



UNDERSTANDING AND MONITORING SERVICE  
DELIVERY IN A DECENTRALIZING ENVIRONMENT  
IN MONGOLIA:

**The Case of Education and Health**

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## ▲ EXECUTIVE SUMMARY

### I. INTRODUCTION

The Integrated Budget Law (IBL) of 2011 has helped launch national reform toward greater decentralization, with significant implications for education and health service delivery. Building on lessons from previous phases of fiscal reform, the IBL grants new “decision space” to sub-national officials, increasing the degree of autonomy that lower levels of government, schools, and health care facilities have in delivering services. It provides local officials with significantly more discretion in how they spend education and health funds from the central government, which previously were subject to strict line item budgeting.

However, two key questions are: to what extent has this decentralization been realized on the ground, and how has it affected education and health service delivery? While the IBL stipulates a comprehensive set of reforms, these reforms have not been implemented across the board or at the same pace. Numerous factors, including existing regulations and local capacities, may also affect the degree to which local officials and institutions are able to exercise the autonomy granted to them by the IBL.

This study attempts to develop a better understanding of how education and health service delivery in Mongolia has been (and could be) affected by decentralization and identifies measures to strengthen service delivery going forward. A “decision space” analysis was used to provide a general overview of the degree of choice local officials have over different system functions as well as capacities and accountability at different levels of the system. Quantitative and qualitative surveys were developed to gather information on implementation of the IBL, as captured by the perspectives of local authorities, service delivery units, and citizens on the delivery of education and health services. Several issues related to service delivery in a decentralizing environment were also examined, namely: education financing, teacher management, and health service provider payment systems.

### II. CURRENT STATUS AND CHALLENGES

#### A. Intergovernmental relations in education and health service delivery under the IBL

General education services and primary health care services are “delegated functions” and are therefore financed through earmarked transfers. In terms of expenditure assignment, the IBL differentiates between local and delegated responsibilities by assigning the former to sub-national governments and the latter to the Aimag and Capital City levels. A key difference between these two is that local functions are financed by local revenue sources, whereas delegated functions are financed by earmarked transfers provided by the central government. Both general education services and primary health care services are delegated functions. In basic education, the Ministry of Education contracts with aimag and Capital City governors to deliver services. In primary health care, the provision of health services is delegated to aimag and Capital City governors.

In both education and health, the central government exercises a large degree of regulatory power. For example, in education, the central government issues regulations on expenditures and reporting of own revenues by the schools; educational standards and norms; job descriptions of school directors; and food standards and norms. The central government also determines the average variable normative cost per student each fiscal year, which is then adjusted for school location. In health, the central government develops and approves regulations on service charges, financing methods, and the list of medical services and medicines financed by the state budget regulations on price definition for services that require charges; regulations on services financed by health insurance; and regulations on bonuses for health organization staff as well as regulations on the Health Support Fund.

## B. Decision Space under the IBL

The results of the survey conducted for this analysis found that in certain areas, the 2011 IBL has granted significant new decision space to sub-national officials. The IBL has increased decision space on budgeting and planning, especially at the aimag, Capital City, and soum levels. It has also given facility directors significant control over human resources functions, especially hiring, firing, and granting of bonuses and incentives. In both education and health, the majority of survey respondents indicated that the delegation of authority to schools and health service providers had improved between 2012 and 2014.

However, actual decision space varies considerably by function and by level. In finance, the decision space appears to be quite narrow at all levels (except for governors), and financial decision space is narrower than the decision space in other functions. The decision space for service organization and delivery as well as for human resource management is quite narrow at the level of governors and Departments and is moderate at the school and health facility and school levels.

The survey also found significant gaps in the views of officials on the actual decision space available at each level. Some respondents were still unclear about the amount of decision space they have and therefore were still reluctant to make decisions that reflect their local conditions. For example, the views on what authority determines the amount of funding for each health facility differed across providers and administrators. As stipulated in the IBL, aimag governors are responsible for the provision of primary health care services in the aimag/capital city. Accordingly, the budget authority has been transferred to the family group practices (FGPs) and soum health centers, and the aimag or soum Khurals approve the amount of money to be allocated to these public health facilities. However, most survey respondents believed that the Ministry of Health is ultimately responsible for the amount of money transferred to health facilities. This variation may just be differences in perception, but it is more likely that a significant effort is needed to inform officials of the kinds of choices they are allowed to make.

While capacity appears to be moderate at the organizational level, survey respondents indicated that insufficiency of funds hinders service provision significantly. The majority of respondents at the Department of Education and schools and at most health facilities believed that they did not have sufficient funding to provide the required services. In terms of human resources, most respondents at the Department of Education reported that schools had adequate human resources to implement public education programs in accordance with the policies, but the supply of human resources posed some challenges in urban areas. Similarly, human resource shortages in health appear to be particularly acute in urban areas, where 60 percent of facilities indicated that the availability of human resources was significantly lower than the needed amount.

Although the survey found that service delivery has improved since 2012 from the citizens' perspective, findings from the administrators' surveys point to continuing challenges in ensuring quality of education and health services. More than half of Department of Education respondents characterized the quality of education at public schools as still being problematic. In fact, they noted that the problems worsened between 2012 and 2014. Similarly, health care providers reported that although compliance with national standards appears to be universal, they perceived substantial problems in the quality of care as well as availability of services.

## III. RECOMMENDATIONS

The survey results point to areas where greater expansion of decision space would help create a more efficient and responsive system than what is embodied in the IBL. In particular, budget flexibility could be improved, giving managers more discretion after the budget is approved to respond to changed situations over the year and to variations in needs from one district to another in a governor's aimag. For the procurement decision space, a maximum procurement that local authorities can manage without central

approval could be considered. Furthermore, if local authorities are allowed to raise revenues through education and health facilities (for example, through user fees or through mobilizing mechanisms such as charity fairs or extracurricular programs), these revenues should be retained at the facility level.

At this point in time, however, greater efforts are needed in monitoring and evaluating the impacts of the current law on performance rather than on revising the IBL. It is advisable to invest in ongoing monitoring and a sophisticated evaluation study to provide information on benefits and problems that are likely to arise in implementation. This is also a capacity issue: central authorities need strong capacity to monitor how well the system is functioning at the provincial level. Furthermore, as decentralization and performance-based financing initiatives are implemented, information system auditing and surveys to verify routine information are important.

If national policymakers want to decentralize but local officials lack capacity, policymakers should consider how much they can strengthen or build new capacity in a relatively short period and align the decision space to the capacities that can be strengthened. Before fully implementing any expansion of decision space at the sub-national levels, an assessment of local capacities is critical. International experience also suggests that sub-national officials benefit from significant programs of management and leadership training, carefully constructed pay-for-performance incentive systems, and improved information systems. In addition, it might be useful to disseminate materials that provide examples of the variety of choices the IBL allows for in the key functions of financing, human resources, procurement, and contracting so local officials know what their decision space is and are encouraged to make decisions that reflect their local needs and priorities.

Importantly, sufficient financing for the sub-national levels is critical so they have the financial capacity to implement the decisions that they are now allowed to make. Perhaps the most important initiative would be to provide a standardized and predictable formula for assigning intergovernmental transfers based on actual needs rather than historical budgets. It will also be important to find mechanisms for mobilizing additional funding both for intergovernmental transfers and for raising own-source revenues.

More information is needed to determine whether there are sufficient mechanisms for ensuring accountability. More time is needed to determine whether the current accountability mechanisms are effective and meaningful or if they play the more formal role of "rubber stamps." If the "decision space" survey is repeated in 12-18 months, it will give more information to clarify and determine whether there are sufficient mechanisms for community participation or the involvement of civil society through committees, councils, or primary care facility and school boards.

The study also proposes a number of measures based on an assessment of the primary and secondary education financing system. Budget discretion for schools and school managers could be increased, while also making the budget more transparent to enable parties like the PTA, Education Departments, and Ministry to monitor school expenditure properly and foster accountability. Another recommendation is to review the budget allocation formula for variable cost to make it not just per capita-based, but also to account for such factors as children with special needs, distance to the aimag capital and to UB as a proxy for price levels, and poverty as a proxy for the capability of parents to contribute.

Regarding teacher management and teachers' wages, the following measures are suggested: reducing the number of components of teacher wages, retaining only a few critical additives; introducing monthly pay slips and/or a system where teachers can obtain details of their wages and see what has been paid or deducted along with an explanation of the adjustments. All performance-related additives should be discontinued or postponed, so as to give time to develop and implement a bonus system based on "value-added" measures at some time in the future. In terms of the medium-term recommendations, a system for measuring annual "value added" that can be associated with individual teachers could be developed and evaluated, and a methodology could be developed to assess the impact of existing pre-

service teacher training programs as well as teacher development activities. An assessment of the impact of graduate degrees on teacher effectiveness could also be considered.

According to analysis of a health services provider payment systems assessment, a major overhaul of the payment systems does not seem to be necessary. Mongolia can make substantial progress with a shift in the basis for the payment cap and budget payment from inputs to parameters that reflect population health need and with some technical refinements to the design of the DRG-based payment system and capitation. A top priority is to begin to develop appropriate geographic coefficients to adjust payments for the varying cost of delivery services related to Mongolia's challenging physical environment and population density. There is also some flexibility in the IBL that has not been exploited, and steps should begin to reduce the number of line items and maximize the opportunity to retain any surpluses for the health sector that are generated from underspending due to lower-than-expected volume.

## ▲ OVERVIEW

The passage of the Integrated Budget Law (IBL) of 2011, which represents an important milestone in Mongolia's decentralization reforms, has significant implications for education and health service delivery. The IBL has granted new "decision space" to subnational officials in Mongolia, increasing the degree of autonomy that lower levels of government, schools, and health care facilities have in delivering services. The IBL extends this autonomy to decisions on budgeting and planning as well as control over human resource functions.

However, two key questions are: to what extent has this decentralization been realized on the ground, and what are the implications for education and health service delivery? While the IBL stipulates a comprehensive set of reforms, these reforms have not been implemented across the board or at the same pace. Numerous factors, including existing regulations and local capacities, may also affect the degree to which local officials and institutions are able to exercise the autonomy granted to them by the IBL.

This study attempts to develop a better understanding of how education and health service delivery in Mongolia has been (and could be) affected by decentralization and identifies measures to strengthen service delivery going forward. As summarized in this overview, the report begins with a brief background of fiscal reforms in Mongolia. It then presents findings of a "decision space" analysis to provide a general overview of the degree of choice local officials have over different system functions as well as capacities and accountability at different levels of the system. Building on this analysis, the report summarizes the findings of quantitative and qualitative surveys that were developed to gather information on implementation of the IBL, as captured by the perspectives of local authorities, service delivery units, and citizens on the delivery of education and health services. Several issues pertinent to service delivery in a decentralizing environment are then examined in turn, namely: education financing, teacher management, and health service provider payment systems.

### I. BACKGROUND

Mongolia has undergone three phases of fiscal reform since the 1990s, starting with a first phase (1991-2002) in which the government tried to improve public financial management through decentralization. One component of the Management Development Program passed in 1992 was decentralization and strengthening of the subnational government. The goals were to strengthen the legal framework, improve intergovernmental fiscal relations, define authorities at different governmental levels, and develop capacity at the local level. According to the Budget Law of 1992, both the central and subnational governments were responsible for delivering education and health services.

The effort to decentralize education and health service delivery was hindered by lack of clear delineation between central and subnational government responsibilities. The central government held most of the decision-making authority, while the central and subnational governments shared responsibilities for the financing and provision of services. By 2001, the subnational governments financed about two-thirds of expenditures in education, health, housing, and community amenities. Although the central government was responsible for revenue generation, in reality, revenue from VAT, excise taxes, and corporate income tax (CIT) was shared between the central and local governments.

While Mongolia was able to achieve administrative decentralization, the extent of financial decentralization was quite low (Tsilaajav et al., 2013). Due to low levels of local revenue, local governments relied heavily on central government transfers to finance their provision of education and health services. Between 1990-2002, central government transfers represented approximately 70 percent of subnational revenue. Transfers were determined on an arbitrary basis since no formulae for transfer allocations were in place, which limited the fiscal and planning autonomy of subnational governments (Lkhagvadorj, 2013). In addition, lack of professional staff, the capacity limits of existing personnel, and an inadequate information management system hindered the success of reforms in this phase.

Given poor outcomes in the first phase of fiscal reform, the government of Mongolia decided to recentralize some functions between 2003 and 2011, marking the second phase of fiscal reform. Under the legal framework, most revenue bases were concentrated with the national government, while local governments had only very limited revenue autonomy. Almost all taxes were legislated by the central government, and subnational governments<sup>1</sup> had limited autonomy to introduce their own taxes. All taxes were collected at the provincial and county level, then local taxes were transferred to the respective budget accounts while other taxes were concentrated in the national budget. The revenue was then partly shared, and transfers were allocated to the provincial level.

During this second phase of reform, education and health expenditures shifted to be under central government control. Education and health were essentially contracted services and were financed by the central-level conditional transfers also called “state-financed local budget.” At the soum level, state-financed local budgets were used to finance schools, kindergartens, hospitals, and cultural centers. At the aimag level, these transfers covered the provision of education, health, and cultural services. Under this arrangement, subnational governments had two budgets: (i) the local budget, financed by own revenues and approved at the respective Assembly, and (ii) the budget for state-financed services.

Further weakening of the subnational governments’ ability to raise additional revenue made subnational governments largely dependent on central government transfers. Transfers continued to be made on an ad hoc basis with no clear framework or formula for allocation. Subnational government thus had little incentive to develop plans and provide high-quality care (Yadamsuren, 2005; Lkhagvadorj, 2013). The ability of civil society to influence budget allocations through the Citizens’ Representative Khural was essentially eliminated, and the Khural served a primarily ceremonial role by simply endorsing the budget allocations made by the central government (Tsilaajav et al., 2013).

## II. FINANCING OF EDUCATION AND HEALTH SERVICES UNDER THE IBL

The Integrated Budget Law (IBL) was passed in 2011 to address the shortcomings of the previous two phases of fiscal reform. It was passed within the broad context of high economic growth (9 percent of GDP per annum since 2003), an increase in public revenues (by 56 percent between 2010-2011 and with further significant increases in 2012), and general public dissatisfaction with public service provision. The IBL is part of comprehensive public sector reforms, together with the Fiscal Stability Law (FSL 2010) and amendments to the Procurement Law (PPLM 2011).<sup>2</sup>

The IBL has helped launch national reform toward greater decentralization. The IBL has significantly enhanced the role of subnational authorities in planning for social service delivery. It defines the budgeting principles, budget system, composition, classification, authorities, responsibilities, and accountabilities of the participants in budget relations. It also sets forth the conditions to regulate activities related to budget preparation, approval, execution, accounting, and reporting. The IBL has also provided local officials with significantly more discretion in how they spend education and health funds from the central government, which previously were subject to strict line item budgeting.

In terms of expenditure assignment, the IBL differentiates between local and delegated responsibilities by assigning the former to subnational governments and the latter to the aimag and Capital City levels.<sup>3</sup> A key difference between these two is that local functions are financed by local revenue sources, whereas

1 Only the aimag and capital city level had partial legislative sovereignty.

2 The Fiscal Stability Law (FSL 2010) tackles the problems of mineral price volatility and pro-cyclical fiscal policy. The amended Procurement Law (PPLM 2011) changes the institutional arrangements for public procurement with the aim of increasing capacity and transparency. Implementation of the Treasury System and the Government Financial Management Information System (GFMIS) has greatly improved budget execution and expenditure controls.

3 Mongolia has three levels of subnational government: aimag is the upper level, soum is the intermediate level, and bag is the lower level. In the capital Ulaanbaatar, the three levels are: Capital City, district, and khoroo. The jurisdictions are organized on the basis of both self-governance and state administration. Aimags and soums have elected Assemblies that approve their own budgets, while governors collect, allocate, and execute revenues.

delegated functions are financed by earmarked transfers provided by the central government. General education services and primary health care services are delegated functions and therefore are financed through earmarked transfers. In contrast, social and welfare services as well as employment services are assigned to the local level and are not covered in this volume.

## A. Education

In basic education, the Ministry of Education contracts with aimag and Capital City governors. The Ministry develops short- and long-term education development plans with the participation of subnational governments and other related organizations, and the aimags, Capital City, soums, and districts develop their short- and long-term Education Development Plan based on the Ministry's plan. The Ministry contracts with aimag and Capital City governors for implementation of the delegated functions upon 14 days of the approval of the state budget. The aimag and Capital City governors contract with soum and district governors, as well. The contracts define the purpose of finance, standards, quantity and quality of service, as well as reporting requirements. Under the IBL, the aimag and soum governors are expected to develop monthly schedules for each delegated function and submit these with the local budget for approval to the respective Assembly.

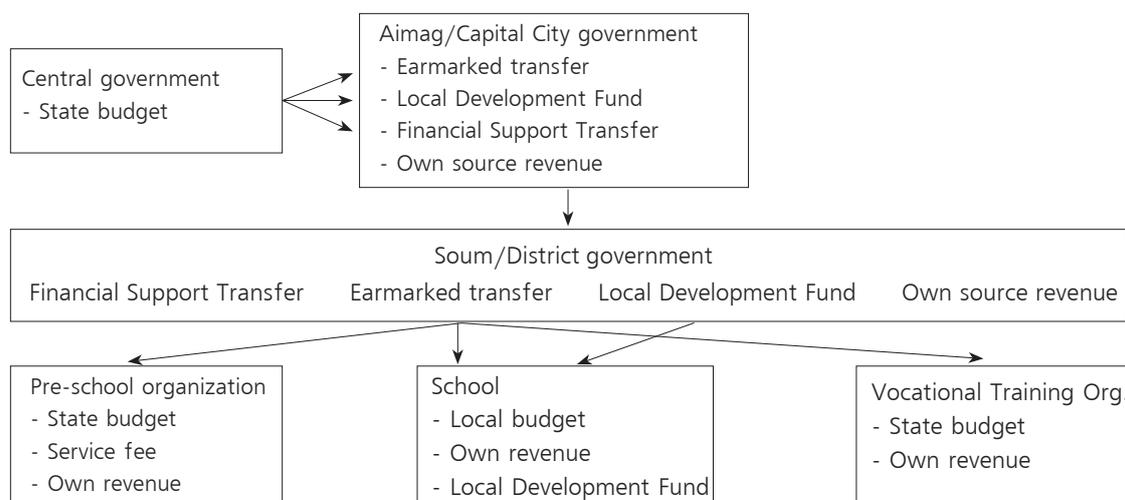
Earmarked transfers allocated by the central government are the main revenue source for education organizations at the subnational level. The Ministry of Education estimates the amount of earmarked transfers within the budget constraint approved by the central government. The Ministry then sends it to the Education Departments of the aimags and Capital City. The education organizations at the subnational level develop the amounts and monthly schedules of earmarked transfers within their budget constraints for submission to the respective governors. The Assemblies discuss and approve the earmarked transfers as part of the local budget. The aimag and soum governors are not allowed to allocate earmarked transfers to the base local expenditure and to the expenditure of other sectors and should not incur debt and receivables.

In addition, schools can generate revenue from own activities, receive transfers from the local budget or the Local Development Fund (LDF), and have a school development fund.<sup>4</sup> Education organizations can generate revenue from "business activities," and the director of the organization has the authority to manage the school development fund for performance improvement. Figure 1 depicts the financial flows in basic education.

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4 Preschool organizations can generate revenue from own activities and service fees paid by parents, and vocational training organizations can generate revenue from own activities. Ensuring proper maintenance of the schools is the responsibility of the aimag governor. Since these buildings are local property, they are eligible to receive money from the Local Development Fund.

**Figure 1: Financial flows in basic education**



Source: Based on Budget Law of 2011 and Education Law.

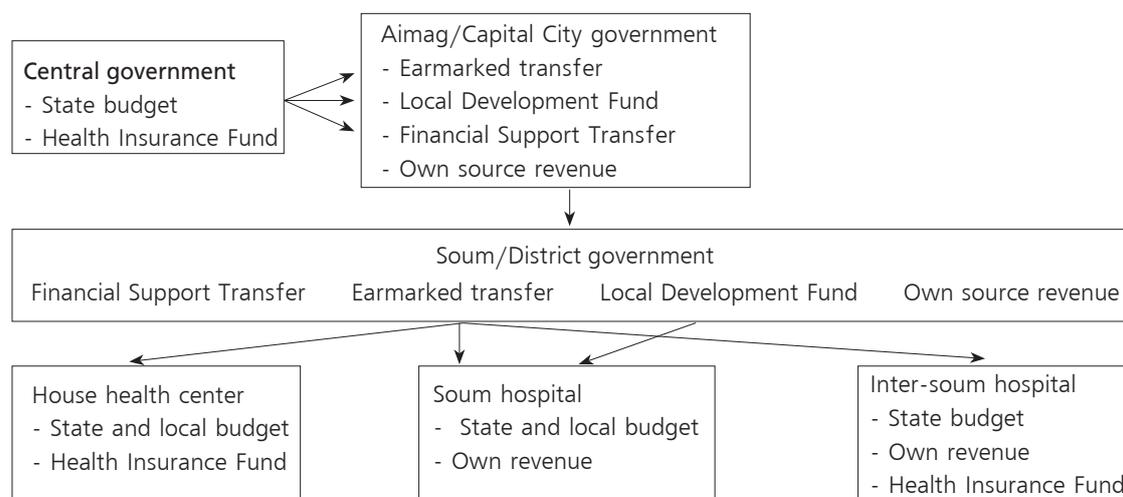
The IBL authorizes aimag and Capital City governors to make adjustments of up to 10 million MNT within categories of recurrent expenditures. The adjustments are made by changing the monthly budget schedules. Governors can make adjustments between economic classifications but are not allowed to modify expenditures on wages, bonuses, and one-time retirement compensation. In addition, funds cannot be shifted toward projects financed by international loans or expenditures likely to incur debt in the future.

The central government exercises a large degree of regulatory power. The central government issues regulations on expenditures and reporting of own revenues by the schools; educational standards and norms; job descriptions of school directors; and food standards and norms. The central government also determines the average variable normative cost per student each fiscal year, which is then adjusted for school location. The head (or director) of a school determines the employees’ salaries based on the regulations and salary scales set forth by the central government. Directors also determine bonuses, which cannot exceed 0.2 percent of the total budget while those for professional rank should not represent more than 3.5 percent of the salary fund (Lkhagvadorj, 2013).

**B. Health**

Similar to the case of education, the provision of primary health care services is delegated to aimag and Capital City governors and is financed by earmarked transfers. The central government is responsible for developing policies on health service provision and financing services and health insurance. As in the case of education, the Health Minister contracts with aimag and Capital City governors for implementation of the delegated functions upon 14 days of the approval of the state budget. The aimag and Capital City governors contract with soum and district governors. The contracts define the purpose of finance, standards, quantity and quality of service, as well as reporting requirements.

The Ministry of Health estimates the amount of earmarked transfers within the budget constraint approved by the central government. The Ministry then sends it to the Health Departments of the aimags and Capital City. The health organizations at the subnational level develop the amounts and monthly schedules of earmarked transfers within the budget constraint set by the central government and submit these to the respective governors. The respective Assemblies discuss and approve the earmarked transfers as part of the local budget. The aimag and Capital City governors can make adjustments within the health sector budget under their supervision.

**Figure 2: Financial flows in primary health**

Source: Based on Budget Law of 2011 and 2011 Health Law.

The 2011 Health Law, passed concomitantly with the IBL, states that financing of health organizations comes from the state budget, health insurance, government special funds for health protection, donations, service charges, and other revenue from own activities. The law clarifies the functions of the health organizations and the Aimag Health Office, as well as the types of health care and services to be financed. The Health Law also stipulates that each facility should have a Health Board to oversee the quality of services. The IBL and Health Law institute important changes in health financing, such as providing a degree of fiscal autonomy for clinics and hospitals and allowing state-owned health organizations to generate revenue from service charges. Figure 2 illustrates the financial flows in primary health.

As in education, the central government plays an important regulatory role in health. It develops and approves regulations on service charges, financing methods, and the list of medical services and medicines financed by the state budget;<sup>5</sup> regulations on price definition for services that require charges; regulations on services financed by health insurance; and regulations on bonuses for health organization staff as well as regulations on the Health Support Fund. The head (or director) of the health facility is responsible for determining salary payments in accordance with government regulations on the salary fund. Similar to education, bonuses for skills should not exceed 0.2 percent of the total budget, and bonuses for professional rank should not be more than 3.5 percent of the salary fund (Lkhagvadorj, 2013).

Further information on Mongolia's public finance system, with a focus on financing of education and health services, is presented in Chapter 1 of this report. The Chapter describes intergovernmental fiscal relations system, including expenditure assignments, revenue assignments, intergovernmental transfers, and subnational borrowing for the three main phases of fiscal reform since 1990. It also takes a closer look at how education and health services were financed during each phase of reform.

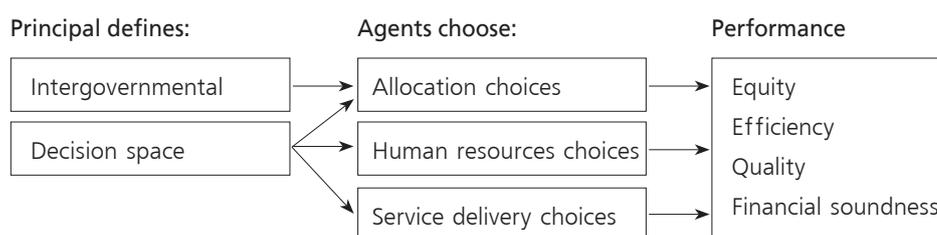
<sup>5</sup> The house health centers of Family Group Practices (FGPs) and soum hospitals are financed on a per-person basis, inter-soum hospitals are financed on a per-person and per-bed basis, and second- and third-level clinics are financed on a per-bed basis.

### III. DECISION SPACE APPROACH FOR MONITORING THE IMPACT OF IBL ON DELIVERY OF EDUCATION AND HEALTH SERVICES

This study uses a framework based on the notion of “decision space,” which allows for designing and implementing an empirical study to monitor implementation of the IBL on the ground. The first step in understanding the relationship between decentralization and performance is a systematic monitoring of actual choices made by local authorities and service delivery units within the decision space allowed to them under the new rules. Following Bossert (1998), the key notion of the framework used for this study is that it is not decentralization per se but the interaction among “decision space” (the amount of choice local officials have over different system functions), capacities to make policy and implementation choices, and accountability to both the local population and the central ministries that determine the degree of success of decentralization. How much to decentralize depends on how well the decision space, capacities, and accountability mechanisms are balanced.

“Decision space” is defined within the various spheres of policy, management, finance, and governance as areas that are broadened selectively when the principal (national authority) transfers formal authority to agents (local authorities and service delivery units) to promote its policy objectives. The degree and nature of this transfer differs case by case and shapes the function of the principal-agent relationship and the decentralized system as a whole. Figure 3 is a schematic summary of the interactions between the principal and agents and also shows the performance indicators.

**Figure 3: Summary model of the interactions between principal and agents and the performance indicators<sup>3</sup>**



Source: World Bank (2009).

Following Bossert and Mitchell (2012), four areas of “decision space” are defined: finance, service organization, human resource management, and access rules and local governance. In finance, decision space encompasses functions such as responsibilities for determining revenue sources, expenditure allocations, and income from fees and contracts. In service organization, functions include determining the degree of school or hospital autonomy, insurance plans, payment mechanisms, required programs and norms, and contracts with private providers. In human resource management, functions include setting up salary scales, managing contracts, and interactions with civil service. In access rules and local governance, functions refer to approaches to targeting, use of facility boards, and community participation.

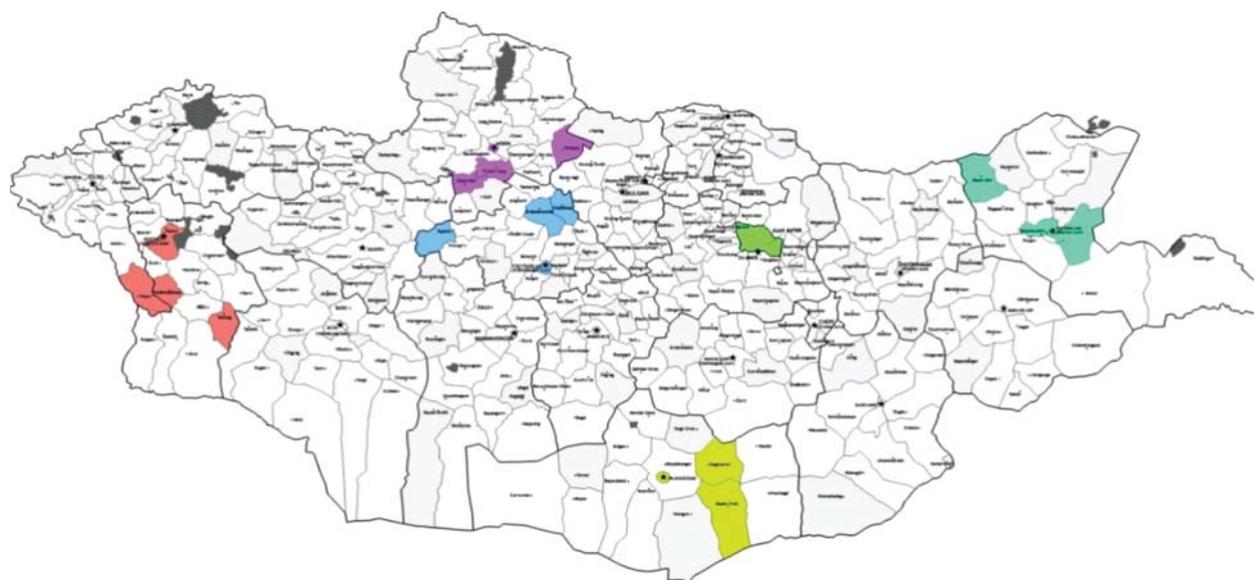
3 Decentralization, viewed through the lens of a principal-agent model, describes the central government as the principal who sets the goals and parameters for policies and programs in a particular sector. The principal then delegates authority, functions, and resources to agents (municipal and regional governments, local field offices, or autonomous institutions) for implementation of its objectives. Agents often have distinct preferences regarding the mix of activities and expenditures to be undertaken and respond to a different set of stakeholders and constituents than the national-level principal. Within this context, the central government seeks to achieve its objectives through incentives and sanctions that effectively guide agent behavior without imposing unacceptable losses in efficiency and innovation. Diverse mechanisms are employed to this end, including monitoring, reporting, inspections, performance reviews, contracts, and grants. The central government also keeps at its disposal channels of control to shape or override local decisions. The central government may offer incentives to local decision-makers to encourage them to make choices in favor of national priorities.

The study also examines decision-making capacities and accountability in education and health. It looks at institutional capacities at the organizational and individual levels. For accountability arrangements, the study focuses on those between administrators within the state apparatus (whether “upward” accountability from lower to higher levels of the system or “horizontal” accountability among different branches of government at a given level of the system) and those between the state apparatus and citizens/citizen representatives (“downward” accountability). Objects of accountability include those related to process (such as procurement and financial management mechanisms to ensure proper use of state funds) and those focused on performance (such as achievement of targets for specific outcomes).

A full description of the “decision space” framework for assessing the impact of the IBL on delivery of education and health services is presented in Chapter 2. Chapter 2 also presents some aggregate results from an empirical investigation developed on the basis of this framework.

To translate the “decision space” approach into an empirical strategy, this study developed a survey to solicit information about the actual choices made by local authorities and service delivery units. The survey has both quantitative and qualitative parts. The quantitative survey comprises six types of questionnaires and is aimed at service providers (basic education and primary health care), administrative departments (education, health, and governors’ administrations), and households with members who use these services (and who are eligible to use these services). The qualitative survey consists of feedback reports from aimag-level education and health departments, aimag governors’ offices, and soum-level groups such as local administrators, service providers (basic education and primary health care), and citizen and NGO representatives. The Mongolian Marketing Consulting Group, an Ulaanbaatar-based survey company, was competitively selected to conduct the survey. The survey covered Ulaanbaatar and five aimags (Figure 4), sampling both the aimag center and rural soums. Information was collected on the current situation and retrospectively (within the last year). A household survey collected social and demographic information as well as information on the level of service utilization, satisfaction with services, and individuals’ ability to exert pressure on service providers.

**Figure 4: Sampling units selected for the “decision space” survey**



The survey focuses on key determinants of local-level authority and accountability: financial management, service organization, human resource management, and access rules and local governance. Survey modules cover the following:

- Financial flows, i.e. sources of revenues and expenditures. Revenues include intergovernmental transfers, transfers from the LDF, own-source revenues, income from user fees and contracts,

charitable contributions, and borrowing. Expenditures refer to the broad categories of disbursements and the informants' ability to determine or influence budgetary allocations, including planning, budgeting, and execution.

- Four key aspects of service organization: programs, quality standards, autonomy, and procurement. Information on programs refers to whether government departments or service providers can determine programs to be provided by the various entities or whether programs are determined at the national/aimag level. The survey also collects information on whether the users of services can influence the types of programs offered. Information on quality standards refers to whether entities comply with nationally determined standards and who is responsible for verifying and monitoring compliance. The survey also collects information on whether a provider has the ability to modify nationally determined standards across a variety of dimensions. Autonomy focuses on the degree of independence of service providers—for instance, whether primary health centers have the ability to be managed independently, including discretion over health sector functions. Another goal is to know whether the entity has the ability to contract in/out individuals or organizations to deliver specified (or additionally required) services. Finally, procurement of goods refers to the ability of the health facility or school to obtain goods and services such as pharmaceuticals, equipment, and supplies.
- Human resources management, such as the ability of entities to decide or influence compensation packages (e.g., base salaries and allowances) and determine terms of employment (e.g., recruitment, appointment, transfers, promotion, reassignment to a different locality, and termination). It also covers the range of permissible contracting arrangements with individuals and provider payment mechanisms.
- Access rules and local governance, which covers questions such as whether access to primary health centers (and their programs) and basic education facilities (and their programs) is universal; whether anyone (including aimag-level line departments, aimag-level governor's office, soum-level governor's office, heads of primary health centers and schools) can restrict access; whether schools can accept out-of-boundary pupils; and whether health care facilities can accept individuals without health insurance.

For both education and health, decision space was measured at the governor's office level, departmental level, and facilities level. Respondents at the respective levels included governors, deputy governors, and specialists of the treasury department; directors; budget specialists; and accountants. At the facility level, respondents included facility heads, deputy heads, as well as primary health care workers and teachers.

Capacity was measured at the departmental level and at the facility level, and accountability was measured as both upward and downward. Upward accountability was measured at the facility level, and downward accountability was measured at the household level.

Findings from the six modules of the survey, comparing the perspectives of different actors and stakeholders on education and health services delivery, are presented in Chapter 3. Chapter 3 also presents and briefly discusses the sampling frame of the survey. Survey instruments are available from the authors upon request.

## IV. KEY INSIGHTS FROM THE EMPIRICAL INVESTIGATION AND INTERNATIONAL PRACTICE

### A. Findings from the empirical investigation

Overall, the survey results show that in finance, the decision space is quite narrow at all levels except the governor level, and financial decision space is narrower than the decision space in other functions. The decision space for service organization and delivery is quite narrow at the level of governors and Departments and is moderate at the health facility and school levels. Similar to the decision space for service organization and delivery, the decision space for human resource management is narrow at the level of governors and Departments and is moderate at the school and health facility levels.

Capacity appears to be moderate at the organization level, and overall, capacity appears to be slightly higher in the education sector than in the health sector, particularly at the departmental level. Schools and public health facilities seem to more directly accountable upward (to the Department of Education and Department of Health, respectively), as compared to responding to the downward channels.

#### *Education*

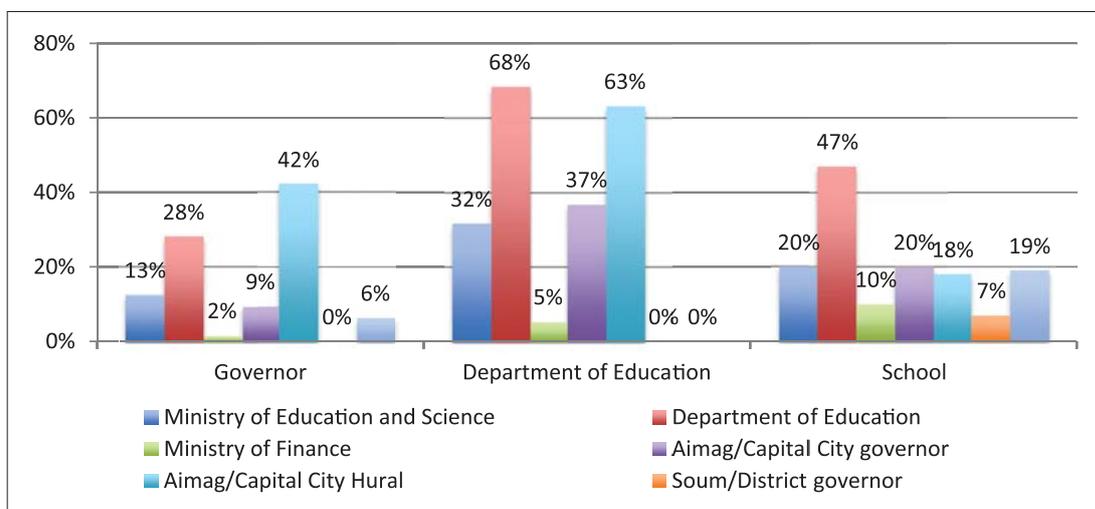
The survey results confirmed that the main source of financing for schools is the state government/state budget. The LDF was cited as providing resources to support schools by only 22 percent of respondents at governors' offices, 11 percent at the Department of Education, and 4 percent of all schools. In terms of budget preparation, schools submit their budget proposals to the Department of Education, where the budget proposals at the aimag and district level are integrated and submitted to the Ministry of Education and Science. Although the respective governors' offices and Departments of Education oversee the development of budgets and control budget spending, they provide limited input to schools during budget preparation. The integrated budget from the Ministry of Education and Science is approved at the Ministry of Finance and subsequently reallocated to the schools.

The bulk of the budget is used to finance salaries, which represent over 65 percent of total spending at schools. The right to reallocate spending across categories in the budget lies with the Department of Education, Ministry of Education, and Aimag or Soum Treasury Funds. The Department of Education, Aimag or Soum Treasury Fund, and school directors also have the right to reallocate spending within budget categories.

The survey results revealed gaps in budget planning responsibilities among the players who participate in the school budget process. In the survey responses, 41 percent of school staff mentioned that schools submit their budget proposals to their respective aimag/district Departments of Education, and 35 percent said they send these directly to the respective aimag/soum/district Treasury Offices. Interviews with the Education Departments found that they see their role in school budgeting as quite vague, limited to consolidating school information and sending it to the Ministry of Education.

Respondents from the governors' offices, Departments of Education and schools differed in their views on which authority determines the final amount of money allocated to each school. At the governors' offices, the majority of respondents indicated that the aimag Khural determined the amount allocated to schools. At the Departments of Education, about the same share of respondents thought that the final allocations are made by the Departments and the aimag Khurals. The majority of respondents at schools reported that the Department of Education was responsible for determining the final amount (Figure 5).

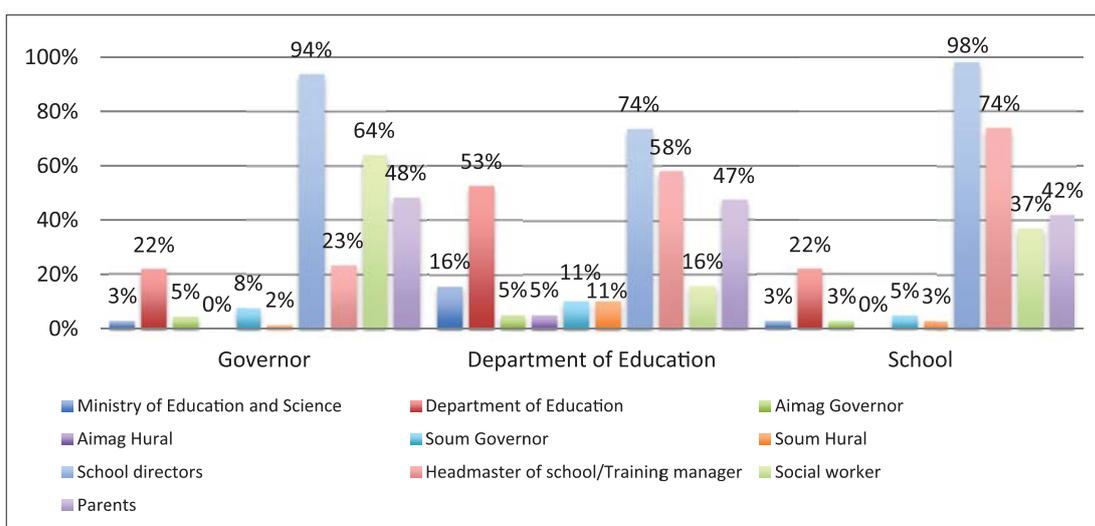
**Figure 5: Who determines the final amount of money allocated to each school? (respondents at each level)**



The majority of school-level respondents indicated that their school could not save funds, and over half of the surveyed schools did not have own-source funds. Those schools that did generate own-source funds reported that the funds had to be remitted to the Department or Ministry or could be used for the purpose of the facility if the director sought approval from the Department of Education, Ministry, or subnational government.

The survey results indicate that school directors are responsible for most decisions related to human resource management. This includes the authority to manage staff recruitment and make final decisions regarding appointments, promotions, or demotions. While most respondents at all levels indicated that school directors had the authority to set requirements for teachers, more than 40 percent of respondents at all levels also said that parents have this right (Figure 6).

**Figure 6: Authority to set requirements for teachers (% of respondents at each level)**



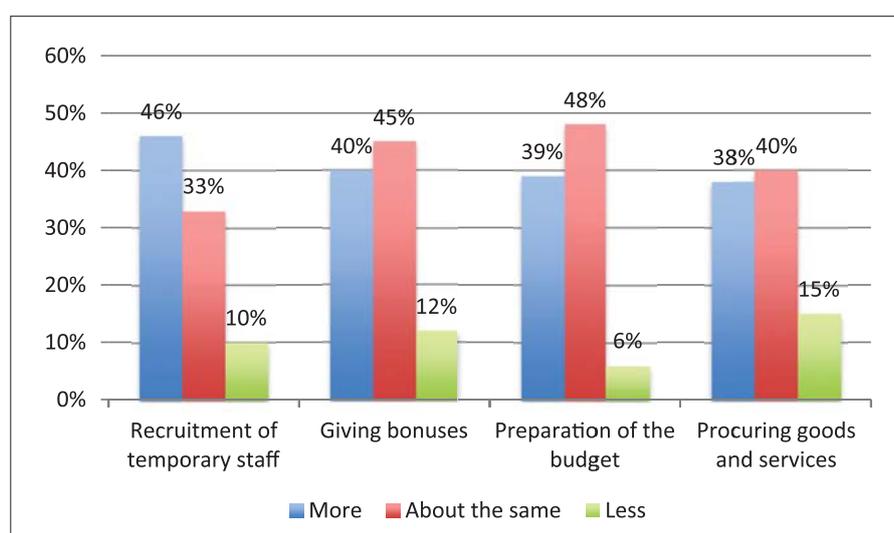
Schools are held accountable by the Department of Education as well as parents. The Department of Education conducts annual visits to inspect school operations and frequently invites school representatives to meetings. The household survey results suggest that slightly more than one-third of respondents at

the household level knew channels for voicing complaints and suggestions, but parents can influence the types of programs offered by schools.

In terms of capacity, at the organizational level, insufficiency of funds appears to hinder service provision significantly. The majority of respondents at the Department of Education and schools believed that they did not have sufficient funding to provide the required services. Most respondents at the Department of Education reported that schools had adequate human resources to implement public education programs in accordance with the policies, but the supply of human resources posed some challenges in urban areas, where 25 percent of surveyed schools indicated that they had less than enough human resources.

It appears that the delegation of authority to schools has improved. Slightly more than half of the respondents at schools felt that they had more autonomy in 2014 compared to 2012, while one-third believed they had about the same amount of independence. Facilities appeared to have slightly more autonomy in recruiting temporary staff than in giving bonuses, preparing the budget, and procuring goods and services, with independence in these three domains remaining about the same between 2012 and 2014 (Figure 7).

**Figure 7: School autonomy in decision-making in 2014 compared to 2012, by dimension**



Overall, results from the household survey show that the majority of parents of school-going children saw improvements in several key areas between 2012 and 2014. For example, they saw improvements in the conditions of school facilities, attitude and quality of teachers, overall academic performance, and the variety of extracurricular activities. However, the quality of teaching remained slightly lower at the upper secondary school level.

The good news is moderated by the findings from the administrators' surveys that point to continuing challenges in ensuring quality of education and access to education in public schools. More than half of Department of Education respondents characterized the quality of education at public schools as still being problematic. In fact, they noted that the problems worsened between 2012 and 2014.

### **Health**

The primary source of funding at health facilities is the central government/state budget. The respective governors' offices and Departments of Health oversee the development of budgets and control budget spending. Once the budgets are developed, the budgets are submitted to the Department of Health and the Ministry of Health, and funds are typically released to the health facilities based on

expenditures and/or based on a schedule. While the authority in charge of reallocating across budget categories differed across respondents in governors' offices, Departments of Health, and health facilities, respondents across all levels largely agreed that reallocating spending within budget categories is the responsibility of public health facility directors. The bulk of the budget is used for salaries.

Most primary health care facilities do not generate own-source revenue. About one quarter of the surveyed health centers indicated that they had own-source funds from renting facilities or providing additional services or programs. Despite the important changes in health financing under the IBL and Health Law in providing fiscal autonomy for clinics and hospitals and allowing state-owned health organizations to generate revenue from service charges, the survey results indicate that only general hospitals practice this right.

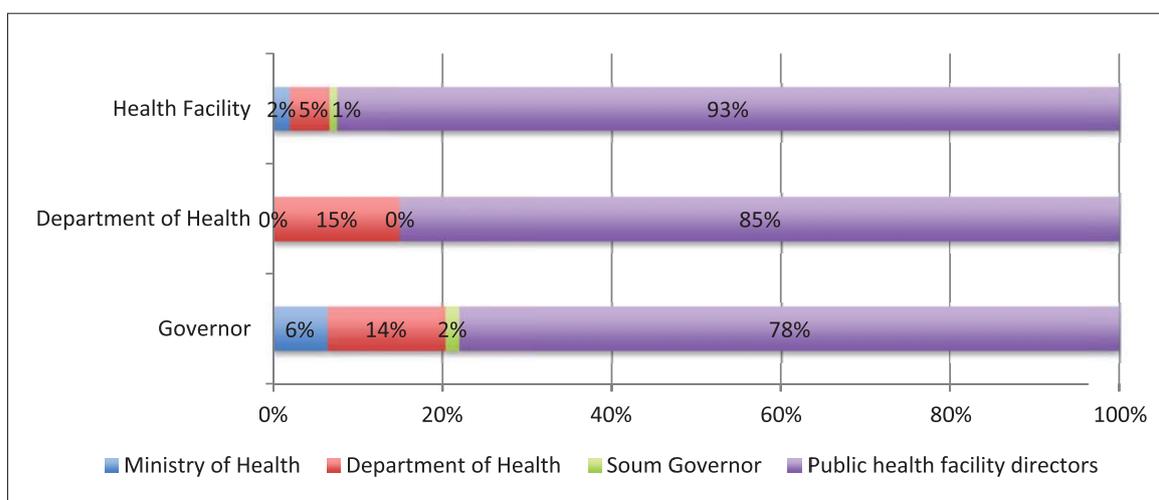
The views on what authority determines the amount of funding for each health facility differ across providers and administrators. As stipulated in the IBL, aimag governors are responsible for the provision of primary health care services in the aimag/capital city. Accordingly, the budget authority has been transferred to the family group practices (FGPs) and soum health centers, and the aimag or soum Khurals approve the amount of money to be allocated to these public health facilities. However, the survey results show that most respondents believe that the Ministry of Health is ultimately responsible for the amount of money transferred to health facilities. Only respondents at the governors' offices indicated that aimag and soum Khurals played an important role in determining the amount of funds to providers (Table 1).

**Table 1: Authority that determines the amount of money available to health facilities, by level of respondent (percentage)**

	Governor	Department of Health	Health facilities
Central government/State budget	9	4	0
Ministry of Health	72	43	70
Department of Health	36	19	29
Ministry of Finance	19	11	27
Aimag/Capital City governor	13	4	2
Aimag/Capital City Khural	47	19	1
Soum/District governor	9	0	4
Soum/District Khural	22	0	1

The Ministry of Health is responsible for choosing which programs and services (including special needs/requirements) are offered at facilities. This includes public health services such as vaccinations and HIV/AIDS trainings. The Ministry of Health also has the authority to determine service charges at public health facilities. However, public health facility directors have the authority to make final decisions on procurement, including procurement of medical supplies, medicines, medical equipment, and services.

