | 11,832,524 | 14,862,262 | 15,916,404 | 19,546,494 | 22,414,591 |
| Non-teaching staff salary | 6,116,075 | 7,837,865 | 9,483,385 | 10,244,394 | 12,410,945 | 15,251,367 |
| Textbooks and Teachers’ Guides: | 2,601,317 | 3,671,048 | 4,703,714 | 5,136,191 | 6,434,262 | 8,262,793 |
| Other Recurrent Costs: | 25,948,439 | 32,170,544 | 37,764,363 | 39,697,677 | 46,199,098 | 51,288,383 |
| Insurance | 1,615,338 | 2,163,743 | 2,678,021 | 2,877,688 | 3,515,318 | 4,143,255 |
| Staff Development & In-service Training | 1,174,791 | 1,573,631 | 1,947,652 | 2,092,864 | 2,556,595 | 3,013,277 |
| Dormitory Meals | 64,424 | 86,335 | 105,239 | 109,506 | 130,919 | 141,858 |
| State Training Fund | 9,340,345 | 9,807,362 | 10,297,730 | 10,812,616 | 11,353,247 | 12,526,889 |
| Fixed Costs | 2,850,630 | 3,846,756 | 4,722,188 | 4,948,845 | 5,959,591 | 6,555,187 |
| Current Renovations | 321,684 | 431,091 | 525,486 | 546,790 | 653,715 | 708,335 |
| **Capital Costs:** |  |  |  |  |  |  |
| New Construction | 1,748,785 | 9,151,296 | 1,137,847 | 10,037,520 | 1,414,069 | 4,551,686 |
| New Equipment (incl. furniture) | 987,129 | 4,429,032 | 544,117 | 4,862,882 | 678,021 | 2,186,745 |
| Reconstruction | 277,646 | 336,796 | 349,419 | 417,158 | 433,872 | 487,908 |
| **Total Vocational Education** | **46,248,205** | **69,429,105** | **68,845,106** | **86,312,225** | **87,116,761** | **104,443,472** |

3,800 new places are projected for 2008-2015 period and these are estimated to cost an average of MNT4.7 billion per year during 2008-2012 and an average of MNT4.6 billion per year during 2013-2015.

For new equipment and furniture in TVET an average of MNT2.3 billion per year will be required during 2008-2012 and MNT2.2 billion in 2013-2015.

1. **Higher Education**

The recurrent cost of higher education is projected to increase by 8% annually.

***Table 5.22: Higher Education Expenditure (MNT ‘000)***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline** | **Mid Term Framework** | | | | **Average** |
| **Academic year** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013-2015** |
| **Recurrent costs** |  |  |  |  |  |  |
| Salary: |  |  |  |  |  |  |
| Teachers |  |  |  |  |  |  |
| Non-Teaching Staff |  |  |  |  |  |  |
| Textbooks and Teachers’ Guides: |  |  |  |  |  |  |
| Other Recurrent Costs: | 21,934,821 | 23,464,340 | 24,756,281 | 26,078,454 | 27,609,643 | 30,875,153 |
| Scholarships for the poor and herders scholarship programme | 9,559,007 | 10,036,957 | 10,538,805 | 11,065,745 | 11,619,033 | 12,820,150 |
| Transportation Costs | 550,000 | 577,500 | 606,375 | 636,694 | 668,528 | 737,638 |
| Local administration professional development | 315,000 | 330,750 | 347,288 | 364,652 | 382,884 | 422,465 |
| Children of Civil Servants (1 child) | 7,766,620 | 8,154,951 | 8,562,699 | 8,990,833 | 9,440,375 | 10,416,274 |
| Access to Digital Libraries for Teachers | 99,666 | 105,875 | 122,900 | 131,863 | 140,579 | 167,614 |
| Books for Libraries | 140,000 | 147,000 | 154,350 | 162,068 | 170,171 | 187,762 |
| Electricity | 855,627 | 1,003,772 | 1,080,083 | 1,153,995 | 1,266,663 | 1,494,986 |
| Heating | 1,806,068 | 2,118,773 | 2,279,851 | 2,435,866 | 2,673,687 | 3,155,634 |
| Water Supply & Treatment | 842,833 | 988,762 | 1,063,931 | 1,136,738 | 1,247,722 | 1,472,631 |
| Bursaries/Fellowships | 6,965,761 | 7,314,049 | 7,679,752 | 8,063,739 | 8,466,926 | 9,342,195 |
| Within the country | 4,002,259 | 4,202,372 | 4,412,491 | 4,633,115 | 4,864,771 | 5,367,667 |
| Abroad | 2,963,502 | 3,111,677 | 3,267,261 | 3,430,624 | 3,602,155 | 3,974,528 |
| **Capital Costs** |  |  |  |  |  |  |
| New construction | 2,085,651 | 18,543,351 | 6,739,740 | 5,963,609 | 12,624,014 | 10,644,303 |
| New Equipment (incl. furniture) | 929,438 | 8,268,065 | 3,008,571 | 2,663,263 | 5,632,675 | 4,749,459 |
| Reconstruction | 654,411 | 782,290 | 863,624 | 946,566 | 1,065,699 | 1,317,510 |
| **Total Higher Education** | 32,570,082 | 58,372,096 | 43,047,968 | 43,715,630 | 55,398,957 | 56,928,619 |