Public health facility directors have the authority to manage staff recruitment. This includes deciding how to recruit, choosing whom to hire, and developing the criteria for hiring. Public health facility directors also have the authority to appoint staff to positions and choose staff for promotion or demotion. While around 57 percent of respondents at the health facility level said that public health directors had the authority to determine employee compensation, respondents at the governor and Department of Health levels indicated that the central government was responsible for establishing salary scales (Figure 8).

**Figure 8: Authority that appoints, promotes, and demotes staff (% of respondents at each level)**

Accountability mechanisms are built into the health system, and survey results suggest that public health facilities seem to be under the control of the Department of Health. The Department of Health receives budget spending reports from health facilities and monitors compliance with national health standards to ensure adequate quality of care. The Department of Health also inspects and audits facilities at least once per year. Facilities are also accountable to citizens. Around 40 percent of respondents in the household survey knew about existing channels for providing complaints and suggestions on the service delivery of health centers. Almost 80 percent of respondents in the household survey indicated that they could influence the types of services/programs offered at health facilities.

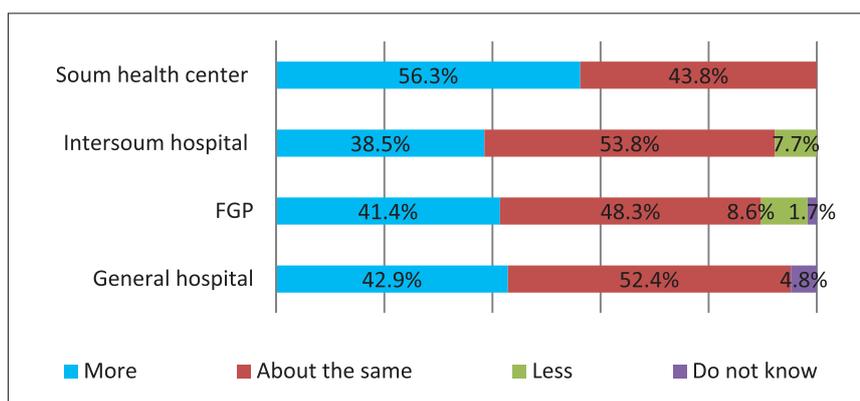
In terms of capacity, as in the case of education, at the organizational level, insufficiency of funds appears to hinder service provision significantly. Most facilities indicated that they did not have enough funds to provide the required services. While almost all respondents received at least some on-the-job training, more than half found the training to be only somewhat useful. Moreover, while almost all respondents at health facilities were familiar with the IBL, only 38 percent had received training on the IBL.

Overall, findings from the household survey indicate a relatively high level of satisfaction with primary health services among the general population. Of those who visited a health facility more than once in the past year, more than 70 percent were satisfied with the services received. Access to health services does not appear to be hindered by financial barriers. Most surveyed individuals did not have to pay for services at public health facilities, although paid services were more prevalent at general hospitals, tertiary-level hospitals, and soum health centers. Moreover, unlike other studies, the survey did not find a high prevalence of informal payments—only 5 percent of respondents reported paying informally for health services provided at public health facilities.

Citizens reported that the services provided by health facilities had improved compared to two years earlier, but providers' perceptions about the quality of care and improvements over the past year were less positive than those of patients. In particular, results from the household survey show that improvements have been made at private health care facilities, maternal hospitals, regional diagnostic treatment centers, and specialized health care providers. More than half of those who had visited a health facility in the past year indicated that the conditions of the health facility and the medical staff had improved. At the same time, providers reported that although compliance with national standards appeared to be universal, they perceived substantial problems in the quality of care as well as availability of services. Human resource shortages are particularly acute in urban areas, where 60 percent of facilities indicated that the availability of human resources was significantly lower than the needed amount.

The delegation of authority to health facilities appears to have improved to some degree. Almost half of the respondents at health facilities felt they had more autonomy in 2013 compared to 2012, while the other half believed they had about the same amount of independence. Facilities appeared to have slightly more control over recruitment of temporary staff and bonuses than in preparation of the budget or procurement of goods and services (Figure 9).

**Figure 9: Autonomy in decision-making of health facilities in 2014 compared to 2012 (% of respondents at each type of facility)**



### B. Options for enhancing decision space

The survey found that some respondents were still unclear about the amount of decision space they had and therefore were still reluctant to make decisions that reflect their local conditions. This response is not unusual from officials who were administrators in a centralized system in which they had little discretion. While most of them may know about the IBL, they need more encouragement rather than just training sessions on the content of the law.

It might be useful to disseminate materials that provide examples of the variety of choices the IBL allows for in the key functions of financing, human resources, procurement, and contracting. Possible actions might include publishing user-friendly manuals with clear implementation cases drawn from subnational experiences. In addition, a series of workshops for each level could be designed in which central-level officials would present the legal and regulatory rules but also encourage officials from the subnational levels to discuss their own experiences (with the officials taking the widest decision space explaining their choices and the results they achieve).

The survey results also point to areas where greater expansion of decision space would help create a more efficient and responsive system than what is embodied in the IBL. While there seems to be general agreement that the IBL has increased decision space, the limitations could be reduced further in several areas. In particular, budget flexibility could be improved, giving managers more discretion after the budget is approved to respond to changed situations over the year and to variations in needs from one district to another in a governor’s aimag. These changes would likely require new legislation.

For example, local officials could be granted more flexibility in allocating resources across facilities within their jurisdiction. Although minimum per student allocations for primary schools and minimum per capita health allocations for primary care facilities could be used, some range of choice could be provided to allow officials to strengthen weaker schools and health facilities or respond to unanticipated changes in demand. Given the general impression that funds are insufficient, sufficient funding for both the minimum and cross-facilities fund should be provided.

For the procurement decision space, a maximum procurement that local authorities can manage without central approval could be considered. In addition, low levels of procurement for specifically

defined materials could be allowed without cumbersome tendering rules. In one initiative for procurement of pharmaceuticals for districts in Guatemala, an open solicitation at the national level was tendered for the right of pharmaceutical companies and distributors to respond directly to procurement requests from districts for pharmaceuticals on the national essential medicines list. The solicitation required the companies to offer a price for the pharmaceuticals that included the costs of directly delivering the product to district warehouses (Bossert, Bowser, and Amenyah 2007). It might also be useful to develop a transparent web-based portal for government procurement so local purchasing can be monitored easily by both the local population and the central authorities. Such a system has reduced procurement irregularities in Chile significantly.

If local authorities are allowed to raise revenues through education and health facilities (for example, through user fees or through mobilizing mechanisms such as charity fairs or extracurricular programs), these revenues should be retained at the facility level. While the case of Chinese hospitals using pharmaceutical sales as a major income stream raises concerns regarding incentives for over-medication and unnecessary procedures, it has not been a problem in most other countries if pharmaceuticals are limited to regulated pharmacies and if the fees charged are centrally defined. While there may be a risk of additional revenue-producing activities displacing core activities, this should be balanced with the possibility that the additional revenue streams could cross-subsidize the basic services. Monitoring and auditing of these programs, perhaps with a limit on the revenue that can be collected by these programs, could help avoid the problem.

To avoid granting authority without sufficient checks against abuse and patronage, a transparent, merit-based recruitment and personnel review system needs to be in place. Granting greater flexibility to local authorities in hiring, firing, promoting, and remunerating the local education and health workforce is an important objective of decentralization in many countries. However, making these changes is often difficult due to long-standing rigid civil service rules and service unions' political power. In some countries, central and local governments have gotten around civil service rules with short-term contracts for service personnel. Experience suggests that unless there is a surplus in the service cadre, remuneration for contracting must be significantly higher than usual salaries to attract personnel without the benefits of a secure job. In addition, contract workers often organize and pressure to become incorporated into the civil service permanent staff. Mongolia could experiment with pilots to develop a more transparent merit-based human resources system and a pilot contracting program to evaluate which system is appropriate.

### **C. Options for strengthening capacities at the subnational level**

Before fully implementing any expansion of decision space at the subnational levels, an assessment of the capacities of decision makers and implementers at the local level is needed. Officials who have worked in centralized systems usually have not developed the capacities for making decisions before decentralization. If the local officials are mainly education or health professionals/paraprofessionals, they may not have the managerial and financial control capacities needed to assume control of human resources and budgets, and they may not have sufficient technical capacity to make good plans and service delivery choices. If they were educated in a centralized system, they often react to more choice by making the same choices they were directed to make by higher officials.

If national policy makers want to decentralize but local officials lack capacity, the policy makers should consider how much they can strengthen or build new capacity in a relatively short period and align the decision space to the capacities that can be strengthened. Encouraging local officials to learn how to improve their capacities is also important—if local officials are not given reason to develop capacities, they are likely not to do so. They should be encouraged to make decisions that reflect their local needs and priorities and, with some limits, to seek innovative solutions to their ongoing problems.

Currently, it appears that Mongolia has a need for enhanced capacity at all subnational levels. One major capacity issue is the level of funding available. As noted above, responses in both the education and health surveys consistently indicated inadequate funds for required activities. The current system,

which primarily assigns resources based on historical budgets, is unlikely to provide sufficient funds for actual needs. Sufficient financing for the subnational levels is needed so they have the financial capacity to implement the decisions they are now allowed to make. The formula for assigning intergovernmental transfers can play an important role in redeploying resources based on actual needs, which should strengthen capacities in previously underfunded districts and provinces (Bossert et al., 2003).

International experience offers a variety of options for developing needs-based allocation formulae. For example:

- South Africa transfers funds to the provincial levels through conditional and unconditional grants. Unconditional grants are calculated using a formula, which is broken down as follows: i) an education share based on the size of the school-age population and the average number of students enrolled in public schools; ii) a health share based on the proportion of the population with and without access to health services; and iii) a social security element based on the estimated number of people entitled to social security benefits and weighted by the poverty index. In addition, the formula takes into account the population size of each province, backlog component (for capital needs), and an economic output component based on the average workers' remuneration in the area (Wittenberg, 2006).
- In Canada, the federal government supports health care services by allocating public monies to provincial governments through Canada Health Transfer (CHT) payments and on a per capita basis (Marchildon 2013). The CHT payment includes direct (cash) transfers and indirect (tax) transfers wherein the federal government reduces its tax rates to allow provinces to raise their rates by an equivalent amount. A tax point is worth more in a wealthy province than in a poorer province, and taxes are subject to the province's economic conditions, which can be more variable than Canada's overall economic performance. Provinces with greater revenue-raising ability receive lower per capita CHT cash payments. The provincial/territorial governments also allocate public monies to the regional health authorities (RHA) through varying methods, including the population-based funding method and the historically based global budget method.

As studies in Latin America have shown, decentralization to municipalities and other subnational governments may be an effective means of mobilizing additional financial resources for the social sectors. A study of Colombia and Chile showed that after decentralization granted additional decision space to municipalities, they mobilized significant increases in their own-source revenues to cover health expenditures, and the difference between richer and poorer municipalities was reduced significantly (Bossert et al., 2003). This experience could be used in Mongolia to promote and encourage district authorities to assign increasing portions of the LDF to health and education expenditures.

- In Chile, one major innovation of the decentralization process was the Municipal Common Fund. This horizontal equalization fund receives up to 60 percent of the wealthier municipalities' own-source revenue and redistributes it to other municipalities based on a per capita formula adjusted for rural areas and capacity to generate revenue. This fund comprises the major share of funding for all but the wealthiest municipality, averaging 60 percent of all own-source revenues. This redistributive instrument has made it possible for poorer municipalities to assign relatively similar per capita allocations to education and health. Municipalities with the lowest own-source income experienced a nearly ten-fold increase in the amount of resources available per inhabitant.

Initiatives to improve incentives through contracting and strengthening pay-for-performance could perhaps start in the health sector. While pay-for-performance additives for teachers' salaries are deemed premature in Mongolia at this time, until a good assessment of "value added" is developed, international experience shows decentralization may be accompanied by improving incentives through contracting and strengthening pay-for-performance. This initiative could perhaps start in the health sector.

- In Turkey, a performance-based contracting system was established to incentivize family medicine providers. Under the system, the Provincial Health Directorates (PHDs) enter into contract with family medicine providers. While the money is transferred from the Ministry of Health, responsibility for contracting, disbursing payments, and monitoring results is delegated to the PHDs. Delegation of contract management to the provincial level has helped create a more manageable span of control and hold providers accountable to provincial managers. A key component that enabled the PHDs to perform their duties was the Family Medicine Information System, which contained all medical records (World Bank, 2013). Monthly audits are performed to verify data. Through a combination of financial incentives and adequate supervision, the family medicine program has contributed to substantial improvements in health in a relatively short time period (World Bank, 2013).
- In Chile, a system of performance incentives—the National System for Assessing School Performance—was introduced in 1996 to improve outcomes. All schools received a per pupil grant, and the top 25 percent of schools that demonstrated the highest performance received a financial reward to be shared among the teachers in the school (Meade and Gershberg, 2008). Not only did the reward help motivate teachers, but the program also served as a quality monitoring system for providers.

Information system improvement is also an important capacity required by decentralization. Routine information systems and accompanying surveys are important tools for improving management and decision making at the subnational levels as well as for helping the central authorities monitor and evaluate the performance of local education and health systems. One central argument for decentralization is that local officials have a better understanding of local conditions so can be more responsive to actual needs than distant central authorities, but local officials need more discrete and accurate information on local conditions in order to make better decisions. Routine information systems need constant upgrading and assessment of the validity and reliability of the information collected. Recent efforts to introduce performance-based financing have demonstrated a potential risk of undermining routine information collection, since those who would benefit from reaching performance targets are often the ones who enter the data necessary for performance evaluation so have a strong incentive to provide inaccurate information that benefits them. As decentralization and performance-based financing initiatives are implemented, information system auditing and surveys to verify routine information are important capacity building measures.

Experience in several countries also suggests that enhanced training in management and leadership of core senior staff at the district and provincial/state levels is an important tool for capacity strengthening at subnational levels (Bossert et al., 2011). A current program in South Africa involves building the training capacities of two local universities to provide ongoing and sustained training in management, leadership, and policy development for district leaders. This program has the potential to improve the management and motivation of local staff significantly as the government develops policies to grant more authority at the district level. Included in these training programs are key elements of financial and human resources management, especially if decision space for these functions is to be increased. Such training must be provided at a quality level sufficient for the staff to design and implement effective planning, supervision, and management of these functions. In many cases, this training involves sequential class training with field application exercises so they can apply the new skills in their actual work environment, as well as mentoring by skilled leaders and managers.

#### **D. Retaining relevant functions at the national level and strengthening central capacities**

Even with a high degree of decentralization, some functions will always need either coordination among the subnational units or strong national decision making. Even in Pakistan which pursued extreme decentralization of its health service and where the Ministry of Health was abolished for a period of time, the government had to redistribute the “national list” of functions to other ministries (WHO, World Bank, DFID USAID-TAUH, 2012). Countries with significant degrees of decision space at the provincial or state level still have many functions that the central authorities must fulfill. For example, assuring the

quality of pharmaceuticals, immunization, and programs to control malaria usually requires knowledge and skills that are in short supply, and uniform policies and implementation would lead to better results for all localities. In Pakistan, the provinces shifted responsibility for pharmaceutical regulation back to the national level after the fatal failure of an immunization program. Several functions need central decisions, and often there are national policies in treaties or international agreements that must be respected throughout the country.

Central authorities also need strong capacity to monitor how well the system is functioning at the provincial level. Some of this involves having a uniform information system that provides valid and reliable information. It also requires the capacity to analyze data for monitoring, evaluation, and supervision.

### **E. Accountability**

International experience suggests that localities are often dominated by specific elites who have financial interests in controlling public funds (elite capture) or use these funds to provide patronage to supporters. Mechanisms that encourage accountability to the beneficiary population are needed to improve democratic practices and allow voters or civil society organizations to remove interested or corrupt elites. The responsiveness of education and health officials can be increased through committees, social audits, and certifications. Mechanisms that allow central authorities to monitor local conditions and enforce national policies are also needed, which means that the information system should be well-developed and have checks to validate the routine information as mentioned above. Central authorities should also have the authority to intervene if local officials are failing to achieve national objectives.

The current accountability mechanisms in Mongolia include the review of plans and budgets by the local assemblies at the aimag, Capital City, and soum levels and the newly created hospital boards. More time is needed to understand whether these are actually accountability mechanisms or play the more formal role of “rubber stamps.” If the “decision space” survey is repeated in 12-18 months, it will give more information to clarify and determine whether there are sufficient mechanisms for community participation or the involvement of civil society through committees, councils, or primary care facility and school boards.

International experience suggests some options for strengthening accountability. For example:

- In Turkey, the 2005 Municipalities Law increased transparency by requiring a two-thirds majority vote for closed-door council sessions and allowing the headmen (muhtar) to participate in municipal council meetings. In addition, the Law stipulated that minutes from council meetings must be publicly available within seven days of the session.
- In Bolivia, the Popular Participation Law created Territorial Base Organizations (OTBs) which included indigenous and peasant NGOs, neighborhood organizations, and other organizations. The OTBs were designed to allow grassroots participation in local government through Oversight Committees. To coordinate among municipalities, OTBs, and local health professionals, a new organization (the Local Health Directorate or DILOS) was formed, which included the local health official and representatives of the municipality and the OTB.
- In Ethiopia, using the Financial Transparency and Accountability (FTA) tools, woredas (districts) and city administrations disclose budgets and service delivery information. Citizens can provide feedback to local administrators and service providers through community scorecards, citizen report cards, and participatory budgeting. The result is that compared to other countries with over 50 percent absenteeism rates, absenteeism in Ethiopia is only 15 percent among teachers and only 10.4 percent among health workers (World Bank, 2014).

## V. OTHER PERTINENT ISSUES FOR SERVICE DELIVERY IN A DECENTRALIZING ENVIRONMENT

This study also examined several issues pertinent to service delivery in a decentralizing environment, such as the current system of primary and secondary education financing and proposed measures to help strengthen the system as described in Chapter 4. These measures focus on increasing budget discretion for schools and school managers, while also making the budget more transparent to enable parties like the PTA, Education Departments and Ministry to monitor school expenditure properly and keep them accountable. Another recommendation is to review the budget allocation formula for variable costs to make it not just per-capita based but also to account for such factors as children with special needs, distance to the aimag capital and to Ulaanbaatar as a proxy for price levels, and poverty as a proxy for the capability of parents to contribute. Analysis presented in the chapter suggests that making teachers' staff salaries part of the allocation formula would be premature at this point.

Further issues related to teacher management and teachers' wages are examined in Chapter 5. The chapter reviews the situation in Mongolia and examines experience in other countries to help inform reforms. Recommendations focus on reducing the number of components of teacher wages, retaining only a few critical additives, as well as introducing monthly pay slips and/or a system in which teachers can obtain details of their wages and see what has been paid or deducted along with an explanation of the adjustments. Analysis presented in the chapter suggests discontinuing (or postponing) all performance-related additives to give time to develop and implement a bonus system based on "value added" measures at some point in the future. In terms of medium-term recommendations, the chapter proposes developing and validating a system for measuring annual "value added" that can be associated with individual teachers and developing a methodology to assess the impact of existing pre-service teacher training programs as well as teacher development activities. It also proposes undertaking an assessment of the impact of graduate degrees on teacher effectiveness.

Chapter 6 presents analysis of health services provider payment systems, for which the implications of the IBL are particularly important in the context of payments to primary care providers. The main conclusion is that a major overhaul of the payment systems does not seem to be necessary. Mongolia can make substantial progress with a shift in the basis for the payment cap and budget payment from inputs to parameters that reflect population health needs and with some technical refinements to the design of the DRG-based payment system and capitation. A top priority is to begin to develop appropriate geographic coefficients to adjust payments for the varying cost of delivering services related to Mongolia's challenging physical environment and population density. The IBL has already introduced some flexibility in spending across line item categories in the budget for soum hospitals. There is also some flexibility in the IBL that has not been exploited, and steps should begin to reduce the number of line items and maximize the opportunity to retain any surpluses for the health sector that are generated from underspending due to lower-than-expected volume.

## VI. CONCLUSION

The 2011 IBL has granted significant new decision space to subnational officials in Mongolia. It has increased decision space on budgeting and planning, especially at the aimag, Capital City, and soum levels. It has also given facility directors significant control over human resource functions, especially hiring, firing, and granting of bonuses and incentives.

There are good arguments for this distribution of decision space. Aimag, Capital City, and soum officials may have more capacity to carry out financial planning and management and more capacity to respond to the accountability mechanisms of the legislatures at these levels. Management of human resources is probably better handled at the facility level, where directors are able to observe performance more directly and provide adequate supervision. The survey found that only a small portion of respondents felt that directors' decisions on human resources were unjust or unmerited.

However, the survey findings suggest that at least in the view of officials, the actual (de facto) decision space among officials at each level varies significantly. The majorities indicated that the de jure decision space allowed more choice, while significant minorities did not report sufficient authority to use the decision space allowed. This variation may just be differences in perception, but it is more likely that a significant effort is needed to inform officials of the kinds of choices they are allowed to make.

While there might be some areas where revisions to the IBL might be needed to provide more flexibility in budget implementation, it is probably more important to monitor and evaluate the current situation to assess the impacts of the current law on performance. Revisions might also be needed in accompanying sectoral laws to align them with the budget flows. At this point in time, it is advisable to invest in ongoing monitoring and a sophisticated evaluation study to provide information on benefits and problems that are likely to arise in implementation.

Efforts to build capacity and strengthen accountability are also needed. Perhaps the most important initiative would be to provide a standardized and predictable formula based on need rather than historical budgets and to find mechanisms for mobilizing additional funding both for intergovernmental transfers and for raising own-source revenues. International experience also suggests that subnational officials benefit from significant programs of management and leadership training, carefully constructed pay-for-performance incentive systems, and improved information systems. While the legislatures provide some form of accountability to the local population, enhanced mechanisms for civil society to monitor performance and to express preferences for service delivery are also necessary.

## ▲ CHAPTER 1: FINANCING OF PRIMARY EDUCATION AND PRIMARY HEALTH SERVICES

### **MONGOLIA HAS UNDERGONE THREE PHASES OF FISCAL DECENTRALIZATION REFORM:**

- Fiscal decentralization of 1990 to 2002, when the revenue authority was shifted to subnational government;
- Fiscal recentralization of 2003 to 2011, when expenditure assignments were clarified and functions for social services were shifted to the central government; and
- Fiscal decentralization of 2012, when comprehensive decentralization reform was started by the Budget Law of 2011.

This chapter provides an overview of Mongolia's public finance system, with a focus on financing of education and health services. It looks at each phase of fiscal reform since 1990 in turn, describing the intergovernmental fiscal relations system, including expenditure assignments, revenue assignments, intergovernmental transfers, and subnational borrowing. It also takes a closer look at how education and health services were financed during each phase of reform.

### **I. PUBLIC SECTOR FINANCE AND MANAGEMENT SYSTEM FROM 1990 TO 2002**

In 1990, Mongolia started the transformation toward democracy and a market economy, with a reform agenda that included fiscal decentralization. As a former centrally planned and communist-ruled country, Mongolia had a highly centralized public sector. In 1990, the government faced the triple challenges of strengthening public finance, disciplining the expenditure allocation across jurisdictions and sectors, and improving service delivery. The government developed and implemented the three-component "Management Development Program," passed in 1992, that included a component for Decentralization and Strengthening Subnational Government which aimed to improve the legal framework and intergovernmental fiscal relations, define the authorities of different levels of government, and develop capacity at the local level and shift health and education service delivery to the subnational level.

During 1991-1996, responsibilities for service provision were shifted increasingly to the lower levels of government, although local capacities and local ability to raise revenues were limited. The local government share in consolidated government expenditure rose to 35 percent, while the local share in consolidated budget revenue decreased to 23 percent in the mid-1990s. All of these decentralization efforts were concentrated on the administrative side of the government. As a result of the reform efforts, the political system was decentralized and created management capacity at the subnational level. The "Public Service Law" of 1999 defined the tasks and directions of the public service system, and Mongolia's reform policy on the "Trends and Structure of Government Activities" clarified the structure of authorities and functions of the central government.

#### **A. Intergovernmental Fiscal Relations System**

The Constitution of Mongolia that was adopted in 1992 provides the general legal foundation for the government structure and assignment of functions for the different levels of government. As stated in the Constitution, the administrative and territorial units of Mongolia are organized on the basis of both self-governance and state administration. Mongolia is a unitary state with three levels of subnational government: the aimags and Capital city are subdivided into soums and districts, and the lowest level is bag and khoroo. Under this structure, Mongolia had 21 aimags with 336 soums and a Capital city with 12 districts during the 1990s. Most aimags and soums depended on central budget transfers-for instance, about 20 percent of the soum budgets were generated by own revenues during 1990-1995 (Mongolia, 1995).

The Law of Territorial and Administrative Units of Mongolia (LTAU) and Budget Law (BL) of 1992 as well as General Tax Code (GTC) of 1992 defined the budget relations and intergovernmental fiscal relations system from 1990 to 2002. The BL of 1992 regulated budget policy, budget preparation, approval, fund distribution, and execution and defined the expenditure assignments for the different levels of government. The GTC defined the tax system, general principles of taxation, and the structure of national tax administration. The LTAU provided regulations on the structure and administration of the jurisdictions, as well as authorities and responsibilities of subnational government.

### ***Expenditure Assignment***

The extent of decentralization is usually measured by subnational expenditures as a percentage of GDP and consolidated expenditures. From 1991 to 2002, the share of subnational expenditures in GDP was about 10 percent on average, with some fluctuations by fiscal year. The share of subnational expenditures in the consolidated expenditures was estimated at about 36 percent on average, falling from 43 percent in 1991 to 31 percent in 2002. However, the Capital city accounted for about one-third of total subnational expenditures, compared to an average aimag share of about 3 percent (Bank, 2002).

Table 1 illustrates the functional assignments of different levels of government. According to the BL, the aimag and soum levels were assigned the expenditures for administration, investment, environmental protection, recreation, mineral exploration and mining, and social services such as education, health, culture, and sports. However, the functions assigned to the subnational level were also assigned to the central government, and no differentiation was made among the government levels. Under the LTAU of 1992, the subnational governments were responsible for local public goods such as local roads and bridges, livestock protection, veterinary service, community amenities, environmental protection, and housing, as well as social services and social welfare which had benefits beyond the local level.

**Table 1: Expenditure Assignments of Different Government Levels, 1990–2002**

<b>Functions of the CG</b>	<b>Functions of the Capital City and Aimag</b>	<b>Functions of the Districts and Soums</b>
<b>As defined in the BL</b>		
Investment expenditures	Investment expenditures	Investment expenditures
Science and technology development expenditures	Environmental protection and recreation, and mineral exploration expenditures	Environmental protection and recreation, and mineral exploration expenditures
Environmental protection and recreation, and mineral exploration expenditures	Education, culture, sport, health expenditure financed by aimag budget	Education, culture, sport, health expenditure financed by aimag budget
State organizations expenditures	Aimag government expenditures	Soum government expenditures
Defense expenditures		
Education, culture, sport, health expenditure financed by state budget		
Loan, interest payment and foreign activities expenditures		
Government resource fund financed expenditures		
Transfer to government special funds		
State loan payment		
Other expenditures financed by state budget		

As defined in the LTAU	
Local functions: Issue land permission Resolve issues on natural resource usage, mineral exploration and mining in accordance with law Public order and safety affairs Manage emergency situations (natural disasters, infectious diseases, etc.) Build and maintain local roads and bridges Improve transportation and communication as well as other services Provision of water, energy, and heating services Provision of general and vocational education Health care Culture and science Improve provision of housing, support low income population, protect children and family, support employment Organize environmental protection, recreation, and appropriate usage Capacity building of local administrative staffs and solve their social issues Help to people in case of natural disaster Arrange centrally financed activities Cooperate with organizations in charge of national defense Implement fiscal, tax, and monetary policy Implement the delegated functions	
Administer and direct the activities of the lower level government Appoint and dismiss the deputy governor of aimag, Capital city by consulting with prime minister Solve issues related mineral exploration and mining, usage of natural resources and issue land usage permission in accordance with law Provide all types of registration services	Administer and direct the activities of the lower level government Appoint and dismiss deputy governor of soum, district by consulting with aimag, Capital city governors Permission of land usage by legal entities and citizens in accordance with law Organize tax collection Collect tax on land, natural resource usage to raise local revenue Organize all civil registration services

Source: BL and LTAU of 1992.

Looking at the shares of each level of government for major expenditure classifications, subnational governments financed about two-thirds of total expenditures in education, health, housing, and community amenities in 2001. The central government financed 100 percent of national defense, social welfare, energy and heating, mineral resource, mining, and construction spending. The expenditures of other functions were shared by the central and subnational governments.

In general, the decentralization reform from 1990 to 2002 was implemented with poor expenditure assignments. Decision making responsibility for almost all services was assigned to the central government, while the financing and provision of services were shared among central and local governments (Bank, 2002). The legal provisions on expenditure assignments were very ambiguous, with many duplications and overlapping functions between different levels of government. In addition, the regulations did not provide guidance for resolving conflicts between aimag and soum governments on the assignment of shared responsibilities.

### ***Revenue Assignment***

Table 2 illustrates the revenue assignments of different government levels by legislation. According to the BL and GTC of 1992, Parliament defines the bases and rate for custom duties and direct and indirect taxes as well as fixes ceilings for the rates of local taxes and user fees. The BL defines the central and local revenues and revenue sharing, while the GTC defines the central and local taxes as well as the authority of the Aimag Assembly regarding tax rates. Under the GTC, the Aimag Assembly defines the rates of user fees other than hunting, timber, and land use and also defines rates of local taxes within the limits set by Parliament.

**Table 2: Revenue Assignments of Different Government Levels, 1990–2002**

Central taxes	Aimag and Capital City taxes	Soum and District taxes
Custom duties	Wage tax	PIT (other than wage)
Petroleum tax	City tax (shared with soum)	Vehicle tax
VAT (shared with LG)	Mineral royalty	Inheritance and gift taxes, gun tax
Excise taxes (shared with LG)	User fee for land (shared with soum)	Dog tax
CIT (shared with LG)	User fee for water and springs (shared with soum)	Stamp duties
Mineral royalty	License fee for mineral exploration	Hunting user fee
Social Security Contribution	Property tax (shared with soum)	User fee for natural resources other than minerals
		User fee for herbs
		User fee for timbers
		User fee for common minerals
		User fee for water and springs
		Unidentifiable income tax

*Source: Based on BL of 1992 and budget data of 2000.*

Empirical data indicates that revenues of VAT, excise taxes, and CIT were shared among the central and local governments. According to the BL of 1992, the central government generates revenue from custom duties, petroleum tax, VAT, excise taxes, CIT, and mineral royalty. However, the revenue sharing was defined by the BL of each fiscal year on arbitrary bases, and there were no regulations on revenue sharing between central and subnational governments. At the subnational level, the aimags generated revenues of wage tax, city tax, user fee for land, user fee for water and springs, license fee for mineral exploration, and property tax. The revenues of city tax, mineral royalty, user fees for land, water and springs as well as property taxes could be shared between the aimag and soum levels by resolution of the respective Aimag Assembly.

The share of subnational revenues in GDP was about 6 percent on average from 1991 to 2002, with small fluctuations each fiscal year. The average share of subnational revenues in the consolidated expenditures was estimated at about 25 percent, decreasing from 38 percent in 1991 to 22 percent in 2002.

### ***Intergovernmental Transfers***

Subnational governments were highly dependent on financial transfers from the central government for the provision of social services. According to the legislation, the local government was responsible for providing social services such as education, health, and social assistance in addition to the local public good assigned to them (e.g., garbage collection, street lighting). However, subnational governments did not have sufficient revenue to finance the assigned functions, so central government transfers helped fill the subnational revenue and expenditure gaps. The average share of central government transfers in subnational revenue was about 70 percent from 1990 to 2002. During this period, regional disparities in fiscal capacity and fiscal needs were very high.

The intergovernmental transfer system was non-transparent, unpredictable, and unstable, which limited subnational fiscal autonomy and development planning. The allocation of central government transfers to subnational governments was defined by the Ministry of Finance (MoF) and approved by Parliament in the BL of each fiscal year. There were no formulae for transfer allocations, and the transfer amounts for each aimag and Capital city were defined on an arbitrary basis in an ad hoc way. The soum and districts' transfers were allocated in a similar ad hoc way by Aimag and Capital City Assembly decision.

### ***Subnational Borrowing***

Even though they had limited authority to borrow, the aimags and soums accumulated substantial debt. The aimag governments had no authority to borrow, while the Capital city had special authority to borrow until 2002. The bulk of the subnational debt was liabilities for salaries, pensions, and payments to public and private organizations for their services.

## **B. Public Education Financing**

The education sector was a high priority in Mongolia's government policy from 1990 to 2002. As defined in the Education Law (EL) of 1995, education finance should comprise at least 20 percent of the total budget of the current fiscal year. The functions of providing primary education, professional training, and retraining services were assigned to the aimag and Capital city levels. Thus, subnational expenditure on education was relatively high until 2002. The central government expenditures covered tertiary education, scholarships, textbook development and publication, capital investment, and teacher training.

The Education Ministry defined regulations on the norms, normative amounts, and methodology for education financing. The central government defined the appropriate proportion of central budget, local budget, and other sources to finance the education sector for each fiscal year. The Parliament and Aimag Assembly approved the education budget needed to provide an adequate service standard, and the Aimag and Capital City Assembly discussed and approved the educational institution budgets based on the normative amounts defined by the central government. For instance, in 1992, the per pupil normative cost for primary and secondary education was 2000 MNT, and the per student normative cost for university was 13000 MNT.

Educational institutions were financed by state budget, local budget, investments, tuition fees, donations, soft loans, and own revenues. Both public and private institutions received per pupil normative costs from state and local budgets. State budget also financed the fixed costs and dormitory expenditures of state-owned general education schools and vocational training centers. Kindergarten was financed by local budget, own revenues, and service fees paid by parents; primary and secondary schools were financed by local budget and own revenue; vocational training centers were financed by state budget, local budget, and own revenue; and universities were financed by state budget, tuition fees, own revenue, and research project finance. The EL prohibited reducing state and local budget financing for educational institutions based on the amount of own revenues. In order to provide scholarships and issue soft loans, the government established a State Tuition Fund, from which universities received part of their financing.

Aimags and soums established an Education Fund to finance education service provision. The law allowed for the establishment of an Education Fund at the aimag and soum levels by initiatives of public organizations. The EL prohibited spending of the education budget and Fund money for purposes other than education service provision.

### ***Public Health Financing***

Health care was another priority area for government policy from 1990 to 2002. The government's strategy for the health sector was to provide high-quality health care services that would be accessible and equitable. Until 2000, health expenditures comprised about 10 percent of total government spending.

According to the BL and LTAU of 1992, health care service provision was assigned to the aimag, Capital city, soum, and district levels and financed by local budget. The Health Law (HL) of 1998 provided more detailed assignments for the provision of health services by different government levels. The HL said that the aimag, Capital City, soum, and district governor should develop the long- and short-term health care development plan, allocate financial and human resources, and define the structure and organization of the health sector for their respective jurisdictions. The Aimag, Capital City, Soum, and District Assembly therefore discussed and approved the health development plan, budget proposal for health service provision, and governor report on health service provision.

The Health Ministry set the regulations on health service provision for subnational governments to follow, and the aimag and Capital city provided health care services at the subnational level. The head of the health organization was appointed and dismissed by the soum/district governor in consultation with the head of the Aimag/Capital City Health Office, respectively. Similarly, the head of Aimag/Capital City Health Office was appointed and dismissed by the Aimag/Capital City governor in consultation with the Health Ministry.

Starting in 1991, the health sector started to move toward a market-based economy, and the financing system also changed gradually. Until 1991, health organizations were fully financed by budget under the centrally planned economy. The bases for reform were provided by the Health Insurance System (HIS), implemented in Mongolia since 1994, and the Health Insurance Law (HIL) that passed in 1993. Implementation of the HIS was a major innovation in Mongolia's health financing system.

From 1990 to 2002, health sector financing came from three main sources: budget (state and local) financing, health insurance fund (HIF) financing, and revenue from own activities. Until 1995, health organizations were financed by budget and revenue from service charges. Aimags and soums established a Drug Circulation Fund to finance the provision of necessary medicines and sustainability of primary health care services.

### ***Issues in the Intergovernmental Fiscal Relations System from 1990 to 2002***

Overall, the intergovernmental fiscal relations system of Mongolia was very weak during this period, affecting the quality of public service provision. Many studies have found that despite the elaborate rules and regulations for management of public resources, informal practices differed significantly until 2002. Weaknesses included: an unreliable, unstable, and unpredictable budget management framework; violations of budget rules; a weak budget preparation process lacking hard budget constraints; and lack of control of government cash payments by the MoF. As discussed above, even though subnational governments were assigned the responsibility of providing local and social public goods, the functional assignment was very ambiguous, and revenues were not sufficient to finance the assigned functions. Subnational governments were highly dependent on central government funding such as revenue sharing and fiscal transfers, but these revenue sources were unpredictable and unstable due to arbitrary decision making processes on tax sharing rates and transfer amounts.

## II. PUBLIC SECTOR FINANCE AND MANAGEMENT SYSTEM FROM 2003 TO 2011

In order to address weaknesses in the intergovernmental fiscal relations system as described above, the Mongolian government undertook the next stage of reforms starting in 2003. The reforms included a series of measures to enhance the budgeting process, such as increasing transparency, linking policy priorities with budget resources, rationalizing the system of norms, introducing a Treasury Single Account (TSA) system, and improving the reporting system.

### *The Intergovernmental Fiscal Relations System*

The reform measures were based on the concept of New Public Management and legalized by the Public Sector Finance and Management Law (PSFML) of 2002. The PSFML provided detailed regulations on authorities and responsibilities of the budget entities and officials with regard to the budget cycle and personnel management, as well as the division of responsibilities for service provision among different levels of government. The Consolidated Budget Law (CBL) of 2002 defined general regulations on budget revenue collection, expenditure types, portfolio manager's authority, budget accounting, and reporting.

### *Expenditure Assignment*

The PSFML distinguished between pure local government expenditure functions and central government functions, as well as functions contracted to the subnational level by the central government. The subnational governments' own expenditure functions were financed by the subnational budget, while contracted functions were financed by the central government. The functions contracted out to the local government level included support for central government policies and key social services: education, health care, culture, labor, social welfare, and social security. As defined by PSFML, the core functions of local governments to be financed by own revenues were:

- sanitation and garbage collection;
- environmental protection, renewal, and maintenance;
- pest eradication and control;
- local road maintenance;
- sewage;
- flood barrier and soil protection;
- fire protection, prevention, and mitigation;
- local public infrastructure facilities; and
- fighting and prevention of infectious animal diseases.

The PSFML limited subnational discretion over service delivery. The portfolio ministers<sup>7</sup> determined the service/output-based budgets<sup>8</sup> in accordance with the government action plan and general guidelines for socioeconomic development. The general manager (head of the state budgetary bodies) delivered outputs by receiving funds from the central budget in accordance with the contracts made with the portfolio ministers. The aimag and Capital city governors raised revenues from local sources and delivered core local outputs and contracted outputs financed by the central budget. Soum and district governors were responsible for the delivery of core local outputs and central budget-financed outputs to the aimag and Capital city governor by contract.

Under the legislation, Mongolia became a de-concentrated state with fiscal centralization. While aimag and Capital city governors had the authority to manage activities of the state budgetary bodies and monitor the delivery of contracted outputs, they did not have financial authority over the budget of the budgetary bodies. The funds for contracted functions were transferred directly to the state budgetary

7 As stated in PSFML, the portfolio ministers are line ministers and governor of the provinces and regions.

8 "Output" is a similar term for service or function that was used in the PSFML.

bodies (schools, hospitals, etc.) through the aimag and Capital city offices of the respective ministries. Therefore, the expenditure functions for social services such as education and health shifted to the central government. With regard to capital expenditure responsibilities, investment decisions were made at the central level while maintenance and operation of facilities were organized at the local level, which created many problems at the local level<sup>9</sup> and led to inefficient service delivery.

The legal provisions were quite ambiguous, with many duplicated assignments. They provided no guidance for resolving conflicts between aimag and soum governments on the assignments for the shared responsibilities mentioned above. Furthermore, the expenditure assignments did not differentiate between responsibilities for funding, regulating, and implementing expenditure programs. There were also many duplications and overlapping functions between different jurisdictional levels, which required the reassignment of expenditure responsibilities.

**Revenue Assignment**

The General Tax Code (GTC) uniformly formulated taxes, defined the central and local taxes, and provided the regulation for the tax administration. The Consolidated Budget Law (CBL) differentiated central, provincial, and local revenues. Under this system, the Parliament defined the tax bases and rates for custom duties and direct and indirect taxes, and the Aimag and Capital City Assembly defined the tax rates within the limit set by the central government and introduced some user fees.

Although aimags and soums had access to their own tax revenues, the revenue proceeds of these taxes were very limited. Table 3 shows the tax assignments for different levels of government. The main distinction was between own revenue and shared revenue. Although aimags and soums had access to their own tax revenues, the environmental hardships of Mongolia sometimes had negative impacts on local farmers, which in turn affected the collection of livestock taxes and land payments.

**Table 3: Tax Assignments Classified by Jurisdictional Level**

Shared taxes	Central taxes	Aimag, Capital City taxes	Soum, District taxes
Value added tax* (VAT)	Wage tax*	City tax <sup>10</sup>	Personal Income Taxes (PIT) other than wage tax
Royalty	Corporate income tax (CIT)	Land payment	Gun tax
License fees for the mining and prospecting mineral resources	Custom duties	Immobile property tax	Stamp duty*
	Excise taxes	Vehicle tax	User fee for hunting
	Gasoline and diesel taxes		User fees of natural resources other than minerals
	Windfall taxes*		User fee for herb
	Air pollution tax*		User fee for the extraction of the common natural resources
			User fees for water and springs
			User fee for timber

Source: Source: Author's calculations based on based on General Tax Code (2008) and Consolidated Budget Law (2002).

Amendments to the GTC and CBL changed the tax assignments and revenue sharing rules for different levels of government. Wage taxes were assigned to the aimag and Capital city level by a 2009 amendment to the GTC. A 2010 amendment to the GTC introduced an air pollution tax, and a 2011 amendment of the GTC removed windfall taxes. Since 2010, stamp duties were shared between the aimag and soum levels. With the GTC amendments of 2009 and 2010, the central government had

9 Local governors complained about the facilities that were expensive and incompatible with local needs but built according to central procurement.  
 10 The city tax is not introduced due to the lack of legal framework.

the right to define the rates for the user fees of nuclear resources, air pollution, water usage, hunting resource, land usage, and timber within the limits set by Parliament. The Aimag Assembly had the right to define the rates for the user fee for springs, immobile property tax, vehicle tax, user fee for herb usage, and city tax within the limits set by Parliament.

VAT revenue sharing was unclear and unstable, which caused uncertainty as well as reduced predictability for subnational budgeting and planning. Under the government resolution of 2002, VAT and excise taxes were shared between central and local government, but excise tax sharing was removed in 2003. As stated by MoF staff, the VAT sharing rate is 80:20 for the central and subnational governments, respectively, but actual practices differed, and VAT sharing rates were regulated by the annual budget law on arbitrary bases. For example, the distribution of VAT was 92.2 percent to central government and 7.4 percent to provincial government in 2003 and 94 percent to central and 6 percent to provincial government in 2007.

Tax sharing rates for the royalties and license fees for mining and prospecting minerals were determined by the 2006 amendment of CBL. The revenues from royalties were shared as 70 percent for the central government, 20 percent for the aimag, and 10 percent for the soum level. The revenues from license fees for mining and prospecting minerals were shared as 50 percent for the central government, 25 percent for the aimag, and 25 percent for the soum level.

Under the legal framework, most revenue bases were concentrated with the national government, while local governments had only very limited revenue autonomy. Almost all taxes were legislated by the central government, and subnational governments<sup>11</sup> had limited autonomy to introduce their own taxes. Furthermore, the tax assignment and authority to set tax rates were changed very frequently, making it difficult to clarify the legislative sovereignty of subnational governments. All taxes were collected at the provincial and county level, then local taxes were transferred to the respective budget accounts and other taxes were concentrated in the national budget. The revenue was then partly shared, and transfers were allocated to the provincial level. The subnational tax departments were subordinate levels of the National Tax Authority (NTA), operating as its agencies. Thus, lower jurisdictional levels had no influence on legislation, administration, and subnational tax revenue.

Subnational governments had no incentives to increase revenue collection. Any increase in local revenues was equalized by reductions in either tax sharing or transfers. Therefore, the system encouraged local governments to find extra-budgetary sources of income and incentivized an under-estimation of tax revenues.

### ***Intergovernmental Fiscal Transfers***

As discussed above, subnational governments had very limited sources of revenue, so they were increasingly dependent on central government transfers. This reliance on central transfers weakened local incentives for fiscal self-control. Conceptually, greater fiscal autonomy would strengthen the link between services and costs as well as local autonomy.

Central-provincial<sup>12</sup> and provincial-local transfers were important revenue sources for the aimag and soum governments. Transfers represented about 55 percent of consolidated subnational revenues until 2003. After the reform of 2003 which shifted major social service responsibilities to the central government, the ratio dropped to 40 percent of consolidated subnational revenues. Intergovernmental fiscal transfers then increased sharply, amounting to 71.1 percent of consolidated subnational revenues in 2007 (L.Ariunaa, 2010).

11 Only the aimag and Capital city level had partial legislative sovereignty.

12 The province is equal to aimag and Capital city level.

Transfers could be classified into two categories: unconditional and conditional transfers. Unconditional transfers, which had a gap-filling purpose, were called “financial support transfers.” Conditional transfers, used to finance contracted services such as education and health, were called “state-financed local budget.” At the soum level, state-financed local budgets were used to finance schools, kindergartens, hospitals, and cultural centers. At the aimag level, these transfers covered all costs of the Aimag Food and Agricultural Department and the Veterinary Department as well as the provision of education, health, and cultural services.

Under this arrangement, subnational governments had two budgets. One budget was the local budget, financed by own revenues and approved at the respective Assembly. The second one was the budget for state-financed services. Revenue-sharing transfers were classified as own revenues according to the budget format approved by the MoF.

The Mongolian fiscal system was based on a “layer cake” model, with strict vertical hierarchical relationships between different levels of government. The central government determined transfers to the aimag level, and there were no direct central transfers to the soum level. The soum level governments received transfers from the aimag level. In order to get financial support transfers, subnational governments submitted revenue and expenditure estimates to the MoF. Consolidated requests from aimags were reviewed and analyzed by the MoF, and based on these estimates, the MoF calculated the amount of transfers for each aimag.

The system lacked transparency, predictability, and stability, which are the most important components of an effective transfer system. Transfer allocations did not use a formula and were instead based on expenditure and revenue projections that were quite ad hoc and disregarded local differences in needs and fiscal capacity. Subnational governments could not reasonably estimate intergovernmental transfers until budget execution started. Annual changes in transfer amounts and lack of clarity on funds distribution created highly unpredictable and unstable conditions for subnational governments, making subnational planning for budgetary resources impossible. The system did not support efficient delivery of public services or local incentives.

### ***Subnational Borrowing***

The borrowing activity of the government was regulated by the PSFML, LTAU, and CBL. Under the PSFML, local governments must obtain approval for borrowing from the central government through the MoF, and only aimag or Capital city governors have a right to borrow. Aimag and Capital city governors and general managers of the budgetary bodies are forbidden to spend above the appropriation and to overdraw the bank account. As defined by the LTAU, the provincial Assembly has the authority to approve bond issues according to the governors’ proposal.

## **B. Public Education Financing**

Under the PSFML, education services were financed by state budget and contracted to subnational government. The Minister made contracts with the aimag and Capital city governors for the provision of preschool education and general education services, and the same contracts were made between soum/district and aimag/Capital city governors. The contract defined the standard, quantity, and quality of service as well as reporting requirements. The Education Ministry allocated the budget to the Education Office of the aimag/Capital city, then the funds were transferred directly to the treasury account of the educational institution.

At a minimum, education sector financing was supposed to equal 20 percent of the consolidated budget each fiscal year. As defined in the Education Law of 2002, revenue sources for educational institutions were the state budget, investments, tuition fees, donations, soft loans, and own revenue. The Aimag Education Office and research and methodology organization were financed by state budget and project funds. Primary, secondary, and high school services organized unofficially by the private sector as well as evening courses were financed by state and local budget. The aimag, Capital city, soum, and

district could establish Education Development Funds by public initiative, and schools could also establish School Development Funds. State-owned kindergarten was financed by state budget, service charges paid by parents, and own revenues. Vocational training centers were financed by state budget and own revenues. Universities were financed by state budget, tuition fees, research project funds, and own revenues, and education services for the police and army were financed by state budget.

The central government determined per pupil normative costs for preschool, primary, and secondary schools as well as vocational training each fiscal year. The Minister of Education determined per pupil normative costs based on location, features, professional direction, and demand for disabled pupils. Scholarships and soft loans for students of university and vocational training centers were also defined by the central government each fiscal year. Educational institutions were prohibited from charging payments other than those defined in the Education Law.

### C. Public Health Financing

Health financing was regulated by a new Health Law (HL), PSFML, CBL, and related government regulations. The HL of 1998 was redeveloped and passed in May 2011. According to the HL of 2011, the health financing system should be designed to improve public health and provide equitable, accessible health services with high quality.