The policy to provide tuition loans to 3 out of 5 students enrolling in Engineering, Natural Science, Teacher Training, Agriculture and Medical Sciences programs, and 2 out of 5 students enrolled in all other programs. For this purpose, the State Training Fund is projected to provide an average of MNT7.7 billion annually during 2008-2012 and an average of MNT9.3 billion per year during 2013-2015.

Students from lower income and herders’ families will be provided with tuition grants. For this purpose, an average of MNT10.6 billion per year will be required during 2008-2012 and an average of MNT12.8 billion per year in 2013-2015. In addition, the provision of a tuition grant for 1 child of civil servants will cost an average of MNT8.6 billion per year will be required during 2008-2012 and MNT10.4 billion during 2013-2015.

The provision of access to international digital libraries for higher education teachers, researchers and students is projected to cost an average of MNT120.2 million per year during 2008-2012 and MNT167.6 million per year in 2013-2015. In addition, the provision of new books, publications, textbooks and teachers’ guides to state universities is projected to cost an average of MNT154.7 million per year during 2008-2012 and MNT187.8 million per year during 2013-2015.

The required capital investment in higher education is projected to be an average of MNT14.2 billion per year during 2008-2012 and MNT16.7 billion per year in 2012-2015.

1. **Non-Formal and Adult Education**

The salary fund for teachers involved in NFE equivalency programs is projected to be an average of MNT1.2 billion per year during 2008-2011 and an average of MNT1.7 billion per year in 2012-2015.

An average of MNT176 million per year will be required for modular textbooks and teaching guides needed for the equivalency program during 2008-2011 and MNT193 million during 2012-2015.

***Table 5.23: Equivalency Education Program Expenditure (MNT ‘000)***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline** | **Mid Term Framework** | | | | **Average** |
| **Academic year** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013-2015** |
| **Recurrent costs** |  |  |  |  |  |  |
| Teachers’ salary | 1,071,660 | 1,170,749 | 1,278,524 | 1,394,033 | 1,516,430 | 1,800,070 |
| Non-teaching staff salary |  |  |  |  |  |  |
| Learning/instructional materials | 80,694 | 96,105 | 113,554 | 133,275 | 155,529 | 133,466 |
| Other Recurrent Costs: | 359,366 | 385,068 | 412,950 | 442,918 | 474,902 | 548,517 |
| Insurance | 117,883 | 128,782 | 140,638 | 153,344 | 166,807 | 198,008 |
| Staff Development & In-service Training | 53,583 | 58,537 | 63,926 | 69,702 | 75,822 | 90,003 |
| EP Module Development | 8,000 | 8,400 | 8,820 | 9,261 | 9,724 | 10,729 |
| EP Module Printing | 4,400 | 4,620 | 4,851 | 5,094 | 5,348 | 5,901 |
| Other Support per class | 144,000 | 150,877 | 158,271 | 166,211 | 174,732 | 193,896 |
| Maintenance (per room, incl. repair) | 31,500 | 33,851 | 36,444 | 39,307 | 42,470 | 49,980 |
| **Capital Costs:** | | | | | | |
| New constructions | 250,254 | 269,425 | 290,589 | 322,975 | 389,210 | 554,957 |
| New equipment (incl. furniture) | 29,104 | 31,334 | 33,795 | 37,562 | 45,265 | 64,541 |
| Reconstruction | 119,403 | 128,550 | 138,648 | 149,804 | 162,142 | 191,499 |
| **Total Equivalency Education Programme** | 1,910,480 | 2,081,232 | 2,268,060 | 2,480,567 | 2,743,479 | 3,343,051 |

For new construction and rehabilitation of equivalency program buildings, an average of MNT304.5 million and MNT39.7 million respectively per year will be required during 2008-2012 and MNT555 million and MNT91.5 million respectively in 2013-2015. For new equipment and furniture an average of MNT35.4 million per year will be needed during 2008-2012 and an average of MNT64.5 million per year during 2013-2015.