Under the PSFML, the health sector had a vertical financing system in which health care providers developed budget proposals for submission to the Aimag and Capital City Health Office. The Health Office consolidated the health care providers' budget proposals and submitted them to the Ministry of Health (MoH) and the MoH Department of Economy and Finance for review, screening, then bargaining with the MoF. Upon approval of the state budget, the Minister of Health would establish service provision contracts with the aimag and Capital city governors, then the aimag and Capital city governors would establish service provision contracts with soum and district governors. The MoH Department of Economy and Finance allocated the budget to the Health Office of the aimag/Capital city, then the funds were transferred directly to the health care provider's treasury account.

Health care is classified as primary, secondary, and tertiary care. House and soum hospitals as well as inter-soum hospitals are primary care providers. Aimag and Capital city polyclinics and district polyclinics are secondary care providers, while clinics and specialized professional hospitals as well as regional diagnostic centers are tertiary care providers.

The 2006 health sector reforms introduced a number of changes in health financing. A list of government-paid health services were defined in the HL,<sup>13</sup> but with the 2006 amendments, the Minister of Health would define the list. Until 2006, primary health care providers were financed by the state budget and HIF, then with the 2006 reforms, the variable costs of primary health care were financed by state budget based on per citizen tariffs as determined by the Minister of Health. The additional health care and services provided by inter-soum hospitals would be financed by HIF based on performance. By 2006, reform financing by diagnosis-related group (DRG) costs were implemented in the secondary and tertiary health organizations, and the financing source for these organizations combined state budget and HIF.

State budget played an important role in financing health care provision. In 2008, state budget accounted for about 70 percent of the total budget, while HIF accounted for about 25 percent. Service charges and other revenues accounted for about 5 percent of the total budget.

<sup>13</sup> According to the HL amendment of 2002, child and maternal health care, government paid health services, part of the national public health program, and fixed costs of health providers as well as investment spending were financed by state budget. Under the HL, the financing sources for health care providers were the state budget, health insurance, government special fund for health protection, donations, service charges, and other revenue from own activities.

The health sector still faced the problem of insufficient financial resources and ineffective financing arrangements which could undermine service delivery. According to the PSFML, the budget savings of health care providers should be spent with approval of the Health Office and treasury. Due to the PSFML and vertical budget management in the health sector, the aimag and Capital city governor had no authority to make adjustments to the health budget that could help improve health service provision.

### ***Issues in the Intergovernmental Fiscal Relations System from 2003 to 2011***

As discussed above, the revenue assignments between 2003 and 2011 lacked a very important element: significant revenue autonomy for subnational governments. Local governments were still far from having the political, administrative, and fiscal autonomy to manage their own affairs. The expenditure assignments and limited revenue raising possibilities became major obstacles to the development of local self-government and the promotion of fiscal decentralization. In addition, the intergovernmental fiscal relations system lacked incentives for the local level to increase their own revenue collection and rationalize expenditures.

## **III. PUBLIC SECTOR FINANCING AFTER THE BUDGET LAW OF 2011**

The government developed and passed the IBL in December 2011. The purpose of the law is to define the budgeting principles, budget system, composition, classification, authorities, responsibilities, and accountabilities of the participants in budget relations and to regulate relations connected with budget preparation, approval, execution, accounting, reporting, and controlling. The law has 11 chapters and 66 articles.

### **A. The Intergovernmental Fiscal Relations System**

#### ***Expenditure Assignment***

The IBL of 2011 addresses the overlap and duplication of responsibilities for expenditure assignments among the different government levels that occurred under the PSMFL. The IBL of 2011 addresses this issue by clearly defining the functions delegated to the Aimag and Capital city level and differentiating the local functions among subnational governments. Under the law, local functions are financed by local revenue sources, and delegated functions are financed by earmarked transfers.

#### ***Local Expenditure Functions***

The BL of 2011 addresses the issue of ambiguity in functional assignments by differentiating functions among the various levels of government (article 58). Expenditure assignments for the aimag and Capital city as well as soum and district are summarized in Table 4.

**Table 4: Expenditure Assignments under the BL of 2011**

Functions of the Capital City	Functions of the Aimags	Functions of the Districts	Functions of the Soums
<ul style="list-style-type: none"> <li>• Capital city management</li> <li>• Urban planning, construction, and establishing new infrastructure</li> <li>• Capital maintenance of construction and buildings owned by the Capital city, establishing new property, and making investments</li> <li>• Social care and welfare services</li> <li>• Implementing programs and measures to support employment and alleviate poverty</li> <li>• Development of small- and medium-sized enterprises</li> <li>• Pasture management</li> <li>• Establishing water supply, sewerage, and drainage systems</li> <li>• Housing and public utility services</li> <li>• Flood protection</li> <li>• Public transport services</li> <li>• Fighting infectious livestock and animal diseases, pest eradication and control</li> <li>• Disaster prevention</li> <li>• Environmental protection and rehabilitation</li> <li>• Establishing large-scale roads, bridges and their lighting, traffic lights, and other respective construction</li> <li>• Utility services for public areas, landscaping, public hygiene, street lighting, cleaning, and waste removal</li> <li>• Within the territory of the Capital city, operation and maintenance services of high voltage and electricity lines and substations and other activities to ensure normal functioning</li> </ul>	<ul style="list-style-type: none"> <li>• Aimag management</li> <li>• Urban planning, construction, and establishing new infrastructure</li> <li>• Capital maintenance of locally owned construction and buildings, establishing new property and making investments</li> <li>• Social care and welfare services</li> <li>• Implementing programs and measures to support employment and alleviate poverty</li> <li>• Development of small- and medium-sized enterprises</li> <li>• Replace livestock</li> <li>• Pasture management within the territory of the aimag</li> <li>• Establishing livestock fodder reserve</li> <li>• Water supply, sewerage and drainage systems, housing and public utility services, and flood protection</li> <li>• Public transport services</li> <li>• Fighting infectious livestock and animal diseases, pest eradication and control, and disaster prevention and elimination</li> <li>• Environmental protection and rehabilitation</li> <li>• Establishing within the territory of the aimag and inter-soum road, bridge and their lighting, traffic lights and other respective construction</li> <li>• Utility services for public area, landscaping, public hygiene, street lighting, cleaning, and waste removal</li> <li>• Within the territory of the aimag operation and maintenance services of high voltage and electricity lines and substations and other activities to ensure normal functioning</li> </ul>	<ul style="list-style-type: none"> <li>• District management</li> <li>• Social care and welfare services provided subsequent to the decision of district governors</li> <li>• Within the territory of districts, utility services for public areas, public hygiene, street lighting, cleaning, and waste removal</li> <li>• Promotion of intensified raising of livestock</li> <li>• Protection of nature and the environment within the district territory</li> <li>• Recurrent maintenance of lighting of public areas within the district territory</li> <li>• District landscaping, and development and maintenance of sidewalks, recreational areas, and children's playgrounds</li> </ul>	<ul style="list-style-type: none"> <li>• Soum management</li> <li>• Social care and welfare services provided subsequent to the decision of soum governors</li> <li>• Within the territory of soums, utility services for public areas, public hygiene, street lighting, cleaning, and waste removal</li> <li>• Replace livestock</li> <li>• Pasture management within the territory of the soum</li> <li>• Protection of nature and the environment within the soum territory</li> <li>• Recurrent maintenance of lighting of public areas within the soum territory</li> <li>• Soum landscaping, and development and maintenance of sidewalks, recreational areas, and children's playgrounds</li> </ul>

Source: Budget Law of 2011.

***Delegated Functions***

- The law clearly defines the functions delegated to the aimag and Capital city level as:
- Preschool education services,
- General education services,
- Cultural services,
- Primary health care services,
- Land relations and cadastre services,
- Child development and protection services, and
- Community sports.

***Assignment of Investment Functions***

The new BL assigns capital expenditure to the aimag and Capital city level. Under the previous legislation, capital expenditure was an exclusive central government function. While capital maintenance was partly assigned to the Capital city and aimag levels, no capital expenditures were assigned to the district and soum levels. For example, about 5 percent of total expenditure was spent on capital repair, and about 95 percent accounted for recurrent expenditures in Bulgan aimag from 2003 to 2011. Soums had no capital spending at all until 2013 (L.Ariunaa, 2010).

The investment projects and activities that fall under the local functions assigned by law are supposed to be financed from the respective budgets. Investment projects included in the budget proposal are supposed to have a technical and economic feasibility study, with the list of procurements included as an annex. The financing amount for each current fiscal year investment is required to be higher than the per year combined investment for the projects.

The aimag level is supposed to finance the following investment functions from own budget:

- City planning and construction;
- Create new infrastructure;
- Capital repairs of locally owned constructions and create property;
- SME development;
- Re-stock with cattle;
- Create sanitation, grey and drinking water supply network;
- Housing and utility;
- Flood protection;
- Build roads within aimag and between soum, and bridges as well as their lighting and other related facilities;
- Landscaping, public utility and sanitation, street lighting within aimag territory; and
- Maintenance and repair of high voltage transmission lines, substations in aimag territory.

The soum level is supposed to finance the following investment functions from own budget:

- Public utility and sanitation, street lighting and cleaning in soum territory;
- Re-stock with cattle;
- Environmental protection of soum territory;
- Repair of public lighting facilities; and
- Landscaping, gardening, sidewalks, parks, and play gardens.

### **Revenue Assignment**

According to the current legislation, the subnational budget revenue sources are comprised of own source revenue, financial support transfers, earmarked transfers, revenue sharing transfers or Local Development Fund (LDF), and local borrowing. Each of these sources is discussed below.

### **Own-Source Revenue**

The subnational government's own-source revenue consists of tax and non-tax revenues, with tax revenues being the major revenue source. Tax revenues can be differentiated as own tax revenue and tax sharing revenue. Table 5 presents the revenue assignments by government level. Aimag and soum governments generate own revenue from the taxes assigned to each government level by the BL of 2011. The law introduced new taxes such as the dog tax, inheritance tax, and gift tax, but the regulating framework for these taxes is not yet complete. Local governments have no authority to create new taxes so have limited autonomy over local own revenue sources.

**Table 5: Revenue Assignments according to the BL of 2011**

<b>Common taxes</b>	<b>State taxes</b>	<b>Aimag and Capital city taxes</b>	<b>Soum and district taxes</b>
Royalty on minerals (95:5)	CIT	Capital city tax	PIT other than 8.1.1 of the PIT law
Domestic VAT (75:25)	VAT of imported goods and services	Land user fee	Gun tax
	Excise taxes	Immovable property tax	Stamp duties other than 11.2 of the stamp duty law
	Custom duties	Vehicle tax	User fee for hunting
	Gasoline tax	User fee for water on production use	User fee for the use of natural resources other than minerals
	License fees for mining and exploration of mineral resources	Wage tax (8.1.1 of PIT law)	User fee for herbs
	Air pollution fee	Inheritance and gift tax	User fee for timber
	Stamp duty (11.2 of the stamp duty law)	Stamp duties other than 11.2 of the stamp duty law	User fee for common minerals
	Water pollution fee		User fee for drinking water and springs
			Self employment tax
			Dog tax
			User charges for waste services

Source: Budget Law of 2011.

Mongolia has a vertical fiscal administration under the MoF. All taxes are collected at the aimag and soum levels, then local taxes are transferred to the respective local treasury account and other taxes are concentrated in the central government account in accordance with the monthly budget schedule approved by MoF. Transfers are then allocated to aimag and Capital city governments, and the aimag and Capital city should allocate transfers to the soum and district levels. The subnational tax departments are subordinate levels of the National Tax Authority and operate as its agency, while subnational tax offices are responsible to both the MoF and respective local governments. Therefore, subnational governments have very limited or no administrative autonomy.

### **Intergovernmental Transfers**

As defined in the BL of 2011, there are three types of transfers to subnational governments, namely: (i) financial support or gap-filling transfer, (ii) revenue sharing transfer, and (iii) earmarked transfer to finance delegated functions. There are also transfers from subnational governments to the central government, and the amount of transfer is determined as a residual of the basic budget surplus minus the base expenditure of the lower-level government.

Central government fiscal transfers are an important revenue source for subnational government. On average, about 40 percent of consolidated subnational revenues were represented as intergovernmental fiscal transfers during the last 10 years. The share of total transfers in terms of total local revenue was 59.9 percent in 2013, with a small increase to 64.2 foreseen for the 2014 fiscal year. Since 2012, the financial support transfer has grown rapidly, quintupling in size from 29.4 billion MNT in 2011 to 155.0 billion MNT in 2013. The revenue sharing transfer or LDF implemented under the BL of 2011 accounted for 187.47 billion MNT in 2013 or 16.6 percent of total transfers. The earmarked transfer plays a relatively important role in subnational budgets, at about 70 percent of total transfers in 2013 (Table 6).

**Table 6. Total Intergovernmental Transfers in 2013 and 2014**

No		2013		2014	
		Amount (billion MNT)	Percentage in total	Amount (billion MNT)	Percentage in total
1	Financial support transfer	155.0	13.8	159.2	12.1
2	LDF	187.47	16.6	284.4	21.7
3	Earmarked transfer	784.03	69.6	869.43	66.2
3	Sub total	1126.5	100.0	1313.03	100.0
4	Own source revenue	755.46		732.03	
5	Total local revenue	1881.96		2045.06	
6	Share of total transfers in total local revenues		59.9		64.2

Source: Author's calculations based on data from MoF.

Note: Data for 2013 is expected budget performance, and data for 2014 is approved budget.

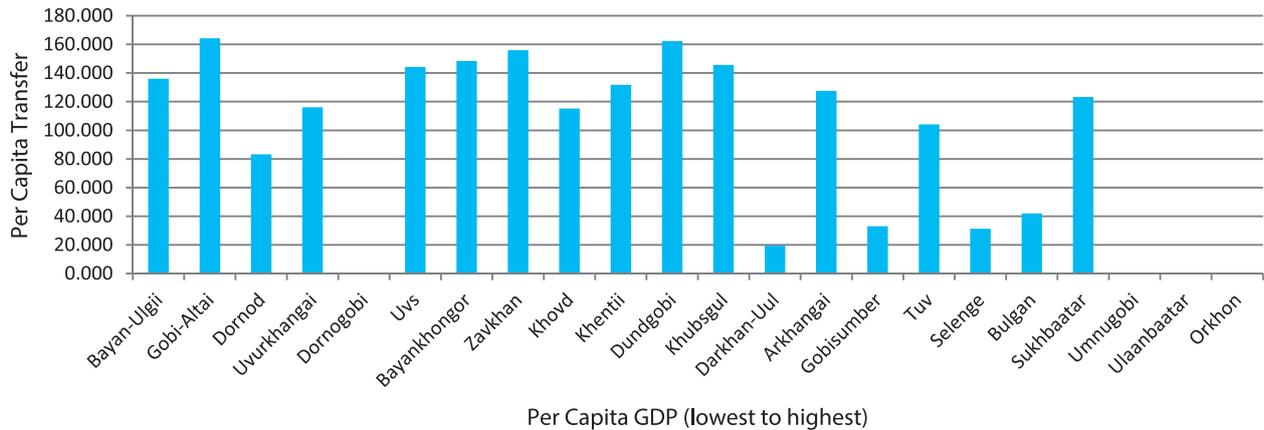
### ***Financial Support Transfer***

The central government provides the financial support transfer to the aimag level, and the aimag provides the transfer to the soum level in order to fill the expenditure and revenue gap of the basic budget. As defined in the BL of 2011, the central government has the authority to determine the amount of financial transfers to the aimag level, and the aimag Governor has the authority to determine the amount of financial support transfers to the soum level. The Aimag Assembly then discusses and approves the transfer.

The main condition for the transfer is that the base revenue does not cover the base expenditure of the aimag and soum. The amount of the financial support transfer is supposed to equal the residual of the base expenditure and the base revenue of the respective aimag and soum basic budget. As defined by the BL, the base expenditure of the aimag and soum is the expenditure for local administration, social welfare, and environmental protection services. The base revenue of the aimag and soum is the local revenue calculated by minimum tax rates as defined by the law.

Higher transfer amounts have been allocated to poor jurisdictions, while lower transfer amounts have been allocated to rich jurisdictions. Figure 1 illustrates the actual allocation of per capita financial support transfers by aimags in 2013.

**Figure 1. Actual allocation of per capita financial support transfers for 2013, in thousand MNT**



Source: Author's calculations based on data from MoF.

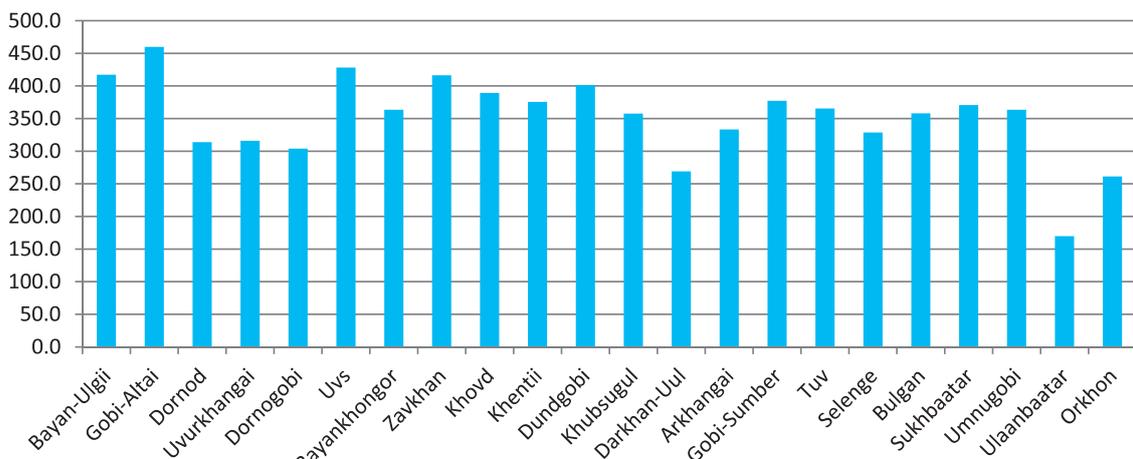
**Earmarked Transfer**

The earmarked transfer to subnational government is provided by the central government to finance the delegated functions as listed above. The line ministries have passed regulations for estimation of the cost of education and health services (i.e. normative cost per pupil and per bed), and the earmarked transfer calculations are based on those normative costs.<sup>14</sup>

The procedures for allocating earmarked transfers have not changed from the previous system to the current one. The only change is the consolidation of earmarked transfers into the local budget, but the other procedures remain the same as in the previous system. The total amount of earmarked transfers was 784.03 billion MNT in 2013, and 869.4 billion MNT is planned for the 2014 fiscal year.

Figure 2 illustrates the actual allocation of per capita earmarked transfers across aimags, which are arranged by fiscal capacity in ascending order for 2013. Relatively higher transfer amounts were allocated to Bayan-Ulgii and Gobi-Altai aimags which have lower fiscal capacities, while lower transfer amounts were allocated to Ulaanbaatar and Orkhon aimag which have higher fiscal capacities. The allocation of earmarked transfers for other aimags had a standard deviation of 39,558 thousand MNT.

**Figure 2. Actual allocation of per capita earmarked transfers for 2013, in thousand MNT**



Source: Author's calculations based on data from MoF.

<sup>14</sup> Ministry of Education passed a regulation that defines per pupil variable cost, which is updated each year for the inflation rate and also differentiated by regions. The Ministry of Health also has a regulation that defines the per bed variable cost.

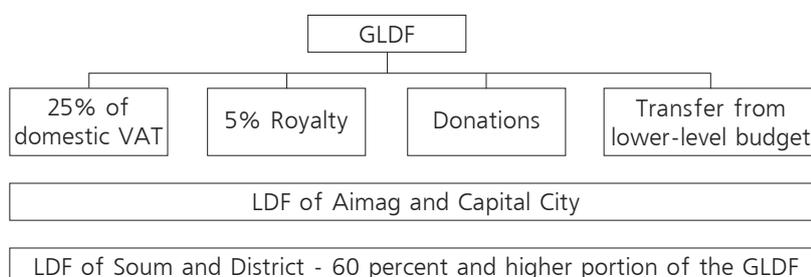
Aimags and soums must follow a specific process for delegated functions and earmarked transfers. The aimag Governor establishes the contract as defined in the BL within 14 days upon approval of the state budget, and the soum Governor establishes the contract within 14 days upon approval of the aimag budget. The contract should include the purpose of the spending, quantitative and qualitative indicators of the services, and reporting requirements. The aimag and soum governor also develop a monthly schedule for each delegated function and submit it with the local budget to the respective Assembly. The Aimag and Soum Assembly approve the schedule for the earmarked transfer as part of the local budget, and the transfer should not be decreased from the contract amount by the Assembly. The aimag and soum Governor should not allocate the earmarked transfer to the base local expenditure and to the expenditure of the other sectors, and they should not incur debt and receivables.

**Revenue Sharing Transfer or Local Development Fund**

Shared revenue comes from proceeds of mineral royalties and domestic VAT revenues and is concentrated in the General Local Development Fund (GLDF). The GLDF is shared between subnational governments by formulae, using indicators such as local development index, population, population density, remoteness, territorial size, and local tax incentive. As defined in the law, a minimum of 60 percent of the funds are allocated to the soum and district LDF. The aimag shall define the amount of LDF for the soum level using the “Methodology for the calculation of revenue transfer from LDF.” The indicators and formulae are similar to those used to estimate the central government’s transfer to the aimag. The Soum Governor Office is supposed to prioritize the investment projects submitted by Community Meeting in accordance with development policy and reflect them in the budget proposal, then submit it to the Soum Assembly.

As described in the BL of 2011, the GLDF is comprised of four sources: 25 percent of domestic VAT, 5 percent of royalty on minerals,<sup>15</sup> donations from national and international organizations, and transfers from subnational levels (Figure 3).

**Figure 3: Composition of General Local Development Fund**

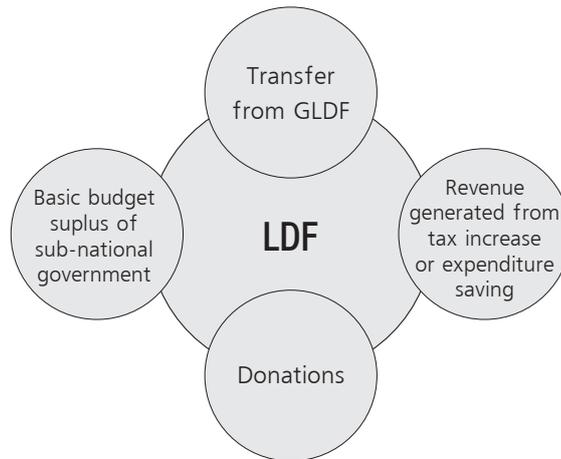


Source: Budget Law of 2011.

The MoF defines the revenue-sharing transfer amounts from GLDF to the aimag and Capital city LDF, and the transfer amounts for the soum and District LDF are calculated by the Finance and Budget department of the aimag and Capital city. In the formulae, each indicator has a weight of 25 percent: local development index (25 percent); population (25 percent); population density, remoteness, and territorial size (25 percent); and local tax incentive (25 percent). The soum and district LDF is comprised of revenue-sharing transfers from GLDF, basic budget surplus of subnational governments, revenue generated from tax increases or expenditure savings, and donations (Figure 4).

<sup>15</sup> When allocating the transfer from GLDF to the soum and district LDF, the per capita revenue-sharing transfer of mineral royalty is supposed to be increased up to 10 percent for mining jurisdictions.

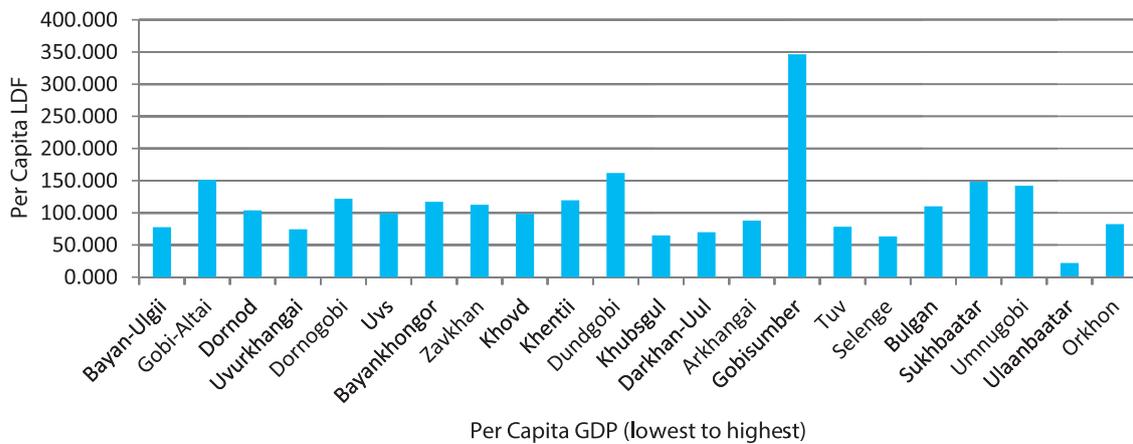
**Figure 4: Composition of Local Development Fund**



Source: Budget Law of 2011.

Figure 5 illustrates the actual allocation of per capita LDF across subnational jurisdictions, arranged by lowest to highest per capita GDP for fiscal year 2013. In 2013, Gobi-Sumber received the highest amount of per capita LDF, while the Capital city received the lowest amount of per capita LDF. The average per capita LDF allocated to the other 20 jurisdictions was 104,300 MNT, with a standard deviation of 30,100 MNT.

**Figure 5. Actual Allocation of Per Capita LDF, in thousand MNT, 2013**



Note: \* - The earmarked transfer is not included in the estimated total transfer.  
 Source: Author’s calculations based on data from MoF.

The fund supports investment projects and programs to improve local public service provision, hence local government is responsible for execution of the approved LDF. The fund can be used to finance investment in schools, kindergartens, and hospitals at the local level. The funds should be allocated based on community participation as defined in the BL of 2011, i.e. only for those investment projects included on the list as identified and prioritized in the Community (Bag) Meeting.

The LDF is prohibited from financing the following activities:

- Programs and activities that are not assigned to subnational levels,
- Spending of political parties and NGOs,
- Celebrations other than national Naadam,
- Activities not in the common interest,
- Issue loans or guarantees with financial consequences, and

- Expenditures not approved and reflected community opinions.

### ***Subnational Borrowing***

The aimag government can get loans from the central government to finance seasonal revenue deficiencies, while the soum level can get loans from the aimag to finance seasonal revenue deficiencies. Subnational governments are not eligible to get loans for investment purposes. The aimag and soum governments are supposed to plan and execute the local budget without deficit.

### ***Making Budget Adjustments***

Article 42 of the BL provides regulations for adjustments to the governors' budget. Adjustment to the general budget governors' (GBG) budget must be made only by the supplementary budget. The GBG cannot make adjustments between recurrent and capital expenditures but can make the following adjustments to his/her budget:

- between programs,
- between central budget governors' budget under direct supervision,
- between central and direct governors' budget, and
- between direct budget governors' budget under his/her direct supervision.

The central budget governor can make adjustments between the direct governor budgets under his/her supervision. The direct budget governor can make adjustments only between recurrent expenditures of his/her own budget.

The aimag and Capital city governor can make adjustments within the school, kindergarten, and hospital budgets by changing the approved monthly and quarterly budget schedule. The amount of adjusted expenditure should not exceed 10 million MNT for the aimag and Capital city level. The revenue and expenditure adjustments can be made between economic classifications. It is prohibited to adjust the expenditures on wage, bonuses, and one-time retirement compensation; deferred or one-time expenditures; and expenditures that will incur debt in the future and to shift funds to projects financed by international soft loans by government agreement.

## **B. Public Education Financing System**

The MoE develops short- and long-term Education Development Plans with the participation of subnational government and other related organizations. The aimags, Capital city, soums, and districts develop their short- and long-term Education Development Plans based on the Ministry's plan. Educational institutions are supposed to have short-term plans based on the norms and normative amounts passed by the central government.

As described in the BL of 2011, provision of preschool education and general education is delegated to subnational government and financed by state and local budget. The Minister makes contracts with aimag and Capital city governors for implementation of the delegated functions upon 14 days of approval of the state budget. As described earlier, the aimag and Capital city governors make contracts with the soum and district governors, as well.

The MoE estimates the amount of earmarked transfers within the budget constraint approved by the central government and sends it to the Education Department of the aimag and Capital city. The educational institutions at the subnational level develop the amount and monthly schedule of earmarked transfers within the budget constraint and submit them to the respective governors. The respective Assemblies discuss and approve the earmarked transfers as part of the local budget. As mentioned earlier, the BL of 2011 provides authority to aimag and Capital city governors to make adjustments within the category of recurrent expenditures of up to 10 million MNT by changing monthly budget schedules.

Earmarked transfers allocated by the central government are the main revenue source for educational institutions at the subnational level. In addition to the earmarked transfer, preschool organizations can

generate revenues from own activities and service fees paid by parents; schools can generate revenue from own activities and receive local budget transfers as well as have a school development fund; and vocational training institutions can generate revenue from own activities. Under the BL of 2011, the aimag governor is responsible for maintenance of the buildings of educational institutions since these buildings are local property, so schools can receive funds from the LDF.

As described in the Education Law, the revenue sources for educational institutions are the state budget, investments, tuition fees, donations, soft loans, and own revenue. The fixed and normative costs for state-owned education and training institutions (e.g., schools, kindergarten, vocational training institutions) are financed by state budget. State budget financing includes the fixed costs for all level schools; dormitory costs of general education schools and vocational training organizations; food costs for kindergartens; and per pupil normative costs for all types of school and kindergartens (public and private). Educational institutions can generate revenue from business activities, and the director of the institution has the authority to manage the fund to improve performance and address "social issues" of staff.

The central government (namely the MoE with other related Ministries) is responsible for developing regulations related to education financing, such as issuing soft loans for tuition fees; spending and reporting own revenues of educational institutions; education standards, norms, and normative amounts; job descriptions for general education school director; performance evaluation of teachers; food standards norms and normative amounts for preschool and school pupils; and per pupil average normative costs for dormitory. The salary is defined by government regulations on the salary scale for public servants, and central government regulations also define bonuses for teachers. Per pupil average variable normative costs are defined by the central government each fiscal year, and the average variable normative costs are differentiated by the locations of educational institutions.

The head of the educational institution decides on the amount of salary according to the government regulations within the salary funds. The head of the institution also determines the bonuses in accordance with government regulations. For example, bonuses for skills should not be more than 0.2 percent of total budget, and bonuses for professional rank should not be more than 3.5 percent of the salary fund.

### **C. Public Health Financing System**

The central government is responsible for developing policy on health service provision and financing the services as well as health insurance financing. The aimag and Capital city governors are responsible for providing primary health services for their respective jurisdictions using earmarked transfers. The aimag and soum governor appoint and dismiss the head of the Health Office in consultation with higher-level bodies. The aimag governor is supposed to provide additional financing to the health care providers of his/her jurisdiction.

According to the BL of 2011, health service provision is delegated to the subnational government and financed by earmarked transfers. As in the education sector, the Minister of Health makes contracts with aimag and Capital city governors for implementation of the delegated functions upon 14 days of approval of the state budget. The aimag and Capital city governors make contracts with the soum and district governors, as well.

The Ministry of Health estimates the amount of earmarked transfers within the budget constraint approved by the central government and sends it to the Health Department of the aimag and Capital city. The health care providers at the subnational level develop the amount and monthly schedule of earmarked transfers within the budget constraint set by the central government and submit to the respective governors. The respective Assemblies then discuss and approve the earmarked transfers as part of the local budget. Compared to the previous legislation (before BL of 2011), the earmarked transfer became part of the local budget and monthly budget schedule prepared by the governor, so the aimag and Capital city governor can make adjustments within the health sector budget under his/her supervision.

As defined in the Health Law,<sup>16</sup> financing sources for health care provision are the state budget, health insurance, government special fund for health protection, donations, service charges, and other revenue from own activities. The redeveloped Health law clarified the functions of the health care providers and Aimag Health Office as well as the types of health care and services. The main changes in health financing were providing fiscal autonomy to clinics/hospitals and allowing the state-owned health care providers to generate revenue from service charges. It also added that the Health Board should be established to implement health service quality control and internal controls for health care providers. The central government developed and approved regulations on service charges, financing methods, and list of medical services and medicines financed by state budget; price definition for pay-services; health insurance financing services; and bonuses for health care staff as well as regulations for the Health support fund. The family group practices and soum hospitals are financed on a per person basis, inter-soum hospitals are financed on a per person and per bed basis, and second- and third-level clinics are financed on a per bed basis.

In 2006, the Minister of Health, Minister of MoF, and Minister of Labor and Welfare passed the "Financing of family group practices regulation." According to the regulation, 40 percent of total expenditures of house health centers should be financed by state and local budget, and 60 percent of total expenditures should be financed by the health insurance fund. In reality, however, the family group practices are financed by per citizen normative costs.

The soum and inter-soum hospitals are financed by state budget and the health insurance fund. The state budget financing of soum hospitals is based on per citizen normative costs that consist of fixed cost, demand-based per person financing, remoteness-based per person financing, and performance-based financing.

The health insurance fund is supposed to finance soum hospitals, the khoroo hospital, ambulance and clinic services, and medicine discounts. The variable cost amounts are defined by health service type, with a provided formula for the calculation. Uninsured people must pay for the health services received from public health organizations.

The head of the health care institution decides on the amount of salary according to the government regulations within the salary funds. The head of the institution also determines bonuses in accordance with government regulations. For example, bonuses for skills should not be more than 0.2 percent of total budget, and bonuses for professional rank should not be more than 3.5 percent of the salary fund.

#### IV. CONCLUSIONS

Building on the lessons learned in previous phases of fiscal reform, the IBL of 2011 represents an important milestone in Mongolia's decentralization process. It embodies a much more comprehensive approach to decentralization and addresses challenges that arose in the two previous phases of reform by clarifying the functions of different government levels in the system. However, a key question is to what extent the decentralization stipulated by the IBL is being realized in practice, particularly in terms of local autonomy over service delivery decisions. The following chapter uses a "decision space" framework to assess the degree of choice allowed at the subnational level in Mongolia.

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<sup>16</sup> The Health Law was redeveloped and approved by Parliament in May 2011.

## ▲ CHAPTER 2: FRAMEWORK FOR ASSESSING THE IMPACT OF IBL ON DELIVERY OF EDUCATION AND HEALTH SERVICES

This chapter uses an empirical strategy to translate the “decision space” framework into an assessment of the degree of choice allowed at the subnational level in Mongolia. After some brief background in Section I on views of decentralization and the implications for performance of education and health systems, Section II presents the theoretical framework for the analysis. Section III summarizes the findings of the assessment for Mongolia, which is based on the survey described in the Overview, for each aspect of the decision space framework. Section IV then juxtaposes the results of the assessment with the experience of decentralization in many countries. Based on these findings, the chapter concludes with a discussion of what is most likely to support a decentralization policy that can improve education and health systems performance in Mongolia.

### I. BACKGROUND

Advocates and researchers of decentralization generally suggest that decentralization could improve the performance of education and health systems. They argue that decentralization allows those at the local level to use their knowledge of local conditions and priorities to make better decisions about what would improve performance and to provide better and more efficient management (Fjeldstad, 2001; Smoke, 2001; World Bank, 1993). Decentralization can also enhance the potential for local accountability so beneficiaries have greater influence on the choices and implementation of services (Mills et al., 1990). Improvements could be manifested as improved and more equitable education outcomes and health status, more responsiveness to needs and wants of local beneficiaries, more financial risk protection to those who get illnesses, better access to services, more efficient use of resources, and better quality of services.

Overall, however, there is little solid empirical evidence that decentralization improves or worsens the performance of education or health systems. Other observers and researchers suggest that there are reasons for thinking decentralization might not lead to better performance, especially in terms of equity and efficiency. One reason could be “elite capture” or local officials making decisions based on corruption or patronage, lack of technical knowledge, and capacity to run uncontrolled deficits (Faguet, 2012; Beall, 2005; Manor, 1999; Prud’homme, 1995; Rono, 2002; Prud’homme, 1995; J. A. Rodden, Eskeland, & Livack, 2003; J. Rodden, 2005).

Nonetheless, experts-academics and practitioners alike-agree that a thoughtfully designed and supported decentralization reform can improve performance (Roberts, et al. 2003). Thinking about decentralization requires careful analysis of the interaction among “decision space” (the amount of choice local officials have over different system functions); capacities to make good policy and implementation choices; and accountability both to local population and the central ministry of health. How much to decentralize depends on how well-balanced the “decision space,” capacities, and accountability mechanisms are. Experts agree that it is important to improve capacities at both national and subnational levels to make decentralization reform more effective. It is also essential to develop appropriate mechanisms for accountability of subnational officials both to the central ministry and to the local beneficiaries.

Lack of empirical evidence may be due more to the difficulty of doing empirical studies than to the failure of decentralization to achieve objectives. One reason for lack of evidence is that it is difficult to do “scientific” studies of decentralization to show its real impact. This study uses an empirical strategy to translate the “decision space” framework into an assessment of the degree of choice allowed at the subnational level. This assessment is juxtaposed with the experience of decentralization in many countries, and based on these, the study discusses what is most likely to support a decentralization policy that can improve education and health systems performance in Mongolia.

## II. THREE ASPECTS OF DECENTRALIZATION THAT NEED TO BE IN ALIGNMENT

### A. Decision space

“Decision space” analysis assesses the degree of choice officials at a specific subnational level have for different functions in making policy and implementation decisions (Bossert, 1998). The degree of choice can be characterized as narrow, moderate, or wide. The broad functions are financing, service delivery, human resources, access rules, and governance rules. Each function may have sub-functions for more specific analysis—for example, within the function of financing, sub-functions could include regular budgeting, collection/use of user fees for financing, and collection/use of other local revenues for financing. Key determinants of choice for the financing function could be the ability to allocate resources according to locally determined priorities, the ability to set/modify/allocate user fee finances, and the ability to use locally generated resources (apart from user fees) for financing.

Decentralization involves both formal redefinitions of relationships of authority and informal practices that may affect formal changes—this combination of formal and informal defines the effective “decision space” of local officials.<sup>17</sup> In any country undergoing decentralization, new laws, regulations, and governmental decisions are generally drafted to redefine lines of authority and hierarchical relationships. The formal regulatory mechanisms govern the degree to which increased powers or ranges of choice are accorded over different functions. Fiscal decentralization of revenue and/or expenditure assignments, for example, may or may not occur alongside decentralization of administrative functions such as human resources management practices or the organization of services delivered. Greater local-level authority of education or health officials over administrative functions (e.g., recruitment of nurses) may not be matched with greater authority over fiscal decisions needed to exercise those powers (e.g., deciding on the number of and budgeting for funded posts).

The actual exercise of authority may vary among localities for a variety of reasons, such as attempts by higher-level authorities to maintain a tight grip over local-level decisions. Higher-level authorities could introduce red tape related to officially “local” decisions or use fiscal decision space to affect administrative decision space. Greater ability to organize or contract for services according to local conditions, for instance, may mean little if the preponderance of financing is channeled through central programs with strict rules and regulations and/or if local own-source revenues are minimal. Conversely, higher-level authorities may choose to largely abide by decisions made by lower-level officials, and in the extreme, lack of enforcement of formal relationships may lead to “bending the rules.”

Another factor may be the degree to which local-level authorities are inclined to take full advantage of the powers officially accorded to them. Particularly proactive local officials, for example, may use their authority to innovate in order to adapt service delivery to local conditions. Others may continue to rely on the center for direction, resulting in practices that largely emulate pre-decentralized relationships of authority. In short, local officials may be *de facto* more or less permitted or inclined to exercise powers that they enjoy *de jure*.

### B. Capacities

Capacity is another concept that is important for decentralization to be effective in improving the performance of education and health systems (Bossert and Mitchell, 2011). Both central authorities and subnational administrative institutions need to have the requisite capacities to make good decisions within the “decision space” they are allowed. For instance, if decision space is increased in financing and

<sup>17</sup> Above all, decentralization is about shifting the choices of policy and implementation from central authorities to subnational governmental levels. The classic approach, first published by Rondinelli and adopted by Mills, offers a typology of: (i) deconcentration, which shifts choice to lower administrative levels of a national institution such as districts within the Ministry of Health or Education; (ii) devolution, which shifts choice to lower levels of government like state or municipal governments; and (iii) delegation, which shifts choice to semi-autonomous organizations like boards of health or education (Rondinelli, 1981; Mills et al., 1990).

in human resources, management capacity in these areas is needed at the level that receives additional decision-making choice. This does not necessarily mean that greater decision space needs to wait until capacity is developed—often it is necessary to have more choice to develop those capacities.

The concept of “institutional capacities” has come to encompass a variety of different capabilities (administrative, technical, organizational, financial, human/personnel) at multiple levels of aggregation (system, organizational, individual). Broadly speaking, system-level capacities focus on macro-level structures (e.g., legal rules) that shape education/health sector governance, with capacity indicators such as the establishment of education/health sector legislation and the articulation of sector-wide strategies. Organizational-level capacities focus on processes within institutions that affect service delivery (such as mechanisms for planning and monitoring), with capacity indicators such as the effectiveness of financial management systems, information systems, and service delivery systems. Individual-level capacities focus on personal skills and training, with capacity indicators such as years of education/training and years of management and leadership experience. At both the system and organizational levels, processes and resources are important components of institutional capacities. Additionally, some capacities are relevant at multiple levels of aggregation, such as the adequacy of human/financial resources or the use of information for decision making. As this study is focused on district-level (and below) decision making in education and health, it also focuses primarily on institutional capacities at the organizational and individual levels.

### **C. Accountability**

At the same time, those who are granted more choice need to be accountable for better performance to both the local beneficiary population and the national authorities. Accountability revolves around answerability and enforcement. It can be defined as a relationship between parties in which one or more parties has obligations to answer questions regarding decisions and actions, with mechanisms of enforcement that can effectively be directed toward the answerable party (e.g., sanctions) (Brinkerhoff and Bossert, 2008; Yilmaz and Serrano-Berthet, 2008). New mechanisms of accountability such as pay for performance, management contracting for accountability to higher authorities, or local governments or community participation boards with the ability to sanction education and health officials for failure to perform as required need to be developed and implemented (Mitchell and Bossert, 2011).

The dimensions of accountability can be dissected and examined in many ways, including focusing on directions and objects of accountability. Directions of accountability include: those between administrators within the state apparatus (whether “upward” accountability from lower to higher levels of the system or “horizontal” accountability among different branches of government at a given level of the system) and those between the state apparatus and citizens/citizen representatives (which can be termed “downward” accountability). Objects of accountability include those oriented for process (such as procurement and financial management mechanisms to ensure proper use of state funds) and those focused on performance (such as achievement of targets for specific outcomes).

It is also important to determine whether accountability to citizens’ representatives constitutes downward accountability to local citizens themselves. Indeed, the degree to which the latter holds true depends in large part on the quality of “political” accountability at the local level, or the extent to which governments respond to electoral concerns such as in delivering on electoral promises and aggregating/representing citizens’ interests (Brinkerhoff and Bossert, 2008).

## **III. APPLICATION OF THE DECISION SPACE TO ANALYSIS OF THE DECENTRALIZED SOCIAL SERVICE DELIVERY EXPERIENCE IN MONGOLIA**

Results presented here are based on survey described in the Overview and also in details in Chapter 3. This chapter presents selected aggregates, while Chapter 3 presents a more detailed description of empirical patterns found in survey data.

## A. Decision space

As described in the previous section, decision space refers to the degree to which local officials make use of decision-making powers, which is affected from both “above” and “below.” From above, the range of decision space is largely determined by the boundaries set forth by higher levels of the administration. The decision space is then widened or narrowed from below by the choices of local decision makers who either choose to bypass the rules or apply them differently.

This analysis utilized questionnaires that were administered to governors (covering both health and education), Departments of Education, Departments of Health, primary health care facilities, and schools. Respondents at the respective levels included governors, deputy governors, specialists of the treasury department; directors; budget specialists; and accountants. All survey questions analyzed were originally scored on a three-point ordinal scale, with ‘1’ representing narrow decision space, ‘2’ representing medium decision space, and ‘3’ representing wide decision space. For many of the questions, respondents were asked to list all possible responses. In determining decision space, a score of 3 was given if respondents listed their level/position as one of the decision makers. Table 1 presents the decision space functions and examples of corresponding questions for health.

**Table 1: Description of health functions and examples of corresponding questions at the governor level**

Function	Description	Example survey questions	Narrow/low	Wide/high
Finance (F)	Relates to allocation decisions - for current activities, including funds disbursed centrally and local sources of revenue	Did you provide inputs to the preparation of budgets for any public health facilities in your aimag/Capital City?	No	Yes
		Who has the authority to reallocate spending across categories in the budget?	Other positions/entities	Aimag/capital city governor or soum/district governor
Strategic and Operational Planning (SOP)	Relates to planning for future activities (e.g., development of annual plans)	Who makes the final decision on programs to be provided by public health facilities?	Other positions/entities	Aimag/capital city governor or soum/district governor
		Who has the authority to modify national standards?	Other positions/entities	Aimag/capital city governor or soum/district governor
Service Delivery and Organization (SDO)	Relates to implementation of current - programs and activities	Who makes the final decision on procurement of medicine for public health facilities?	Other positions/entities	Aimag/capital city governor or soum/district governor
		Who makes the final decision on charges of services at public health facilities?	Other positions/entities	Aimag/capital city governor or soum/district governor
Human Resources (HR)	Relates to personnel functions (e.g., hiring, posting, discipline)	Who makes the final decision on employee compensation?	Other positions/entities	Aimag/capital city governor or soum/district governor
		Who makes the final decision on managing recruitment of staff (e.g., decides how to recruit, choose whom to hire, criteria for hiring, etc.)?	Other positions/entities	Aimag/capital city governor or soum/district governor

Using the methodology presented in Bossert and Mitchell (2011), the data analysis generated a set of composite scores of decision space for each respondent within a given function. The composite scores were calculated as the unweighted mean (average) of all relevant individual questions provided by a given respondent with scores ranging continuously from 1 to 3. In applying this methodology, two major

assumptions were made: (i) decision space can be meaningfully summarized quantitatively into a single composite score, and (ii) the content of each question is equally important and thus do not weight the individual survey questions. As explained by Bossert and Mitchell (2011), the latter assumption seems reasonable given lack of evidence to indicate the relative importance of one factor over another.

Table 2 presents the average scores for the decision space functions of the different administrative levels. Governors exercise the most narrow decision space with an average score of 1.3, and this does not vary significantly by sector. Respondents from the Department of Health and Department of Education scored an average of 1.53 and 1.56, respectively, also suggesting that their decision space is quite narrow. At the facility level, however, decision space appears to be moderate. Respondents at public health facilities scored 2.14 on average, while those at schools scored 2.2 on average.

**Table 2a: Decision Space - Governors**

	Health					Education					Overall	N
	F	SOP	SOD	HR	Overall	F	SOP	SOD	HR	Overall		
Ulanbaatar	1.60	1.11	1.10	1.05	1.21	1.58	1.11	1.33	1.02	1.26	1.22	6
Arkhangai	2.07	1.26	1.22	1.11	1.41	1.87	1.36	1.00	1.16	1.35	1.39	13
Dornod	1.75	1.23	1.36	1.00	1.34	1.98	1.60	1.13	1.14	1.46	1.39	10
Umnugovi	1.44	1.12	1.25	1.05	1.22	1.64	1.30	1.06	1.11	1.28	1.25	11
Khovd	1.48	1.11	1.07	1.00	1.16	1.71	1.44	1.17	1.08	1.35	1.24	12
Khuvsgul	1.71	1.17	1.35	1.02	1.31	1.75	1.22	1.28	1.08	1.33	1.32	12
Total	1.69	1.17	1.23	1.04	1.28	1.77	1.35	1.15	1.11	1.34	1.31	64

*F=Financing and Budgeting; SOP=Strategic and Operational Planning; SOD=Service Operation Delivery; HR=Human Resources*

**Table 2b: Decision Space - Department of Health**

	Department of Health					
	F	SOP	SOD	HR	Overall	N
Ulanbaatar	1.75	2.12	1.32	1.00	1.46	5
Arkhangai	2.00	2.44	1.40	1.19	1.64	3
Dornod	1.92	2.28	1.27	1.86	1.72	3
Umnugovi	1.92	2.39	1.07	1.00	1.45	3
Khovd	1.08	1.94	1.47	1.38	1.40	3
Khuvsgul	1.67	2.53	1.33	1.19	1.53	3
Total	1.73	2.27	1.31	1.24	1.53	20

**Table 2c: Decision Space - Department of Education**

	Department of Education					
	F	SOP	SOD	HR	Overall	N
Ulanbaatar	1.88	1.70	1.00	1.28	1.48	4
Arkhangai	2.08	1.80	1.67	1.42	1.67	3
Dornod	1.67	1.80	1.33	1.25	1.45	3
Umnugovi	1.25	2.20	2.00	1.21	1.43	3
Khovd	1.75	1.93	2.33	1.46	1.67	3
Khuvsgul	2.25	1.93	1.33	1.38	1.69	3
Total	1.82	1.88	1.58	1.33	1.56	19

**Table 2d: Decision Space – Health Facilities**

	Health Facilities					N
	F	SOP	SOD	HR	Overall	
Ulanbaatar	1.72	1.98	2.85	2.48	2.18	34
Arkhangai	1.69	2.04	2.86	2.39	2.17	16
Dornod	1.82	1.84	3.00	2.29	2.12	14
Umnugovi	1.54	2.03	2.81	2.41	2.14	13
Khovd	1.84	2.01	2.81	2.29	2.16	16
Khuvsgul	1.47	1.89	2.97	2.30	2.05	15
Total	1.69	1.97	2.88	2.38	2.14	108

**Table 2e: Decision Space – Schools**

	Schools					N
	F	SOP	SOD	HR	Overall	
Ulanbaatar	1.61	2.49	2.23	2.21	2.14	28
Arkhangai	1.84	2.59	2.20	2.32	2.25	14
Dornod	1.66	2.71	2.26	2.30	2.24	14
Umnugovi	1.43	2.55	2.27	2.32	2.16	12
Khovd	1.81	2.46	2.43	2.36	2.27	16
Khuvsgul	1.71	2.45	2.32	2.30	2.20	16
Total	1.68	2.53	2.28	2.29	2.20	100

The scores reflect the limited authority and capacity schools and primary health care facilities have in raising additional resources. At the governor level, decision space is widest in relation to budgeting or financial flows, with average scores of 1.69 and 1.77 for health and education, respectively. Schools and primary care facilities rely primarily on earmarked transfers over which they have little authority. At the same time, decision space at the service provision levels is widest for non-financial functions facilities have much more say over human resources and service delivery and organization.