***Table 5.24: Non-formal Education Specific Program Expenditure (MNT ‘000)***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline** | **Mid Term Framework** | | | | **Average** |
| **Academic year** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013-2015** |
| **Recurrent costs:** | | | | | | |
| Teachers Salaries: | 33,000 | 32,082 | 35,838 | 41,401 | 47,581 | 61,035 |
| Literacy | 16,000 | 17,589 | 19,330 | 21,213 | 23,227 | 27,958 |
| Skills training | 15,000 | 12,319 | 14,145 | 17,625 | 21,579 | 29,818 |
| Parental education | 2,000 | 2,174 | 2,363 | 2,563 | 2,774 | 3,259 |
| Non-Teaching Staff | 6,600 | 6,416 | 7,168 | 8,280 | 9,516 | 12,207 |
| Other Recurrent Costs: | 37,476 | 38,394 | 41,115 | 44,573 | 48,331 | 56,502 |
| Insurance | 4,356 | 4,235 | 4,731 | 5,465 | 6,281 | 8,057 |
| Staff Development & In-service Training | 7,920 | 7,700 | 8,601 | 9,936 | 11,419 | 14,648 |
| Training Module Development | 8,000 | 8,400 | 8,820 | 9,261 | 9,724 | 10,729 |
| Training module printing | 4,400 | 4,620 | 4,851 | 5,094 | 5,348 | 5,901 |
| Life Skills and Other Training Materials Development | 2,800 | 2,940 | 3,087 | 3,241 | 3,403 | 3,755 |
| Video Lessons Development and Broadcasting | 8,000 | 8,400 | 8,820 | 9,261 | 9,724 | 10,729 |
| Management | 2,000 | 2,100 | 2,205 | 2,315 | 2,431 | 2,682 |
| **Capital Costs** | | | | | | |
| New Equipment (incl. fuel/expendable) | 110,000 | 118,800 | 128,304 | 138,568 | 149,654 | 174,901 |
| **Total NFE-specific Program** | 187,076 | 195,692 | 212,424 | 232,823 | 255,081 | 304,645 |

Literacy and other NFE specific programs will require an average of MNT216.6 million per year during 2008-2012 and MNT304.6 million in 2013-2015. For these programs, an average of MNT27.8 million per year will be required during 2008-2012 and MNT33.8 million in 2013-2015 for the development and utilization of training modules, video lessons and other learning and teaching materials.

1. **Cross-Cutting Expenditure**

***Table 5.25: Cross-Cutting Expenditure (MNT ‘000)***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline** | **Mid Term Framework** | | | | **Average** |
| **Academic year** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013-2015** |
| **Recurrent costs:** | | | | | | |
| MECS | 738,164 | 775,072 | 813,826 | 854,517 | 897,243 | 989,995 |
| UB Education Dept | 314,951 | 330,699 | 347,233 | 364,595 | 382,825 | 422,399 |
| Education Assessment Centre | 560,636 | 588,668 | 618,101 | 649,006 | 681,456 | 751,902 |
| National Centre for Non-formal and Distance Education | 110,000 | 121,000 | 133,100 | 146,410 | 161,051 | 195,462 |
| NFE District Branches | 223,818 | 235,009 | 246,759 | 259,097 | 272,052 | 300,175 |
| Human Resources Agency | 113,461 | 119,134 | 125,090 | 131,345 | 137,912 | 152,169 |
| Curricular reform, textbook revision and examinations | 278,063 | 291,966 | 306,564 | 321,892 | 337,987 | 372,926 |
| Planning, Monitoring and Evaluation | 441,561 | 463,639 | 486,821 | 511,162 | 536,720 | 592,204 |
| Miscellaneous | 816,995 | 928,849 | 1,056,137 | 1,201,013 | 1,365,933 | 1,777,422 |
| Total Capital | 719,530 | 770,807 | 826,726 | 887,807 | 954,636 | 1,110,931 |
| **Total Cross-Cutting Expenditure** | 3,597,648 | 3,854,034 | 4,133,632 | 4,439,037 | 4,773,178 | 5,554,654 |