The following subsections present the average decision space scores as well more detailed information on various aspects of decision making powers within each domain.

### **1. Finance**

In finance, the decision space is quite narrow. The average score at all levels is less than 2, and except for governors, financial decision space is narrower than the decision space in other functions.

### **Education**

All respondents indicated that the state government/state budget was a source of financing for schools. In addition, respondents at all levels also cited Local Development Fund, charitable contribution/donations, and own-source funds. Aimag/capital city government resources were cited less frequently (11 percent of respondents at the governor and Department of Education levels and 2 percent of respondents at schools).

The most commonly mentioned authorities with the right to reallocate spending across budget categories were the Department of Education, Ministry of Education and Science, Aimag/Capital City or Soum/District Treasury Fund. While 20 percent of respondents at the governor level believed that school directors had the right to reallocate spending across categories, only 11 percent of respondents at schools cited school directors. Less than 10 percent of respondents at all levels indicated that they had no right to reallocate the budget.

Almost all respondents at the governor level and 80 percent of respondents at the Department of Education said that they control the budget spending of schools. The Department of Education is more involved in the development of budget proposals: more than 40 percent of respondents from

the Department said that they submitted proposals during budget preparations, compared to almost 20 percent of respondents at the governor level. However, only a few schools ask for input from the governor's office and the Department of Education during budget development.

Around 43 percent of respondents at the school level indicated that the school could not save funds. Around 29 percent of respondents said that funds had to be remitted to the Department of Education or Ministry of Education. Only 11 percent of respondents believed that the director could use the funds with approval from the department.

About 48 percent of respondents felt that they had about the same degree of independence in budget preparation in 2013 compared to 2012. Almost 40 percent of respondents felt that they had more autonomy in 2013 to prepare the budgets.

### ***Health***

The most frequently cited sources of funds are central government/state budget, Local Development Fund, and Health Insurance Funds. Around 40 percent of respondents at the Department of Health also listed own-sources (e.g., renting facilities, additional programs/services).

Almost 80 percent of governors and Department of Health officials indicated that they oversee the development of budgets, but they provide limited input to health facilities during the budget preparation stage. Only 32 percent of governors and 25 percent of Department of Health respondents indicated submitting proposals to health facilities for budget planning. Of those who provided input, few governors felt that their proposals were accepted in their entirety, with 62 percent indicating that only some of their proposals were taken into account. At the Department of Health, 60 percent of respondents felt that most of their suggestions were taken into account, while 40 percent believed that none of their proposals were used by the health facilities.

At the governor level, 37.5 percent said that the Ministry of Health and the Aimag/Capital City Treasury Fund had authority to reallocate spending across categories in the budget. Around 28 percent also said that the aimag/capital city governor could reallocate spending across categories. At the Department of Health, the majority (95 percent) of respondents thought that the Ministry of Health had the power to reallocate spending across categories. Meanwhile, at the facility level, directors were responsible for budget reallocation. The majority of respondents at the governor and health facility levels said that public health facility directors had the authority to reallocate spending within categories in the budget.

General hospitals are more likely to generate own-sources. Only 9.5 percent of general hospitals indicated that they could not generate own sources, compared to 93.1 percent of family group practices (FGPs), 76.9 percent of inter-soum hospitals, and 56.3 percent of soum health centers. Almost 29 percent of respondents at general hospitals indicated that the raised funds had to be transmitted to the Health Department or Ministry of Health, while 38 percent of hospitals said that the director could spend the funds for the purpose of the facility with approval from the Department, Ministry, or subnational government.

Almost half of the respondents felt that they had more independence in budget preparation in 2013 compared to 2012. The other half believed that they had about the same amount of independence as before.

## ***2. Service Organization and Delivery***

The decision space for service organization and delivery (SOD) is quite narrow at the level of governors and Departments and is moderate at the health facility and school levels. The average score for SOD at the level of governors is 1.15 for education and 1.23 for health. The decision space is not significantly higher at the Department of Education (1.58) and the Department of Health (1.31). The average score is 2.28 at schools and 2.88 at health facilities.

### ***Education***

Almost half of respondents at the governor level indicated that the Ministry of Education and Science has the authority to make decisions on improving school buildings. While almost 26 percent of respondents at the Department of Education cited the Ministry of Education and Science, 42 percent thought that the aimag/capital city governor was responsible for making such decisions. At the school level, the same share of respondents (37 percent) thought that both the Ministry of Education and Science and school directors had this authority.

The Ministry of Education and Science is responsible for determining the local content of the curriculum, as indicated by the majority of respondents at all levels. While 45 percent of respondents at the governor level also said that school directors have this authority, only 24 percent of respondents at the school level said that school directors could determine the local content of the curriculum. Ultimately, the final decision on programs to be provided by schools lies with the Ministry of Education, as suggested by 42 percent of respondents at the governor level.

More than 70 percent of respondents thought that schools have the right to introduce afterschool activities and that none of these activities should charge extra fees. At the school level, however, almost 90 percent of respondents said that the school has the right to introduce afterschool activities and that some of the activities are paid. School directors have the authority to determine extracurricular activities to be provided by the schools, as suggested by the majority of respondents at all levels.

While the majority of respondents at the governor level said that schools do not have the right to contract in and out with individuals and organizations for some services, most respondents at the Department of Education and school levels thought that schools are able to do so. While the majority of respondents at all levels said that schools have a right to procure goods and services (e.g., school lunches, supplies), a smaller share of respondents at the Department of Education and schools thought this was true (slightly over 50 percent of respondents at these levels compared to 73 percent at the governor level).

### ***Health***

The majority of respondents at all levels said that public health facility directors make the final decisions on procurement. This includes procurement of medical supplies, medicines, medical equipment, and services. At the governor and Department of Health levels, more than a third of respondents indicated that the Ministry of Health is involved in making decisions on procurement of medical equipment.

The Ministry of Health seems to be responsible for choosing which public health facility programs and services (including special needs/requirements) are offered. In addition, most respondents indicated that the Department of Health is responsible for determining the criteria for evaluating the performance of public health facilities.

## ***3. Human Resource Management***

Similar to the decision space for SOD, the decision space for human resource (HR) management is narrow at the level of governors and Departments and is moderate at the school and health facility levels. The average score for HR at the level of governors is 1.11 for education and 1.04 for health. The decision space is not significantly higher at the Department of Education (1.33) and the Department of Health (1.24) and. The average score is 2.29 at schools and 2.38 at health facilities.

### ***Education***

Similar to the case of health, school directors are responsible for most decisions related to human resources management. This includes the authority to manage recruitment of staff and make final decisions regarding appointments, promotions, or demotions. In addition, more than 90 percent of respondents at all levels said that school directors have the authority to fire teachers. School directors also have the right to propose additional teachers, as suggested by the majority of respondents at all levels.

While most respondents at all levels indicated that school directors had the authority to set requirements for teachers, more than 40 percent of respondents at all levels also said that parents have this right. Respondents at all levels also indicated that school directors, social workers, and parents have the authority to evaluate teacher performance.

Most respondents said that school directors do not determine employee compensation, citing other agencies. More than 70 percent of respondents at the governor and Department of Education levels said that the Ministry of Finance has the authority to determine allowances. While the majority of respondents at the governor and Department of Education levels also thought that the Ministry of Finance has the authority to determine which employees receive bonuses, only 2 percent of respondents at the school level supported this. Most respondents at the school level thought that school directors have the authority to determine bonuses.

### **Health**

Public health facility directors have the authority to manage recruitment of staff. This includes deciding how to recruit, choosing whom to hire, and developing the criteria for hiring. In addition, public health facility directors also have the authority to appoint staff positions and choose staff to promote or demote. Some respondents also said that public health facility directors have the authority to reassign staff to a different location, while others indicated that this authority lies with the Department of Health. The majority of respondents said that soum/district governors and the Department of Health are responsible for appointing the directors of public health facilities.

While more than 57 percent of respondents at the health facility level said that public health directors have the authority to determine employee compensation, respondents at the governor and Department of Health levels cited other means. Most respondents at the Department of Health and facility levels thought that public health facility directors also have the authority to determine allowances. At the governor level, however, only 14 percent of respondents believed this to be the case, with the majority citing the Ministry of Finance as being responsible for making such decisions. The same was true for determining which employees receive bonuses.

### **B. Capacity**

The same methodology used to calculate decision space was applied to measure capacity. The corresponding capacity questions for health are presented in Table 4 below. The responses were scored on a 3-point scale, with 1 representing “low” capacity and 3 representing “high” capacity. Capacity questions were not asked at the governor level. Given the small number of capacity-related questions, the scores are not broken down by decision-space function. Table 3 presents the average capacity scores for education and health, respectively. Overall capacity appears to be slightly higher in the education sector than in the health sector, particularly at the departmental level. The average capacity score at the Department of Education is 1.88, compared to 1.38 the Department of Health. At the organization level, capacity appears to be moderate: the average score is 2.17 at health facilities and 2.28 at schools.

**Table 3: Average capacity scores**

	Health		Education	
	Department of Health	Health Facilities	Department of Education	Schools
Ulanbaatar	1.07	2.16	1.75	2.24
Arkhangai	1.50	2.28	2.00	2.20
Dornod	1.33	2.23	1.78	2.43
Umnugovi	1.67	2.02	1.78	2.20
Khovd	1.44	2.10	2.33	2.18
Khuvsgul	1.50	2.19	1.67	2.44
Total	1.38	2.17	1.88	2.28

### Education

Most Department of Education respondents thought they had adequate human resources to implement public education programs in accordance with the policies, but 63 percent deemed the current number of facilities to be inadequate. The majority (85 percent) of respondents at the Department thought that all facilities complied with national standards.

As in the case of health, most respondents at schools were familiar with the IBL. In contrast to the health sector, however, more than 68 percent of respondents at schools received training on the IBL.

More than 84 percent of respondents at the Department of Education said that schools in the region did not have enough funds to finance the required services. Similarly, 87 percent of respondents at schools believed that they did not have sufficient funding for the required services. Around 75 percent of respondents believed that they had enough funding to pay for basic salaries, but only 27 percent believed the funding was sufficient to cover bonuses.

As in the health sector, most respondents (86 percent) received on-the-job training and found it only somewhat useful (59 percent). On average, the quality of training was believed to be “good.”

### Health

Only 15 percent of Department of Health respondents indicated that they had adequate human resources to implement public health programs in accordance with policies, and only thirty percent of respondents believed that facilities were adequate. The majority of respondents felt that all health facilities complied with national standards, with less than 15 percent of respondents at the Department of Health and health facilities indicating that only some facilities complied with national standards.

The majority of respondents at public health facilities were familiar with the Integrated Budget Law (IBL). However, only 38 percent of management at public health facilities received any training on the IBL.

Around 88 percent of respondents at public health facilities indicated that they did not have sufficient funds to fund the required services. While 80 percent of respondents thought there was enough funding to cover basic salaries, only 27 percent said there was enough funding to pay for bonuses.

Most respondents (93 percent) received some on-the-job training, but more than half found the training to be only somewhat useful. On average, respondents rated the quality of training as ‘good’ (60 percent of respondents).

**Table 4: Capacity Questions in Health**

	Question	Low	Moderate	High
Department of Health	Does this Soum/District/Aimag center have adequate human resources to implement its public health programs in accordance with the above-mentioned policies?	No, not enough No, less than enough	About the right amount	Yes, enough Yes, more than enough
	Does this Soum/District/Aimag center have adequate facilities to implement its public health programs in accordance with the above-mentioned policies?	No, not enough No, less than enough	About the right amount	Yes, enough Yes, more than enough
	In general, do you feel that the public health facilities in your area comply with national standards?	No, none do	Yes, some do	Yes, all do

Health Facilities	Does this public health facility have enough funds to fund the services that it is required to provide?	No, not enough No, less than enough	About the right amount	Yes, enough Yes, more than enough
	Do you have enough funding to pay for basic salaries?	No		Yes
	Do you have enough funding to pay for bonuses?	No		Yes
	Are you familiar with the integrated budget law (IBL) that came into effect in January 2013?	No		Yes
	Did you receive any training on the IBL?	No		Yes
	Did your office receive new or updates to software for reporting spending?	No		Yes
	Do pharmacies in this area have the medicines that this public health facility prescribes?	No		Yes
	Are counterfeit medicines a problem in this area?	No		Yes
	Have you received any on-the-job training on this job?	No		Yes

### C. Accountability

Schools and public health facilities and seem to be more directly under the control of the Department of Education and Department of Health, respectively. Most organizations are required to submit proposals on budget reallocations and budget spending reports to the respective departments. In education, schools also report expenditures to the soum/district Treasury Fund.

Only 40 percent of respondents in the household survey knew about existing channels to gather criticisms, complaints, and suggestions related to health center service delivery. The most commonly cited channels were: suggestion box at public health facility (72 percent of respondents), telephone (30 percent), and word of mouth (13 percent). Only 4.5 percent of respondents who knew of existing channels for complaints and/or suggestions mentioned the existence of forums with staff of public hospitals, public health facilities, or the district health office. Of those who ever had a complaint, only half used one of these channels to report them.

The share of respondents who knew channels to voice complaints at schools was slightly lower at 34.8 percent. Almost 60 percent of respondents viewed a meeting with the class teacher as a channel for complaints or suggestions. Others mentioned a suggestion box at the public school (49 percent) and the telephone (23.3 percent). Utilization of complaint channels was slightly higher for education compared to health, with over 67 percent of respondents using one of the channels when they had a complaint.

Almost 21 percent of respondents indicated that they could not influence the types of services/ programs offered at health facilities. Around 29 percent of respondents believed they could influence services at FGPs, 26 percent at soum/district health centers, and 12.5 percent at general hospitals (including aimag/district hospitals).

## IV. SOME INTERNATIONAL EXPERIENCES IN DECENTRALIZATION THAT CAN BE USEFUL FOR MONGOLIA

### A. Decision Space

The range of decision space for subnational units varies considerably from country to country. A recent study of health decentralization in selected federal countries suggests that these countries displayed a general tendency from widest decision space to narrowest: Pakistan, Switzerland, Canada, South Africa, Brazil, Mexico, Nigeria, Germany (Marchildon and Bossert, manuscript). Countries vary considerably in decision space according to different types of functions. In general, there is no discernable pattern to suggest that wider or narrower decision space leads to better health or education performance.

For financing decision space, some of the wealthier countries rely on subnational taxing powers to fund the health and education sectors (Switzerland, Canada, United States, and Germany), while most other countries rely on central government intergovernmental transfers. Such transfers tend to increase the control of the central government, which can place restrictions on use of funds and audit expenditures. However, in South Africa, constitutional assignment of budgetary control for the health and education sectors has limited the central government's capacity to influence provincial spending, even though the bulk of funding comes from intergovernmental transfers. In some countries such as Mexico, granting local control over financing (in this case at the state level) has led to greater inequities in funding, while in countries such as Chile and Colombia, adjustments to the financing allocation mechanisms to provide a more equitable distribution of funding have resulted in greater equity.

Decision space over service delivery choices varies considerably among countries that have decentralized some choice to subnational authorities. In this area, most countries have relatively strong national norms and standards which have technical support usually in international experience. There is also a tendency to share information from locality to locality, which tends to homogenize the choices about what kinds of services are offered and the general quality standards for those services. Scarcity of resources in terms of both human resources and financing as well as limited management skills tend to be general constraints on the effectiveness of local choice in service delivery, as was also found in the Mongolia survey.

Human resource management seems to be a major area of variation in decision space internationally. Chile is illustrative of some of the issues that may need to be taken into account in Mongolia. In Chile's health sector, municipalities were first granted significant decision space over hiring, firing, and remuneration that was later overturned by national legislation which restored a national salary scale for health workers. Health worker unions along with their allied political parties were instrumental in restoring central control over human resources, and national rules on civil service continue to limit the range of choice of municipalities over human resources (Bossert et al.,). In many countries, local control over human resources can result in patronage appointments (even in the United States), which undermines the effectiveness of local health systems (Fauget 2012). A limited pool of human resources and the reluctance of health professionals to work in rural and underserved urban areas is not likely to be overcome by decentralizing choice about human resources.

Choices about access tend to be decided at the national level in many countries, although in poorer countries with user fees, local officials often have the authority to grant free services to the extremely poor. Choices about governance structures at the local level vary from country to country. Some countries require a specific structure, while other countries such as Chile allow local governments to choose among several options such as a municipal health department or a semi-autonomous municipal corporation.

## **B. Capacities**

In wealthier countries, administrative capacities, sufficient funding, and qualified human resources are generally available at the state, provincial, or municipal levels, but the differences in middle- and low-income countries can be stark. The recent study of federations suggested that Germany, Canada, and Switzerland had sufficient capacities at the lander, province, and canton levels to make good decisions, but most other countries in the study had significant weaknesses in both administrative and managerial skills and in levels of corruption and patronage. In South Africa where a constitutional provision grants provinces significant autonomy in implementing health and education services, high levels of corruption (especially at the provincial level) have led to scandals and central government receivership of some provinces. In Chile, few officials in charge of the health and education sectors at the local level had sufficient training in financial and human resources management to manage their services adequately. The variation in individual managers' skills leads to significant variation in the quality of services from one municipality to another.

In some countries (Brazil, Colombia, and Mexico in different periods, for example), the central government certifies whether local governments have the capacities necessary to take on more decision

space. Usually, central control of certification allows central governments to retain control over most local activities, except in the largest or most politically powerful subnational units.

### C. Accountability

In a particularly insightful study of Bolivia, Faguet (2012) argues that decentralization in a country with democratic local elections provides significant incentives for local officials to be more responsive to the health and education needs of their populations. In important case studies, the report shows that even for local governments that were dominated by specific elites or riddled with patronage, over time, the local population holds the elected officials accountable in part because they are responsible for the services. The study of Pakistan also found that local governments that had more accountability were also likely to utilize wider decision space and have greater capacities.

Beyond the accountability that comes through local elections, many countries have used other mechanisms of accountability. In Bolivia, for instance, local NGOs created with the express purpose of representing the community for social services are embedded in the Popular Participation Law. Other countries rely on facility boards with representatives from the community and local health committees which often mobilize the local population for health activities and in some cases are granted a role in selecting and monitoring some of the health sector cadre.

Although international experience suggests a variety of cases of decision space, capacities, and accountability, there is little evidence that one or another of these experiences leads to better health or education system performance. It is likely that a careful assessment of Mongolia's own experience in decentralization, attention to mechanisms that can address weaknesses in capacities and strengthen accountability mechanisms, and matching the granting of decision space with existing or likely future capacities and accountability will result in better health and education system performance.

## V. CONCLUSION

Although international experience provides a variety of examples of decision space, capacities, and accountability, it will be most important to understand the changing decision space in Mongolia and the capacities and accountability that are needed to support improved service delivery. As shown by the discussion of international experience above, there is little evidence that any particular country experience leads to better health or education system performance. It is likely that a careful assessment of Mongolia's own experience in decentralization, attention to mechanisms that can address weaknesses in capacities and strengthen accountability mechanisms, and matching the granting of decision space with existing or likely future capacities and accountability will result in better health and education system performance. To help inform the assessment of decentralization and service delivery performance in Mongolia thus far, the following chapter uses the survey data to look at implementation patterns of the Integrated Budget Law on the ground, as captured by the perspectives of local authorities, service delivery units, and citizens on the delivery of education and health services.

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## ▲ CHAPTER 3: MONITORING DECISION SPACE, CAPACITY, AND ACCOUNTABILITY IN DELIVERY OF EDUCATION AND HEALTH SERVICES

To help understand the relationship between decentralization and performance, a set of empirical instruments was developed to systematically learn about how the Integrated Budget Law (IBL) is being implemented on the ground. The first step in understanding the relationship between decentralization and performance is a systematic monitoring of actual choices made by local authorities and service delivery units within the decision space allowed to them under the new rules. To this end, quantitative and qualitative surveys were developed to gather information on implementation of the IBL, as captured by the perspectives of local authorities, service delivery units, and citizens on the delivery of education and health services.

This chapter summarizes the findings of the survey, comparing the perspectives of different actors and stakeholders on education and health services delivery. The chapter begins with a brief description of the quantitative and qualitative surveys. It then describes the findings for the education sector, starting with a summary of the citizens' evaluation of education service delivery based on the household survey results. It then describes the providers' and administrators' perspectives on education service delivery, using the results of the school survey. Results of the administrators survey are also presented, comparing views on authorities and the various dimensions of decision space in the delivery of education services. The chapter then provides a similar summary of findings for the health sector.

### I. DESCRIPTION OF SURVEYS

Design of the quantitative survey modules was based on the notion of "decision space" described in Chapter 2. Separate questionnaires were administered to service providers (schools and health centers), administrative departments (education, health, and governors' administrations), and households. Survey modules collected information on financial flows, key aspects of service organization (i.e. quality standards, autonomy, and procurement), human resources management (i.e. the ability of entities to decide or influence compensation packages and to determine terms of employment<sup>1</sup>), and access rules and local governance. Survey modules also covered citizens' subjective evaluation of service delivery, including changes between 2012 and 2014.<sup>2</sup>

Using a stratified random sampling method, the study selected 18 soums of five aimags and two districts of Ulaanbaatar (UB) city for this systematic monitoring. In the first stage, soums and districts were classified based on soum or district type (rural soum, highly populated soum, aimag center soum, outside city district, or central district), whether the soum or district received grants from the state budget, and population.<sup>3</sup> Strata were created based on these categories, and soums and districts were selected randomly from each stratum. In the selected soums and districts, public service provider organizations including aimag and district health centers; family health centers in UB and aimag centers; soum hospital in rural soums; public secondary schools in UB, aimag centers, and soum centers; as well as administrative departments (health and education departments in aimags and districts and divisions of the aimag and district governor's offices) were selected. Table 1 presents the full sample of providers. For the household survey, khoroos and bags were selected from the sampled soums and districts, and a total of 1,000

1 Terms of employment include recruitment, appointment, transfers, promotion, reassignment, the range of permissible contracting arrangements with individuals, and provider payment mechanisms.

2 Survey instruments are available from the authors upon request.

3 The classification criteria were chosen based on the existing budget allocation and taxation rules. Budget allocation and spending depend on factors such as population size of administrative units (soums and districts), remoteness of soums, and opportunities of soums and districts to raise revenue. Under the General Tax Law, soums and districts have the authority to levy certain taxes, such as a royalty tax. As a result, soums with coal mines have more opportunities to raise revenues.

households were randomly sampled from the selected khoroos and bags. Data collection took place in June 2014.

**Table 1: Total number of organizations and number of selected organizations**

Type of service provider	Positions of responders	Service providers	Selected service providers	Respondents
<b>Total</b>		188	140	352
<b>Education service organizations</b>		71	49	100
Secondary schools	Directors, training managers, and accountants	71	49	100
<b>Health service organizations</b>		78	52	108
Central hospital of aimag	General directors, vice-directors, and managers of finance	3	2	6
Family Group Practices (FGPs) in aimag center		25	15	30
Regional Diagnostic Treatment Center	General directors, vice-directors, and managers of finance	2	3	9
Central hospital of soum	General directors, vice-directors, and managers of finance	1	1	3
Soum hospital	General directors, vice-directors, and managers of finance	10	8	16
Inter-soum hospital	General directors, vice-directors, and managers of finance	2	4	10
District hospital	General directors, vice-directors, and managers of finance	2	2	6
FGPs in UB		31	16	26
Village health centers	General directors, vice-directors, and managers of finance	2	1	2
<b>Administrative agencies</b>		39	39	144
Aimag and the Capital City Governor's Office	Aimag governors, heads and staff of finance and state treasury division and social policy division	5	5	58
Aimag and the Capital City Education and Culture Department	Head and staff who are responsible for finance and planning of education service providers	5	5	15
Aimag and the Capital City Health Department	Head and staff who are responsible for finance and planning of health service providers	5	5	15
Soum Governor's Office	Soum governors and staff who are responsible for state treasury fund	18	18	41
District Governor's Office	District governors and staff who are responsible for state treasury fund	2	2	6
District Health Department	Head and staff who are responsible for finance and planning of health facilities	2	2	5
District Education Department	Head and staff who are responsible for finance and planning of education service providers	2	2	4

Qualitative information was collected to complement the quantitative survey. In-depth interviews were conducted with education, health, and budgetary officials of the selected administrations on topics related to implementation of the IBL and its advantages and weaknesses; budgets of health centers and schools; and budget planning, allocation, and reporting. In total, 26 in-depth interviews were conducted

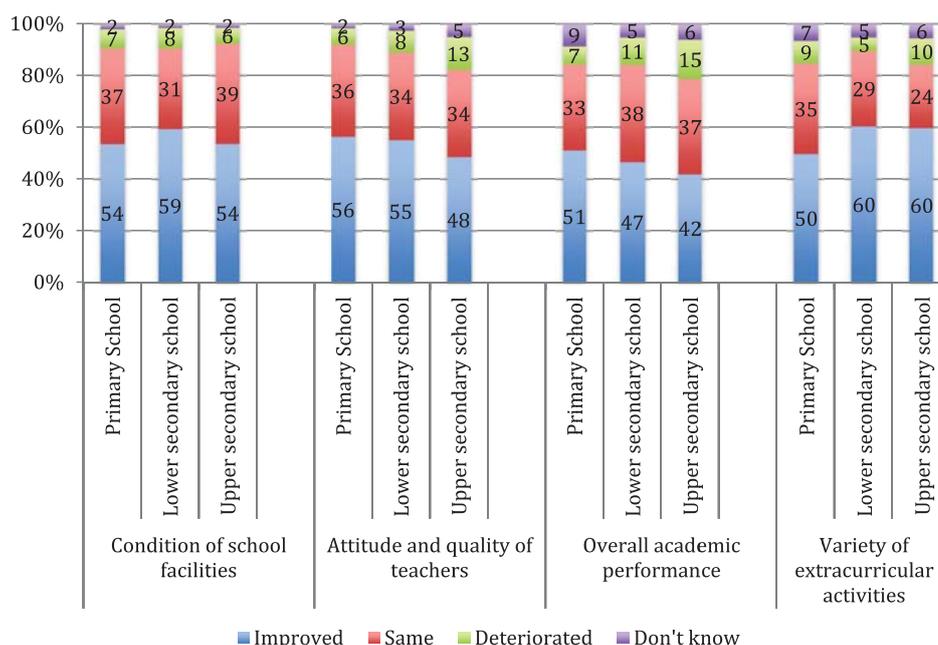
in five aimag centers and one district (Bayanzurkh district). Meanwhile, focus group discussions were organized among citizens utilizing health and education services to gather information on service quality and accessibility.

## II. FINDINGS ON EDUCATION SERVICE DELIVERY

### A. Satisfaction with Education Service Delivery: Views from Citizens and Providers<sup>4</sup>

Findings from the household survey reveal that parents of school-going children saw improvements in various aspects of education services between 2012 and 2014. The majority of parents noted improvements in the conditions of school facilities, attitude and quality of teachers, overall academic performance, and variety of extracurricular activities (Figure 1). Less than 15 percent of parents reported deterioration in these domains, although the likelihood of deterioration was slightly higher at upper secondary schools. Most parents indicated that they noticed improvements in their children’s academic performance in the past year, particularly at the primary and lower secondary school levels. For upper secondary school, about 15 percent of respondents indicated that they observed a deterioration in their child’s academic performance. According to results from the qualitative survey, these patterns could be attributed to the fact that students in lower and especially upper secondary schools spend less time with one teacher and instead have several different teachers.

**Figure 1: Improvement in select domains in 2014 compared to 2012**

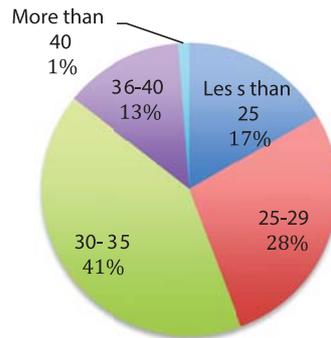


Around 84 percent of households reported sending their children to public schools free of charge. Among those whose children went to schools that require payments, there did not appear to be a substantial increase in school fees in the past year.

<sup>4</sup> About one-third of sampled households did not have children who attended school. Among households with children, 44 percent had children who attended kindergarten, 46 percent attended primary school, 32 percent attended lower secondary school (grades 6-9), and 23 percent went to upper secondary school (grades 10-12).

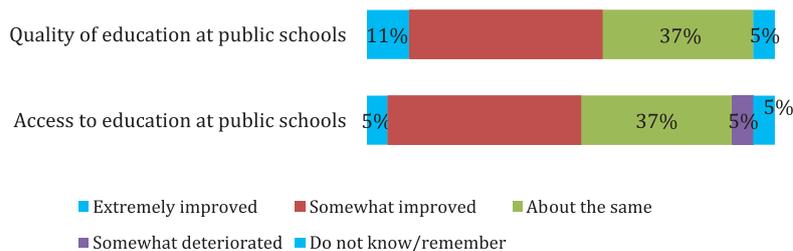
Almost 84 percent of respondents indicated that class sizes were 35 students or less.<sup>5</sup> The average class size appeared to be about 30 students, with some variation. Almost 17 percent of respondents indicated that there were fewer than 25 students per class, while 16 percent of those surveyed indicated that class sizes exceeded 35 students (Figure 2). Results from the qualitative interviews suggest that schools in urban areas are particularly disadvantaged in terms of class size, with most classes having more than 40 students. Some schools have lessons in three shifts, so students at such schools cannot be involved in any extracurricular activities, lessons, or rehearsals. In contrast, rural areas are less densely populated so the number of students per class is generally within the standard.

**Figure 2: Number of students per class**



Findings from the survey of providers and administrators confirm the views of parents on improved quality of and access to education at public schools in 2014 compared to 2012 (Figure 3). Yet challenges remain, as survey data show that around 21 percent of respondents at the Department of Education deemed the quality of education at public schools to be “seriously problematic,” with another 37 percent reporting that the quality was problematic. Access to education at public schools also appears to continue to pose a challenge, with 26 percent of respondents indicating that access was seriously problematic and 42 percent indicating that access was problematic.

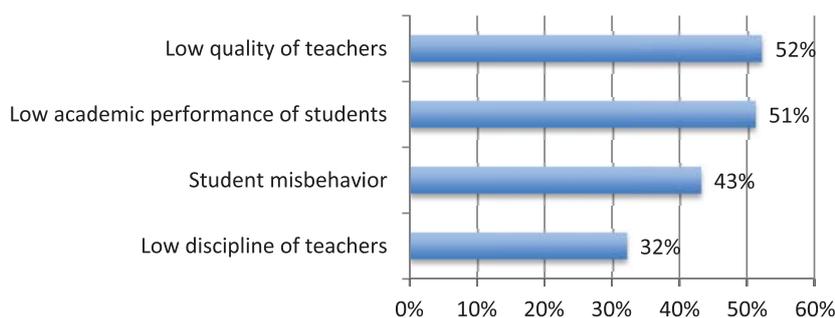
**Figure 3: Changes in school conditions in 2014 compared to 2012**



From the point of view of administrators, the two main problems faced by schools were low quality of teachers and low academic performance of students. The problems identified by the surveyed school staff are presented in Figure 4.

<sup>5</sup> The number of students per class can serve as an indicator not only of accessibility of schools and teachers but also of the quality of education. Evidence suggests that the number of students per class is negatively correlated with students’ performance. Rigorous studies have found that students attending smaller classrooms were more likely to score better on tests, and some studies have also found more long-term benefits of smaller class sizes related to high school graduation, college enrollment and completion, and savings behavior (Mosteller, 1995; Krueger and Whitmore, 2001; Chetty et al., 2011; Dynarski, Hyman, and Schanzenbach, 2014).

**Figure 4: Problems faced by schools (surveyed school staff)**

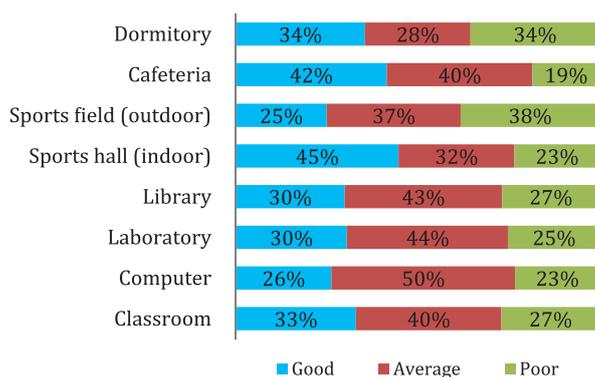


According to participants in the qualitative survey, training of teachers was not sufficient. One informant in Bayanzurkh district reported: “Teachers have different methods and therefore, teachers of each school are different. But there are teachers with inadequate education background who interact with children well. Meanwhile, there are teachers with good education, but they teach poorly. Teachers must have the heart for children and be enthusiastic about children.”

Most teachers taught less than 20 hours per week and spent less than 15 hours per week correcting tests and homework. The average work day for teachers was between 8-10 hours. Most teachers also acted as a coach or supervisor for some extracurricular activities. In addition, almost 90 percent of surveyed teachers indicated that they gave their students lessons outside school hours.

The physical condition of the majority of schools was adequate, although almost one-third of school administrators reported poor conditions in some facilities. Dormitories and outdoor sports fields were in relatively worse condition than other facilities, while indoor sports halls and cafeterias were in better condition. Overall, however, the condition of the different facilities was about average (Figure 5). In the qualitative survey, participants noted that the poor condition of school facilities and supply of human resources in the capital city was due to the dense population concentration.

**Figure 5: Condition of school facilities**



**B. Authorities and Decision Space in Education Service Delivery: Results from the Administrators and Providers Survey**

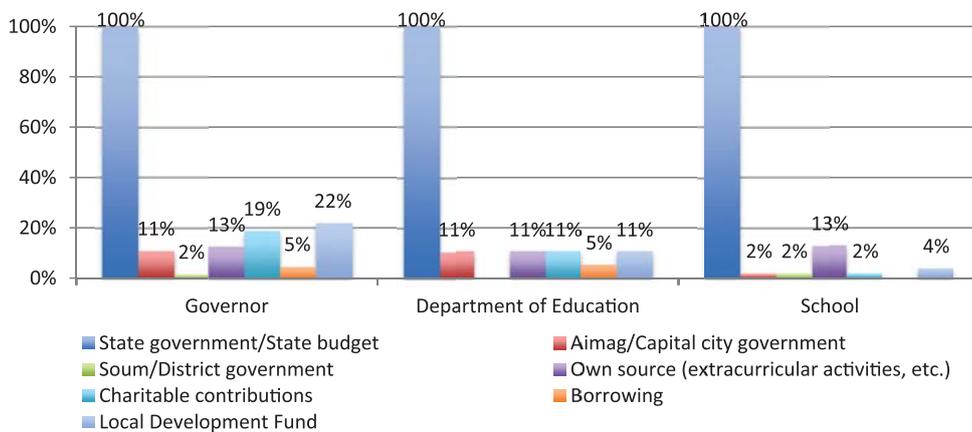
Following the framework presented in Chapter 2, this section presents descriptive statistics on the degree to which authorities at various levels are able to influence the various dimensions of education service provision. The following sections examine the degree of decision space available at various administrative levels in finance, service organization, human resources, and access rules. In order to understand the de facto responsibilities at each level, information was collected from schools, the

Departments of Education, and governors’ offices regarding the authority flows and the degree to which managers at each level were able to make changes in each dimension.

**Financial Flows**

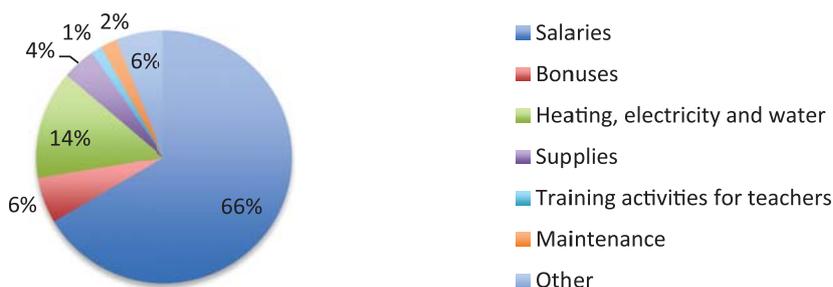
Respondents agreed that the main source of school financing was the state government/state budget, although views on the role of the Local Development Fund differed. All respondents indicated that state budget provided funding for basic education. At the same time, there were differences in respondents’ views regarding the role of the Local Development Fund in providing financing to schools. In particular, the Local Development Fund was cited as a source of funding by 22 percent of respondents at the governors’ offices, 11 percent at the Departments of Education, and 4 percent at schools (Figure 6).

**Figure 6: Most commonly cited sources of funds (respondents at each level)**



The bulk of the budget was used to finance salaries. As shown in Figure 7, salaries represented 66 percent of total spending at schools. Utilities (heating, electricity, and water) were the second largest category of spending and represented 14 percent of expenditures.

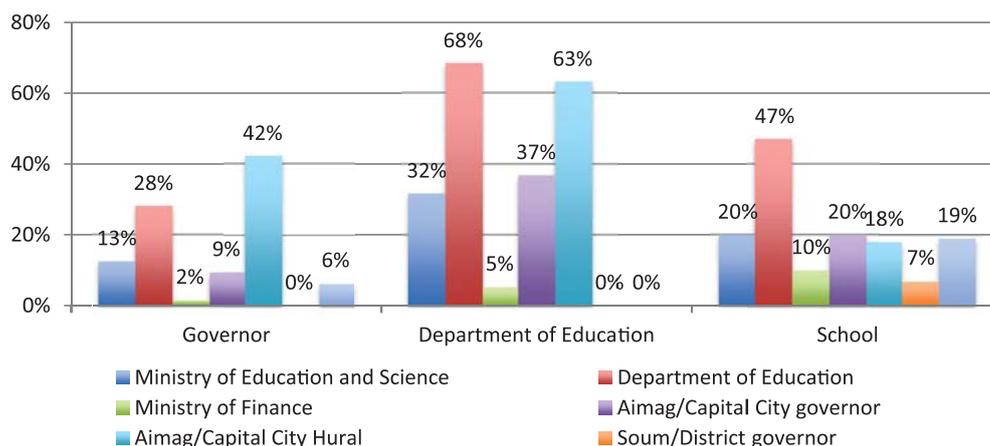
**Figure 7: Spending categories as share of total spending at schools**



Respondents from the governors’ offices and Departments of Education oversaw budget spending of school facilities but had limited input into budget planning. Almost 95 percent of respondents at the governors’ offices and 79 percent of respondents at the Departments of Education indicated that they oversaw budget spending of education facilities. At the same time, the survey results suggest that governors’ offices and the Departments of Education provided limited input to education facilities during budget preparation. Only 20 percent of respondents in governors’ offices and 42 percent of respondents in the Departments of Education indicated providing inputs to education facilities for budget planning. Of those who provided input, most respondents at the governors’ offices thought that only some of their suggestions were taken into account. The majority of respondents in the Department of Education reported that only 5-10 percent of schools incorporated their suggestions regarding the budget.

Respondents from the governors’ offices, Departments of Education, and schools differed in their views on which authority determined the final amount of money allocated to each school. At the governors’ offices, the majority of respondents indicated that the aimag Khural determined the amount allocated to schools. At the Departments of Education, about the same share of respondents thought that the final allocations were made by the Departments and the aimag Khurals. The majority of respondents at schools reported that the Department of Education was responsible for determining the final amount (Figure 8).

**Figure 8: Who determines the final amount of money allocated to each school? (respondents at each level)**

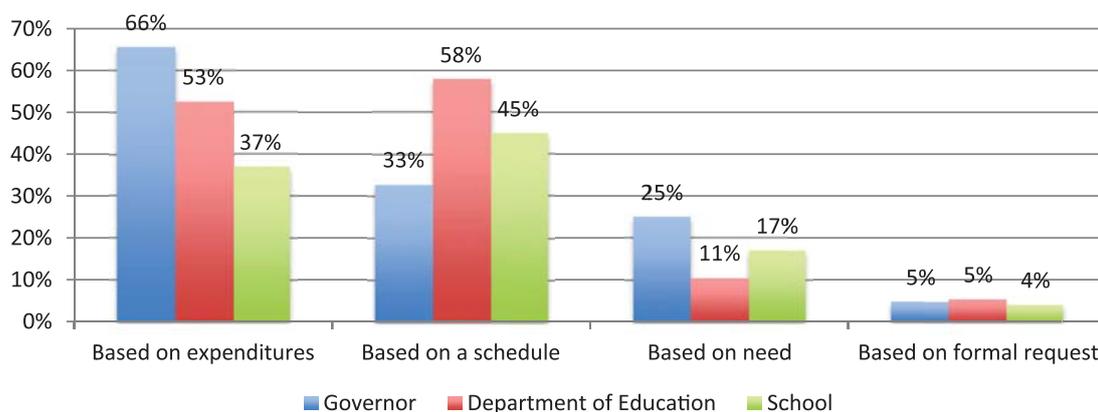


The majority of respondents indicated that the amount of money allocated to each school was determined based on the budget plan prepared by the schools. Yet, almost one-third of respondents at the governors’ offices and almost 20 percent of respondents at the school level believed that allocated amounts were not based on the budget plans prepared by the schools. These respondents indicated that education authorities (Departments of Education and the Ministry of Education and Science) prepared the budget plans that then determined the allocations (Table 2).

**Table 2: Basis for determining allocations to each school (respondents at each level)**

	Governor	Department of Education	School
Based on a budget plan prepared by the school	77	100	80
Based on a budget prepared by the Department of Education	31	37	15
Based on a budget prepared by the Ministry of Education and Science	20	32	16
Based on a budget prepared by the Aimag/Capital City governor	14	16	1
Based on a budget prepared by the Aimag/Capital City treasury	6	11	6
Based on a budget prepared by the Soum/District governor	8	5	2

The majority of respondents reported that funds were released to schools based on actual expenditures and/or a predetermined schedule. About two-thirds of respondents at the governor’s office reported that funds were released to the schools based on actual expenditures, and about one-third said that funds were released based on the schedule. At the Department of Education, the split was about half and half. At the school level, over one-third of respondents believed that funds were released based on expenditures, and about half said that funds were released following a schedule. Relatively large shares of respondents at all three levels indicated that funds were also released based on need (Figure 9). Funds were released to the schools by Aimag or Soum Treasury Funds.

**Figure 9: Principles for releasing funds to each school (respondents at each level)**

In order to ensure effective delivery of services, administrators have the right to reallocate spending across categories in the budget. In particular, according to the IBL regulations, the governor is allowed to reallocate across economic classifications (see Chapter 2). Yet this was not common knowledge among administrators at the governors' offices or Departments of Education, although one-third to one-half of all respondents there were familiar with this IBL regulation. In schools, about one-quarter of respondents believed that reallocations could be done by the Department of Education, and the same number believed that reallocations could be done by the Treasury Fund. Around 20 percent of respondents at the governors' level and 11 percent of respondents at schools believed that school directors had the right to reallocate spending across categories.

**Table 3: Authority with a right to reallocate spending across categories of the budget (respondents at each level)**

	Governor	Department of Education	School
Ministry of Education and Science	22	21	8
Department of Education	23	37	25
Ministry of Finance	6	5	2
Aimag Governor	28	42	5
Aimag Khural	14	26	9
Soum Governor	16	0	4
Soum Khural	20	26	9
School directors	20	0	11
Aimag Treasury Fund	25	2	18
Soum Treasury Fund	20	21	23
No one has the right to reallocate the budget	5	11	8

*Note: Numbers in columns add up to more than 100 percent, as multiple answers were allowed.*

It was also not common knowledge among administrators and service providers who had the authority to reallocate spending within line items of the budget. The most commonly cited authorities were at the local level and included Aimag or Soum Treasury Fund and school directors (Table 4).

**Table 4: Authority with a right to reallocate spending within line items in the budget (respondents at each level)**

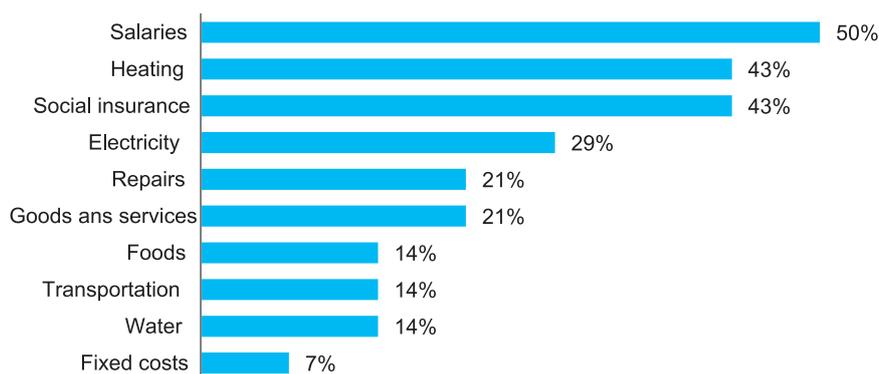
	Governor	Department of Education	School
Ministry of Education and Science	16	11	9
Department of Education	14	21	15
Ministry of Finance	3	0	1
Aimag Governor	14	11	2
Aimag Khural	14	26	2
Soum Governor	11	0	3
Soum Khural	19	21	13
School directors	25	26	22
Aimag Treasury Fund	27	26	19
Soum Treasury Fund	28	21	28
No one has the right to reallocate the budget	5	0	8

*Note: Numbers in columns add up to more than 100 percent, as multiple answers were allowed.*

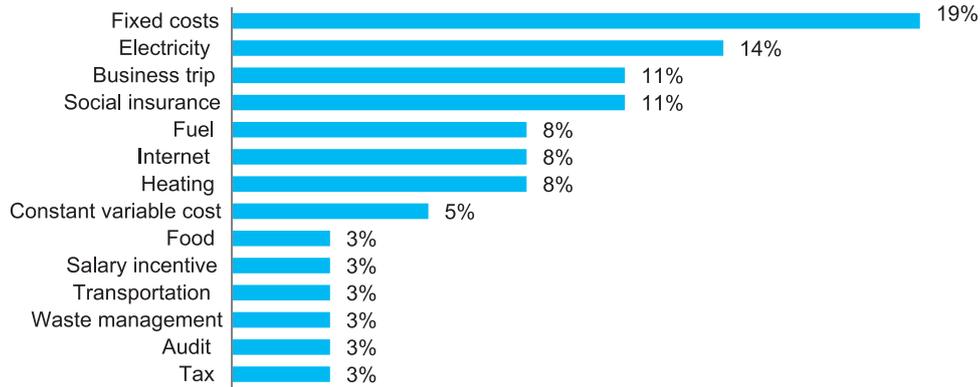
Slightly more than 40 percent of respondents at the school level indicated that the school could not save funds, and about one-third said that saved funds had to be remitted to the Department of Education or Ministry of Education. Only 11 percent of respondents believed that the director could use the funds for the school’s needs with approval from the department. Respondents in most schools (78 percent) indicated that they had the right to receive donations.

Liabilities appeared to be limited at the school level but quite prevalent at the Departments of Education level. While only 21 percent of schools indicated that they had accumulated debts, 74 percent of respondents at the Departments of Education indicated that there were accrued debts. The three most commonly cited reasons for accumulating debts at the Departments of Education were salaries, heating, and social insurance payments (Figure 10). At the school level, debts were most frequently incurred for current repairs, electricity, business trips, and social insurance payments (Figure 11).