1. **EDUCATION EXPENDITURE, GOVERNMENT BUDGET AND FUNDING GAP**

In estimating the total education expenditure, government budget and funding gap, the annual GDP growth is projected to be 10% on average during 2008-2015 based on the recent economic performance of Mongolia. The average inflation rate is projected to be 8% per annum during 2008-2015[[4]](#footnote-5).

The government budget for education is projected to be on average 38.9% of GDP per annum during 2008-2015, the education budget is estimated to be 16.5% of the overall government annual budget during 2008-2015.

***Table 5.26: GDP, Government and Education Budget Projections, 2008-2015***

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline** | **Medium Term Projections** | | | | **Projections** | | |
| **Fiscal year** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** |
| GDP per capita (MNT ‘000) | 2,317.1 | 2,518.9 | 2,737.2 | 2,969.7 | 3,214.3 | 3,481.3 | 3,769.1 | 4,078.2 |
| GDP (MNT ‘000,000) | 6,130,000 | 6,743,000 | 7,417,300 | 8,159,030 | 8,974,933 | 9,872,426 | 10,859,669 | 11,945,636 |
| Government Budget, % of GDP | 40.2% | 39.8% | 39.4% | 39.0% | 38.7% | 38.3% | 38.0% | 37.7% |
| Value (MNT ‘000,000) | 2,462,069 | 2,682,003 | 2,922,207 | 3,184,593 | 3,471,258 | 3,784,501 | 4,126,839 | 4,501,035 |
| Education Budget, % of Government Budget | 16.1% | 16.2% | 16.3% | 16.4% | 16.5% | 16.6% | 16.7% | 16.8% |
| Value (MNT ‘000,000) | 396,544 | 434,703 | 476,636 | 522,723 | 573,386 | 629,087 | 690,339 | 757,704 |

The total education expenditure estimated based on needs is projected to be annually MNT655.4 billion on average during 2008-2012 and MNT945.8 billion in 2013-2015.

***Table 5.26: Total Education Expenditure Projections 2008-2015, (MNT ‘000)***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline** | **Medium-Term Expenditure Framework** | | | | **Annual Average** |
| **Academic year** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013-2015** |
| **Total Education Expenditure** | 535,077,076 | 567,137,133 | 597,906,252 | 688,544,880 | 888,184,964 | 945,777,501 |
| *Recurrent* | 398,411,303 | 465,289,750 | 515,594,096 | 567,353,889 | 630,980,909 | 797,828,611 |
| *Capital* | 136,665,773 | 101,847,383 | 82,312,156 | 121,190,991 | 257,204,054 | 147,948,889 |
| **Sub-sector Expenditure** |  |  |  |  |  |  |
| Preschool Education | 85,891,058 | 105,556,397 | 124,664,421 | 147,226,830 | 166,514,263 | 203,903,323 |
| Primary Education | 176,133,003 | 162,965,603 | 175,354,724 | 188,459,062 | 346,716,210 | 311,841,451 |
| Lower Secondary | 102,575,074 | 90,043,597 | 94,892,276 | 100,763,007 | 122,723,372 | 141,673,714 |
| Upper Secondary | 85,964,450 | 74,639,378 | 84,487,642 | 114,915,697 | 101,943,662 | 117,784,572 |
| TVET | 46,248,205 | 69,429,105 | 68,845,106 | 86,312,225 | 87,116,761 | 104,443,472 |
| Higher Education | 32,570,082 | 58,372,096 | 43,047,968 | 43,715,630 | 55,398,957 | 56,928,619 |
| Non-Formal Education | 2,097,556 | 2,276,924 | 2,480,484 | 2,713,391 | 2,998,560 | 3,647,696 |
| Cross-Cutting | 3,597,648 | 3,854,034 | 4,133,632 | 4,439,037 | 4,773,178 | 5,554,654 |
| **Sub-sector Share (%)** |  |  |  |  |  |  |
| Preschool Education | 16.1% | 18.6% | 20.9% | 21.4% | 18.7% | 21.5% |
| Primary Education | 32.9% | 28.7% | 29.3% | 27.4% | 39.0% | 33.0% |
| Lower Secondary | 19.2% | 15.9% | 15.9% | 14.6% | 13.8% | 15.0% |
| Upper Secondary | 16.1% | 13.2% | 14.1% | 16.7% | 11.5% | 12.4% |
| TVET | 8.6% | 12.2% | 11.5% | 12.5% | 9.8% | 11.0% |
| Higher Education | 6.1% | 10.3% | 7.2% | 6.3% | 6.2% | 6.0% |
| Non-Formal Education | 0.4% | 0.4% | 0.4% | 0.4% | 0.3% | 0.4% |
| Cross-Cutting | 0.7% | 0.7% | 0.7% | 0.6% | 0.5% | 0.6% |
| **Total** | 100% | 100% | 100% | 100% | 100% | 100% |

***Table 5.27: Share of Government Budget in Total Education Expenditure and Funding Gap 2008-2015 (MNT 000’000)***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline** | **Medium Term Framework** | | | | **Average** |
| **Academic Year** | **2008/09** | **2009/10** | **2010/11** | **2011/12** | **2012/13** | **2013-15** |
| Total Education Expenditure | 535,077 | 567,137 | 597,906 | 688,545 | 888,185 | 945,777 |
| Government Budget Education | 396,544 | 434,703 | 476,636 | 522,723 | 573,386 | 692,377 |
| % of Total Education Expenditure | 74.1% | 76.6% | 79.7% | 75.9% | 64.6% | 73.2% |
| ***Funding Gap (1)*** | ***138,533*** | ***132,434*** | ***121,271*** | ***165,822*** | ***314,799*** | ***253,400*** |
| % of Government Education Budget | 34.9% | 30.5% | 25.4% | 31.7% | 54.9% | 36.7% |
| Households and donors expected contribution | 36,855 | 56,521 | 75,657 | 33,104 | 33,813 | 35,284 |
| ***Funding Gap (2)*** | ***101,677*** | ***75,913*** | ***45,613*** | ***132,718*** | ***280,987*** | ***218,117*** |
| % of Government Education Budget | 25.6% | 17.5% | 9.6% | 25.4% | 49.0% | 31.5% |

**Note:** Funding gap (1) represents the additional funds to mobilize for education before households and donors contributions taking into account;

Funding gap (2) represents the additional funds to mobilize for education after households and donors contributions have been taken into account.

The share of government budget in the total expenditure needed for education is projected to be on average 74.2% during 2008-2012 and 73.3% during 2013-2015. Therefore, **the annual funding gap (1)** in education is expected to be MNT174.6 billion on average during 2008-2012 and MNT253.4 billion during 2013-2015 (Table 5.27).

The annual households’ contributions to education are estimated to be MNT11.5 billion on average during 2008-2012 and MNT12.8 billion during 2013-2015. The annual donors’ contributions is projected to be MNT35.7 billion on average during 2008-2012 and MNT22.5 billion during 2013-2015.

After taking account the households and donors’ contributions, **the annual funding gap (2)** in education is estimated to be MNT127.4 billion on average during 2008-2012 and MNT218.1 billion on average during 2013-2015.

**CHAPTER 6: MANAGEMENT, MONITORING AND EVALUATION**

**6.1 Issues of Information Management and Monitoring**

The Mongolian education system is in a state of rapid expansion fuelled by substantial increases in the level of funding devoted to education.

The previous Education Sector Master Plan (ESMP) set out ambitious goals for expanding access to education at all levels. Key initiatives included the rapid expansion of participation in preschool, primary and secondary education, a shift to a 12 year structure and expansion of TVET and higher education, especially in priority fields.

The updated ESMP incorporates a number of measures designed to remove barriers to the participation of children, particularly from disadvantaged backgrounds. These measures include a steady increase in the physical capacity of the preschool, primary, secondary and TVET systems to provide extra places through the construction and renovation of school buildings and in the provision of targeted subsidies for free textbooks, school supplies and school meal programs. It is expected that these measures will substantially improve both quantity and equity of educational output over the medium term.