**Figure 10: Reasons for accumulating debt (% of respondents at the Departments of Education)**



**Figure 11: Reasons for accumulating debt (% of respondents at schools)**

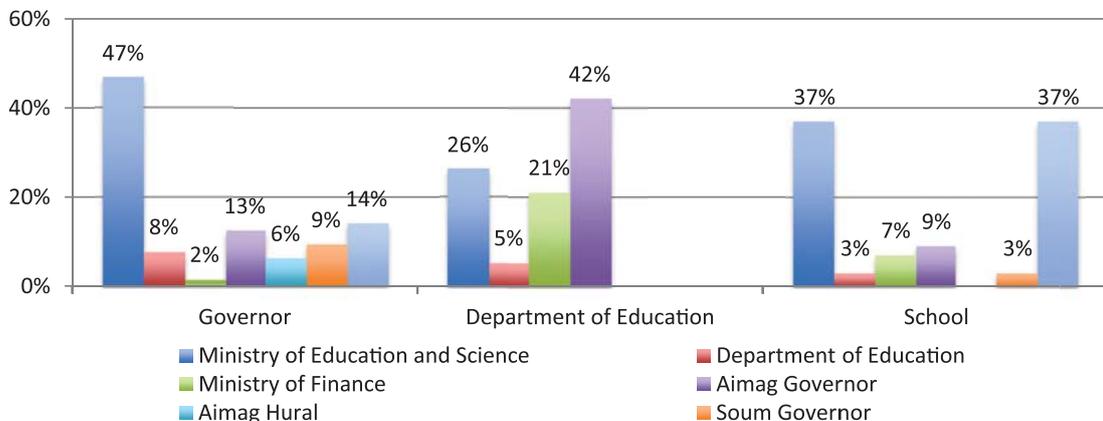


More than half of the surveyed schools did not have own-source funds. Those that did generate own-source funds reported that the funds had to be remitted to the Department of Education, but they could also be used for facility needs if the director sought approval from the Department of Education, Ministry, or subnational government. In the qualitative interviews, participants revealed that prior to introduction of the IBL, the schools could have small husbandry and workshops and could spend the raised funds for school purposes. For example, the funds were spent to provide food for students residing in dormitories. In addition, schools could reduce their operating costs by using resources from own husbandries. Schools could also replace school desks and chairs by producing them in the school wood workshops. Under the IBL, however, these are excluded under state property, and subnational authorities must make decisions regarding the supply of such materials.

**Service Organization and Delivery**

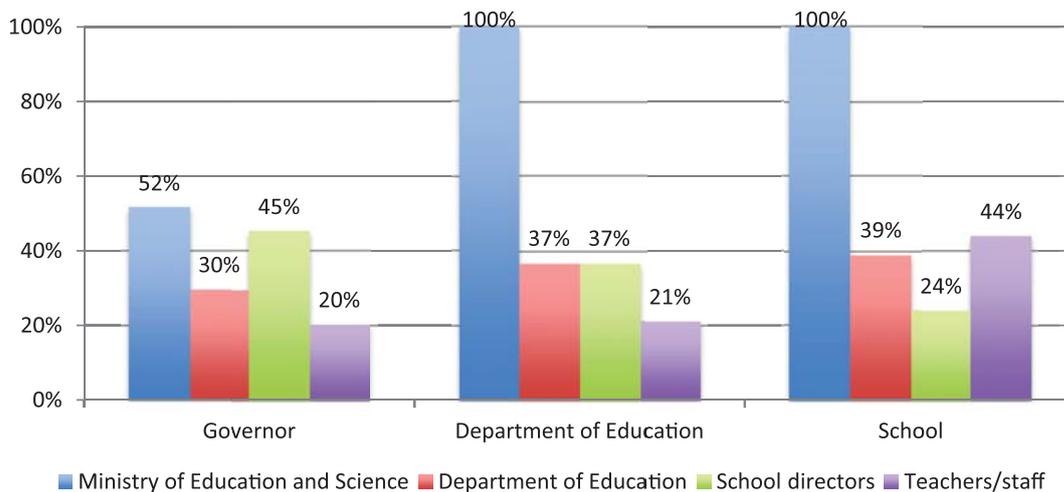
Respondents at governors’ offices, Departments of Education, and schools had differing views on which authority could make decisions regarding school building improvements. As shown in Figure 12, almost half of respondents at the governor’s office indicated that the Ministry of Education and Science had the authority to make decisions regarding school building improvements. In the Departments of Education, while almost 26 percent of respondents cited the Ministry of Education and Science, the majority (42 percent) thought that the aimag/capital city governor was responsible for making such decisions. At the school level, the same share of respondents (37 percent) thought that both the Ministry of Education and Science and school directors had this authority.

**Figure 12: Authority to improve school buildings**



The majority of respondents at governors’ offices, Departments of Education, and schools alike indicated that the Ministry of Education and Science was responsible for determining the local content of curricula. While 45 percent of respondents at the governor level also said that school directors had this authority, only 24 percent of respondents at the school level said that school directors could determine the local content of the curriculum. In addition, the Ministry of Education is responsible for modifying national standards.

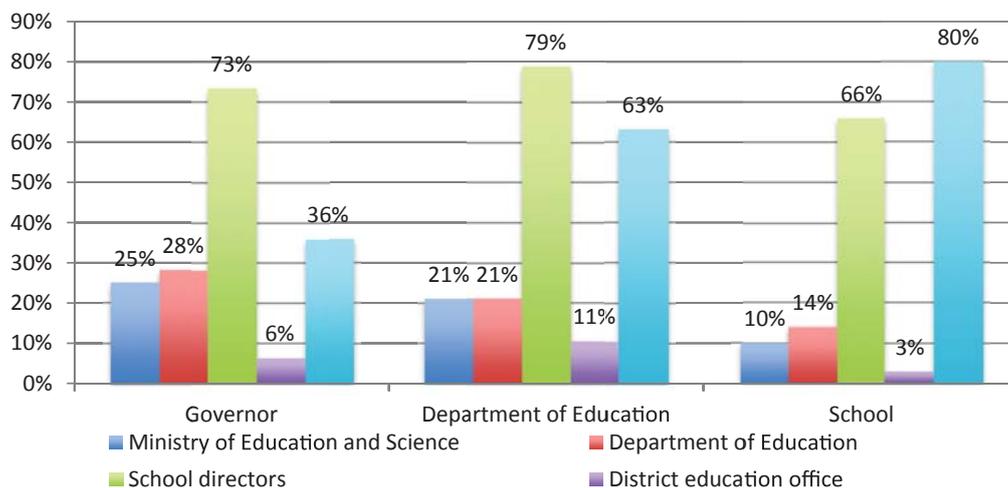
**Figure 13: Authority to determine the local content of the curriculum**



Respondents differed in their views of responsibilities for afterschool activities and whether such activities should require extra payments. More than 70 percent of respondents in the governors’ offices and Departments of Education thought that schools had the right to introduce afterschool activities and that none of these activities should require extra payments from parents. In contrast, almost 90 percent of respondents in schools said that the school had the right to introduce afterschool activities and that some of the activities should require extra charges.

The majority of respondents at the governors’ offices, Departments of Education, and schools indicated that school directors had the authority to determine extracurricular school activities. While respondents at the school level agreed with this, an even greater percentage of them said that teachers and staff had this authority. Other authorities such as the Ministry of Education and Department of Education are not that important in this process (Figure 14).

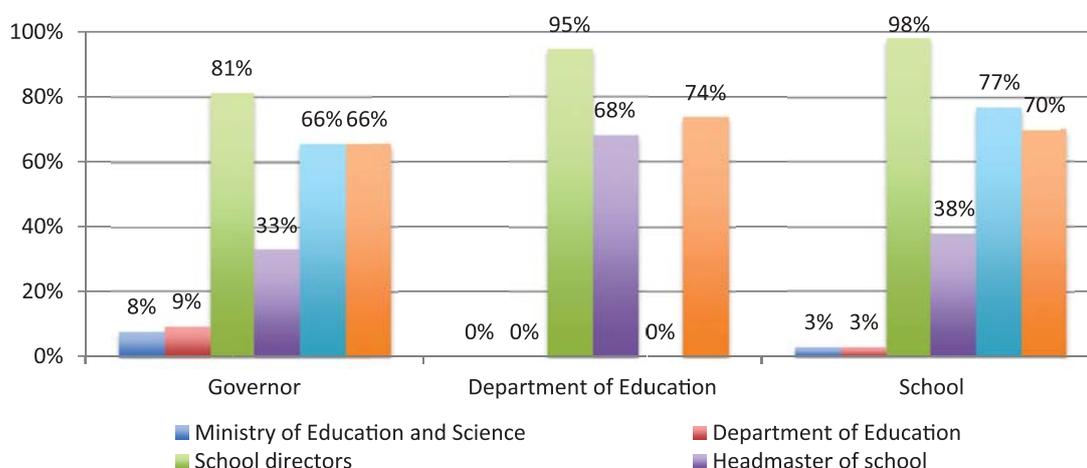
**Figure 14: Authority that determines extracurricular activities to be provided at schools (respondents at each level)**



Views on whether schools had the right to contract in/out with individuals and organizations for services differed across providers and administrators. Only 6 percent of respondents at the governors' offices said that schools had the right to contract in and out with individuals and organizations for selected services. In contrast, most respondents at the Departments of Education (58 percent) and schools (69 percent) thought that schools had the right to do so.

Views on whether school directors had the authority to require use of mandatory textbooks were quite similar across respondents at governors' offices, Departments of Education, and schools. The majority of respondents indicated that school directors had the authority to require use of mandatory textbooks (Figure 15). At the same time, large numbers of respondents believed that training managers and schoolteachers had the authority to determine the required textbooks.

**Figure 15: Authority to set required textbooks (% of respondents at each level)**



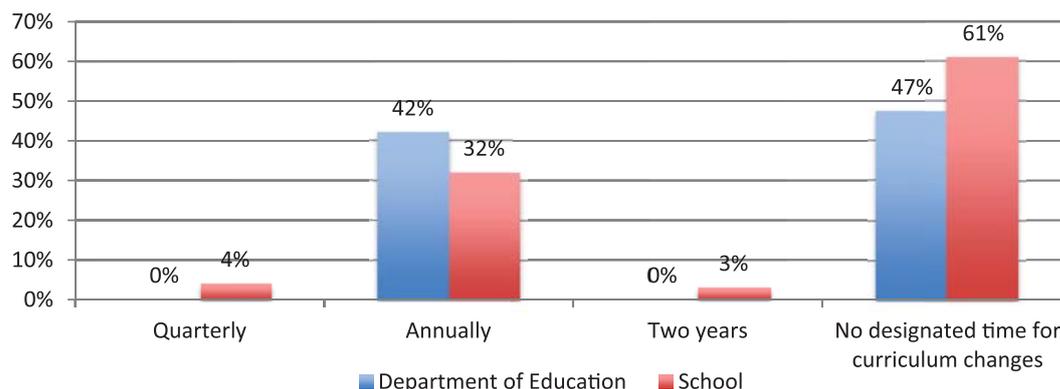
The majority of respondents at governors' offices, Departments of Education and schools said that schools had a right to procure goods and services (e.g., school lunches, supplies). Yet there were some differences: in particular, over three-quarters of all respondents in governors' offices said that this should be left to schools to decide. However, only half of all respondents at the Departments of Education and in schools thought that this was indeed the case.

While most administrators and providers agreed that local schools complied with national education standards, the survey revealed some differing viewpoints. The Department of Education monitors school compliance with national standards, and the overwhelming majority of school staff and Departments of Education officials reported that all schools complied with national standards. Yet in the governors' offices, almost 20 percent of respondents thought that only some schools complied with national standards.

Respondents in schools indicated that they had limited opportunities to provide input into developing school curricula or to adapt the curricula to local conditions. Only 40 percent of respondents in surveyed schools contributed to the development of the local content of the curriculum. Moreover, only 10 percent of schools reported supervising the development of the local content of the curriculum.

The survey results suggest that changes to curriculum content are made on an ad hoc basis. The majority of respondents at the Department of Education and schools reported that there was no designated time for curriculum changes. A significant share of respondents, however, indicated that changes to curriculum content were made annually (Figure 16).

**Figure 16: Frequency of changes to curriculum content**

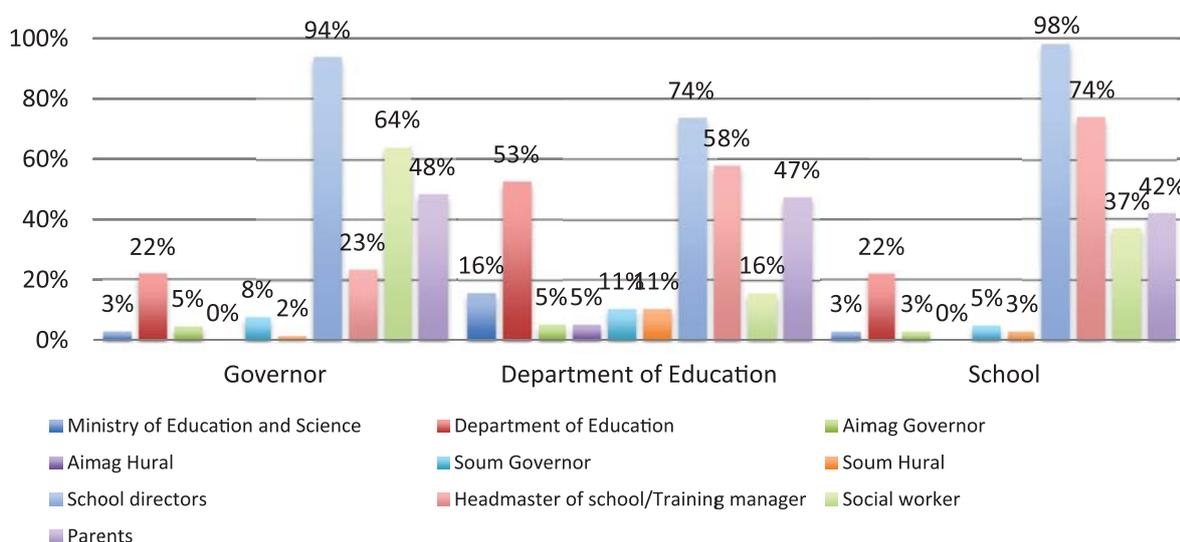


**Human Resources Management**

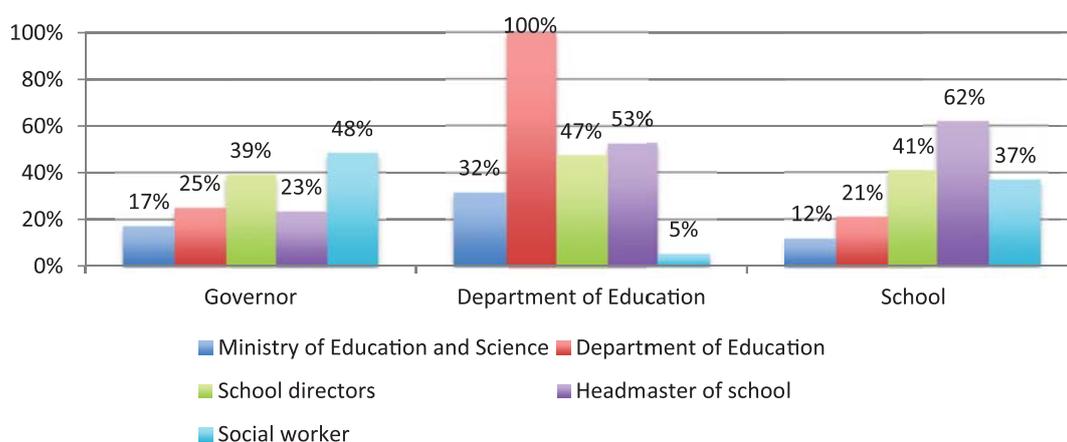
Respondents agreed that school directors were responsible for most decisions related to human resources management within schools. This includes the authority to manage recruitment of staff and make final decisions regarding appointments, promotions, or demotions. In addition, more than 90 percent of respondents at all levels said that school directors had the authority to fire teachers. School directors also had the right to propose additional teachers. Reassignment of teachers to a different location did not occur frequently, so most respondents in the survey did not know who had the authority to reassign teachers.

While three-quarters to nearly all respondents indicated that school directors had the authority to set requirements for teachers, more than 40 percent of respondents also said that parents had this right (Figure 17). Respondents at all levels indicated that school directors, social workers, and parents had the authority to set requirements for teachers and then evaluate teacher performance.

**Figure 17: Authority to set requirements for teachers (% of respondents at each level)**



Respondents' views on what authority was responsible for determining teaching methods at schools varied across administrators and providers. Almost half of all respondents at the governors' offices reported that the social worker had the authority to determine teaching methods. Meanwhile, in schools, over 60 percent thought the headmaster of the school was responsible for this task. All respondents at the Department of Education indicated that it was their responsibility, and about half of them said that school directors and headmasters also had authority to determine teaching methods (Figure 18).

**Figure 18: Authority to determine teaching methods**

Most respondents said that school directors did not determine employee compensation and that salaries were determined by the central government. More than 70 percent of respondents at the governor and Departments of Education levels said that the Ministry of Finance had the authority to determine allowances. While the majority of respondents at the governors' offices and Departments of Education also thought that the Ministry of Finance had the authority to determine which employees would receive bonuses, only 2 percent of respondents at the school level supported this. More than half of respondents at the school level thought that the school directors had the authority to determine bonuses, while another 27 percent thought that bonuses were determined by the Ministry of Education and Science.

Views on the authority to contract teaching and non-teaching staff and to hire short-term temporary employees varied considerably across providers and administrators. Respondents at the governors' offices indicated that schools were allowed to contract teaching and non-teaching staff and hire short-term temporary employees, with 31 and 11 percent of respondents, respectively, citing these employment types. The shares of respondents at the Departments of Education and schools citing these employment types were significantly lower: only 11 percent of respondents at the Departments of Education and 14 percent of those at schools indicated that they could contract employees, and about 5 percent of respondents at both levels believed that schools could hire short-term temporary staff.

All schools reported organizing regular meetings between the school director and staff. Typically, such meetings occurred weekly, and about one-quarter of all schools reported that the frequency of the meetings increased between 2012 and 2014.

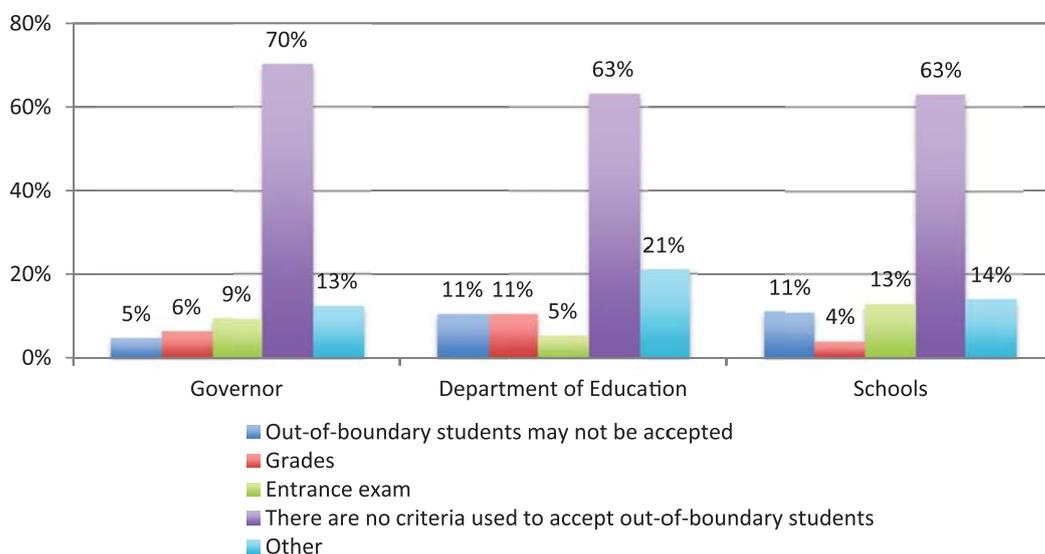
School managers are able to take disciplinary actions for staff at schools. About 70 percent of school managers reported issuing verbal and written warnings to staff. In addition, 27 percent of managers said that they fired staff. Verbal and written warnings were most frequently given for bad performance, repeated absence, or improper behavior. The majority of school managers indicated that disciplinary actions were less frequent in 2014 compared to 2012.

### ***Access Rules***

Schools do not have the right to deny in-boundary student access to education at schools or access to programs, but some schools have criteria for out-of-boundary students. Respondents at the majority of schools in the sample said they did not have any requirements for students residing outside the administrative boundaries. However, at some schools, non-resident students had to take an entrance exam. Around 11 percent of surveyed schools did not accept out-of-boundary students (Figure 19). A number of schools noted that they took the residential address into consideration and that parents were asked to write an application letter. In addition, some schools also accepted non-resident students if their sibling(s) were already enrolled in the school. Results from the qualitative survey, however, indicate that

it is difficult for non-resident students to enroll in a school in the capital city and that the process often requires an informal payment.

**Figure 19: Criteria for accepting non-resident students (% of respondents at each level)**



Respondents from three-quarters of all schools indicated that their schools could not accommodate special needs students, and the majority of respondents in schools indicated that their schools could not provide free textbooks and uniforms to students from poor households. While most schools provided free school supplies to students from poor households, less than one-quarter of surveyed schools reported providing free textbooks and free uniforms to such students.

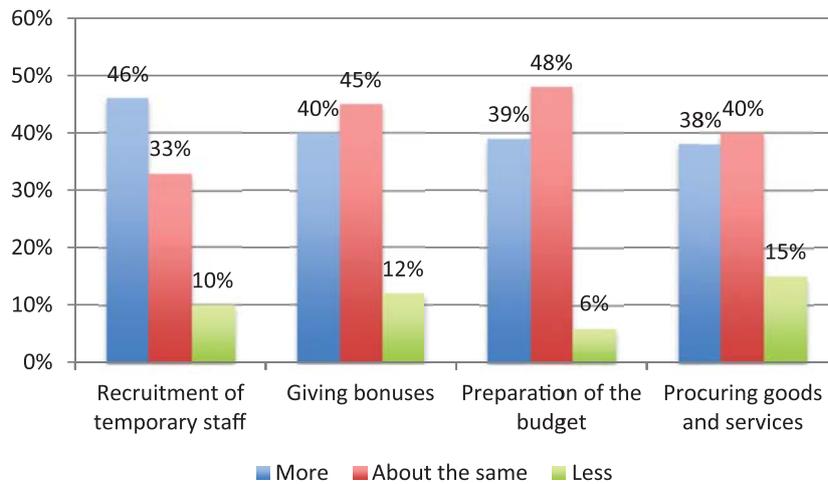
Views on the authority to prevent children from being promoted to the next grade differed significantly across administrators and providers. Almost half of respondents at the school level reported that they had the right to prevent children from being promoted to the next grade. In contrast, less than 5 percent of respondents at the governors’ offices and Departments of Education said that schools had this right.

***Degree of Autonomy in 2014 Compared to 2012***

It appears that there was significant improvement in the delegation of authority to schools between 2012 and 2014. Around 53 percent of the respondents at schools felt that they had more autonomy in 2014 compared to 2012, while 35 percent believed they had about the same amount of independence as they did in 2012. Only 5 percent of school-level respondents believed they had less independence in decision-making compared with the past.

Looking at the various areas of decision-making, facilities appeared to have more autonomy in key areas of service delivery: recruiting temporary staff, giving bonuses, preparing the budget, and procuring goods and services (Figure 20).

**Figure 20: School autonomy in decision-making in 2014 compared to 2012, by dimension**

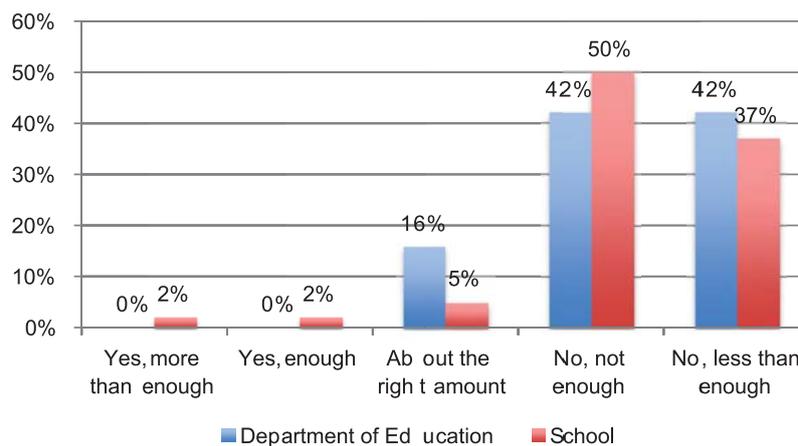


**Capacity**

As discussed in Chapter 2, to ensure effective decentralization, it is important to consider the capacity and accountability of local officials. Institutional capacity encompasses administrative, technical, organization, financial, and human/personnel capabilities, which can be examined at the systemic, organizational, and individual levels.

At the organizational level, insufficiency of funds appears to hinder the capacity of administrators and providers to deliver services significantly. The majority of respondents at the Departments of Education and schools believed that they did not have sufficient funding to provide the required services. Only 16 percent of respondents at the Departments of Education and 5 percent of respondents at schools said that funding was about right, while more than 80 percent indicated that funding was either not enough or significantly insufficient (Figure 21). Most schools (75 percent) indicated that funding was sufficient to cover salaries, but only 27 percent said that funding was sufficient for bonuses.

**Figure 21: Sufficiency of budget to provide necessary services**

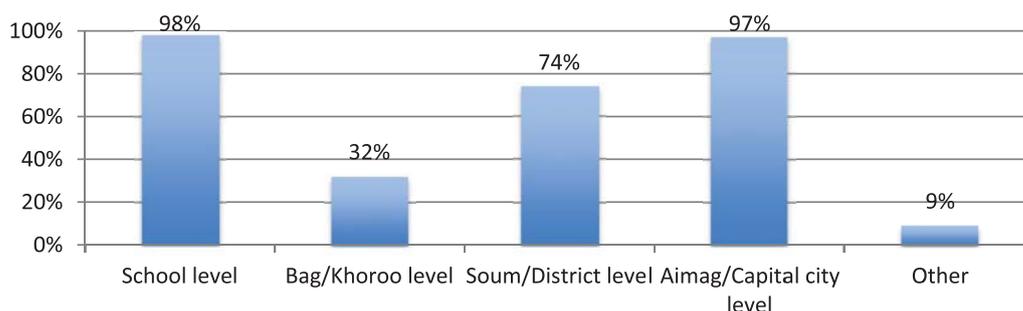


While most respondents at the Departments of Education indicated that schools had adequate human resources to implement public education programs in accordance with policies, about one-quarter of respondents in urban schools indicated shortages. The availability of human resources seemed to be adequate in rural areas, while it presented some challenges in urban areas. Respondents in urban schools indicated that their facilities needed more lower and upper secondary school teachers as well as accountants. Only 7 percent of rural schools indicated that they needed more primary school teachers.

At the individual level, quality of training given to local administrators can influence their capacity to carry out the delegated tasks. Most respondents at the school level (86 percent) received on-the-job training, and among those who received training, over 60 percent found quality to be 'good.' Most employees received training in their school or in aimags/capital city.

Teachers' working groups could be helpful for professional development and sharing teaching methods and other information. Interviews showed that teachers' working groups exist primarily at school and in aimags and the capital city. While about three-quarters of all soums/districts have teachers' working groups, only about one-third of all bags/khoroos have them (Figure 22).

**Figure 22: Existence of teachers' working groups at various levels (% of respondents at schools)**



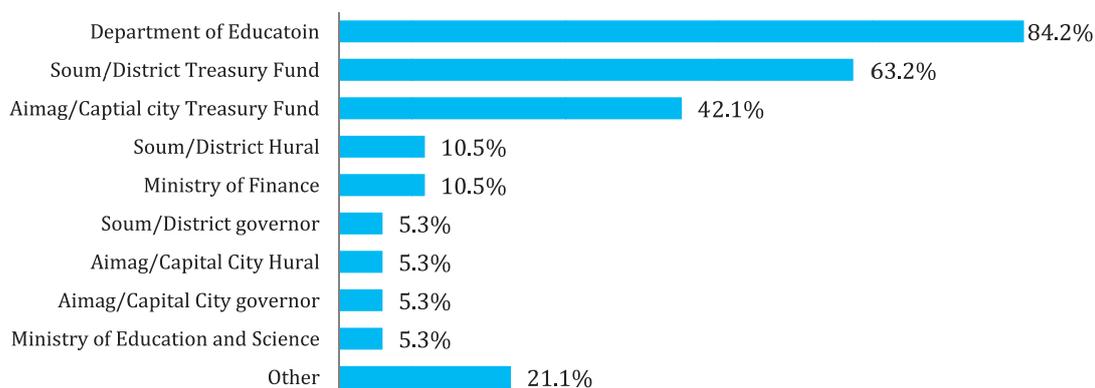
The provider survey also asked about the importance of having staff such as an accountant, social worker, assistant manager, and others for school operations. All surveyed schools employed an accountant and did not deem it possible to share an accountant with a neighboring school. All surveyed schools also had a training manager and a social worker and believed that it was important for schools to employ these cadres. Only one aimag school thought it would be feasible to share a training manager and a social worker with a neighboring school, without affecting quality of instruction. All city and aimag schools had a physician located at the school, but only 60 percent of soum schools employed a school physician. All surveyed schools, however, believed it was important for a school to have a physician. In addition, all city schools had an assistant manager, but only 63 percent of aimag schools and 50 percent of soum schools employed an assistant manager. Even though not all aimag and soum schools thought that it was important for the school to have an assistant manager, most indicated that they would not be willing to share an assistant manager with a neighboring school.

**Accountability**

As discussed in Chapter 2, accountability mechanisms can help ensure that the services are delivered effectively. This survey measured both upward and downward accountability. Upward accountability was measured at the department and facility levels, and downward accountability was measured at the household level.

The survey results suggest that staff in the Departments of Education consider it their responsibility to monitor budget spending by schools. Respondents from the Departments of Education indicated that the top three authorities responsible for monitoring school budget spending were the Departments of Education, Soum Treasury Fund, and Aimag Treasury (Figure 23).

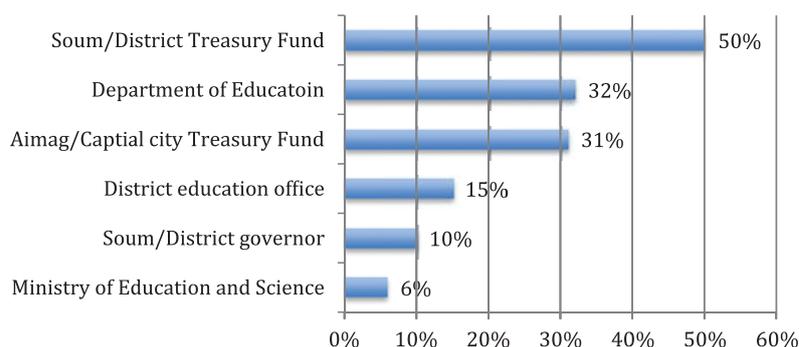
**Figure 23: Who monitors school budget spending? (share of respondents from the Departments of Education)\***



\*Shares do not add up to 100, as multiple responses were allowed.

At the same time, most schools submit their budget spending reports to the Soum Treasury Funds. Some schools reported submitting spending to the Department of Education or the Aimag Treasury Fund (Figure 24).

**Figure 24: Where does the school submit budget spending reports? (share of respondents in schools)\***



\*Shares do not add up to 100, as multiple responses were allowed.

The Department of Education and Aimag Inspection Agency were the two most commonly cited authorities to monitor the implementation of national standards at schools (Table 5). In addition, 56 percent of respondents at the school level indicated that the school control quality department monitored compliance with national standards, but less than one-third of respondents at the governor’s office and the Department of Education mentioned this authority.

**Table 5: Authority to monitor the implementation of national standards at schools (percent)**

	Governor	Department of Education	School
Ministry of Education and Science	30	21	26
Department of Education	50	63	58
Aimag/Capital City governor	13	5	5
Soum/District governor	36	0	7
Soum/District Khural	14	0	6
State inspection agency	22	32	14
Aimag/Capital city inspection agency	64	58	46
National measurement and standardization agency	22	11	2

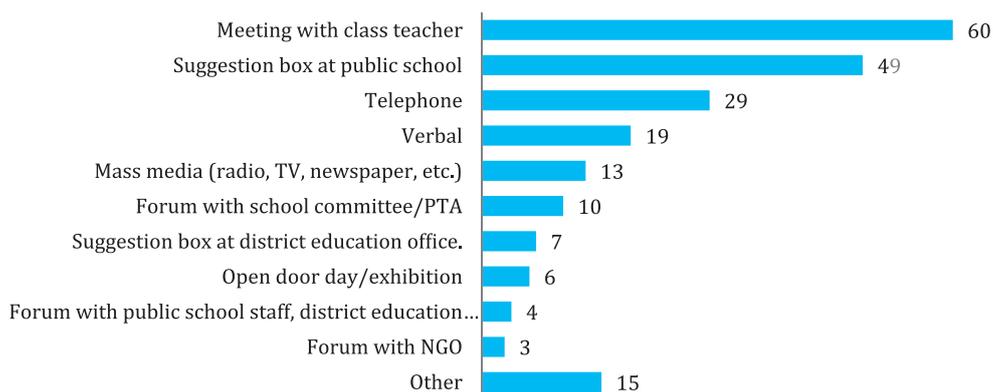
District education office	14	26	16
Schools quality monitoring department	31	21	56
Other	6	5	3

The Department of Education conducts annual visits to inspect school operations and frequently invites school representatives to meetings. Around 70 percent of surveyed schools said that the Department of Education visited 1-2 times in 2014, while 19 percent said that the Department of Education visited 3-4 times. Only 6 percent said that the Department of Education did not inspect the school. In terms of meeting invitations, the majority of respondents at schools (62 percent) indicated that they received 5-10 meeting requests in 2014, while 19 percent received less than 5 invitations and 19 percent received 10-15 invitations. Almost one-third of respondents believed that the meetings became more frequent in 2014 compared to 2012. Most respondents attended most, if not all, meetings to which they were invited.

All surveyed schools were audited either in 2013 or 2014. The majority of schools (46 percent) indicated that the financial inspection lasted less than five days, while 24 percent reported 5-10 days. Around 16 percent of schools reported that the inspections lasted 20-30 days. Most schools (84 percent) received notification of the financial audit in advance of the inspection, although the length of the advance period for the notifications varied. Almost 40 percent of schools indicated that they were notified seven days before the financial audit, while 26 percent of schools were notified less than four days beforehand and another 26 percent were notified 1-2 weeks beforehand.

The engagement of local communities in the organization and delivery of education services, which includes allowing them to voice complaints and suggestions, is an important element of downward accountability. The share of respondents who knew channels for voicing complaints at schools, however, was quite low at 35 percent. Only 21 percent of respondents in urban areas knew channels for voicing complaints, compared to 39 percent at the aimag level and 40 percent at the soum level. As shown in Figure 25, of those who were aware of such channels, almost 60 percent of respondents viewed a meeting with the class teacher as a channel for complaints or suggestions. Others mentioned a suggestion box at the public school (49 percent) and the telephone (23.3 percent).

**Figure 25: Channels for complaints and suggestions known to the respondents**



Around 20 percent of respondents reported filing a complaint or providing suggestions. Complaints and suggestions were filed more frequently at lower secondary and upper secondary schools (18 percent and 17 percent, respectively), compared to less than 10 percent at primary. Teachers seemed to take into account suggestions and complaints—almost 78 percent of individuals who filed a complaint thought the teacher adequately responded to the suggestions. The qualitative information indicates that complaints were filed most frequently due to student/teacher conflicts. Although most respondents did not file complaints because they did not have any, some respondents in the qualitative interviews said they feared

that complaints would have a negative impact on the relations between their children and teachers and would lead to discriminatory practices.

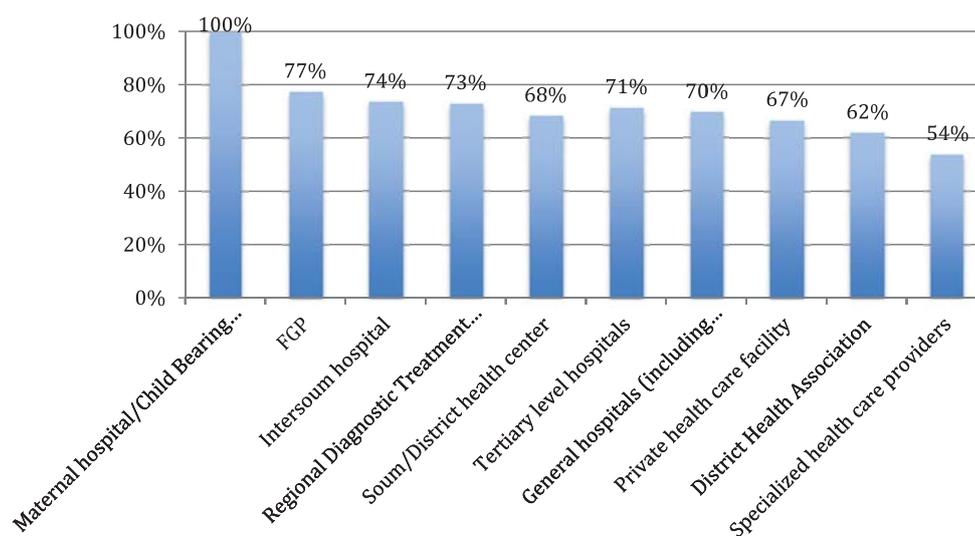
Most parents believed they could influence the types of programs offered by schools. Around 82 percent of respondents whose children attended primary school felt that they had a channel to influence the types of programs offered by schools, while 87 percent of those whose children attended lower secondary school felt that they had such a channel. The share was slightly lower at the upper secondary school level at 80 percent.

### III. FINDINGS ON HEALTH SERVICE DELIVERY

#### A. Citizens' Satisfaction with Health Service Delivery: Results from the Household Survey

Survey results show that satisfaction with health services is quite high in Mongolia, with maternal hospitals and primary facilities enjoying the highest level of satisfaction.<sup>6</sup> Citizens' satisfaction is one of the ultimate objectives of the health system (Roberts et al., 2003). Of the surveyed individuals who had visited a health facility more than once in the past year, more than 70 percent were satisfied with the services received. Dissatisfaction was highest with services received at specialized health care providers, with 46 percent of respondents reporting unsatisfactory services (Figure 26).

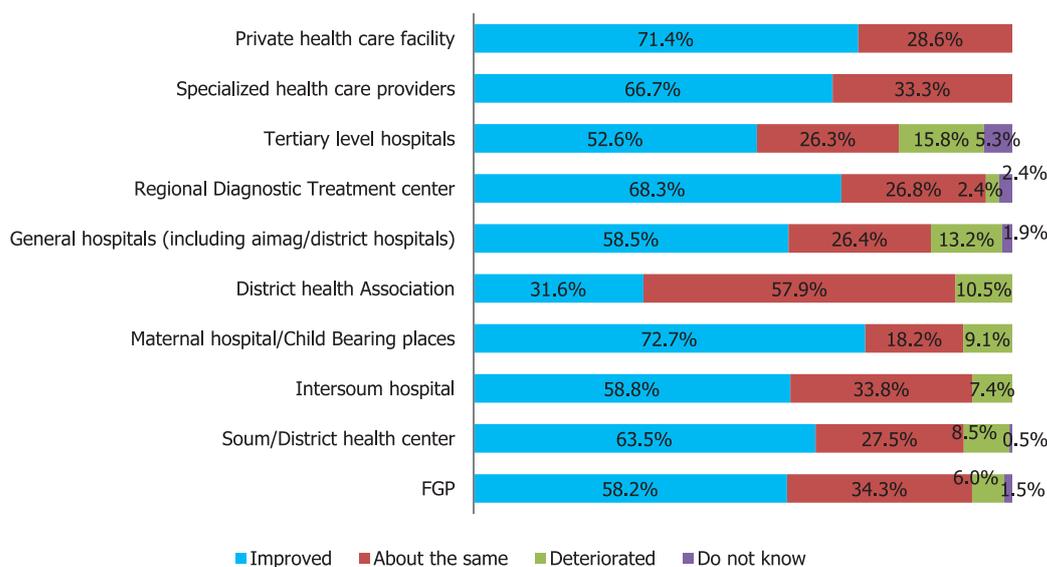
**Figure 26: Satisfaction with health services provided, by the type of facility**



Furthermore, citizens reported noticeable improvements in the services provided by health facilities compared to two years earlier. Most individuals surveyed had been served by a given health facility for more than two years, so they were able to observe and evaluate the changes that had occurred. Respondents noted improvements particularly at private health care facilities, maternal hospitals, regional diagnostic treatment centers, and specialized health care providers (Figure 27). Only a small share of respondents believed that services had deteriorated in the past two years, with the highest share of respondents at tertiary-level hospitals (15.8 percent).

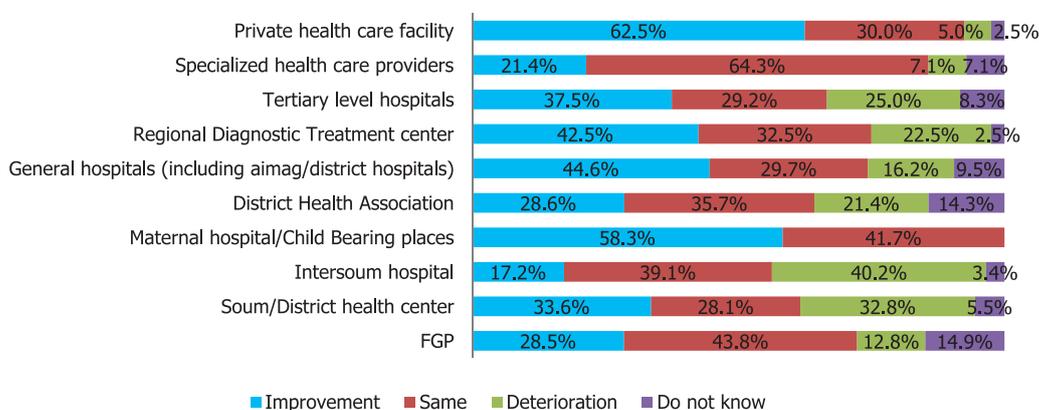
<sup>6</sup> More than 80 percent of households reported having visited a health facility in 2014. The majority sought outpatient care or visited the health facility for a general check-up, but almost one-quarter of those visiting a health facility received some inpatient care.

**Figure 27: Changes in health services in the past two years, by facility type**



Availability of medicines appeared to have improved slightly in the past year, but improvements varied depending on the type of facility. Substantial improvements were reported at private health care facilities and maternal hospitals (Figure 28). At inter-soum hospitals and soum/district health centers, however, large numbers of patients indicated that the availability of medicines had deteriorated in the past year.

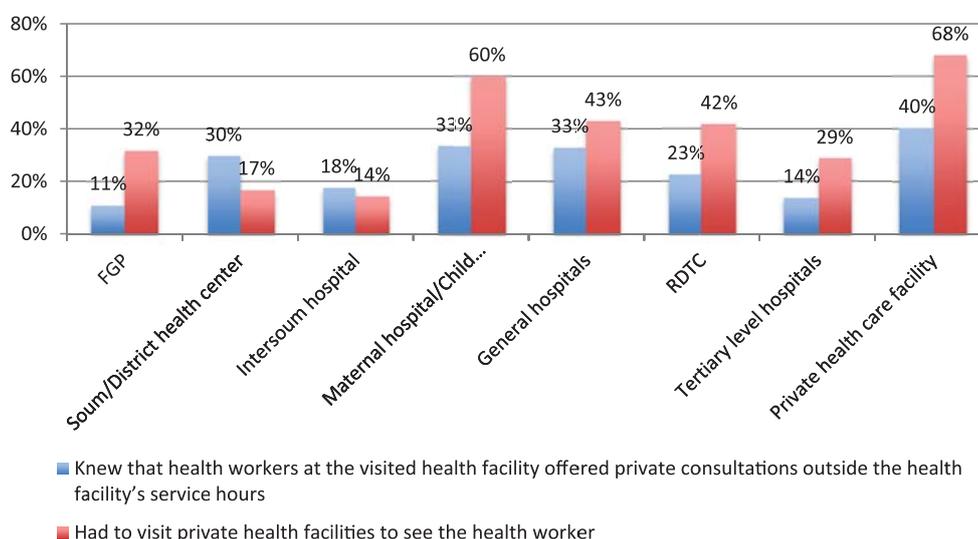
**Figure 28: Changes in the availability of prescribed medicines in the past two years, by facility type**



Although primary health care facilities are located nearby—with over 82 percent of individuals indicating that they spent less than 20 minutes to reach the facility by foot—almost one-third of surveyed individuals reported that the doctor was absent when they reached the facility. Results from the qualitative survey suggest that patients believed that the doctors (particularly at large health care facilities) worked at private health care facilities, which could explain their absence, particularly in the afternoon. In fact, in many countries, providers often schedule follow-up visits at private practices to compensate for low salaries in the public sectors and to generate additional revenue (Ferrinho et al., 2004; Eggleston and Bir, 2006; Garcia-Prado and Gonzalez, 2011). In Mongolia, most patients who visited a health facility in the last year said that the health workers of the facility did not provide private consultations outside the health facility’s service hours, although about one-quarter of the respondents did indicate that health workers held private consultations/practices. This phenomenon was most prevalent at general hospitals,

maternal hospitals, and soum health centers, with around 30 percent of individuals that visited such facilities in the past year indicating that they thought health workers offered private consultations (Figure 29).

**Figure 29: Share of respondents who knew that health workers offered private consultations and sought such services**



Survey results indicate low prevalence of informal payments. Only 5 percent of respondents at the household level reported paying informally for health services provided at public health facilities. Individuals who sought inpatient care were slightly more likely to report having made an informal payment. In contrast, other studies have found higher prevalence—for example, Oyungerel et al. (2011) found that 9.1 percent of outpatients and 15.5 percent of inpatients made informal payments. Earlier studies such as UNDP (2007) but also some recent studies such as WHO (2014) found that informal payments could be affecting as many as 66 percent of all patients.

Under the IBL, health facilities are allowed to charge fees for certain services, but only 11 percent of respondents who visited a public health facility a year prior to the survey reported having to pay for the services provided. Paid services were more prevalent at general hospitals, tertiary-level hospitals, and soum health centers. Those who did not have a health insurance book during the visit were slightly more likely to pay for health services, but the difference was not statistically significant. The median payment amount at public facilities was 28,000 MNT (approximately USD 15), but the amount varied significantly depending on the type of facility and reason for seeking care (Tables 6 and 7).

**Table 6: Median amount paid for an episode of health service received (by facility type)**

Type of facility	Median payment (Mongolian Tugrik)
Soum/district health center	19,500
Inter-soum hospital	3,000
Maternal hospital	55,000
District Health Association	60,000
General hospital	24,500
RDTC	100,000
Tertiary-level hospital	167,500
Specialized health care providers	30,000

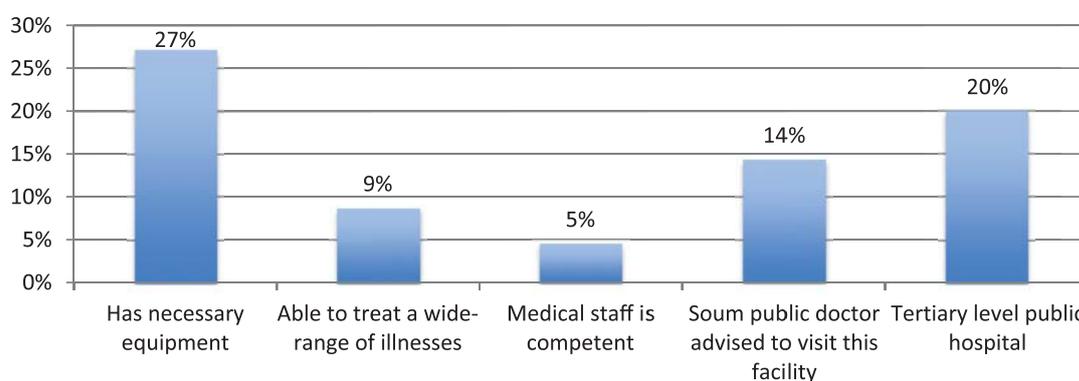
**Table 7: Median amount paid for health services (by reason for seeking care)**

Reason for seeking care	Median payment (Mongolian Tugrik)
Inpatient medical care	28,000
Outpatient medical care	125,000
Child delivery	55,000
Laboratory tests	20,000
Dental treatment	10,000
General check-up	30,000

Results from the household survey indicate that waiting times in Mongolia are quite short and are getting shorter. Waiting times are often used to measure the accessibility of the health system and can also influence citizens’ satisfaction with the health system. According to the survey results, the average waiting time in Mongolia is less than 10 minutes. Individuals’ expectations about waiting times seemed to be slightly higher than the actual waiting time, with over half of respondents indicating that they thought the waiting time was shorter than expected. Results from the qualitative survey suggest that patients expect longer waiting times given that the number of patients per doctor in public health facilities has increased substantially over the last couple of years. Yet almost 40 percent of patients indicated that waiting times improved, another 43 percent indicated that they remained about the same, while 16 percent of respondents believed that waiting times worsened. In particular, waiting times appear to have increased at regional diagnostic treatment centers and District Health Associations.

While the majority of individuals sought care at facilities in the soum where they resided, almost one-third of respondents who sought medical care in the last year reported visiting a health facility outside of their soum. Most respondents sought care outside of their soum because they needed to visit a tertiary-level public hospital or because the facility had the necessary equipment. Other quality measures, such as competency of medical staff and cleanliness of facility, did not appear to play an important role. The top five reasons for visiting a health facility outside of the soum are presented in Figure 30. Overall, respondents indicated that they chose a health facility based on its location and whether or not they would be required to pay at the facility.

**Figure 30: Top five reasons for visiting health facility outside of the soum**



Qualitative interviews indicated that patients often prefer to go directly to doctors at health centers or hospitals than to seek care at family group practices (FGPs), since most doctors at FGPs are new graduates and do not have substantial experience. As other studies have suggested, individuals seek primary health care services not only at FGPs, soum health centers, and inter-soum hospitals but also at

general hospitals. This suggests that there is no effective gatekeeping mechanism and that individuals exercise self-referral.

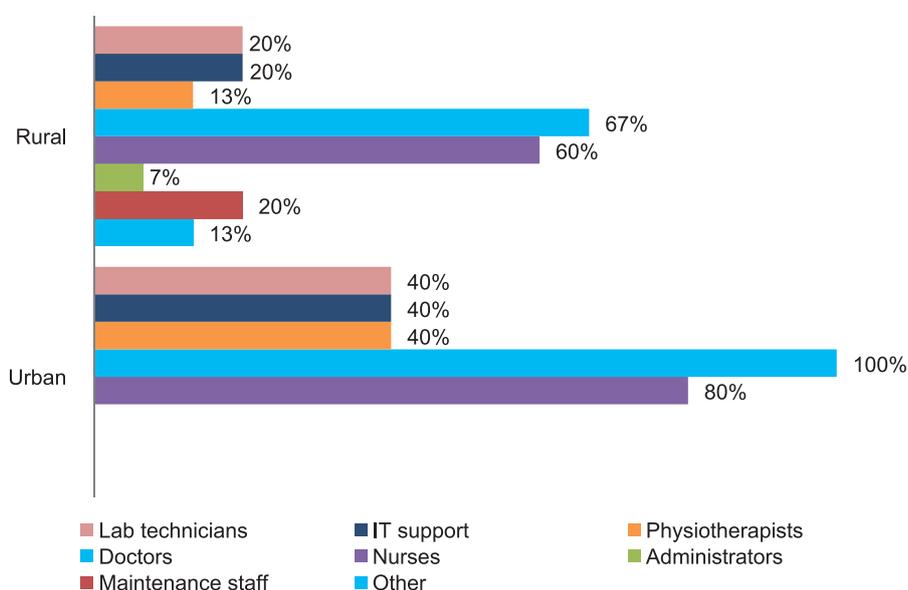
### B. Delivery of Health Services: Views of Health Providers

To complement the results from the household survey, a survey of primary health care facilities was conducted. This survey collected information about the actual services provided, barriers to delivering quality services, and perceived changes.

Providers' perceptions about the quality of care were less positive than those of patients, although slightly more than one-third of all surveyed health care providers indicated that accessibility of health services had improved compared to 2012. Around 60 percent of health providers surveyed believed that the availability of services was "seriously problematic," while 20 percent characterized it as "problematic, but not serious." Only 20 percent of the surveyed health facilities said that accessibility of services did not seem to be a problem. The majority of respondents (45 percent) believed that accessibility remained about the same, while 15 percent of respondents indicated that accessibility had somewhat deteriorated and 5 percent reported extreme deterioration. Further qualitative interviews with health facility managers revealed that accessibility was particularly problematic at large hospitals. Patients generally bypassed services at FGPs and visited health centers and general hospitals directly. The high population concentration in the capital city leads to a higher number of people per doctor, thus limiting the accessibility of services.

Human resource shortages are acute, particularly in urban areas. Shortage of human resources can result in lower-quality health care and subsequently worse health outcomes. In urban areas, 60 percent of facilities indicated that the availability of human resources was significantly lower than the needed amount. This was corroborated by patient interviews in which patients noted the high burden for health care providers in the capital city, which resulted in longer waits. It appears that most urban and rural facilities need additional doctors and nurses (Figure 31).

**Figure 31: Share of facilities indicating the need for additional human resources**



Most surveyed facilities indicated that they provided the basic primary health care package of services. FGP facilities provide outpatient care such as antenatal services, mother and child care, immunizations, family planning, and emergency care. In addition to these services, some health centers and inter-soum hospitals also provide inpatient care and labor and delivery services, with some health centers and inter-soum hospitals also providing dental care. Some health centers provide a more complete array of

health services compared to the FGPs. Given that rural populations have limited access to other levels of care, the *soum* health centers appear to cover the basic needs of the rural population. As suggested earlier, the less comprehensive array of services at FGPs could be due to the proximity of such facilities to secondary and tertiary-level facilities.<sup>7</sup>

Working hours of health facilities vary. FGPs are open for about 40 hours per week, *soum* health centers for 80 hours per week, and inter-*soum* hospitals for 90 hours per week. Meanwhile, general hospitals are open 112.5 hours per week. While the *soum* health center is supposed to offer services around the clock, the survey results suggest that this is not the case.

### **C. Authorities and Decision Space in Health Service Delivery: Results from the Administrators and Providers Surveys**

It is important to identify the degree to which authorities at various levels are able to influence various dimensions of health service delivery. The following sections examine the degree of decision space available at various administrative levels in finance, service organization, human resources, and access rules. In order to understand the *de facto* responsibilities at each level, information was collected from facilities, Departments of Health, and governors' offices regarding the authority flows and the degree to which managers at each level were able to make changes in each dimension.

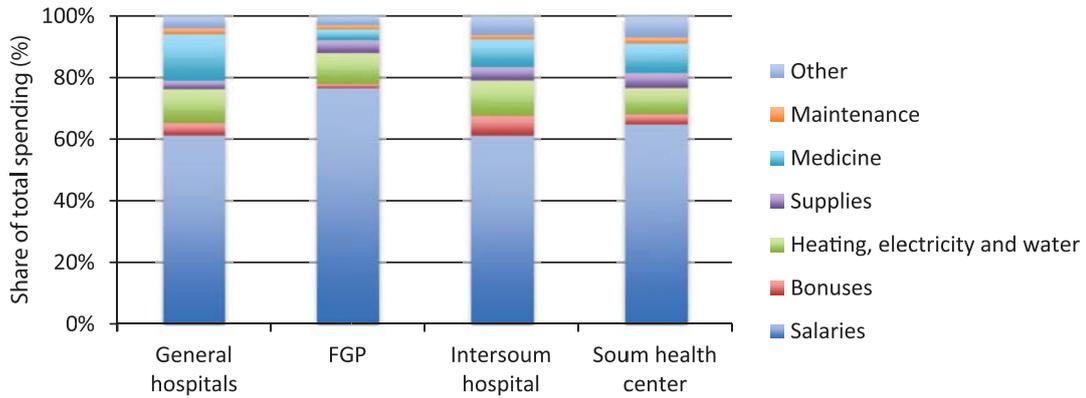
#### ***Financial Flows***

Budgets are developed on a per capita basis for primary and *soum* health facilities, but for other public health facilities, budgets are based on budget utilization in the previous year on a per-line-item basis. Health facilities submit their budget proposals to the Department of Health, where all the budget proposals are integrated and submitted to the Ministry of Health. The integrated budget from the Ministry of Health is subsequently approved by the Ministry of Finance and reallocated to the health facilities. Data from the qualitative interviews suggest that there is a tendency to overestimate budgets since the budget proposals are usually approved with some deductions. All respondents at health facilities agreed on the need to increase the per capita amount by adjusting it for inflation. Some respondents also indicated that it was necessary to change the budget planning process as it was based on the execution of the budget in the previous year, and no studies or analyses were used to calculate actual budget needs.

The bulk of the budget is used for salaries. At FGPs, for example, salaries represent almost 77 percent of total spending. The remaining funds are allocated to utility bills (heating, electricity, and water) and medicines (Figure 32).

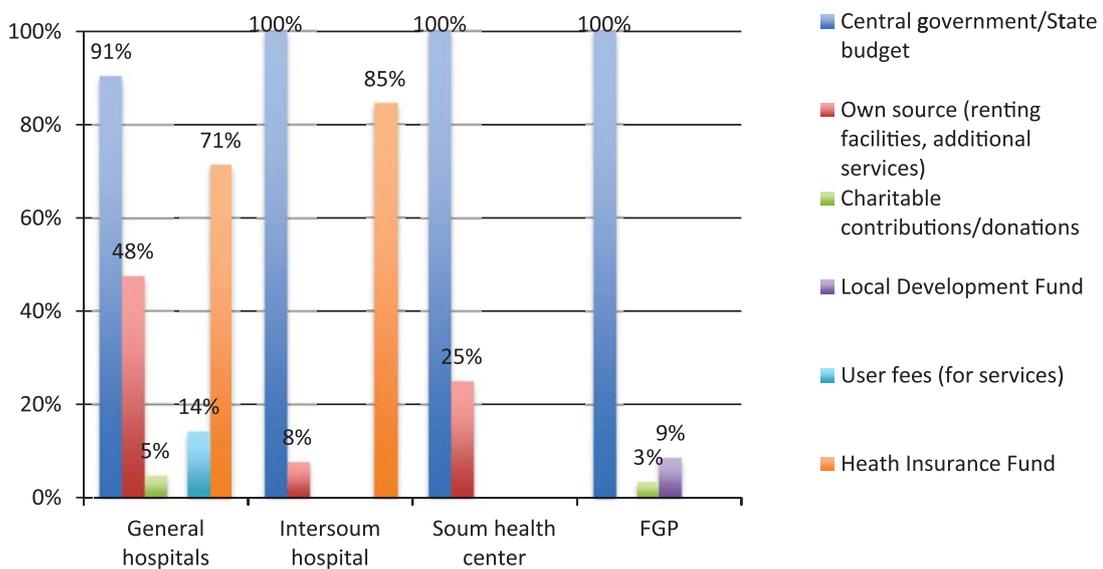
<sup>7</sup> General hospitals provide a similar package of services, but fewer general hospitals offer vaccinations. Although it was previously noted by Tsilaajav and colleagues (2014) that most *soum* health centers provide basic laboratory testing (e.g., rapid blood and urine tests), the survey results indicate that only general hospitals offer laboratory tests. However, the share of facilities reporting such services was quite low.

**Figure 32: Spending categories as a share of total health spending**



Most health facilities rely on central government/state budget for their funding. The majority of general hospitals and inter-som hospitals also received funds from the Health Insurance Fund. Almost half of general hospitals and about one-quarter of som health centers indicated that they also had own-source funds from renting facilities or providing additional services or programs. Only FGPs reported receiving funds from the Local Development Fund, and less than 10 percent of them indicated so. Even though FGPs can also receive resources from the Health Insurance Fund, none of the surveyed FGPs reported having received such funds (Figure 33).

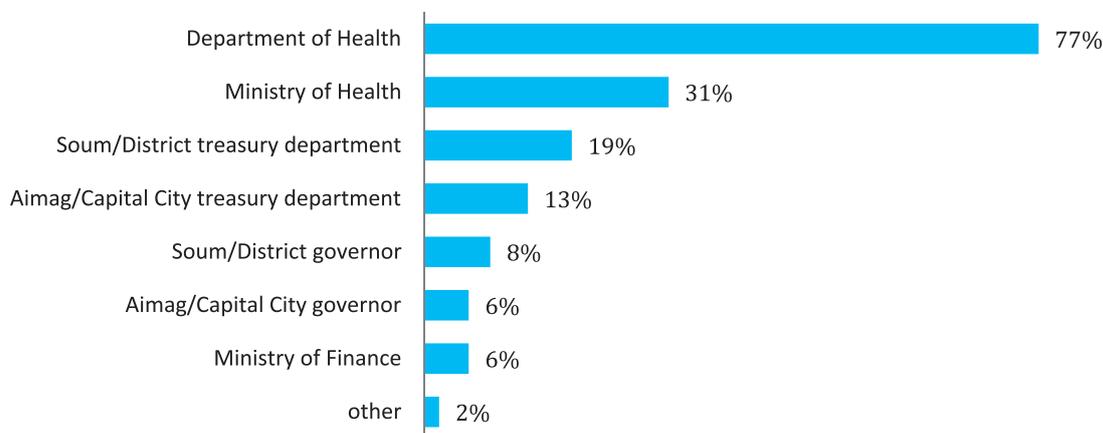
**Figure 33: Source of funds by type of facility, share of respondents at health facilities**



Governors’ offices and Departments of Health monitor budget spending but appear to have limited input during budget preparation by health facilities. Almost 80 percent of respondents at the governors’ offices and Departments of Health indicated that they monitor budget spending of health facilities. However, only 33 percent of respondents from governors’ offices and 25 percent of respondents from the Departments of Health indicated that they submitted written inputs to health facilities for budget planning. In the governors’ offices, among those who provided these inputs, almost three-quarters felt that their views were taken into account (partially or fully). At the Departments of Health, over 60 percent of respondents felt that all of their views were taken into account fully.

Once the budgets are developed, they are submitted to the Department of Health and the Ministry of Health (Figure 34). Some providers indicated that they also submit their draft budgets to the treasury departments at the soum/district or aimag/capital city level. Notably, almost 19 percent of facilities had not yet received the new software to submit budget spending and fund reports.

**Figure 34: To which authority is the budget submitted by the health facility (% of facilities)?\***



\*Shares do not add up to 100, as multiple responses were allowed.

The views on what authority determines the amount of funding for each health facility differed across providers and administrators. As stipulated in the IBL, aimag governors are responsible for the provision of primary health care services in the aimag/capital city. Accordingly, the budget authority has been transferred to the FGPs and soum health centers, and the aimag or soum Khurals approve the amount of money to be allocated to these public health facilities. However, the survey results show that most respondents believed that the Ministry of Health was ultimately responsible for the amount of money transferred to health facilities. Only respondents at the governors’ offices indicated that aimag and soum Khurals played an important role in determining the amount of funds to providers (Table 8).

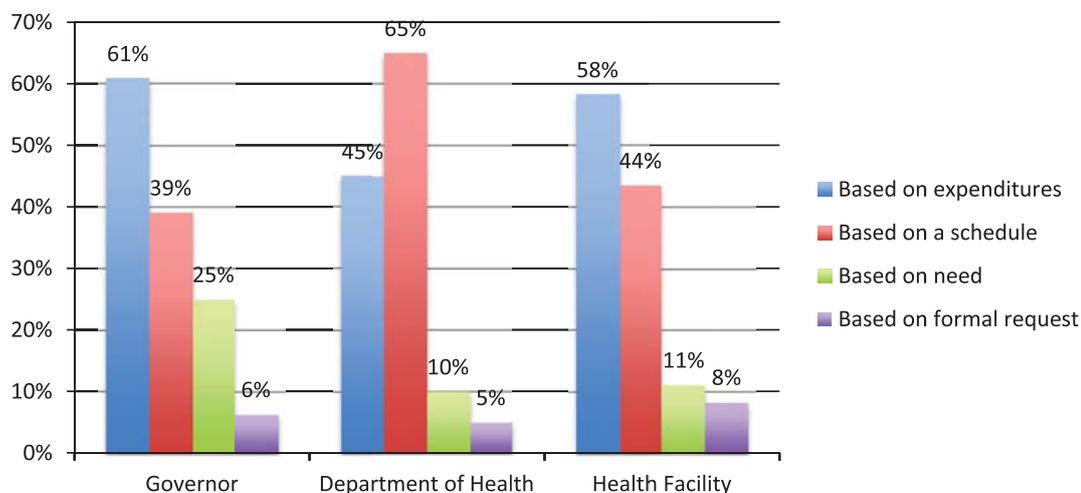
**Table 8: Authority that determines the amount of money available to health facilities, by level of respondent (percentage)**

	Governor	Department of Health	Health facilities
Central government/State budget	9	4	0
Ministry of Health	72	43	70
Department of Health	36	19	29
Ministry of Finance	19	11	27
Aimag/Capital City governor	13	4	2
Aimag/Capital City Khural	47	19	1
Soum/District governor	9	0	4
Soum/District Khural	22	0	1

Most respondents from the Departments of Health, governors’ offices, and health facilities agreed that the amount of money was allocated based on a budget plan prepared by the health facility. In addition, 35 percent of respondents from the Department of Health also indicated that the amount was based on a budget prepared by the Department of Health.

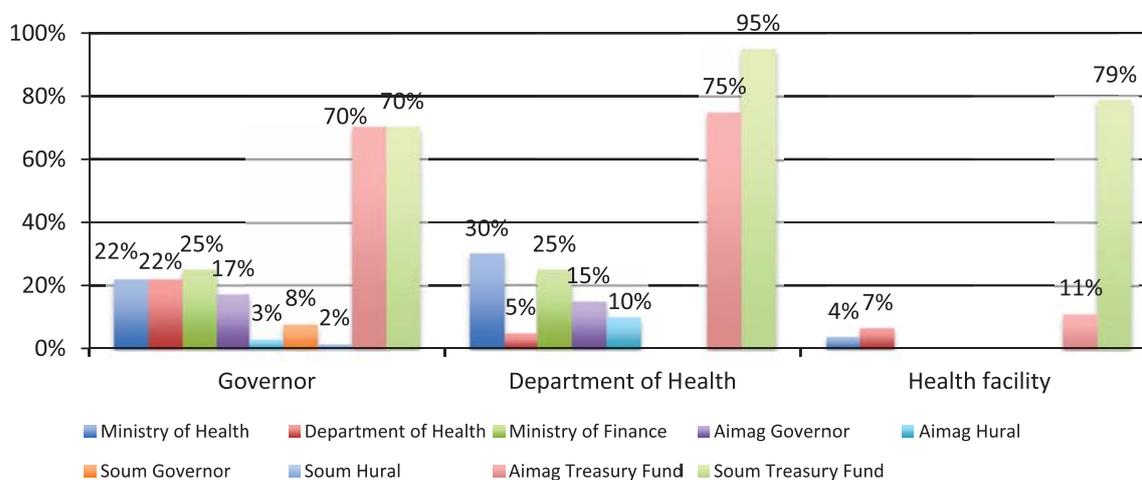
Funds are typically released to the health facilities based on expenditures and/or based on schedule. In addition, about 25 percent of respondents at the governors’ offices indicated that funds were released based on need. Few respondents reported releasing funds based on a formal request (Figure 35).

**Figure 35: Principles of releasing funds to health facilities (% of respondents at each level)**



The majority of administrators and providers were aware that Aimag or Soum Treasury Funds released funds to the public health facilities. At the same time, about one-fifth of respondents at the governors' offices indicated that funds were released by the Ministry of Health or Department of Health. Only 5 percent of respondents at the Departments of Health indicated that the Department of Health released funds to health facilities (Figure 36).

**Figure 36: Authorities that release funds to public health facilities (% of respondents at each level)**

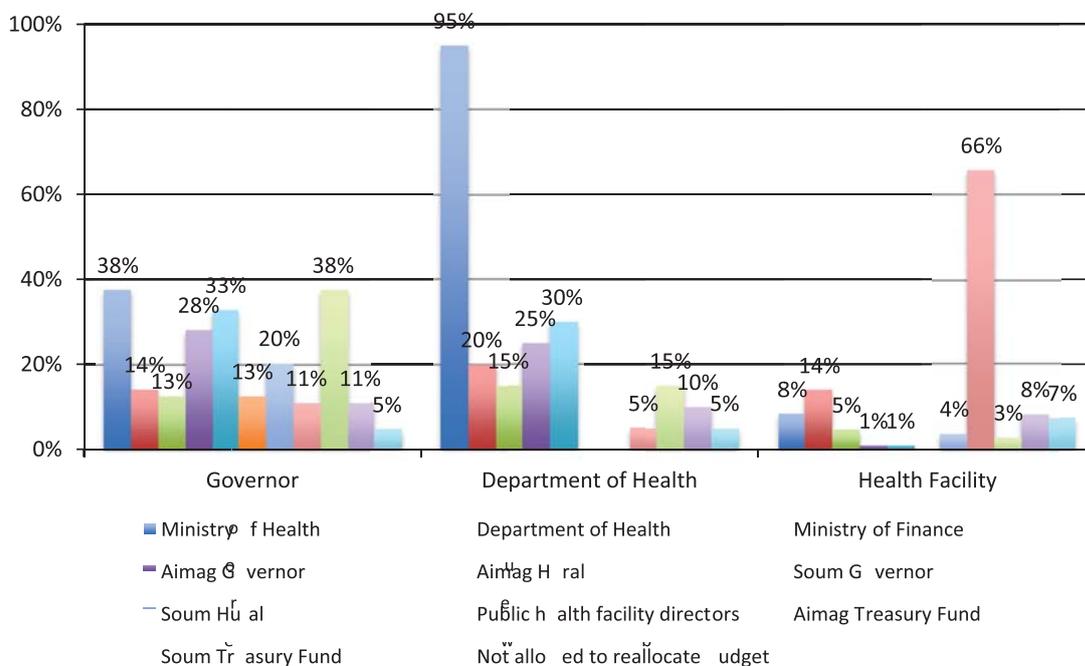


Views on the authority in charge of reallocating spending across budget categories differed across providers and administrators.<sup>8</sup> At the governors' offices, almost 40 percent of respondents believed that the Ministry of Health had the authority to reallocate spending across categories in the budget, while about the same number of respondents knew that the Aimag/Capital City Treasury Fund could do such reallocation. At the Departments of Health, 95 percent of respondents indicated that the Ministry of

<sup>8</sup> Views on the authority to reallocate across categories of the budget also differed across different types of health facilities. The majority of soum health centers and FGPs indicated that the health facility director had the authority to reallocate spending across categories. In general hospitals, respondents indicated that the Ministry of Health had the authority to reallocate such spending. At inter-soum hospitals, almost one-third of respondents reported that such decisions were made either by the Department of Health, public health directors, or Soum Treasury Fund.

Health had the power to reallocate spending across categories. Meanwhile, at health facilities, 66 percent of respondents viewed directors as being responsible for budget reallocation across categories (Figure 37). Reallocating spending within categories in the budget appeared to be easier, with most administrators and providers reporting that public health facility directors were authorized to do so.

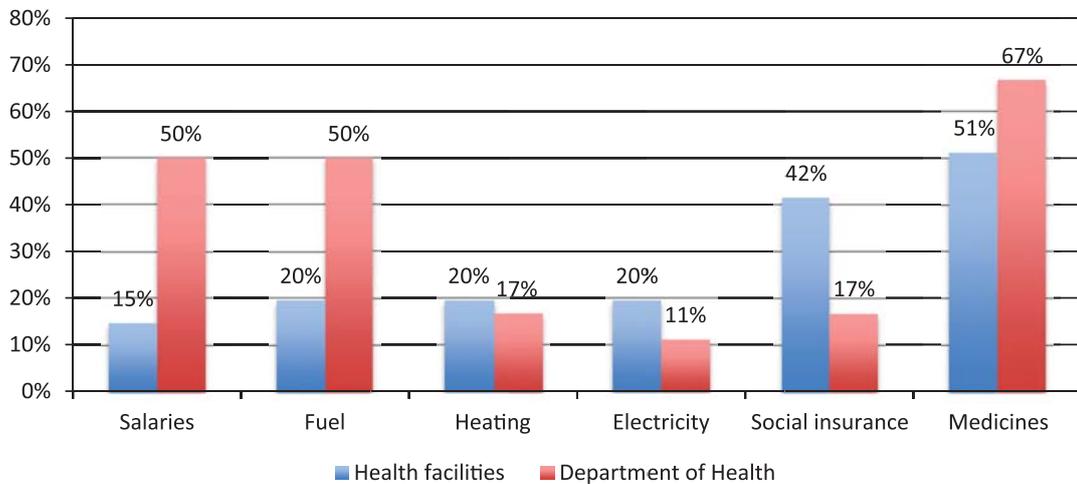
**Figure 37: Authority to reallocate spending across categories in the budget (% of respondents)**



Over 70 percent of surveyed health facilities said they were not allowed to save funds. Of the facilities that said they could save funds, 36 percent reported that the director could spend the funds for the purpose of the facility with approval from the Department, Ministry, or subnational government. Around 24 percent reported that funds must be remitted to the Department or Ministry, while 16 percent said that the director may spend the funds for the purpose of the facility without seeking approval.

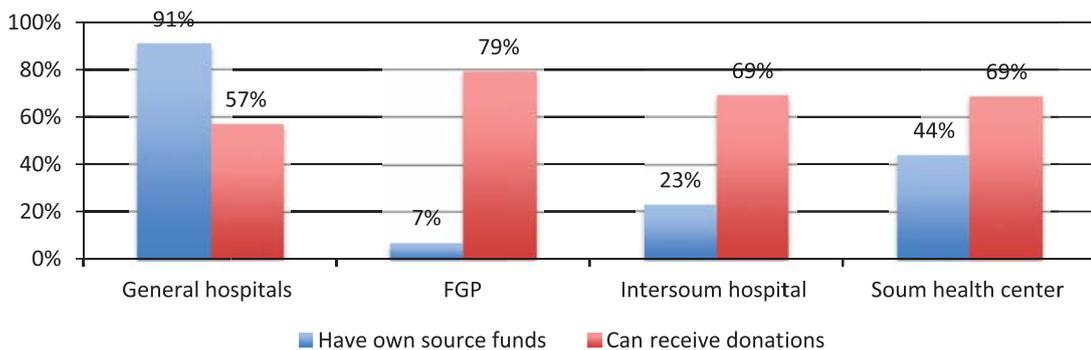
Liabilities appear to be prevalent among health facilities and are nearly universal at the Departments of Health level. While 47 percent of health facilities indicated that they had accumulated debts, 85 percent of respondents at the Department of Health had accrued debts. At both levels, debts were accumulated for medicines, with a significant share of facilities also indicating that they had debts due to payment of social insurance taxes for their employees (Figure 38). Meanwhile, the Departments of Health also reported debts incurred for covering their operational costs such as salaries and fuel.

**Figure 38: Most commonly cited reasons for accrued debts, share of respondents at the respective level**



Survey results show that health facilities have their own sources of funds and can also receive donations. The IBL and the Health Law provided clinics and hospitals with fiscal autonomy and allowed them to generate revenue from service charges and receive donations. Most FGPs do not generate own-source revenue, but nearly all general hospitals do, as do almost half of som health centers and almost one-quarter of inter-som hospitals (Figure 39). Some respondents at general hospitals reported that the raised funds had to be remitted to the Health Department or Ministry of Health, while the majority said that the director could spend the funds for the purpose of the facility with approval from the Department, Ministry, or subnational government. Most health facilities have the right to receive donations.

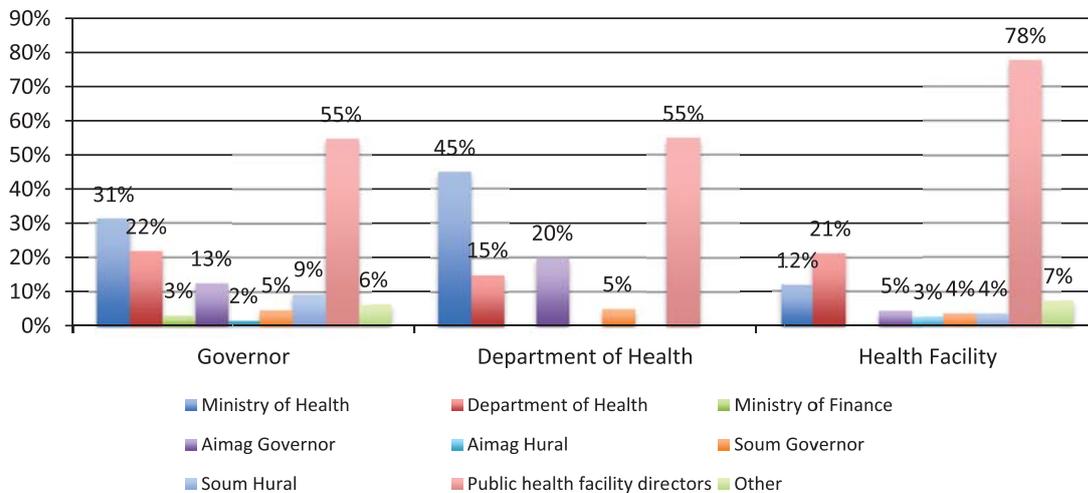
**Figure 39: Share of facilities indicating that they have own-source funds and can receive donations, by facility type**



**Service Organization and Delivery**

The majority of interviewed administrators and providers said that health facility directors made the final decisions on procurement, but there were perceptible differences in views. This includes procurement of medical supplies, medicines, medical equipment, and services (Figure 40 presents information for medical equipment only). Almost 80 percent of respondents in health facilities thought that health facility directors had the authority to procure goods and services. At same time, only slightly more than half of respondents in the governors’ offices and in Departments of Health indicated that facility directors could do so. From one-third to one-half of administrators indicated that the Ministry of Health was involved in making decisions regarding procurement of medical equipment.

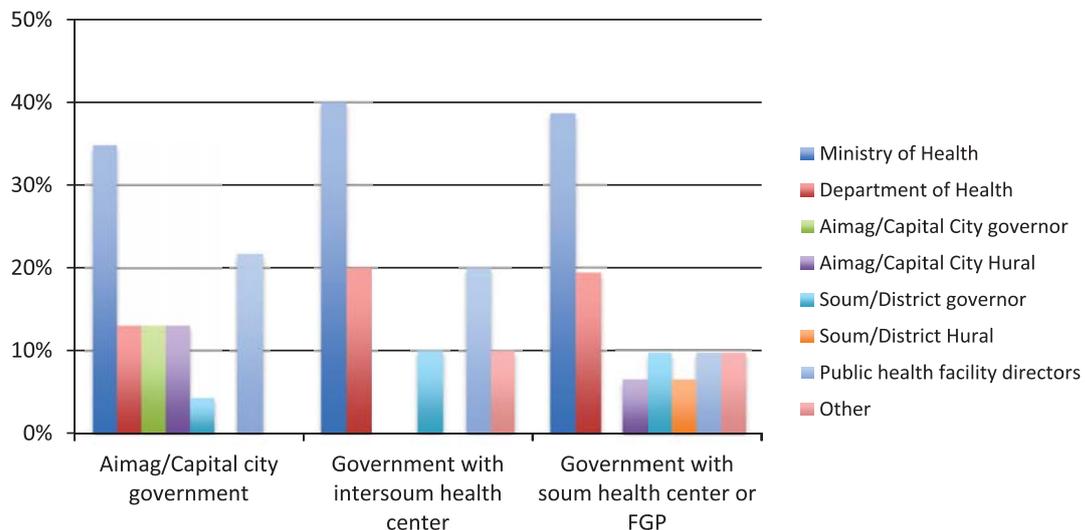
**Figure 40: Authority for procurement of medical equipment for public health facilities (% of respondents at each level)\***



\*Shares do not add up to 100 percent as multiple responses were allowed

Administrators and providers agreed that the Ministry of Health was responsible for determining which public health facility programs and services were offered. Similarly, respondents agreed that the Ministry of Health was responsible for developing the content of public health programs and services such as vaccination, prenatal care, and HIV/AIDS training. In areas with an aimag government or an inter-soum health center, about one-fifth of area administrators said that health facility directors had the authority to approve the programs offered by the health facilities. In areas with a soum health center or FGPs, less than 10 percent of respondents said that directors had this authority.

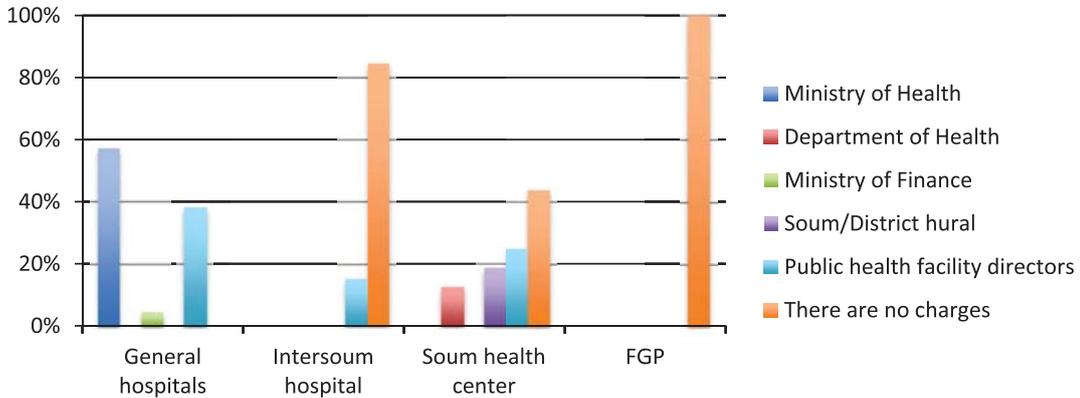
**Figure 41: Authority to choose programs and services offered at health facilities**



Respondents at the governors' offices and Departments of Health indicated that the Ministry of Health has the authority to determine charges for services at public health facilities. Since primary health care services must be provided free of charge, all surveyed FGPs said that they did not have any fees. Almost 85 percent of inter-soum hospitals and 44 percent of soum health centers also reported no charges. However, 57 percent of respondents at general hospitals indicated that the Ministry of Health had the authority to determine charges for services, and 38 percent said that health facility directors held this decision-making power. Notably, during the qualitative interviews, one representative from a soum

health center said: “The Department of Health requires us to generate revenue. So we want to have some paid services to have some income, but the law provides free services at the primary health facilities. If we take money for the services, the law won’t protect us. So we can’t generate additional income because of conflicts between the laws and regulations.”

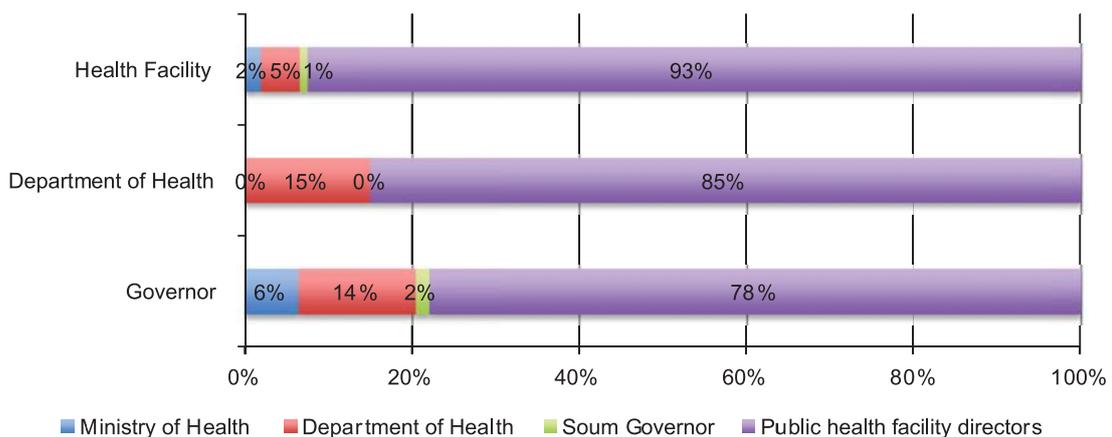
**Figure 42: Authority to determine service charges at public health facilities, by type of facility**



**Human Resource Management**

The majority of administrators and providers believed that facility directors had the authority to manage recruitment of staff, which includes deciding how to recruit, choosing whom to hire, and developing the criteria for hiring. In public health facilities, these views were nearly universal, and directors also had the authority to appoint staff to positions and choose staff to promote or demote (Figure 43). At the same time, over 20 percent of staff in the governors’ offices believed that this authority also belonged to the Department of Health or the Ministry of Health. The majority of respondents said that soum/district governors and the Department of Health were responsible for appointing the directors of public health facilities.

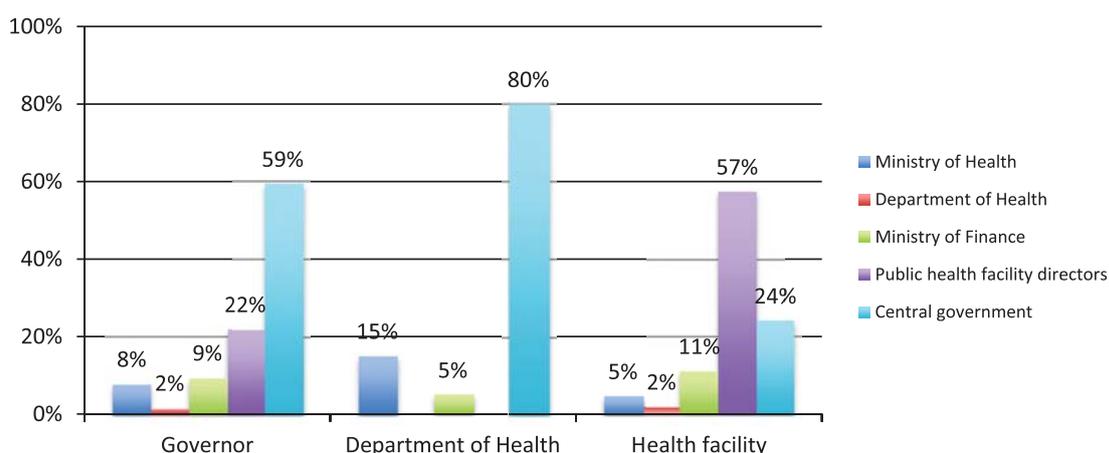
**Figure 43: Authority that appoints, promotes, and demotes staff (% of respondents at each level)**



There was less agreement on the authority to reassign staff to a different location, with almost one-half of respondents in health facilities and governors’ offices saying that there should be no reassignments. From 20 to 40 percent of respondents across administrative and provider units believed that this was the responsibility of the Departments of Health and health facility directors.

While over 57 percent of respondents at the health facility level said that public health directors had the authority to determine employee compensation, about 60 percent of respondents at the governors' offices and about 80 percent at the Departments of Health indicated that the central government was responsible for establishing salary scales (Figure 44). Views on who determines employee compensation differed by type of health facility. More than half of respondents in the general and inter-soum hospitals indicated that the central government determined the salaries, while 24 and 31 percent, respectively, believed that the Ministry of Finance was responsible for this. At the same time, over 80 percent of respondents in soum health centers and FGPs indicated that health facility directors had the authority to determine employees' compensation.

**Figure 44: Authority that determines employee compensation (% of respondents at each level)**



Most respondents in the Departments of Health and health facilities thought that public health facility directors had the authority to determine bonuses. At the governor level, however, only 14 percent of respondents believed this to be the case, while 76 percent cited the Ministry of Finance as the one responsible for making these decisions. Similar to the pattern above, respondents' views on the authority in charge of making these decisions varied by the type of health facility. Respondents in the general hospitals and inter-soum hospitals thought that the Ministry of Finance was primarily responsible for determining bonuses. Half of respondents at the soum health centers indicated that health facility directors were responsible for determining bonuses, and another 44 percent indicated that this was the responsibility of the Ministry of Finance. Respondents in the FGPs thought that health facility directors held more authority in this regard, with almost three-quarters of all respondents indicating that facility directors were responsible for determining bonuses.

While respondents at governors' offices indicated that health facilities were allowed to contract staff and hire short-term temporary employees, fewer respondents at the Departments of Health and health facilities agreed that this was in fact a prevailing practice. In the governors' offices, 33 percent of respondents believed that health facilities could contract staff, while 14 percent believed that health facilities could hire short-term temporary employees. Around 25 percent of respondents at the Departments of Health and 12 percent of respondents in health facilities indicated that they could contract employees, while only 4 percent of respondents at health facilities believed that health facilities could hire short-term temporary staff.

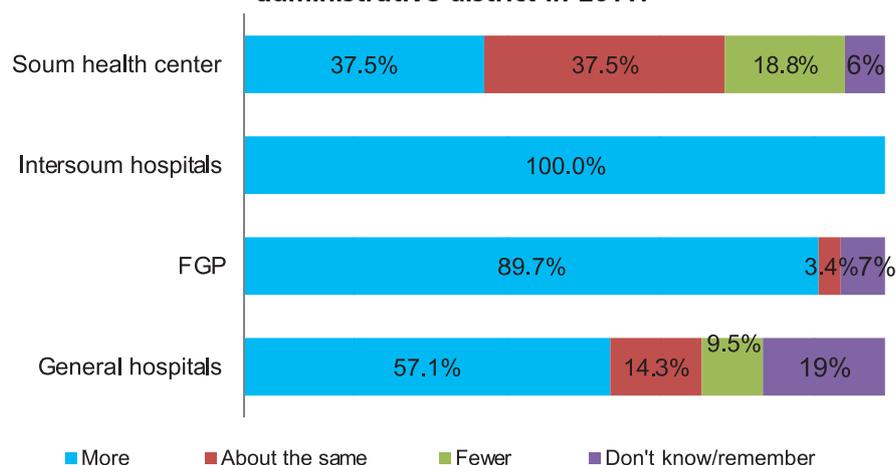
All facilities reported organizing regular meetings between the hospital director and staff. Soum health centers, inter-soum hospitals, and general hospitals indicated that such meetings were conducted weekly. Some FGPs reported that meetings were held every two weeks. Approximately one-third of facilities reported that meetings were held more frequently in 2014 than in 2012, but the majority indicated that the frequency of director-staff meetings did not change.

Managers at health facilities are able to take disciplinary action toward staff at health facilities. Disciplinary measures were taken by managers in most health facilities: 83 percent of respondents reported that managers in their facilities gave verbal warnings, 64 percent reported written warnings, and 19 percent indicated that managers reported staff violations to the Department of Health. Around 15 percent of respondents who were managers themselves indicated that they fired the staff, and 6 percent proposed staff transfers. The overwhelming majority of health facility managers reported that disciplinary actions were less frequent in 2014 compared to 2012. Verbal warnings were most commonly given for repeated tardiness or early departure and repeated absence. Managers reported that they informed the Department of Health if their staff conducted actions against the law.

**Access Rules**

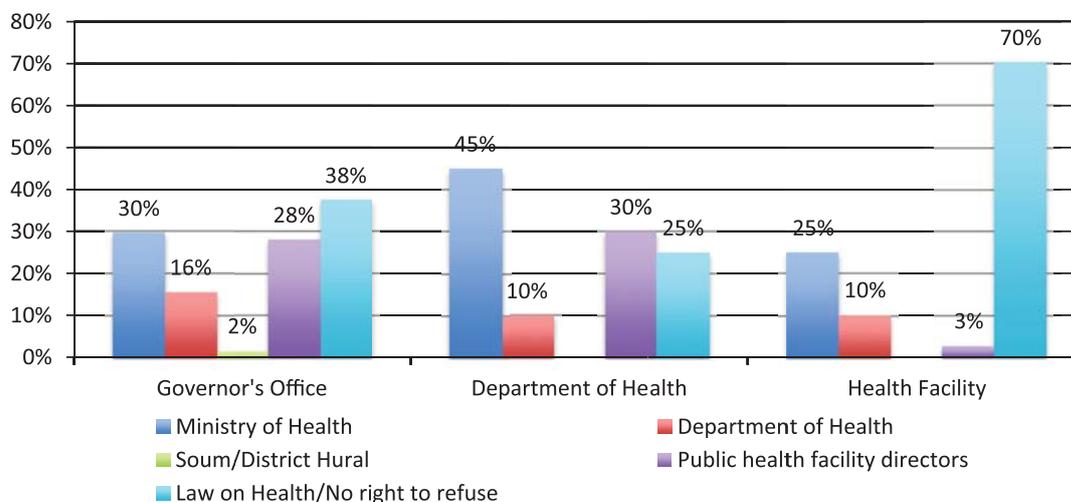
Almost one-third of respondents in the household survey sought care outside of the soum in which they resided. Although the survey did not collect information on whether individuals visited health facilities outside of their soum more frequently in 2014 compared to 2012, such information was collected at the facility level. Compared to 2012, respondents at FGPs and inter-soum hospitals reported seeing more patients that did not reside in their respective administrative regions in 2014 (Figure 46). Although FGPs and inter-soum hospitals have defined catchment areas, freedom to choose providers could lead to higher burdens at some facilities, resulting in longer wait times and increased barriers to access.

**Figure 46: Compared to 2012, did the facility receive more patients out of the respective administrative district in 2014?**



Almost three-quarters of providers indicated that because access to health services is governed by the Law on Health, their facilities did not have the right to refuse non-emergency services. At the same time, one-third to almost one-half of all respondents in the governors' offices and Departments of Health indicated that the Ministry of Health and public health facility directors had the authority to determine who could access services (Figure 45).

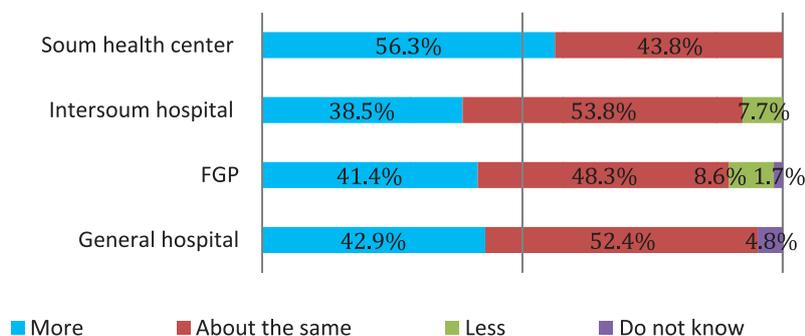
**Figure 45: Authority to determine who has access to non-emergency services (% of respondents at each level)**



*Degree of Autonomy in 2014 Compared to 2012*

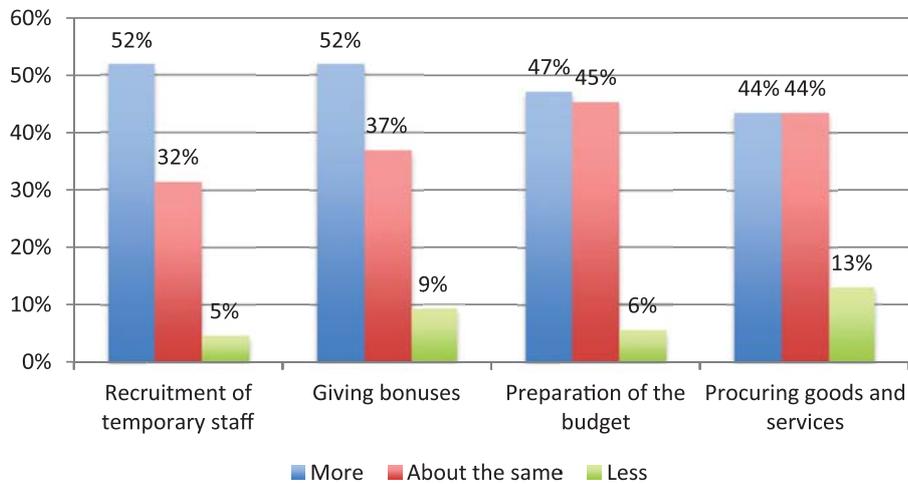
The delegation of authority to health facilities appears to have improved between 2012 and 2014. Around half of the respondents at health facilities felt they had more autonomy in 2014 compared to 2012, while around half believed they had about the same amount of independence as in 2012. Less than 6 percent of facilities thought they had less independence in decision-making. A slightly higher proportion of respondents at soum health centers reported having more autonomy in 2014 compared to other facility types (Figure 47).

**Figure 47: Autonomy in decision-making of health facilities in 2014 as compared to 2012 (% of respondents at each type of facility)**



Looking at the various dimensions of decision-making autonomy, facilities appeared to have more control over key areas of service delivery in 2014 compared with 2012. As shown in Figure 48, these areas include recruitment of temporary staff as well as preparation of budget and procurement of goods and services.

**Figure 48: Autonomy in decision-making of health facilities in 2014 as compared to 2012 by dimension (% of respondents at each type of facility)**

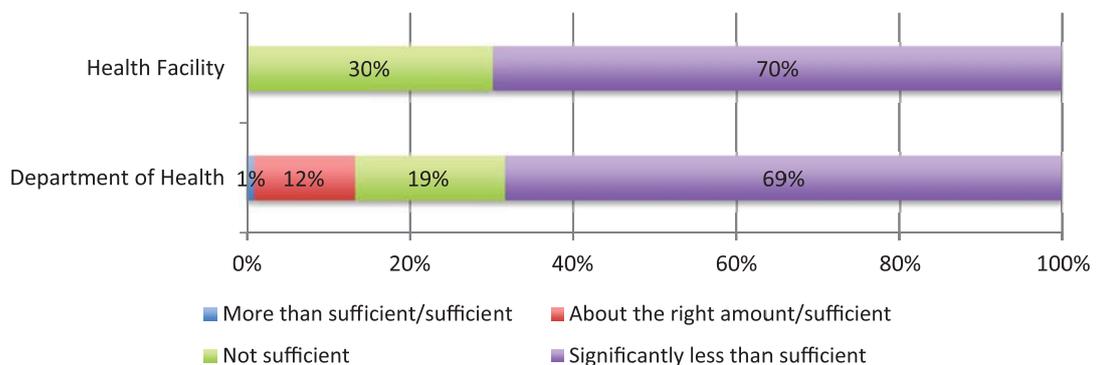


Nevertheless, the qualitative interviews suggested that the IBL is not a fully effective tool for granting necessary authority to the primary budget units. Due to itemized budgets, budget managers ultimately have no authority to make independent decisions on spending and reallocation of resources for other purposes. Staff in the governors’ offices and Departments of Health as well as representatives from the health facilities indicated that health facilities had to seek approval from the governor’s office before making decisions about budget reallocation. However, most did believe that local participation in budgetary discussions was a positive step, as well as better legal coordination of the reallocation process.