In identifying the need for these measures, a careful analysis of quantitative data derived from a well-developed Education Management Information System (EMIS) is crucial. However, the current EMIS did not allow for a detailed analysis of the evidence: therefore, in some cases, simple calculations of enrolment rates for children from different backgrounds and discussions with school administrators and teachers were made. On the other hand, the review of the original ESMP has concluded that the targets sometimes lack measurable performance indicators and that available data – and its reliability – and the monitoring mechanisms currently in place were sometimes inadequate to enable accurate evaluation as to whether or not – and to what extent – targets were being achieved. If the statistical data available to MECS were unreliable, planning and budgeting procedures and processes would be based on inaccurate premises. Chapter 1, above, noted that there is a particular problem with the measurement of system performance, which is hindered by the lack of clear and objective performance targets for students, teachers and schools. This is an issue that will become more urgent with the introduction of the new basic school curriculum and the introduction of skills-based student development targets.

The measures undertaken within the framework of the initial ESMP are likely to have produced the expected improvements in enrollment and graduation rates at all levels of the system, including the enhanced participation of children from disadvantaged backgrounds. However, without effective quality measurements, it is difficult to achieve the targeted education output, especially in terms of education quality.

The updated ESMP is designed to build on and consolidate the previous plan. Therefore, the updated ESMP will continue to devote most of the resources available to MECS to removing barriers to participation. However, the updated ESMP also includes a number of measures designed to shift the focus of investment and activities away from education inputs towards the improvement of educational processes and to ensure that all students are learning at the expected levels and achieving the expected outcomes. This shift implies a need to better understand the efficiency and effectiveness of instruction for different groups of students and the impact of different factors on the learning achievement of students.

The updated ESMP includes elements designed to enhance the Ministry’s EMIS system. The improvement of the EMIS system will, in the first instance, require a focus on:

* The improvement of the reliability of basic statistics on enrollment and graduation rates at all levels of the education system, including in non formal education. This will be achieved through the development, implementation and analysis of individual level student, teacher and school registers. The enhanced data systems will allow the Ministry to monitor progress towards key participation goals and to evaluate the impact and efficiency of measures designed to remove barriers to the participation of students from disadvantaged backgrounds.
* The collection of data on the early learning achievement of children. This will be accomplished by collecting data from a sample of children aged 5 to 11 on their social, physical and cognitive development, including reading and mathematics. The availability of reliable data on early achievement will establish the magnitude of differences in readiness to learn at school entry and the proportions of students that fail to meet learning expectations up to Grade 6. Combining this achievement data with data from the student, school and teacher registers will provide a means to identify barriers to improvement and successes. Participation in the International Association for the Evaluation of Educational Achievement (IEA) international Trends in Mathematics and Science (TIMSS) and Progress in Reading Literacy (PIRLS) studies will allow the performance of Mongolian students in the 4th and 8th Grades to be benchmarked against a broad range of countries.
* The collection of data from students leaving the TVET and HE systems. This will be accomplished through the administration of a survey that focuses on their integration into the labor market and their levels of satisfaction with the quality and relevance of instruction. This data will allow for an analysis of the efficiency of these systems.

Provided that funding can be identified and mobilized in good time, these enhancements will start to be implemented in the 2009/2010 school year. Additional information priorities will be identified through a consultation process with key user groups, including the bilateral and multi-lateral donors.

Collectively the availability of these additional data will support a much-improved capacity for the policy and program planning that will be needed to identify future educational investment opportunities and risks. The same data will provide a basis for the on-going monitoring of the majority of the targets set out in the updated ESMP in order to ensure that progress is being made.

Actions are needed to address the lack of adequate monitoring and supervision capacity in preschools, primary, and secondary schools and also in TVET and NFE. Because of the great distances involved in Mongolia, monitoring and supervision are much more expensive activities than in most other education systems. As a result, any misreporting of enrolments, boarders, dropouts, and transfers is likely to go unnoticed, which in turn makes accurate forward planning and realistic budgeting problematic. Strategies need to be developed which will support effective monitoring and supervision at a cost which can be afforded. Closely associated with the lack of effective monitoring and supervision is a lack of reliable performance evaluation mechanisms to measure student, school and system performance in a consistent and reliable manner and also to measure the impact of the current financial crisis on system outputs. This issue is highlighted in Chapter 2, above.