**Capacity**

As in the case of education, at the organizational level, insufficiency of funds appears to hinder the provision of services significantly. Most facilities indicated that they did not have enough funds to provide the required services (Figure 49). Respondents indicated that lack of funding was less problematic with regard to paying salaries, particularly at general hospitals, but was quite acute with respect to assuring funding for staff bonuses.

**Figure 49: Budget sufficiency at health facilities (% of respondents at each level)**



Shortage of human resources also presents challenges. Only 15 percent of respondents from the Departments of Health indicated that adequate human resources were available to implement public health programs in accordance with policies. Despite such shortages, however, most respondents at all levels felt that health facilities complied with national standards.

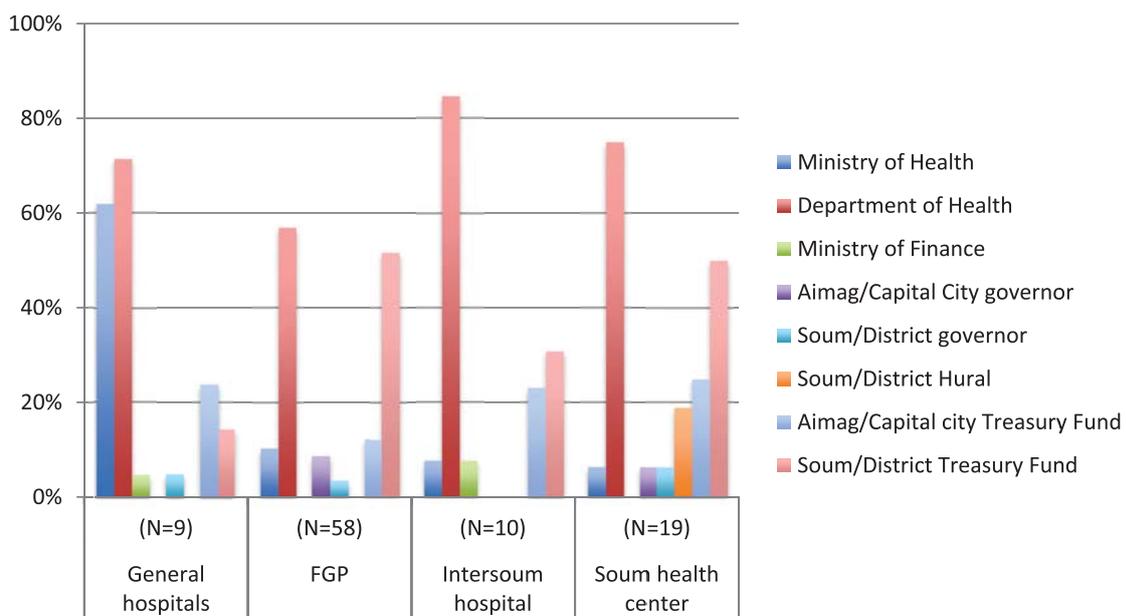
Training appears to be universal, as nearly all respondents-administrators and providers alike-received at least some on-the-job training. However, one-half found the training to be only somewhat useful. While nearly all respondents in the health facilities said they were familiar with the IBL, only 38 percent had received training on how the IBL should change their operations.

**Accountability**

As in education, accountability mechanisms can help ensure that the health system operates effectively. These include obligations to answer/justify questions regarding decisions and actions, with mechanisms of enforcement in place that can be directed effectively toward the answerable party (e.g., sanctions) (Brinkerhoff and Bossert 2008; Yilmaz and Serrano-Berthet 2008). Similar to the approach taken for education services, the survey measured both upward accountability (at the department and facility level) and downward accountability (at the household level) in health service delivery.

The majority of respondents in public facilities indicated that they submitted budget spending reports to the Departments of Health and that the Departments of Health monitored compliance with national health standards. Depending on the type of facility, budget spending reports were also submitted to the Ministry of Health (primarily for general hospitals) and Aimag or Soum Treasury Funds (Figure 50). Compliance with national standards appears to be universal.

**Figure 50: Where does the health facility submit budget spending (by health facility type)?\***



\*Totals do not add up to 100, as multiple responses are allowed.

The Department of Health inspected all facilities at least once in the past year. Inspections were more frequent at inter-soum hospitals, which their respective Departments of Health visited 3-4 times in the past year. About one-third of facilities reported that the number of supervisory visits from the Department of Health and the Ministry of Health increased in 2014.

The Department of Health frequently gathers representatives of health facilities for meetings. Staff from FGPs were invited to meetings more frequently than staff from other types of health facilities, with more than one-third of FGPs reporting that they received more than 10 meeting invitations from the Department of Health. The majority of facilities indicated that they had received between 1-5 meeting requests in the past year, while some facilities did not receive any meeting invitations from the Department of Health. Most respondents indicated that they participated in the meeting if they received an invitation. The frequency of meetings in 2014 did not appear to change significantly compared to 2012 for most

types of health facilities.

All surveyed facilities were audited in 2013 or 2014. The majority of primary health care facilities indicated that the audit lasted less than one day. At general hospitals, audits typically lasted 1-2 days. Although most FGPs were audited within one day, almost one-third reported that audits lasted 1-2 days, and 17 percent indicated that the financial audit lasted one month. Most facilities received notification of the financial audit in advance of the inspection. However, notifications appeared to be less common at inter-soum hospitals and soum health centers.

Over 80 percent of respondents in the household survey indicated that they could influence the types of services/programs offered at health facilities. Although ensuring that providers are held accountable to patients is important for effective service delivery, the channels for allowing citizens to voice complaints and suggestions at health facilities appear to be limited. Only 40 percent of respondents in the household survey knew of existing channels to gather criticisms, complaints, and suggestions related to health service delivery. The most commonly cited channels were: suggestion box at public health facility (72 percent of respondents) and telephone (30 percent of respondents). Less than 5 percent of respondents mentioned knowledge of forums where staff of public hospitals, public health facilities, or the district health office would participate to receive complaints and suggestions.

#### **IV. CONCLUSIONS**

Overall, the survey results point to encouraging progress in the decentralization of service delivery. In both the education and health sectors, citizens noted improvements in various aspects of service delivery between 2012 and 2014. The surveys also found that delegation of authority to the local level has generally increased, with a significant proportion of schools and health facilities reporting more autonomy over decisions in key areas of service delivery such as recruitment of temporary staff, preparation of budget, and procurement of goods and services.

However, the survey results also indicate that at least in the view of officials, the actual decision space among officials at each level varies significantly, and capacity constraints continue to pose a challenge. In both education and health, views on who was responsible for decisions related to financial flows and human resource management often differed between respondents at the government, department, and facility levels. While this variation may be due to differences in perception, it is more likely that a significant effort is needed to inform officials of the kinds of choices they are allowed to make. The surveys also found that education and health service providers continue to face considerable constraints in terms of financial and human resources.

Beyond understanding the “decision space,” it is critical to examine other issues pertinent to service delivery in a decentralizing environment, such as the system of financing. As discussed above, views among administrators and providers differ considerably on key questions such as who is responsible for decisions on allocation/reallocation of financing and how funds are released. It is therefore important to assess and understand the current situation to identify what issues need to be addressed as decentralization progresses. The following chapters delve into such issues, starting with Chapter 4 which examines the current system of primary and secondary education financing.

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## ▲ CHAPTER 4: SCHOOL FINANCING

This chapter discusses the system of primary and secondary education financing in Mongolia and proposes measures to help strengthen the system. Section I begins with an overview of school financing mechanisms and a description of the system of normative amounts from the aggregated macro perspective, followed by a description of school-level budgets in Section II. Section III then summarizes three recent studies to improve the present system of school financing, as well as looks at international experiences with voucher systems and their potential relevance for Mongolia. Options to improve school financing over time are discussed in Section IV, against the backdrop of a trend toward decentralized management of service delivery to both Ulaanbaatar (UB) city and the aimags. The chapter concludes with a summary of recommendations in Section V.

### I. SCHOOL FINANCING

#### A. Central government contribution to school budgets

In principle, the Mongolian government provides primary and secondary schools with school budgets comprised of three components:

An amount based on a per student allocation, whereby the amount per student varies according to grade and location of the school. As discussed further below, these amounts per student are, in theory, “normative” estimates of the average costs per student for that school-type and location. The resulting budget envelope is commonly called the ‘flexible budget,’ as it varies with the number of students. The allocation is calculated and made available in two parts, one for salaries and one for other variable costs, which together are supposed to cover all operational costs of the schools except for utility costs.

A so-called ‘fixed budget’ to cover utility costs (for electricity, water, and notably, heating), whereby the amount is largely based on historical expenditure data (incremental budgeting), but in the end it is a ‘negotiated’ budget.<sup>1</sup>

Highly earmarked funding for targeted social assistance to support children of low-income families for the procurement of books and stationery (primary school), based on the number of (listed) beneficiaries. The school feeding program (for all children in public schools in Grades 1-5) also falls into this category.

Public schools receive all three allocations, while private schools are only entitled to the ‘flexible’ allocation for salaries and other variable costs. Thus, in terms of government funding, the single difference between public and private schools is that the latter are not receiving allocations for utility costs and social assistance programs (although the food programs also apply for private schools). However, considering that the share of fixed costs and costs for social assistance programs is only around 20 percent of the total budget for secondary education the bulk of school budgets is provided via the normative amounts and is applicable to all secondary schools, public and private.

#### B. The system of normative amounts

##### 1. A brief history

Officially, the voucher system was introduced in Mongolia in the late 1990s to help increase efficiency. A basic principle is that it provides resources where they are needed, as “money follows students.” In

<sup>1</sup> The term ‘fixed’ costs is misleading. Apart from cases in which a flat rate is charged, irrespective of the actual levels of consumption (such as for heating costs under a central-heating system that can not be switched on or off and for which a fixed amount is paid based on the volume of the building), the utility costs are in most cases ‘flexible costs’ that vary with the quantity of kWh, cubic meter of water, and firewood (or coal) used. Hence these costs are largely variable costs on which schools can make savings if given the proper incentives.

practice, however, the freedom of parents to send their children to any school of their choice (as it comes with the voucher) is largely seen as its main virtue, stimulating competition that is expected to enhance the overall quality of education.<sup>2</sup>

The way the norm-based flexible allocation was established has changed a number of times, as illustrated by Table 1. When the system was introduced in 1998, the amounts per student were fixed by location and school type, and micro-coefficients were added in 1999 to calibrate the allocations further. Although this highly disaggregated system provided the opportunity for a high level of fairness, it was considered too complicated and hence the pendulum swung back in 2003, with a simplified allocation formula using the four regions and three school types as variables. In subsequent years, because the system was felt to be too "crude," the allocation system was refined again by dividing the regions into smaller geographical areas.

The 2007 revisions to the system have largely continued until today, with some further modifications as described below. In 2007, the system used the following variables:

the school's location being either in a bag center, a soum center, the aimag capital, or UB;<sup>3</sup>

the size of the school, differentiating between schools offering only primary grades, schools offering basic education, and schools offering full secondary; and

the school type the student is in, i.e. primary (grades 1-5), lower secondary (grades 6-9), or upper secondary (grades 10-12) .

Furthermore, the allocation per student was divided into two categories: one for teacher salaries and one for other variable costs. In total, 38 different norm amounts were to be set (see, for example, Tables 4.1a and 4.1b in Annex 4.1).

**Table 1: Overview of changes in calculating the normative amount**

Year	Main feature	Variables in the formula
1998	Introduction of normative amounts	66 different normative amounts for 21 aimags and UB 3 school types
1999	Refinement	Micro coefficients were added to take account of cost differentials within aimags
2003	Simplification	4 regions 3 school types
2004	Refinement	Over the period 2004-06, the regions were divided into smaller (initially 5 then 6) geographical areas (the "formula" thereby going partly back to the original set-up)
2007	Refinement	4 school locations (bag, soum, aimag, UB) 3 school types (primary, basic, full secondary) student grade ((primary, basic, full secondary) Distinction between salaries and other costs Resulting in 2*19 = 38 different norm amounts (Table 4.1a in Annex 4.1)
2011	Simplification	No longer a distinction for grades for other flexible costs-all students get/bring the same amount

<sup>2</sup> Countries that have introduced a voucher system typically aim to improve efficiency, equity, transparency, and competition. However, without school autonomy (which is, as will be described below, the case in Mongolia), per capita financing alone has limited impacts in improving efficiency and school accountability. For other countries (and Mongolia falls so far largely into that category), the objective is purely to facilitate freedom of choice. In the Netherlands, for example, which introduced the voucher system a long time ago, it mainly served as a means for the government to be able to fund schools belonging to various different faith-based organizations in an equitable manner.

<sup>3</sup> Whereby a number of selected UB outskirts schools are treated as aimag schools.

2012	Further Simplification	The distinction for school types for UB city and aimag schools was abolished Only two school types for the soum level Resulting in 12 different norm amounts (See Table 4.1d in Annex 4)
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Source: With input from Peter Mook (2012b).

Over the past few years, the level of differentiation in the originally selected variables has decreased gradually. The same normative amounts are being used for different school types or student grades/levels (Tables 4.1c and 4.1d, in Annex 4.1). The only differentiation presently is (i) by location, being the main differentiating factor for both the salary allocation and the allocation for other variable costs, and (ii) a relatively small differential for staffing costs depending on the level the student is in (primary, lower secondary, or higher secondary), reflecting differences in the student/teacher ratios for the different school levels. Although 'other variable costs' depend on location, they no longer vary by grade or differences in distances (to, depending on the school location, UB, the aimag, or soum center).

## 2. Characteristics of the current system

### Calculation of normative amounts

In practice, the normative amounts for salaries are largely the calculated result of a budget process based on inputs and resource availability. While the "normative" label suggests the use of objective criteria or normative calculations to establish reasonable or minimum requirements related to a particular level of quality, the normative amounts are not calculated this way in practice. For the normative amount for salaries, the Ministry first establishes the total payroll (with names and detailed salaries for individual teachers), then divides this calculated total budget requirement by the number of concerned students. Although this is communicated to the schools as a "normative amount," the salaries are still budgeted according to the actual establishment, and the normative amounts play virtually no role in the actual calculation of the school's salary budget.

For the "other variable costs" component, the actual normative figures are determined by a combination of incremental historical budgeting and the available resource envelope. While in principle a normative list of expenditure needs for an average school (for each level and each location as distinguished) should be used, no such standard lists of items are transparently available. Therefore, in practice, the normative amounts are typically not based on objective or transparent norms but are rather the calculated result of a budget process based on resource availability.

The share of the recurrent budget that is actually allocated using the normative amounts has decreased to around 3.3 percent of the recurrent budget only. The salary and other cost components of the "normative amounts" illustrate the same: for 2012 and 2013 for all school types except bag and small soum schools, the salary component comprised 95 percent and the "other flexible costs" component less than 5 percent of the total normative amount in 2012 and 2013.<sup>4</sup>

Notably, circumstantial evidence suggests that the ratios as implicitly applied are biased toward bigger schools. The general consensus seems to be that the bigger aimag and UB schools are better-off as compared to the soum and bag schools.<sup>5</sup>

4 Utility costs and transfers each constitute around 10 percent of the recurrent budget—the remaining 80 percent is, in principle, subject to allocation via the normative amounts. Over 95 percent of this is for salaries which are—as argued—not actually allocated using the normative allocation system. Therefore, only less than 5 percent of 80 percent, which is less than 4 percent of the total recurrent budget, is allocated using the normative amounts.

5 For the block grant (see next chapter), for example, the Ministry decided to take the aimag schools out of the pilot because they were less needed—a clear admission that something is wrong with the normative amounts. However, and although it must be argued that all schools suffer from the reduced operational budgets, it is generally accepted that bigger schools find it easier to cope under the present system.

### ***Planning and budgeting***

The current system leaves very little (if any) scope for school managers to actually plan and budget as they see fit for the particular circumstances of their school. This can be attributed to two main factors: (i) salary costs are a given for the staff deployed at the school using the set salary scales and levels for each individual, irrespective of the norm amounts, while (ii) for 'other variable costs,' the schools are given set percentages for allocating the given budget envelope over the sub-budget lines (and in fact, schools are provided with a spreadsheet that does this for them). For their "operational budget," schools are forced into a straightjacket that is supposed to fit all. As far as the salary bill is concerned, school managers may propose to retrench staff but have no incentive to do so as staffing norms are hardly enforced.

Schools often apply some sort of incremental budgeting, not only for the so-called fixed costs but also for salaries and "other variable costs." When schools are making their plans and budgets for the next financial year, they often do not yet know the new normative amounts so instead use incremental budgeting. In general, school principals pay little attention to the budgeting process and often complain that whatever they propose, their plans and budgets are overruled by the Aimag Education Offices.

Contrary to the original intent, the current system therefore gives rise to inefficiencies and other problems. The current system results in both inefficiencies and ample ex post budget modifications to regularize over-spending. At the same time, it stimulates "creative bookkeeping," as managers in a budgetary straightjacket are forced to make ends meet. Therefore, due to the way the system has been operationalized, it has not achieved the increased efficiency that in many countries has been the prime motive for introducing a voucher-type scheme.

### ***Availability of funds***

The current arrangement for cash flows results in further inefficiencies in the system. Once the sector budget for the Ministry (which implicitly includes the budgets for all individual schools) is approved, the funds are made available to schools on a monthly basis. The distribution of annual allocations over the months is usually done in a mechanical manner, splitting the total amount for each budget line into 2 half-yearly, 4 quarterly, or 11 or 12 monthly allocations, without taking any realistic cash flow planning into account. As a result, the often already relatively small allocations are split into even smaller (if not extremely small) amounts that would only make sense for regular local purchases. It does not allow for purchase of a single item or bulk purchases (which would make a lot of sense for remote schools) once or twice a year.

### ***Budget management***

Because schools only nominally prepare the school budgets, it is difficult to keep schools accountable, which in turn reduces the budget management function to an ex post administrative process. Funds for schools are kept with the local treasury offices, and whereas the schools act as "requisitioning" and "accounting officers," the treasury offices scrutinize all payment requests against the approved budget. With permission from the local treasury department, schools are allowed to "take credit" from other months or other budget lines, but this is a tedious process. However, frequent budget modifications are needed retrospectively because the initial (spreadsheet-generated) budgets do not reflect the actual situation in each school. In the end, the Ministry normally settles the bill.

**Table 2: Per student amounts for other flexible costs**

<b>Table 2a: Major school-types, 2008/13, in MNT'000</b>				
<b>Student</b>	<b>2008</b>	<b>2009 and 2010</b>	<b>2011</b>	<b>2012 and 2013</b>
Bag, primary only school, grade 1-5	46.6	23.3	35.0	41.8
Soum, Basic education, grades 1-5	21.8	10.9	17.4	20.9
Soum, Full secondary, grades 1-5	15.2	6.8	11.6	14.6
Aimag, Full secondary, grades 1-5	13.7	6.8	11.6	12.9

UB, Full secondary, grades 1-5	12.9	6.4	10.9	13.1
Soum, Basic education, grades 6-9	28.6	14.3	17.4	20.9
Soum, Full secondary, grades 6-9	21.4	10.7	12.2	14.6
Aimag, Full secondary, grades 6-9	19.2	9.6	11.6	12.9
UB, Full secondary, grades 6-9	16.1	8.1	10.9	13.1
Soum, Full secondary, grades 10-12	45.2	11.3	12.2	14.6
Aimag, Full secondary, grades 10-12	19.7	9.9	11.6	12.9
UB, Full secondary, grades 10-12	19.2	9.6	10.9	13.1

**Table 2b: A above, indexed for each year, Bag grade 1-5 =100**

Student	2008	2009 and 2010	2011	2012 and 2013
Bag, primary only school, grade 1-5	100	100	100	100
Soum, Basic education, grades 1-5	47	47	50	50
Soum, Full secondary, grades 1-5	33	29	33	35
Aimag, Full secondary, grades 1-5	29	29	33	31
UB, Full secondary, grades 1-5	28	27	31	31
Soum, Basic education, grades 6-9	61	61	50	50
Soum, Full secondary, grades 6-9	46	46	35	35
Aimag, Full secondary, grades 6-9	41	41	33	31
UB, Full secondary, grades 6-9	35	35	31	31
Soum, Full secondary, grades 10-12	97	48	35	35
Aimag, Full secondary, grades 10-12	42	42	33	31
UB, Full secondary, grades 10-12	41	41	31	31

**Table 2c: A above, indexed for each year and each school type**

Student	2008	2009 and 2010	2011	2012 and 2013
Bag, primary only school, grade 1-5	100	100	100	100
Soum, Basic education, grades 1-5	47	47	50	50
Soum, Full secondary, grades 1-5	33	29	33	35
Aimag, Full secondary, grades 1-5	29	29	33	31
UB, Full secondary, grades 1-5	28	27	31	31
Soum, Basic education, grades 6-9	100	100	100	100
Soum, Full secondary, grades 6-9	75	75	70	70
Aimag, Full secondary, grades 6-9	67	67	67	62
UB, Full secondary, grades 6-9	56	57	63	63
Soum, Full secondary, grades 10-12	100	100	100	100
Aimag, Full secondary, grades 10-12	44	88	95	88
UB, Full secondary, grades 10-12	42	85	89	90

**Table 2d: A above, indexed for each type of student, 2008=100**

Student	2008	2009 / 2010	2011	2012 / 2013
Bag, primary only school, grade 1-5	100	50	75	90
Soum, Basic education, grades 1-5	100	50	80	96
Soum, Full secondary, grades 1-5	100	45	76	96
Aimag, Full secondary, grades 1-5	100	50	85	94
UB, Full secondary, grades 1-5	100	50	84	102
Soum, Basic education, grades 6-9	100	50	61	73
Soum, Full secondary, grades 6-9	100	50	57	68
Aimag, Full secondary, grades 6-9	100	50	60	67
UB, Full secondary, grades 6-9	100	50	68	81
Soum, Full secondary, grades 10-12	100	25	27	32
Aimag, Full secondary, grades 10-12	100	50	59	65
UB, Full secondary, grades 10-12	100	50	57	68

## C. School-level budgets

### *Income*

Apart from the normative amounts which account for an estimated 95 percent or more of the income of public schools,<sup>6</sup> some income is generated from other sources, most notably parents. While officially education is free, voluntary contributions are allowed. In all schools, it is general practice that parents make “voluntary” contributions for refurbishment of the classrooms their children are in at the beginning of the school year. Parents may even contribute to cleaning materials that are kept by the classroom teacher. In 2010, the parent contribution was estimated to vary between 500-10,000 MNT per student per year (between USD0.40 and USD 7.50 at the time), with smaller amounts in remote schools in poor areas and higher amounts in UB city center schools.<sup>7</sup> Hence, compared to the normative amounts for other variable costs (for which the contributions are used), the parent contributions are negligible for rural bag schools but substantial for the larger aimag and UB schools (which, it has been argued, is a major part of the explanation of why the bigger schools find it easier to cope with the shrinking operational budgets).

**Table 3: Parent contribution as percentage to ‘other variable budget’ 2013, for different levels of parental funding**

		Norm amounts 2012/13 500	Average voluntary contribution per student, in MNT				
			1000	2500	5000	10,000	
Bag	Primary	41.8	1.2%	2.4%	6.0%	12.0%	23.9%
Soum	Basic/primary	20.9	2.4%	4.8%	12.0%	23.9%	47.8%
Soum	Full secondary	14.6	3.4%	6.8%	17.1%	34.2%	68.5%
Aimag	Full secondary	12.9	3.9%	7.8%	19.4%	38.8%	77.5%
UB	Full secondary	13.1	3.8%	7.6%	19.1%	38.2%	76.3%

Although third-party contributions may not be captured fully in school accounts, they do appear to be significant. Per public financial management (PFM) instructions, all revenues received by schools should be deposited in the school’s bank account within the Treasury Single Account system, which would hence capture all income and expenditure. However, most—if not all—of the contributions made by parents are directly managed by those parents so are not captured in school accounts. Nonetheless, even if the partly invisible or not centrally recorded third-party contribution is a few percentage points lower than the estimated maximum 5 percent of the total education budget, given the size of the operational school budgets (3.3 percent of the total in 2013), this is still a considerable amount (Table 3).

### *Expenditures*

Following a classification system used for the public sector as a whole, the expenditure side of school budgets is classified under three subheadings. As shown in Box 1, these subheadings are: (i) salaries and related costs; (ii) expenditures for other goods and services, which include both utility costs and the other variable costs and which are funded differently; and (iii) subsidies and transfers. Apart from the three utility items of heating, electricity, and water, the ‘other goods and services’ category is broken down into a number of sometimes minute—and for education, not so relevant—budget lines (including, for example, ‘postage’ and ‘working cloths’). Annex 4.1 shows the standard template used for at least the past decade, and Annex 4.2 provides examples of some school budgets.

<sup>6</sup> See e.g., PET study by World Bank (2002) and ADB/Gerhard van ‘t Land, Block grant design report (2010).

<sup>7</sup> The bigger and more urban schools also more regularly seem to receive gifts (such as a television set or other equipment) from alumni or other well-wishers.

**Box 1: Summary overview of the structure of school income and expenditure**

The table below summarizes the income and expenditure of individual schools as well as the relationship between income and expenditure. The government contribution consists of three parts: (i) the flexible allocation (to pay for salaries and provide a budget for other operational costs), (ii) the contribution for so-called fixed costs, and (iii) transfers. The government income categories are mirrored on the expenditure side of the budget, and any other income mainly serves to top up the budget for "other variable costs." Most parent contributions are not recorded in the school books and are managed by the parents on a classroom-by-classroom basis.

Income categories	Amount	Expenditure categories	Amount
<b>1. Government Contribution</b>			
1.1 Flexible allocation			
1.1.1 Flexible – salary costs		<b>1. Salaries and related staff costs</b>	
1.1.2 Other flexible costs		<b>2. Other operational costs *)</b>	
		2.1 Management related costs	
		2.2 Staff development	
		2.3 Classroom/Teaching materials	
		2.4 Sports competitions, etc.	
		2.5 Support services (cleaning, catering)	
		2.6 Furniture replacement	
		2.7 Maintenance and minor repair	
1.2 Fixed allocation		<b>3. Utility costs</b>	
		3.1 Heating	
		3.2 Electricity	
		3.3 Water	
1.3 Targeted (social) assistance		<b>4. Special programs / transfers</b>	
- Flexible allocation boarders		4.1 School food and lunch	
- Specific programmes		4.2 Schoolbooks, stationery, etc.	
<b>2. Own income</b>			
2.1 From core activities			
2.2 From non-core activities			
<b>3. From voluntary contribution</b>			
(parents, mining companies, other)			
<b>4. Local government contribution</b>			
Total Income		Total Expenditure	

\*) Exclusive of utility costs

These classifications (currently under revision) are not very suitable for budgeting against the main school tasks and objectives, namely (i) school management, (ii) running the school infrastructure, and (iii) delivering classroom education. In fact, several of the budget lines overlap (the same type of expenditure could easily be booked under different lines), which makes actual budgeting and expenditure non-transparent.

Although definitive conclusions cannot be drawn, a small sampling of school budgets provides insight into expenditure levels and how they may vary by type of school. Although the sample is too small to draw firm conclusions, some observations can be made about the school budgets presented in Annex 5 for a handful of different types of schools:

Heating costs are the major determinant of the share of utility costs in the overall budget and have an important bearing on the relative composition of the entire budget. Whether or not a school is connected to a grid for its heating largely influences the structure of its overall operational budget.

Only the UB city center school has some sizable part (1-3 percent) of its budget covered by third-party financing as recorded in its books. For all other schools, it is less than 0.5 percent and most often zero (at least as recorded, although the actual situation is likely different as discussed above).

The available data indicates that there is no direct relationship between student numbers and teacher establishment. In some cases, the number of teachers for a particular year decreased even if the student population increased. For the two smaller schools in the sample (few hundred students), the student-teacher ratio has for years been around 10:1 or below.

A particularly striking observation is that the budgets for individual budget lines are often very small. For example, the UB school, with almost 2,200 students, has a budget for the whole year of US\$285 for medicines (“the office of the nurse”), US\$650 for participation in sports competitions, and US\$2,895 for maintenance and repair. The figures are similar for the other aimag and soum schools in the sample, and such amounts are clearly insufficient given the price level in Mongolia.

## II. RECENT STUDIES TO IMPROVE THE PRESENT SYSTEM OF SCHOOL FINANCING

### A. Review of the school funding formulae (2012)

A recent study on education financing and budgeting made some concrete suggestions for revising the funding formula for general secondary education.<sup>8</sup> Stimulated by discussions on the allocation formula for the block grant and the interest it generated from the Ministry, the study was implemented by the Teacher College of Columbia University under the ADB-funded Financial Crisis Response Project. The proposals seek to increase both equity and efficiency. The study mentions that one weakness of the present system of normative amounts is that it does not take into account the remoteness of a school or particular student and school factors such as languages spoken at home, the number of students with physical or mental handicaps, and socio-economic status of the community. The formula for the block grant took into account some factors (notably remoteness and poverty), but it did not take into account any of the variables on student characteristics such as grades, language, or special needs.

In summary, the report proposes to allocate part of the total recurrent budget envelope across schools, notably the amounts for salaries and other variable costs.<sup>9</sup> It suggests splitting the total available amount according to pre-determined shares in five ‘watertight’ compartments that are allocated to schools according to different formulas and serve different expenditure categories (Table 4).

**Table 4: Summary of the proposed new allocation funding formula**

Envelope	Envelope size as % of total	Formula variables	Expenditure categories / Expenditure needs
1	58%	Weighted* student population	Salaries of both teachers and support staff
2	14%	Weighted* student population	Other variable costs (OVC)
3	10%	Weighted* number of boarding students	Dormitories
4	9%	School characteristics Distance to aimag center Distance aimag center to UB Connections to utility grids (electricity, heating, water & sewerage)	Salaries + OVC in a proportion 4:1 to be added to envelopes 1 and 2

<sup>8</sup> Moock and Batchimeg (2012).

<sup>9</sup> The report suggests that the other budget lines (such as for “fixed costs,” the tea program, and subsidies and transfers and textbooks) will remain outside of the allocation as proposed.

5	9%	Student characteristics Poverty Students with disabilities Language spoken at home	Salaries + OVC in a proportion 4:1 to be added to envelopes 1 and 2
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\* "Weighted" to take into account economies of scale-e.g., the first 500 students count for 1, the next 500 get a lower weight, the next 500 again a lower weight, etc. For dormitories, other classes are used.

The report also proposes that to increase efficiencies, school managers should become budget holders for their own budgets and be held accountable for them. It explicitly states, "Schools should be given considerable discretion as to how the funds are allocated across the various individual budget lines [in each of the three envelopes]. School managers will submit budget proposals that reflect their schools' needs. Schools will then be held accountable for executing their budgets as proposed and approved. Finally, once they know their budgets, schools will be expected to live within their means, and requests for supplemental allocations should be granted only in exceptional cases."

Reactions to the above proposals have been lukewarm likely due to their complexity, but a few simplifications seem quite feasible. A first simplification would be to reduce the number of envelopes to three (Table 5). The approach to economies of scale could also be simplified: the report presents rather complicated tables (with coefficients for the first, 2nd, 3rd, and 4th batch of 500 students) to reflect economies of scale, but the same could perhaps be achieved through a simple fixed amount per school, which naturally benefits the smaller schools and provides a gliding scale (rather than the abrupt change with the change of batch).

**Table 5: Simplified presentation (some variables added)**

Envelope	Envelope size as % of total	Formula variables	Expenditure categories / Expenditure needs
1	72.4%	(Weighted) student population Student characteristics Poverty Students with disabilities Language spoken at home	Salaries of both teachers and support staff
2	17.6%	(Weighted) student population School characteristics Distance to aimag center Distance aimag center to UB Connections to utility grids (electricity, heating, water & sewerage) Poverty (added) Nos. of classrooms (added)	Other variable costs (OVC)
3	10.0%	Weighted* number of boarding students	Dormitories

A further suggestion is to distinguish between (a) the process of allocating the budget envelope(s) and (b) the guidelines for planning and allocating that budget (Table 6). It could resemble the experience of the block grant, in which the allocations are based on proxies for "expenditure needs," while schools are also guided in the desired direction for their actual budgets through broad guidelines. Simulations (with different total budgets, different coefficients, and different weights) will need to be done and compared to present allocations to ascertain the feasibility of the proposed formula. However, given the current school financing practices as discussed above, it may be too early to include the salary component in the allocation formula, and applying the formula initially only for OVCs may be a more prudent approach.

**Table 6: Recurrent budget allocation formula – alternative proposal (based on Mook proposal and block grant experiences)**

Allocation of Budget envelopes			Planning / allocation guidelines	
Variable	Weight	Mainly proxy for ...	Schools with dormitories	Schools without dormitories
Fixed share	10%	Fixed cost	Maximum of 72.5% of budget for salaries	Minimum of 25% for OVC (which means max 75% for salaries)
Student numbers *	65%	Salary & OVC		
Students with disabilities *	3%	Salary		
Language spoken at home *	2%	Salary		
Distances	5%	OVCs **	Minimum of 5% for dormitories	
Number of classrooms (added)	5%	OVCs **		
Poverty	5%	OVCs **		
Number of boarding students	5%	OVCs **		
<b>TOTAL</b>	<b>100%%</b>			

\* These three variables could be taken separately (as in the Mook report), but it would also be possible and probably easier to make coefficients-e.g., a standard primary student counts for 1, a lower secondary student counts for 1.3, and a higher secondary student count for 1.5. Then for children with serious (and specified) handicaps, a factor of e.g., 1.5 could apply and a factor of e.g., 1.2 could apply for each primary school student who speaks a different language at home. The "composed variable" would then be given 70 percent of the total weight (and budget).

\*\* If the budgets are not too small (i.e. historical provision for the utility cost included in the total pool) so that schools have room to maneuver, utility cost could be included in the OVCs. Simulations will need to be done to confirm the feasibility of this suggestion.

## B. Study on funding for operation and maintenance costs (2012)

A second relatively recent study analyzed the budget provisions for operation and maintenance (O&M).<sup>10</sup> The study, which was also funded under the Financial Crisis Response Project, found that the available budgets for O&M at the school level are scattered across (and hidden under) various budget lines such as maintenance, replacement of small items, and even classroom materials (items 2.3 in Box 1 above). It noted that the management of O&M is equally scattered: school principals are responsible, but the support staff reports to the school accountant (the school's financial manager) while most of the actual maintenance is done on a classroom-by-classroom basis, with help of the parents as coordinated by the classroom teacher.

The report estimates that O&M budgets would need to triple or quadruple to make the budget for regular and routine maintenance meaningful. Depending on what is counted and what is not (e.g., support services), the budgets for O&M have comprised around 25-35 percent of OVC budgets.<sup>11</sup> With OVC budgets comprising around 3-4 percent of the total budget for secondary schools, the provisions for O&M are around 1 percent of the total budget or below (or more precisely, 0.91 percent for the 2013 budget). Based on the literature and corroborated by the views of some school principals, the report estimated that O&M budgets need to increase by a factor of 3 to 4, which means an increase in the O&M budget to 2-3 percent of the recurrent variable cost budget as it presently stands. The overall OVC budget would need to almost double from 15.0 billion MNT in 2013 to around 25-27.5 billion MNT, an increase of around USD 6 million which appears to be a feasible amount.

From an institutional and management perspective, the report suggests that all costs related to the management of school buildings be considered "utility management costs." This would include the costs

<sup>10</sup> van 't Land and Enkhsaikhan (2012).

<sup>11</sup> For the mentioned percentage, the O&M budget includes the sub-budget lines (a) support services, (b) furniture repair/replacement, and (c) repair and maintenance.

for support staff and all O&M as well as the utility costs. It would be clearly separate from the cost of “teaching” and “providing education” so would be a budget that reflects the expected outputs and objectives.

The report also proposes reallocating part of the overhaul maintenance budget as well as the budget for (new) furniture to the recurrent budget. Currently, the budget for periodic (or overhaul) maintenance is part of the investment budget. This budget is managed in complete isolation from the recurrent budget and under full control of the infrastructure unit in the Ministry. Given the spectacular growth of the investment budget in past years (which in itself is expected to lead to increased O&M), and compared to the stagnant or even declining O&M budget for schools, the report suggests reallocation of part of the overhaul maintenance budget and budget for (new) furniture to the recurrent budget. Hence part of the required increase in the recurrent OVC budget could be found in the investment budget.

The study on O&M in schools is relevant as there may be scope in the context of the impending decentralization process to transfer part of the responsibilities for investment budgets to the aimag governments. Such budgets normally belong to the meso level, and the allocations cannot be at the school level since schools need overhaul repair only once in so many years. At the same time, the national level is too far away to make allocation decisions and oversee implementation. The aimag level (with its education department, now working under the aimag government) would, in accordance with the new legislation, be the appropriate level to manage such budgets.

### III. INTERNATIONAL EXPERIENCES: SCHOOL FINANCING IN A DECENTRALIZED CONTEXT

In Mongolia, the number of private schools is relatively limited (17 percent of total) and mainly in urban areas. As in Sweden and the Netherlands, these schools receive allocations similar to those of public schools. Yet, and unlike the situation in both European countries, private schools are allowed to attract additional resources, which generally tends to widen the divide between public and private schools (as well as between rich and poor). Mongolia may be better served by promoting generic, undifferentiated provision of universal education by both private and public providers, which is ultimately a political choice.

In the international literature on school financing, much attention has focused on the trend toward devolving organizational, managerial, or financing decision-making to progressively lower levels of government. Since the 1980s, there has been a strong tendency to devolve functions, driven by reasons such as failure of the central government to be sufficiently responsive to citizens’ needs and regional differences, failure of centralized economic planning to deliver results, and an increasing demand for democratization where local communities can make decisions and control their own resources in accordance with local needs and priorities. Recent empirical research supports these considerations especially in sectors like education and health.<sup>12</sup>

In both high-income and developing countries, the general trend of decentralization has been accompanied by an increasing interest in greater choice in schooling options between public and private schools and diversification within public education. A distinct trend toward devolution of functions and decision-making authority to municipalities and/or school levels can be seen globally. Fiscal decentralization has in most cases gone hand in hand with devolution of authority in organizational, administrative, and staff matters. In many countries (e.g., Chile, Sweden, Netherlands), the authority to hire, dismiss, pay, and supervise teachers and other staff has shifted to local authorities. Other countries such as France and Mongolia have so far maintained central control over these functions.

In general, actual decision-making power at the school level is much greater in private schools. This is not surprising given that private education is largely self-financed or in some cases subsidized with block

<sup>12</sup> See Faguet, *Decentralisation and Development*, in *World Development*, Vol. 53, 2014.

grants, especially with regard to teacher compensation (salaries) only, leaving other decision-making in the hands of the institutions themselves.

School choice is often promoted as a means of increasing competition in the school system, which is believed to lead to efficiency gains. It is believed that by encouraging more private schools, vouchers will allow school managers to become innovative and thereby bring improvements to the learning process. Public schools, in order to attract the resources that come with students, will need to improve to keep up with private schools. Thus, school choice will lead to improved learning outcomes and increased efficiency.

Opponents claim that under a voucher system, private providers will be unaccountable to taxpayers and the public. Opponents sometimes claim that choice will lead to privatization, less public (government) control of education, and increased segregation. Claims of efficiency gains are also questioned. Both proponents and opponents tend to pick their evidence as it suits their line of argument, and in fact, it is almost impossible to compare across countries with very different systems.

One useful example to consider is the Dutch education system, which combines centralized education policy with decentralized administration and management of schools. Central control is exercised over both public and private schools. The system is characterized by a large category of central staff, many school advisory services and coordination bodies, a strong Inspectorate, and stringent regulations.

The Dutch system is relatively efficient, with high achievement levels and relatively low costs. Education in the Netherlands is free for the compulsory first ten years of schooling. At all levels of education, the Dutch government spends the OECD average (OECD 2009). Education spending as a proportion of GDP is 4.8 percent. To deal with disadvantage, a weighted funding formula is used. For every ethnic minority student, a school receives 1.9 times the amount paid for other children as extra funding for personnel. Native children from disadvantaged backgrounds receive 1.25 times the amount.<sup>13</sup>

#### **IV. IMPROVING SCHOOL FINANCING IN THE CONTEXT OF THE IBL 2011**

##### **A. The new budget law and expected changes in institutional arrangements**

For the second time in its recent history, Mongolia has entered into a process of decentralization with the introduction of the new budget law. Although aimag and soum councils have always existed, they have been quite dormant for a while. With budgets becoming available for aimag and soum governors (or rather aimag and soum governments) and a legislative and oversight role for the elected Khurals, the latter are expected to start playing a more prominent role in the allocation of resources and management of public service delivery at the subnational level.

In the IBL 2011, secondary education is described as a delegated function to be funded through a 'special purpose transfer' and hence not from the local government's general fund, but this is in fact not a major change. In other countries, such a grant would be called a conditional or sector earmarked grant, and the ministry providing the grant would normally set the guidelines for the use of the grant. The Ministry of Education has always been doing this, so it is not a significant change. For preparation of the 2013 and 2014 budgets, the only thing that actually changed was that the khurals (both aimag and soum level) approved the budgets for the schools, but all budgets were approved as proposed by the Ministry cum aimag Education Boards. Thus, and in accordance with the instructions of the new IBL, in actuality very little has changed.

The decentralization process is still in the very early stages, and the concepts of decentralized planning—such as planning by schools—have been interpreted very narrowly. Apart from establishing local governments as well as schools as budget units, little has been defined in terms of responsibility and accountability of the various parties. Furthermore, the division of actual service delivery tasks between

<sup>13</sup> Ritzen and others (1997); see Leuven et al. (2007) for an evaluation.

aimag and soum governments needs to be clarified further, also because (as is the case for education) most departments do not have any staff at the soum level. During the fieldwork, it became clear that understanding of the principles of decentralization and what it means for the roles of the various parties is fairly limited, in part because communication on the topic has been limited.

However, the education sector has a chance to help develop a meaningful constellation for decentralized service delivery. The discussion below provides a brief background on the principles of decentralization and the place of service delivery units (such as schools) in such a set-up. It then suggests a model for a multi-level governance and accountability framework that clarifies the roles of the various parties.

### **B. The principles and objectives of decentralizing decision-making powers**

In most cases, the first objective of deconcentration or devolution is to capture efficiency gains based on the subsidiarity principle. The subsidiarity principle is a management rule that within an organization—be it a government or private sector company—decisionmaking powers for distinguished and clearly identifiable functions are best placed at the lowest level possible. That level arguably has the best knowledge of what is needed (effectiveness in the allocation of resources) and is best placed to oversee the execution of the decision (increased efficiency). At the same time, sharing of power enhances participation and accountability.

A transfer of responsibilities to lower levels is to be coupled with the establishment of accountability relationships that provide the necessary “checks and balances” at the subnational and local level. As such, schools are monitored first by the parents, second by the local government (which in turn is accountable to their electorate, being the same citizens as those parents), as well as by the national level (usually through the regional and local offices).

Well-established divisions of tasks among the different layers and the different parties are also critical for accountability. Currently, there is some ambiguity at least between the roles of the aimag and soum governments vis-a-vis the individual schools. Since many soums only have one school and because there is no education office/staff at the soum level, it seems, at least for the moment, appropriate that soum governments only have a general oversight role. However, if any tasks are devolved, they should be devolved to the aimag government. At the same time, school managers, in consultation with the (S)PTA, have their own responsibilities and area of ‘jurisdiction’ that should not be encroached on by local politicians.

### **C. Implications and options for school financing**

To help ensure equal treatment of schools and equity among students, national guidelines at least for operational budgets under the mandate of school managers seem to be a logical option. In the IBL (2011), financing of education is through a conditional grant to aimag governments, and the Ministry has the legal mandate to prescribe how the available funds are allocated to schools. There are no reasons to change the present system of making allocations to schools, but an improved allocation formula could be used as proposed earlier.

On behalf of the Ministry and as a delegated function, the aimag (or UB city) education departments under the purview of the respective Khurals could be charged to monitor adherence to and achievement of minimum education standards and appropriate use of the financial resources (i.e. recurrent budgets as managed by the schools). As discussed above, soum (and district) governments are expected to play only a minor part by providing an enabling environment for the schools to operate, perhaps stepping in if problems arise.

Giving schools responsibility for the day-to-day operational budget in consultation with the (S)PTA while giving aimag governments responsibility for larger repair and maintenance items will foster a multi-layered, multi-stakeholder governance and accountability framework. Based on the functional assignments spelled out in the IBL, in which aimag and capital city governments have been given responsibility for

maintenance of locally owned public infrastructure, those governments could have clear tasks (with a corresponding budget) for periodic maintenance. As argued earlier, the budget for routine day-to-day (and even year-to-year) O&M should be included in the school budgets. However, budgets for periodic/overhaul maintenance could be made available and managed at the aimag level.<sup>14</sup>

Given the lack of overall clarity, the Ministry itself could facilitate communication on how it sees the roles of the various parties. Following the new IBL (2011), there has been some anxiety over the roles of the local governments and quite a bit of mis-communication (or more accurately, non-communication) regarding the roles of the parties under the new decentralized system. Under the IBL (2011), education remains a de-concentrated service for which the Ministry retains control and responsibility. Yet it should take advantage of the benefits of localized accountability and oversight-which are especially relevant in a country as vast as Mongolia-and the various roles should be communicated clearly. Table 7 provides a tentative overview of the roles of the different parties at the various levels and assumes (yet to be confirmed, as opinions differ<sup>15</sup>) that the aimag level will be the main decentralized service delivery level, aside from the schools themselves.

**Table 7: Responsibilities of different parties at different levels**

Level	Player	Roles and accountability
National	Ministry of Educations	Policy setting/setting (minimum) quality standards Request MoF for timely release of the conditional grants General oversight/inspection Accountable to Parliament
	MoF	All roles - both at national level and local level- related to the single treasury account Local treasury offices (as de-concentrated offices of MoF) to verify school expenditures against the approved budget and PFM rules (but not to question the validity of the payments as school managers are accounting officer)
Aimag / UB	Education offices	Oversight on general functioning of schools as a delegated function on behalf of and with guidance from the ministry No interference in day-to-day management of schools Responsible for school infrastructure and (as proposed in this report) will have a dedicated budget for that purpose Accountable to the aimag Khural
Soum/ district		Soum governments are a close 'partner' to the school(s) but have no direct supervisory or executive role Expected to support the school if/when they can but not to interfere in the school's day-to-day management Should not substitute for the SPTA
School	School Manager	The school manager is responsible for the school's operation (in consultation with the SPTA) The school manager is accountable to the SPTA, the aimag education department, and (through the latter) to the Ministry

<sup>14</sup> Such allocations could be made on the basis of a rather straightforward formula based on mainly the student numbers, with a small consideration for the actual capital stock to be maintained.

<sup>15</sup> For the Local Development Fund, for example, one of the new main elements of the IBL (2011), a lot of attention is given to the Soum/District level even in the absence of a full-fledged technical administration at that level. Hence over the years, either the administration at this level is to be enhanced, or more functions will need to fall back on the provincial level. These are issues to be clarified by government as the decentralization process unfolds further. In the meantime, and given the present situation regarding offices and staffing, this report takes the position that aimags will be the nuclei of decentralized service delivery for all those services other than municipal services in the soum centers.

#### D. Possible improvements to school financing irrespective of the IBL (2011)

The actual implementation experience with the system of normative amounts and recommendations made in various studies prior to IBL (2011) suggest some broad directions for improving the system of school funding:

As a starting point to improve planning and monitoring of the school budget, the chart of accounts could be reviewed. The presently used budget classification is outdated in its choice of words, while budget lines do not reflect outputs or any management structure.

Table 8 suggests a revised, more output- and management information-oriented grouping of existing budget lines. The costs of teaching staff are separated from the costs of the support staff, while all costs related to the running of the school building are grouped together as “cost of utility management.” The cost for “delivering education” is made visible through salaries and teaching materials. The chart recognizes the need for teacher development and, by singling out such a budget line that may come under pressure when schools are given discretion on their budget, makes it easy to monitor.

Because prescribed one-size-fits-all budgets are highly inefficient, school managers must be given the allocation as a budget envelope along with discretion over the allocation of at least part of their budgets.

As discussed earlier, part of the capital investment budget for overhaul maintenance could be reallocated to the recurrent budget.

It has been suggested that using (or adding) objective variables that are proxies for expenditure needs could make the system of allocating the recurrent budget to schools more transparent and fair. A more transparent system of allocations can still take the shape of a voucher or use an allocation formula to allocate the available budget across schools. The latter method appears to allow a much more gradual allocation, taking the different characteristics of each school into account, but some modeling would be needed to get the total budgets and formula right.

When opting for a formula-based system, the amount could be made available as one budget envelope or as several budget envelopes, depending in part on the level of discretion that will be given to schools. If schools will not be given the power to hire and fire teachers or the freedom to introduce multi-grade teaching to save costs, there is little point of making teacher salaries part of a discretionary school budget (since with student/teacher norms, that budget becomes a given). In such a situation, a first intermediate step in improving the situation could be to:

Provide schools with a budget envelope for teacher salaries, based on the student/teacher norms.<sup>16</sup>

Allocate the operational cost budget (items 2-6 in Table 8) to schools according to a formula and give schools full discretion over this budget (including the hiring and firing of support staff) but set some general guidelines for minimum and maximum percentages following policy objectives (e.g., a minimum for teaching materials and maintenance) and sound PFM principles (e.g., maximum for overhead and teacher development).