Improved and upgraded data collection and analysis, upgraded and reliable monitoring and supervision and improved performance evaluation will depend to a very great extent on improved management of all parts of the educational system and this issue has been considered as part of the ESMP Review. The management problem is emphasized by manpower issues and the lack of clear priorities between sub-sectors and within sub-sectors. The development of an over-arching education management based on clear targets and established priorities must be, perhaps, the highest priority of the revised ESMP in order to ensure that all of the targets can be delivered effectively.

Many of the prerequisites to support the enhanced EMIS have already been put in place. The creation in 2009 of the Information and Monitoring Directorate at the Ministry provides the needed institutional home for the activity. Additional staff will be required to oversee the development of the new information systems and to manage their implementation. It is estimated that implementation of the enhancements specified above will require an incremental investment of approximately US$500,000.

**6.2 Sector Performance Indicators and Targets: 2012/13 – 2015/16**

Quantitative sector performance indicators are necessary to inform the progress being made and, subsequently, feed into decision-making and stakeholder consultations as for the improvement, adjustments and potential remedial measure in the course of the plan implementation.

The baseline data are taken from the MECS’s EMIS as well as from different sources. These baseline data and its subsequent projected targets will be reviewed in the light of the information garnered from annual school census and surveys.

Below are presented such sector performance indicators for 2008/09 (base year) through 2015, which have been projected by means of a simulation model to allow for the assessment of the implementation of the ESMP in terms of (i) access and equity; (ii) quality and efficiency:

**Table 6.1: Equitable Access (Literacy rate and GER)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **BASELINE** | **PROJECTIONS** | | | | | |
|  | 2008 | 2009 | 2010 | 2011 | 2012 | 2015 |
| **Literacy rates (16 +)** | **98%** | **98%** | **99%** | **99%** | **99%** | **100%** |
| Gender parity index | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| **Gross enrolment ratios (GER)** | | | | | | |
| **Preschool** | **57%** | **55%** | **56%** | **57%** | **60%** | **64%** |
| Gender parity index | 1.04 | 1.04 | 1.03 | 1.03 | 1.02 | 1.00 |
| Share of private education | 5.0% | 7.6% | 10.4% | 13.0% | 15.6% | 24.9% |
| **Primary** | **86%** | **97%** | **99%** | **99%** | **97%** | **104%** |
| Gender parity index | 0.98 | 0.98 | 0.98 | 0.97 | 0.97 | 1.00 |
| Share of private education | 4.4% | 4.9% | 5.3% | 5.6% | 6.0% | 6.8% |
| **Lower Secondary** | **127%** | **112%** | **109%** | **107%** | **98%** | **116%** |
| Gender parity index | 1.05 | 1.05 | 1.04 | 1.04 | 1.01 | 0.97 |
| Share of private education | 4.1% | 4.5% | 5.0% | 5.5% | 6.0% | 7.5% |
| **Upper Secondary** | **45%** | **66%** | **65%** | **65%** | **73%** | **66%** |
| Gender parity index | 1.24 | 1.24 | 1.14 | 1.07 | 1.01 | 1.00 |
| Share of private education | 7.8% | 8.1% | 8.2% | 8.4% | 8.5% | 9.5% |
| **Technical and vocational** | **22%** | **29%** | **33%** | **32%** | **36%** | **33%** |
| Gender parity index | 0.91 | 0.90 | 0.84 | 0.78 | 0.74 | 0.73 |
| Share of private education | 15.5% | 15.4% | 15.4% | 15.3% | 15.2% | 15.0% |
| **Higher** | **54%** | **54%** | **53%** | **52%** | **51%** | **49%** |
| Gender parity index | 1.49 | 1.44 | 1.40 | 1.36 | 1.32 | 1.20 |

***Table 6.2: Quality and Efficiency***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **BASELINE** | **PROJECTIONS** | | | | |
|  | **2008** | **2009** | **2010** | **2011** | **2012** | **2015** |
| **Completion rates** |  |  |  |  |  |  |
| Preschool |  |  |  |  |  |  |
| Primary |  |  |  |  |  |  |
| Lower Secondary |  |  |  |  |  |  |
| Upper Secondary |  |  |  |  |  |  |
| **Pupil/teacher ratios (Public)** | | | | | | |
| ***Preschool:*** |  |  |  |  |  |  |
| Urban | 12.9 | 12.6 | 12.4 | 12.1 | 11.8 | 11.0 |
| Rural | 13.3 | 13.2 | 13.0 | 12.9 | 12.7 | 12.3 |
| ***Primary:*** |  |  |  |  |  |  |
| Urban | 31.9 | 31.2 | 30.5 | 29.8 | 29.1 | 27.0 |
| Rural | 28.3 | 27.8 | 27.4 | 26.9 | 26.4 | 25.0 |
| ***Lower Secondary:*** |  |  |  |  |  |  |
| Urban | 18.1 | 17.7 | 17.4 | 17.1 | 16.8 | 15.8 |
| Rural | 17.9 | 17.5 | 17.0 | 16.6 | 16.1 | 14.8 |
| ***Upper Secondary:*** |  |  |  |  |  |  |
| Urban | 13.5 | 13.7 | 13.9 | 14.1 | 14.2 | 14.8 |
| Rural | 13.7 | 13.8 | 13.8 | 13.8 | 13.8 | 13.7 |
| **Class size (Public)** |  |  |  |  |  |  |
| ***Preschool:*** |  |  |  |  |  |  |
| Urban | 24.7 | 24.8 | 24.8 | 24.8 | 24.9 | 25.0 |
| Rural | 28.5 | 28.1 | 27.8 | 27.4 | 27.1 | 26.0 |
| ***Primary:*** |  |  |  |  |  |  |
| Urban | 38.7 | 38.7 | 38.8 | 38.9 | 39.0 | 39.2 |
| Rural | 40.6 | 39.0 | 37.5 | 36.0 | 34.5 | 30.3 |
| ***Lower Secondary:*** |  |  |  |  |  |  |
| Urban | 38.7 | 43.1 | 42.7 | 42.3 | 41.9 | 40.6 |
| Rural | 40.6 | 31.7 | 31.9 | 32.1 | 32.3 | 32.9 |
| ***Upper Secondary:*** |  |  |  |  |  |  |
| Urban | 28.9 | 38.9 | 38.5 | 38.1 | 37.8 | 36.7 |
| Rural | 30.5 | 34.2 | 33.7 | 33.3 | 32.9 | 31.5 |

***6.3 Management, Monitoring and Evaluation Mechanisms***

The roles and responsibilities of respective levels in terms of management, monitoring and evaluation of the Plan will be the following:

* ***MECS, including other stakeholders:***
  + Comprehensive evaluation of the Plan implementation before the end of medium term (2012/13) and long term periods (2015/16);
  + Ensuring that annual budgeting is in conformity with the updated ESMP targets, in light of new developments;
  + Annual review of the plan implementation in cooperation with major stakeholders, to take stock of plan implementation and to bring necessary adjustments;
  + Regular monthly disbursements of human, technical and financial resources to aimags and educational institutions;
  + Semi-annual monitoring meetings with heads of departments to review progress and shortcomings.
* ***Aimag Education and Culture Departments:***
  + Regular supervision and support to schools and education centers;
  + Annual, semi-annual and monthly monitoring and review meetings at aimag levels;
  + Daily management and monitoring of the plan, including introduction of aimag and soum level micro-planning and school mapping exercises;
  + Annual meetings at MECS in view of experience sharing, review of progress and remedial measures, as well as planning next year education development program.
* ***Schools and Education institutions:*** 
  + Development of school development plans;
  + Maintaining school registers and reporting accurately to annual statistics to aimag Education and Culture Departments and MECS
  + Involving community in school development activities.
* ***Education Donors Consultative Mechanism (EDCM):***
  + Semi-annual technical meetings and annual high-level meetings with donors and relevant stakeholders;
  + Coordination of development actions between the Government and partner agencies;
  + Decision on donor support to development and reform in the education sector.

1. United Nations Development Programme, 2007. *The Millennium Development Goals Implementation: Second National Report*. Ulaanbaatar. [↑](#footnote-ref-2)
2. World Bank 2008. *Mongolia: Public Expenditure and Financial Management Review*. Washington, D.C. [↑](#footnote-ref-3)
3. Urban schools are defined as schools located in Ulaanbaatar city and aimag centers. [↑](#footnote-ref-4)
4. GDP growth was 8.6% in 2006, 10.2% in 2007 and is projected as 12.4% in 2008. The inflation rate was 4.5% in 2006, 8.2% in 2007 and is projected as 8.2% in 2008. Selected Economic and Financial Indicators*, 2006-2010, IMF, March 200* [↑](#footnote-ref-5)