If the budgets made available are not too stringent (i.e. two times the present other variable budget, with some extra resources for O&M-to be obtained through budget re-allocation from the investment budget and the amounts now used for fixed costs), it may be possible to include the provision for utility costs in the envelope (as schools, whether on a grid or not, will have sufficient scope to “make ends meet”). This would need to be confirmed through simulations.

<sup>16</sup> But simultaneously mechanisms are to be put in place that if a school is above the norm for more than one year, some teachers are to be either re-deployed or laid off. But the proposal as made leaves the handling of this for the moment with the Ministry in order to avoid transferring too much discretion at once.

All the data available on school characteristics and past years' allocations to schools could be used for simulations to determine the extent to which certain formulas would yield similar but more fine-tuned results compared to the present allocations. At the same time, it should be kept in mind that with the same total budget, a better (i.e. more precise and fairer) allocation mechanism will have "winners" and "losers" depending on the objectives set. For example, if a variable for distance is included, naturally UB and aimag schools are bound to lose in favor of bag and soum schools.

## V. SUMMARY OF RECOMMENDATIONS: A ROAD MAP

### *Budget discretion for schools and school managers*

To realize efficiency gains, it is imperative that schools be allowed to make their own budget (within the given budget envelope and broad guidelines that may be issued by the Ministry) and be held accountable for it. Or to slightly rephrase Mook/ADB (2012b), "Schools should be given considerable discretion as to how the given budget envelope is allocated across the various individual budget lines. School managers will thus be allowed and expected to submit budget proposals that reflect their schools' needs and circumstances and Education offices and Ministry should respect the choices of the schools as long as they play by the rules. Schools will subsequently be held accountable for executing their budgets as they proposed and as approved and for meeting the required minimum quality standards. Schools will be expected to live within their means, and requests for supplemental allocations should be granted only in very exceptional cases."

### *Review the chart of accounts to reflect the policy choices*

To enable parties like the PTAs, Education Departments, and Ministry to monitor school expenditure properly and keep them accountable, budgets must be transparent and straightforward. While the budget classification of the Ministry of Education needs to fit into a wider government budget classification system, the classification for schools should be meaningful and reflect the main tasks of schools. The revised chart of accounts proposed in Table 8 above still has most of the present sub-budget lines, only the headings and groupings have been changed. Hence, with relatively simple modifications, more useful management and monitoring data can be obtained.

### *Review the budget allocation formula for OVCs*

To help ensure that students in all schools across the country have access to education that meets the same minimum standards, more factors need to be taken into account in determining how resources will be allocated across schools. While the current system of norm-based amounts allows for some differentiation according to "expenditure needs," the persistent (and understandable) search for simplifications has made the allocation system too "crude" to do justice to reality. Other factors such as children with special needs, distance to the aimag capital and to UB as a proxy for price levels, and poverty as a proxy for the capability of parents to contribute should be included. Based on a recent study on school financing and on the experiences with the school block grant, an OVC budget allocation formula (to "share the cake") and budgeting guidelines are proposed in Table 9.

**Table 9: Proposed OVC allocation formula and budgeting guidelines.**

Allocation of OVC budget envelopes		Planning / allocation guidelines	
Variable	Weight	Schools without dormitories	Schools with dormitories
Fixed share	10%	Minimum of 25% for teaching materials	Minimum of 24% for teaching materials
Student numbers, with coefficients *	70%		
Distance to Aimag center	3%	Minimum of 60% for facility management	Minimum of 57.5% for facility management
Distance to UB	2%		
Number of classrooms	5%	Minimum of 60% for facility management	Minimum of 4.5% for dormitories
Poverty	5%		
Number of boarding students	5%		
TOTAL	100 %		

\* E.g., a standard primary student counts for 1, a lower secondary student counts for 1.3 and a higher secondary student count for 1.5. For children with serious and specified handicaps a factor of e.g., 1.5 could apply and a factor of e.g., 1.2 for each primary schools student that speaks a different language at home (even though the latter variable is more a proxy for extra salary costs than for OVCs). Coefficients as well as the proposed weights to be confirmed by simulations.

If the thus-allocated OVC budgets are substantial, simulations could be undertaken to test whether utility costs should be included as part of the OVC (as per the proposed chart of accounts). If not possible for “heating” (because whether the school has a grid connection is too much of an influence that can not be captured by the formula), at least water and electricity (which are variable costs for which schools can economize if they choose to do so) should be included under OVCs. There is no reason for singling out these two budget lines from the OVCs.

Making teachers’ staff salaries part of the allocation formula is considered premature. One reason is that schools have had very little experience with budget discretion and budget management and have no experience with direct HR management. A second and more important reason is that the current levels of teacher-staff establishment appear (too) high and the student-teacher ratio too low, partly because norms have not always been applied and partly because creative methods to optimize teacher load (such as multiple grade teaching and teachers teaching multiple subjects) were often considered unacceptable. It would be inappropriate to offload the burden of regularizing this to schools, so management of the teacher salary bill should remain centralized for the moment. Together with the education offices, the Ministry could first align the actual situation with the norm and improve the indicators before handing over to the schools. However, as per the chart of accounts proposed above, it is suggested that all support staff be paid under the formula-allocated OVCs and hence that school managers start gaining relevant experience and have the incentive to economize on the use of support staff (so the thus freed-up money can be used for other purposes).

The simulations to be done will have to be analyzed carefully, and in the case of (unexpected) big changes for particular schools, mitigating measures may need to be taken to facilitate the transition. As noted above, with a given budget, every change in the allocation system will have winners and losers. Some schools will get more while others get less. However, the pain may be partly relieved if the total budget for OVCs is increased, as proposed below.

### ***Increase the budget envelope for OVCs***

Dwindling budgets (especially in real terms) for OVCs, which are the actual operational school budgets, have put schools and school managers in a dire position and need to be rectified. It has been suggested that the overall envelope for OVCs (exclusive of utility costs) be increased to a level of at least MNT 27.5 billion—a 65 percent increase compared to the 2014 budget. Part of this budget should be used for O&M, and as such, part of the increase could be found in the present “infrastructure budget” which includes provisions for school maintenance.

***“Unpack” the investment budget and see what can be decentralized.***

The recurrent and investment budgets could be better linked. The recurrent and investment budgets for primary and secondary education are prepared and managed in separate “silos.” Yet the investment budget, which has seen spectacular growth over the past years, includes elements that come close to operational maintenance (such as the provision for furniture and the provision for routine maintenance). While periodic overhaul maintenance is also a normal feature in any maintenance schedule, deferred routine maintenance leads in the end to higher overhaul maintenance costs. Better provisions for routine O&M in school budgets will bring savings on the overhaul maintenance budget.

Decentralization of elements of the present investment budget to the schools, aimag, and capital city governments should also be explored. As proposed above, the budget could be decentralized to the schools to increase the OVC envelope, while periodic and overhaul maintenance could be decentralized to the aimag and capital city governments. Keeping the entire investment budget (including the provision for more complicated maintenance) at the central level is neither practical nor responding to the spirit of the IBL (2011).

***Provide the aimag and capital city governments with a maintenance budget***

Part of the current investment budget for overhaul maintenance should be made available as budget envelopes (conditional school maintenance grant) to local governments. As per the new budget law, the aimag and city governments are responsible for maintenance of public buildings. As recommended above, schools are supposed to take care of routine maintenance, provided their OVC budget is sufficient. However, periodic or even overhaul maintenance cannot be avoided once in a while, which by its nature will be beyond the scope of the regular annual OVC budgets of individual schools.

All of the above recommendations are in line with the principles of decentralization. As such, the entire set of recommendations is expected to help put in place a local governance framework for local service delivery with the involved participation of—and accountability to—the recipients. This can happen both directly through involvement in the discretionary space for school management and indirectly through the empowered local Khurals.

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## ANNEX 4.1

**Table 4.1a: Amounts per pupil for 'flexible' capitation grant, '000, FY 2008**

Location	Type of school	Salary & related costs			Other variable costs			TOTAL		
		Gr 1-5	Gr 6-9	Gr 10-12	Gr 1-5	Gr 6-9	Gr 10-12	Gr 1-5	Gr 6-9	Gr 10-12
Bag	Primary	333.1	-	-	46.6	-	-	379.7	-	-
	Primary	249.8	-	-	37.9	-	-	287.7	-	-
Soum centre	Basic	178.5	277.8		21.8	28.6	-	200.2	306.4	-
	Full secondary	166.6	240.8	253.5	15.2	21.4	45.2	181.7	262.2	298.6
Aimag centre	Primary	166.6	-	-	15.2	-	-	181.7	-	-
	Basic	158.6	229.3	-	15.2	21.4	-	173.8	250.7	-
	Full secondary	158.6	229.3	233.9	13.7	19.2	19.7	172.3	248.6	253.6
UB	Primary	158.6	-	-	13.7	-	-	172.3	-	-
	Basic	158.6	229.3	-	13.7	19.2	-	172.3	248.6	-
	Full secondary	145.7	209.7	220.7	12.9	16.1	19.2	158.6	225.9	239.8

Source : MEDS

**Table 4.1b: Amounts per pupil for 'flexible' capitation grant, '000, FY 2009 & 2010**

Location	Type of school	Salary & related costs			Other variable costs			TOTAL		
		Gr 1-5	Gr 6-9	Gr 10-12	Gr 1-5	Gr 6-9	Gr 10-12	Gr 1-5	Gr 6-9	Gr 10-12
Bag	Primary	305.9	-	-	23.3	-	-	329.2	-	-
	Primary	229.4	-	-	19.0	-	-	248.4	-	-
Soum centre	Basic	163.8	254.2		10.9	14.3	-	174.7	268.5	-
	Full secondary	152.9	221.1	232.7	7.6	10.7	11.3	160.5	231.8	244.0
Aimag centre	Primary	151.2	-	-	7.6	-	-	158.8	-	-
	Basic	144.0	208.2	-	7.6	10.7	-	151.6	218.9	-
	Full secondary	144.0	208.2	212.3	6.8	9.6	9.9	150.8	217.8	222.2
UB	Primary	142.5	-	-	6.8	-	-	149.3	-	-
	Basic	142.5	206.0	-	6.8	9.6	-	149.3	215.6	-
	Full secondary	130.7	188.3	198.2	6.4	8.1	9.6	137.1	196.4	207.8

Source : MEDS

**Table 4.1c: Amounts per pupil for the 'flexible' capitation grant, '000, FY 2011**

Location	Type of school	Salary & related costs			Other variable costs			TOTAL		
		Gr 1-5	Gr 6-9	Gr 10-12	Gr 1-5	Gr 6-9	Gr 10-12	Gr 1-5	Gr 6-9	Gr 10-12
Bag	Primary	397.7	-	-	35.0	-	-	432.7	-	-
Soum centre	Primary	298.3	-	-	28.5	-	-	326.8	-	-
	Basic	213.0	331.7	-	17.4	17.4	-	230.4	349.1	-
Aimag centre	Full secondary	198.8	287.5	302.6	12.2	12.2	12.2	211.0	299.7	314.8
	Primary	196.7	-	-	12.9	-	-	209.6	-	-
	Basic	187.3	270.7	-	12.9	12.9	-	200.2	283.6	-
UB	Full secondary	187.3	270.7	276.1	11.6	11.6	11.6	198.9	282.3	287.7
	Primary	185.3	-	-	11.6	-	-	196.9	-	-
	Basic	185.3	267.7	-	11.6	11.6	-	196.9	279.3	-
UB	Full secondary	170.1	244.9	257.6	10.9	10.9	10.9	181.0	255.8	268.5

Source : MEDS

**Table 4.1d: Normative amounts 2012 and 2013 / simplified presentation**

Location / Type of school	Salary & related costs			Other variable costs			TOTAL		
	Gr 1-5	Gr 6-9	Gr 10-12	Same for all concerned grades			Gr 1-5	Gr 6-9	Gr 10-12
Bag		556.8	-	-	41.8	(Grades 1-5)	598.6	-	-
Soum	Primary & Basic	298.3	464.3	-	20.9	(Grades 1-9)	319.2	485.2	-
	Full secondary	278.3	402.5	423.6	14.6	(Grades 1-12)	292.9	417.1	438.2
Aimag centre *)		262.2	379.1	386.5	12.9	(Grades 1-12)	275.1	392.0	399.4
UB		238.1	342.8	360.6	13.1	(Grades 1-12)	251.2	355.9	373.7

Source : MEDS, simplified presentation by the authors

## ANNEX 4.2: RECENT INITIATIVES AND STUDIES ON IMPROVING SCHOOL FINANCING

Over the past few years, a number of initiatives and studies were conducted in relation to school financing, especially under the ADB-funded “Education for the Poor–Financial Crisis Response Project.” Three initiatives/studies are briefly described below as they can help inform improvements to the present system of school financing.

### *Education block grant (2011–2012)*

In 2010, shortly after the worldwide financial crisis, the Ministry of Education designed a block grant for schools in collaboration with ADB. The immediate objective was to roughly double the available amount for “other variable costs” while at the same time stimulate the participatory involvement of the wider school community (teachers, parents, students) in management of schools through school councils, which were still largely dormant then. The major novelty in the design and implementation of the grant was (i) its allocation through an expenditure needs-based and income-equalizing formula, combined with (ii) the discretion for schools to make their own investment decisions (following consultations with the school councils). The block grant was operational for two years, and in its second year, benefited 50 percent of all public soum and bag schools in the country<sup>17</sup> located in the nine least developed aimags.

### *Allocation formula*

The total funds available (established on the basis of, on average, roughly doubling the existing budget for other variable costs) were divided among the eligible schools according to several variables and relative shares. These were:

<b>Variable</b>	<b>weight</b>
Fixed amount per school	10%
Relative number of enrolled students	25%
Relative number of classrooms	20%
Relative number of boarding students	20%
Relative distance of the school to the aimag center	5%
Soum poverty index (relative number of ‘poor’ students)	<u>20%</u>
	<b>100%</b>

Most of the variables were proxies for expenditure needs, while the poverty variable reflected the possibility of the school to mobilize additional sources of income (mainly through parent contributions). Overall, the formula was poverty-biased in favor of the smaller and more remote schools (through the fixed amount, the variable for distance, and the indicator on classrooms, which favored schools with a lower student/classroom ratio).

In the second year for the block grant, the average allocation was US\$8,080 per school (for a total of 192 schools), but the actual allocation per school varied roughly between US\$3,000–20,000 based on the formula. The lower amount was for a bag school with 68 students, while the latter was for a soum school with over 1,400 students (of which 550 boarding students) located 160 kilometers away from the aimag center. In the same year, the allocation per student varied from almost US\$7 (for a soum school with over 2,400 students) to US\$230 (for a bag school with only 17 students, 16 of which were boarding). Despite these huge differences in amount per student, the total amount for the soum

<sup>17</sup> In order to have more aimags in the pilot, the Ministry decided to eliminate aimag schools from the pool of eligible schools. The argument was that these schools are already better off, which appears to be an implicit confirmation that the normative amounts were not set correctly.

school with over 2,400 students was US\$16,500, while the bag school with 17 students received less than US\$4,000. For all schools combined, the spread was much more modest: for the 31 bag schools (which in total served slightly over 3,000 students), the average amount per student was US\$46.20, while for the soum schools, the average was US\$16.00—more or less a factor of three (Table 5.1).<sup>18</sup>

**Table 5.1 : Summary data block grant allocation 2012, by school type**

	All schools	Bag schools	Soum schools
Base data:			
Number of schools	192	31	161
Number of students	91,339	3,052	88,287
Total amount block grant 2012 (USD)	1,551,000	140,900	1,410,100
Allocation per school (USD):			
Minimum amount per school	3,067	3,067	3,278
Maximum amount per school	20,055	11,867	20,055
Average amount per school	8,078	4,545	8,758
Resulting amounts per student (USD):			
Minimum amount per student	6.8	20.7	6.8
Maximum amount per student	230.2	230.2	109.3
Average amount per student	17.0	46.2	16.0

#### Box 5.1: Block-grant eligible activities

<b>1. Management related costs (communication, stationery, travel, etc.)</b>
22301 - Stationery
22303 - Postal expenses/communication:
22304 - Travel
<b>2. Staff development / training (journals, periodicals, etc)</b>
22306 - Publication/books:
<b>3. Support services (cleaning, catering)</b>
22311 - Uniforms support staff and soft apparel
<b>4. Sports/Music competitions, etc</b>
22318 - Provision for participating in competitions
<b>5. Classroom / Teaching materials</b>
22307 - Classroom materials (incl chalks etc, wall maps, reference books, etc )
<b>6. Maintenance and minor repairs (classrooms, canteens, boarding facilities)</b>
22317 - Recurrent Building maintenance
<b>7. Replacement of Furniture &amp; Equipment (classrooms, canteen, dormitories)</b>
22330 - Small item replacement

Compared to the case of normative amounts, the block grant allocation formula allowed for a bigger spread and was applied more transparently. While at the aggregate level both allocation systems converged in terms of costs differentials for soum and bag schools, the formula used for the block grant allowed for (and effectively created) a much bigger spread. Moreover, the block grant allocations were arrived at in a much more transparent manner, while it is not very clear how the normative amounts are established. For the block grant, all allocations as well as the underlying data were transparently communicated to all parties and generally considered to be “fair.”

#### *Investment menu*

For the block grant, schools could allocate the resources across all the existing sub-budget lines<sup>19</sup> (within the budget envelope as established by the formula described above), with a few restrictions. These restrictions were: (i) at least 25 percent of the budget was to be used for teaching materials (item 5 in Box 5.1) and (ii) at least 60 percent was to be used for maintenance (items 6 and 7). This implicitly meant that only 15 percent was available for the other sub-budget lines.

<sup>18</sup> This is, surprisingly or not, the same factor as the normative amounts for other variable costs for *soum* full secondary and *bag* schools, respectively.

<sup>19</sup> All budget lines in the standard template were eligible only with the exception of “bonuses or related items,” so schools could not use the block grant to top up staff salaries but were otherwise completely free within the existing arrangements.

### *School perceptions of experience from the block grant*

Both schools and the Ministry considered the block grant to be “successful,” especially because it provided schools with some degree of discretion, unlike the current rigid system of school funding. As summarized in Table 5.2, the block grant allowed schools to plan and budget purposefully for activities of their own choice. Schools may have seen this as a sign of trust, which was highly appreciated and generally used responsibly.

**Table 5.2: Current system of variable cost funding vs. system under the block grant**

	<b>Current system variable cost funding</b>	<b>Block grant funding</b>
Total available budget	Over the past five years, the total budget for other variable costs has deteriorated in real terms.	Schools were given a discretionary budget that, on average, doubled the amount available for those budget lines that make the school’s operational budget.
Planning and discretion	Because the budget for other variable costs has become small, it only supports very basic items, and no real planning is involved.	The block grant provided schools with a budget envelope that allowed them to purposefully engage in a planning and budget process.
Instalments	Approved budgets become available in monthly instalments itemized by sub-budget lines. Amounts are so small that they must lead to huge inefficiencies, especially for remote soum schools (e.g., the equivalent of US\$100 per month for stationaries for an entire school, or US\$200 for books once every quarter.	The block grant was made available to each school in two instalments, thus allowing works or procurement of goods of an amount well above the monthly allocations.

The block grant thus offers lessons of experience for revising the current system of school financing. The voucher system and the formula-based allocation are two distinct methods—the voucher system is (at least most often) based on the principle of attaching a ‘normative price tag’ to each (type of) student, while the latter allocates a given budget envelope across schools. In practice, however, and because the voucher system has to fit within a given envelope, the two systems come close together in the sense that they seek to find an objective way to allocate a given budget envelope across schools in a fair and equitable manner.

## ▲ CHAPTER 5: TEACHERS' SALARIES AND KEY ASPECTS OF TEACHERS' MANAGEMENT

This chapter reviews teacher management in Mongolia as well as examines experience in other countries to help inform reforms going forward. It also discusses the implications and likely impact of the new Integrated Budget Law (IBL) on teacher management. Section I reviews teacher management in the context of six key government objectives and compares elements of Mongolia's system to those of other countries. The section then goes on to review 24 factors that seem to be central to teacher management in Mongolia and introduces the concept of an accountability framework for teacher management. Section II examines teachers' wages and considers the question of an "appropriate" wage for teachers in Mongolia. It also discusses the so-called salary "compression ratio." Section III briefly examines the possible impact of the new IBL on teacher management. Section IV looks at global experience and discusses the importance of linking teacher management policy to measures of student learning and personal development gains. It briefly reviews the empirical literature to identify relationships that are supported consistently by research and those that are not, then closes by presenting eight principles that are supported by research and widely recommended. Section V concludes by proposing key areas for further action to improve teacher management in Mongolia.

### I. TEACHER MANAGEMENT

#### A. Overview of objectives and data

This section discusses key questions and issues related to teacher management in Mongolia. It focuses on teacher management in preschool and general secondary education (which refers to the primary and secondary grades). Tertiary education is discussed only in relation to pre-service teacher training. Vocational education, adult non-formal education, and other education sub-sectors are not included.

The analysis utilized several sources of information related to teacher management in Mongolia. In November 2012, the Ministry of Education and Science (MES) collected data on staffing and wages (including bonuses, benefits, and allowances) at some preschools and all general secondary schools.<sup>1</sup> Responses were received from 434 schools, providing data on 41,462 staff. In 2011, the World Bank and UNESCO collected data on teacher management in Mongolia, using the SABER-teacher methodology and instruments. The analysis presented here also utilized data on education and teacher management provided by the World Bank, ILO, and OECD.

In Mongolia, the education system has multiple objectives, with the following appearing most prominently in Government policy documents:

- Maintaining the safety, welfare, and health (both physical and mental) of children.
- Learning and mastering the skills and competencies defined for each grade in the national curriculum. Without these competencies, a child cannot be successful in the remaining years of general education and beyond.
- Promoting the personal development of each individual student by enabling every child to identify at least one activity in which he/she can excel and from which each student gains pride and self-respect. Notably, this particular objective receives greater emphasis in Mongolia than in most other countries.

<sup>1</sup> In Mongolia, the term "general secondary" includes both primary and secondary school. Data from three preschools were also included.

- Developing a need for information and appreciation of learning that will continue not only through their formal education but also for the rest of their lives.
- Improving equality of access and outcomes and avoiding policies that increase inequality. Article 6.4.7 of the IBL states that “any activities, programs, and measures to be undertaken by the state...shall not create inequality for current and future generations.”
- Participating in international assessments to assure that the education system produces graduates who will be competitive in a global economy.

As a starting point, the number of teachers per 1,000 students in Mongolia is compared with those of other countries. Table 1 shows pupil/teacher ratios (columns A and B) and the number of teachers required per 1,000 students (columns C and D) for Mongolia and five groups of comparator countries. This estimate of teachers per thousand pupils is simply 1,000 divided by the pupil/teacher ratio. Column E shows Mongolia’s use of teachers as a percentage of each comparator group; the (unweighted) average of comparator countries is shown at the bottom of Column E. Graphs with details for selected countries are provided in Annex 6.

For preschool (Panel A), Mongolia requires (or at least uses) far fewer teachers per thousand students than any of the comparator groups. For example, lower middle-income countries require 53.8 teachers per 1,000 preschool students, while Mongolia only requires 38.1. Mongolia uses fewer preschool teachers than any of the five comparator groups and only 55 percent of the average of the five groups. If the comparator countries are similar in terms of students and their learning outcomes, it could be said that Mongolia is “more efficient” in managing its teacher force at the preschool level.<sup>2</sup>

Primary education (Panel B) shows a similar pattern, although the differences are less pronounced than those seen for pre-primary. Compared to four of the five groups and to the average of comparator countries, fewer primary teachers are needed in Mongolia. However, Mongolia’s use of primary teachers is 13.7 percent higher than the average of lower-middle-income countries.

This pattern reverses in secondary education, with Mongolia using more teachers than comparator countries (except for those influenced by the Soviet system). It is not clear why this is the case. In all groups, the number of teachers in secondary is higher than in primary—this makes sense as there is need for greater teacher specialization at the secondary level.

<sup>2</sup> This concept of “efficiency” does not include a measure of cost. If teachers’ salaries are higher in Mongolia, this would offset part of the efficiency gain.

**Table 1: Teaching staff relative to comparable countries**

Comparistom Groups	PANEL A: Pre-school: Teachers per 1,000 students				Mongolia % of Comparator Teachers/1.000
	Pupil/Teacher Ratio		Teachers per 1,000		
	[A]	[B]	[C]	[D]	
		Average		Average	[E]
	<u>Mongolia</u>	<u>Others</u>	<u>Mongolia</u>	<u>Others</u>	
Lower middle-income countries	26.3	18.6	38.1	53.8	70.8%
Former Soviet republics	26.3	9.3	38.1	107.5	35.4%
Finance study countries	26.3	9.7	38.1	103.1	36.9%
CEECIS study countries	26.3	13.5	38.1	73.9	51.5%
East Asia teacher study	26.3	21.1	38.1	47.4	80.4%
		Non-weighted average of averages			55.0%

Comparistom Groups	PANEL B: Primary: Teachers per 1,000 students				Mongolia % of Comparator Teachers/1.000
	Pupil/Teacher Ratio		Teachers per 1,000		
	[A]	[B]	[C]	[D]	
		Average		Average	[E]
	<u>Mongolia</u>	<u>Others</u>	<u>Mongolia</u>	<u>Others</u>	
Lower middle-income countries	34.1	38.8	29.3	25.8	113.7%
Former Soviet republics	34.1	19.0	29.3	52.6	50.7%
Finance study countries	34.1	14.4	29.3	69.4	84.3%
CEECIS study countries	34.1	17.7	29.3	56.5	64.4%
East Asia teacher study	34.1	21.1	29.3	47.4	74.6%
		Non-weighted average of averages			74.8%

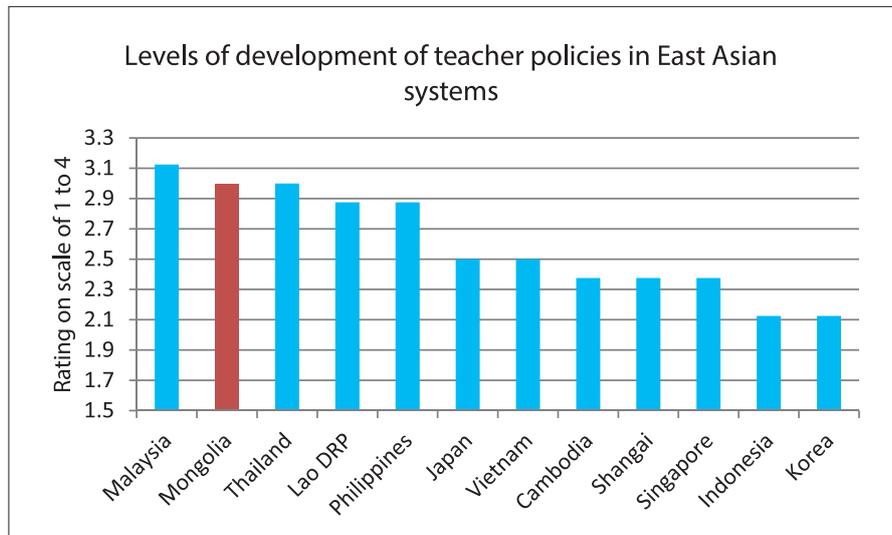
Comparistom Groups	PANEL C: Secondary: Teachers per 1,000 students				Mongolia % of Comparator Teachers/1.000
	Pupil/Teacher Ratio		Teachers per 1,000		
	[A]	[B]	[C]	[D]	
		Average		Average	[E]
	<u>Mongolia</u>	<u>Others</u>	<u>Mongolia</u>	<u>Others</u>	
Lower middle-income countries	14.5	20.6	69.0	48.6	142.1%
Former Soviet republics	14.5	18.3	69.0	54.6	66.9%
Finance study countries	14.5	12.2	69.0	82.0	137.2%
CEECIS study countries	14.5	17.7	69.0	56.5	75.4%
East Asia teacher study	14.5	18.3	69.0	54.6	132.7%
		Non-weighted average of averages			110.9%

Source: World Bank EdStats – most recent year available.

In a 2011 study of factors affecting education quality, the findings for Mongolia were very positive. While there is a great deal of international data on factors that can be “counted” easily (e.g., number of schools, students, teachers), comparative data on teacher management policies is relatively limited. In 2011, UNESCO and the World Bank conducted a pilot study of factors affecting education quality in 12 East Asian countries.<sup>3</sup> This exercise included the use of new tools to assess teacher management: the SABER-teacher module (Patrinos, 2012). As shown in Figure 1, Mongolia ranked 2nd out of the 12 systems examined in the study. Raw data from this study is used extensively throughout this chapter.<sup>4</sup>

3 In addition to the 11 countries, the SABER instrument was administered in Shanghai, yielding a total of 12 sub-studies: Cambodia, Indonesia, Japan, Lao PDR, Malaysia, Mongolia, the Philippines, Shanghai, Singapore, South Korea, Thailand, and Vietnam (UNESCO/World Bank, 2012).

4 The data file of SABER data for Mongolia is referenced as World Bank (2011c). These are unofficial, “raw” data and should only be considered as being indicative.

**Figure 1: Ratings of Teacher Policies in East Asia**

Source: Vegas (2012).

## B. Factors affecting preschool and general secondary teachers

A total of 20 factors were identified as central to teacher management in Mongolia and are discussed below. The IBL will affect teacher management primarily through teacher hiring and placement. In most aspects, teacher management of preschool and general secondary teachers is nearly identical in the public system, so unless otherwise noted, statements apply to both groups. Three broad questions are addressed:

- What factors determine who will be teaching?
- What factors influence the teacher's effectiveness and use of time?
- What factors determine whether and when the teacher will leave the teaching profession?

### *What factors determine who will be teaching in a classroom?*

#### 1. Government policy on licensing teachers

The Government requires a bachelor's degree in education and certification as a pre-condition for employment as a teacher. Over 99 percent of teachers have bachelor's degrees and are certified, with the few exceptions being in rural areas (World Bank, 2011b). These requirements serve as the main "gatekeeper" for entry into the teaching profession. Mongolia also has a one-year program that enables individuals with non-teaching degrees to become licensed, and it also uses international volunteers as teachers.

#### 2. Decision by grade 12 graduates to select a teacher training program

The first step in the process is the decision by grade 12 graduates to apply to a pre-service teacher training program, but presumably most of the applicants do not intend to be teachers. At this point, the motivation of most applicants is unknown. A review of the labor market indicates that the probability of being hired as a teacher is extremely low.<sup>5</sup> Even if wages in teaching are thought to be higher than other occupations, the "expected value" (probability multiplied by wages) is still quite low. Therefore, one

<sup>5</sup> Estimates of the probability vary significantly. One estimate, which is based only on students from the most prestigious university, is about 50 percent. A comparison of students entering teacher training and the number of job vacancies in 2012 suggests a probability of 2 percent.

important question is whether students harm their prospects for other employment when they major in teacher training.

For many applicants, teacher training might be the only way to enter a degree program. Different institutions and programs have different “threshold” requirements for examination results on the national grade 12 examination. The entry requirements for teacher training are lower than for most other degree programs.<sup>6</sup> This pattern of over-producing teachers is common in countries that had been influenced by the Soviet education system.

At some point, students in pre-service training are required to select their area(s) of specialization. Teachers intending to work in preschools must specialize in child development and preschool education. This is an area where employment prospects are higher, given growth in enrollment.

### **3. Decision by institutions to accept or reject applicants**

The availability of places and criteria for accepting students are primarily determined by economic factors. Universities expand programs in part because the unit cost of providing teacher training is low relative to most other degree programs. Teacher training is often described as a “cash cow” for universities. Therefore, the overall size of the sector is not determined by the national need for teachers.

The selection system ends up providing perverse incentives that may actually hurt the “quality” of graduates. It has been observed that by expanding provision in pre-service programs, teacher education programs “focus on students who performed poorly on school exit and university entrance exams” (Steiner-Khamsi, 2012). Until recently, the probability of receiving a scholarship was also much higher in education programs than in other disciplines. In effect, the economic incentives of both training institutions and prospective students encouraged mediocrity.<sup>7</sup>

Acceptance to a degree program is based on secondary school grades and the score on the national entrance exam. However, school grades are not a reliable indicator of student performance, and standards are not comparable between schools. Entry requirements also change over time. For example, at the MSUE Department of Foreign Languages, the average entrance exam score increased from 550 in 2006/07 to 710 in 2010/11. This increase in the “quality” of the applicant pool was probably a response to large salary increases for teachers (World Bank, 2006).

### **4. Additional requirements for licensing**

Candidates must have successfully completed a pre-service degree program<sup>8</sup> followed by a 12-month supervised practicum (UNESCO, 2008). They must prepare a presentation for parents, students, and community members and receive a passing score on the presentation; prepare and present a short report on teaching methods; and conduct at least one class observed by other teachers. There is no examination or formal interview (World Bank, 2011c). Licenses are granted by the local authority and are valid for five years. Prior to 2003, teachers were licensed immediately upon graduation and completion of the practicum, but this was changed to require a one-year probationary period (World Bank, 2011c).

### **5. Decision to apply for teaching position(s)**

The labor market for teachers appears to be a “buyers’ market,” with many qualified applicants for each vacancy. Given this imbalance (and the very low probability of getting a teaching job), it is assumed that most graduates of pre-service programs do not even look for teaching jobs. This gives rise to the

6 One hypothesis is that on average, the entrance exam grades of applicants who eventually enter teaching (motivated to be a teacher) would be higher than those who choose education as a “last resort.” This could be probably be tested using historic data on the exam grades of all applicants to pre-service programs compared to the grades of those who apply for teaching jobs.

7 Section V further explores the issue of students’ grades in teacher preparation programs and the correlation of grades with effectiveness.

8 There is also an alternative program that allows individuals who have completed a degree in another discipline to complete the requirement in a one-year program.

question: are the graduates of pre-service programs who do not enter the teaching force able to find jobs that require a degree? If the degree is not very marketable, much of the cost of having students pass through the system (mainly the “opportunity cost” of students’ time during the four or five years of training) is essentially wasted. However, if the teaching degree is marketable, this could have important implications regarding the reform of policies governing the retention of ineffective teachers, which is discussed in more detail in Section V.

## 6. Teacher selection process

State-owned and locally owned schools differ in their selection and appointment processes. In state-owned schools, teachers are selected and appointed by the Ministry of Education and Science (MES). In locally owned general secondary schools, teachers are appointed by the aimag or soum governor, based on the recommendation of the school principal. In preschools, teachers are directly appointed by the school.

The legal responsibility for hiring teachers in locally owned schools is not entirely clear. Regulations indicate that general education teachers and preschool directors are appointed by the soum governor. However, the substantive selection decision is made by the school director. It is not entirely clear where the formal responsibility for teacher hiring rests. According to Minister’s Order No. 179 of May 2007, responsibility for hiring and firing teachers is included in the principals’ Terms of Reference (TOR).

## 7. Process of selecting and appointing the school principal

Because principals appear to have functional authority to select or fire teachers, it is important to review the factors affecting their selection.<sup>9</sup> The selection and appointment of principals were centralized under the Soviet system, but after the transition to democracy, this responsibility was completely decentralized to local authorities. The 2002 Education Law (Articles 3.1.10) then retreated from full decentralization, and directors were appointed by the aimag governor. The most recent Amendment to the Education Law (Article 9, Section 30.1.15), passed in May 2012, reassigns responsibility to the provincial or city-level education authority. The rationale for the latest reform was to “mitigate the effects of interpersonal networks and to increase merit-based employment.” These changes suggest that there may have been problems of favoritism or corruption in the past.

Compared to many countries, the requirements for becoming a principal in Mongolia are minimal. Other than holding an ISCED 5A qualification, there are no requirements related to administrative experience,<sup>10</sup> specific qualification, specific courses, written examination, or participation in an internship or induction program (World Bank, 2011c). Notably, a preschool methodologist is required to have a master’s degree, while this is not a requirement for the school principal.

A disproportionate share of principal posts is held by males. Overall, 98 percent of teachers are women, while 47 percent of principals are men. Given the absence of objective requirements for selection, this raises the concern that appointments may be made based on networks, cronyism, or other inappropriate factors. This possibility is consistent with the various changes in selection and appointment responsibility discussed above. Unlike teachers, who are appointed on one-year performance contracts, principals are appointed for five years and are on a higher pay scale than teachers. Principals are evaluated by the local authority and are entitled to performance bonuses (World Bank, 2011c).

Unlike many countries (and contrary to “best practice”), in Mongolia, the principal is not the instructional leader at the school. He/she is not directly responsible for guiding curriculum, managing the teaching schedule, or evaluating teacher performance. Most of these tasks are the responsibility of school

<sup>9</sup> Principals have functional authority in selecting general secondary teachers and both functional and legal authority in the case of preschool teachers.

<sup>10</sup> The policy on administrative experience is not entirely clear. The TOR for principals, as specified in Minister’s Order 179 of May 2007, indicates that prior administrative experience is a prerequisite for appointment.

manager(s). Instead, the principal is responsible for overseeing the budget; disciplinary issues; representing the school in interactions with the community and local, subnational, and national education authorities; and managing school property (World Bank, 2011c). The principal is not involved in teacher evaluation but has responsibility for dismissing teachers based on evaluation outcomes or serious infractions.

### ***What factors influence teachers' credentials, use of time, and effectiveness?***

#### **8. Skills and competencies at start**

The fact that virtually all teachers have completed a pre-service program is not a guarantee that they have the skills and competencies required to teach effectively. In 2012, less than 1 percent of teachers were unqualified, compared to 12 percent in 1996. However, "the eradication of the category 'unqualified teachers' does not necessarily imply that the quality of teachers has improved to the same extent as the increase in number of degree holders. A significant number of the small, private teacher education institutions are merely degree mills, while licensing programs do exist [they] do not necessarily help to improve the quality of teaching" (Steiner-Khamsi et al., 2012). The MES sets the national curriculum for pre-service programs, but the institutions are responsible for developing and assessing their own programs.

Increasingly, educational leaders have been questioning whether an education degree should be required for entry into the profession. A number of innovative programs in other countries suggest that graduates from other disciplines can be as, or even more, effective with limited additional training in education. Mongolia does have an alternative path to licensing which requires an additional 60 credits in education for applicants with a degree in another discipline, but the effectiveness of teachers who completed an education degree has not yet been compared with the effectiveness of those who switched to teaching from another field.

#### **9. Orientation and mentoring of new teachers**

Teachers must complete mandatory induction/mentoring programs of six to twelve months duration (World Bank, 2011c). A 2008 UNESCO study identified problems in programs to mentor new teachers.<sup>11</sup> It is not clear whether these problems have been resolved.

#### **10. Pedagogical support at the school**

The government supports a large number of teacher managers, with at least one teacher manager at every school. Teachers collaborate in curriculum development and observe colleagues teaching. During a field visit to one of the schools, it was reported that teachers are videotaped as part of this process.

#### **11. Non-teaching staff services**

Schools in Mongolia have an unusually high number of non-teaching positions. Around 44 percent of total staff and over one-third of school-based staff are not teachers. In some interviews, it was reported that over-staffing was a feature of the Soviet system, while others asserted that the practice began in the late 1990s under decentralization. Regardless of school size, almost every school has a management team with at least five staff positions: a principal, an education manager (two or more for larger schools), a school social worker, an accountant, an inventory clerk, and a dormitory administrator if the school has a dormitory. Some schools also have a doctor or a nurse.

Despite this additional staffing, many teachers complain of excessive paperwork and other non-teaching tasks. It is clear that schools are required to produce large amounts of information on budgets, expenditure, teacher and student characteristics, teacher appraisal, and so on. It is less clear that all of this information is used by the MES for purposes of policy and planning; in fact, it appears that much of this information does not even reach the MES so may be "busy work" which does not improve the efficiency of the system or of individual schools.

<sup>11</sup> UNESCO (2008).

## 12. Professional development programs

As in most countries, Mongolia has requirements for professional development and further education for teachers.<sup>12</sup> The norm for professional development in Mongolia is about 70 hours per year (World Bank, 2011c). More intensive training (10-21 days) is scheduled for the 1st, 5th, and 10th years and every five years thereafter. The teaching qualification is valid for five years after it is awarded; if the teacher has not met the professional development requirements, the qualification is terminated. Most teachers' training is credit-based, and it is centralized in the capital, city, or in one of three regional teacher training colleges (World Bank, 2006).

In addition to standard training, the MES has also been providing "specialized additive training."<sup>13</sup> This program delivers additional services to senior staff and teachers with special responsibilities; provides assistance in the transition of general education from 10 to 12 years; and provides training to teachers working in special programs, such as the pilot of the Cambridge curriculum in 22 schools. Over one-quarter of MES employees are estimated to be receiving training under this program (MES, 2012).

Little research has been conducted on the impact of professional development programs on teacher effectiveness. The quality of professional development courses is uneven, with offerings by teacher's colleges, government organizations, donors, unions, and NGOs. A recent study suggested that despite substantial investments, "the effectiveness of these programs...may require significant monitoring, evaluation, and documentation" before they are institutionalized (Steiner-Khamsi et al., 2012). The 2006 Public Expenditure Tracking System (PETS) report noted that "[t]here is no reliable data to assess teacher quality and the impact on it of these investments in training" (World Bank, 2006). Moreover, the PETS report found that post-training follow-up support was insufficient.

Arrangements for financing professional development have been fragmented. In different situations and to varying degrees, professional development was financed by the MES, donors, local education authorities, schools, teacher organizations, and individual teachers (World Bank, 2011c). The financial circumstances of schools vary considerably, which influences their ability to pay for teachers' professional development. For courses providing academic credit, teachers paid half or all the tuition costs (World Bank, 2011c). As recently as 2011, some schools financed over 90 percent of the cost; in other schools, teachers paid the full costs themselves (World Bank, 2011c). The Education Law was amended in 2012, and now teacher development is fully funded by the State (Article 13, Section 40.8). In 2013, policies on the financing of professional development were revised again, with clarification on financing issues (MES 2013c).

## 13. Policies and "culture" of time allocation

Mongolia has been cited as a best practice example in managing teacher attendance. In the analysis of teacher absence, Mongolia is cited as an "exception to the rule." Unlike in most other countries, there are salary deductions for unexcused absence, and training managers keep "meticulous" records of tardiness (USAID, 2009).

## 14. Influence of parents, communities, DOE, unions and civil society

The influence of other "actors" is limited and varies by school. As mentioned earlier, prospective teachers present a demonstration to parents and members of the community as part of the certification process. Although the teacher's job description does list interaction with parents and communities as a responsibility, with few exceptions, there appears to be very little community involvement in teacher management. Departments of education (DOEs) are responsible for school visits and some professional development activities, but these are quite limited compared to many other countries. There are plans to reform the functions of DOEs, transforming them into professional organizations that provide

<sup>12</sup> This is often a requirement for continued licensing in other professions such as medicine.

<sup>13</sup> Authorization and funding for specialized additive training were adopted under Resolution #36, Annex 12.

methodological and technological support to teachers and schools (MES 2013a). Some NGOs are active in education in certain communities. The teachers' union does have influence on negotiating teaching loads and salaries but has little direct involvement in teacher management.

### **15. Teachers' "voice" and autonomy**

Teachers constitute the single largest political constituency in the country, which is reflected in patterns of wage increases. Schools are commonly used as polling places, and teachers are charged with counting votes. Raises in teachers' salaries typically occur before elections or to fulfill a campaign promise (Dobbie and Fryer, 2011).

### **16. Teacher Evaluation**

A fundamental weakness in the teacher evaluation system is that it attempts to implement an outcomes-based approach when there are no reliable measures of outcomes. In 2003, the MES prepared a 319-page handbook on outcomes-based education (OBE) to provide an objective national standard for teacher evaluation. The system proved to be unworkable and was quietly abandoned. The MES then tasked each individual school with developing its own evaluation system (Dobbie and Fryer, 2011). Under a revised system introduced in 2009,<sup>14</sup> teachers were evaluated in 23 areas on factors including: attendance, knowledge of subject matter, compliance with the curriculum, teaching methods, use of homework, student assessment, teacher-student interactions, student participation in class, students' socio-emotional development, parent-teacher interactions, and students' academic achievement.

The system is viewed as excessively burdensome by both teachers and education managers. In the 2011 study of teachers, every single education manager who was interviewed complained about the excessive workload associated with teacher assessment (Dobbie and Fryer, 2011). In field interviews for this report, some respondents estimated that individual teachers had to prepare between 7 to 100 pages of material. The excessive documentation required is seen as demeaning and humiliating, and the system reinforces the *stafka* mentality of viewing teaching as "piece work." For example, the full salary supplement for grading student notebooks requires written notes from each teacher demonstrating that they have reviewed and graded each student's notebook (Dobbie and Fryer, 2011). The MES is in the process of implementing reforms to "provide more academic freedom and sovereignty for the teachers" (MES, 2013a).

Students' academic achievement appears to be the primary factor in teacher evaluation, although the student assessment criteria have been problematic. In interviews, teachers expressed concern that the criteria for assessing students' academic achievement did not include adjustments for differences in students' competencies at the beginning of the school year. That is, evaluations have been based on absolute academic achievement, not "value added" (World Bank, 2011c).

The student assessment system has major implications for teacher management. The results of the performance evaluation can affect prospects for promotion and salary increases. They may also be used to identify the need for specific professional development activities and provide feedback on classroom practice. If a teacher fails the end-of-year performance evaluation three times, employment is terminated (World Bank, 2011c).

The MES is developing a new teacher assessment system with a major focus on each student's personal development. The January 23, 2013 Ministerial Order on a revised teacher assessment system emphasizes key elements that are consistent with international best practice. These include: developing an outcomes-based reward system based on actual changes in student performance; measuring baseline, progress, and final outcomes; indexing the assessment to the current level of student skills; and assessing growth in personal development, which is a key government objective for education as described earlier. Under the newly revised guidelines for evaluating staff performance, evaluation will be based on learners'

<sup>14</sup> Regulation 307/91/237.

progress, and exam results at the end of the previous year will constitute the starting point for the current academic year evaluation (MES, 2013a).

### **17. Student Assessment**

The system for assessing student achievement is extremely weak. Most tests are not comparable across aimags and even soums, and most of the exam data that do exist are not available and are not used for policy and planning. One unusual characteristic of the assessment system is that, with the exception of the grade 12 leaving exam, all end-of-year exams are developed by individual schools. This practice contradicts written policy (MES Decree no. 517) and is also not recommended by external organizations. Teachers are involved in developing, administering, and grading these tests (World Bank, 2011c). Furthermore, there are no formal courses on assessment offered as part of professional development (World Bank, 2011c).

### **18. Incentives**

Mongolia has a long history of creating and providing a very wide range of incentives. Presumably, most are intended to influence teachers' decisions and behavior in a way that will increase student learning. The MES uses a complex system of "additives" (supplements, benefits, allowance, and bonuses)-presumably, some of these are intended to improve teacher productivity. Details of the system are presented in greater detail in Section II.

Previously, the MES used negative incentives to influence teachers' decisions and behavior. In 2006, the primary system of incentives was deductions in salary additives due to various "infractions." Reasons for these deductions included: pedagogical issues, class management, teacher's self-discipline, morality, communication skills, management of official documents, and maintenance of school property. The criteria for these deductions were subjective, ambiguous, and could not be measured. The regulations governing various additives did not specify the appropriate amount; they simply indicated a cap as a percentage of base salary. Due to this complex, punitive system, wages were unpredictable, and there was no shared understanding of what determined wages.

The MES has now moved to a system of positive incentives. In 2012, a review of incentives noted that the regulations governing additives had been revised; additives were stated as a fixed percent of base salary (e.g., cabinet teacher 5 percent, class teacher 10 percent); and punitive deductions from supplements essentially became illegal. The study also found no instances of teachers reporting punitive deductions.

Nonetheless, it appears that wages are still unpredictable, and a shared understanding of factors that determine wages still does not exist. While in theory performance bonuses are intended to provide incentives for better performance, in practice, the performance bonus is rarely changed due to excellent or poor performance. The quarterly performance bonus has become an additional supplement that all teachers receive-it is effectively a "13th check" (Dobbie and Fryer, 2011). Due to financial management problems such as shortfalls in allocations, delays in disbursement, and budget "adjustments," some additives are not provided at the stipulated level, and some are not paid at all.

Some analysts suggest that there may be perverse incentives for teachers to teach poorly in order to increase demand for after-hours tutoring. Teachers are not allowed to hold another job, but they are allowed to tutor students from their own or neighboring schools.

Private tutoring, demanding fees, and expecting gifts are common practices for teachers in the region. Strikingly, both parents and students are empathetic and understand that teachers need to engage in such practices for making a living...the common sentiment in Mongolia [is] that, to get things done, once needs to engage in all kinds of gifting practices, ranging from honorific expressions of gratitude to illegitimate practices of bribery (Steiner-Khamsi and Harris-Van Keuren, 2008).

What factors determine whether and when the teacher will leave the teaching profession or a particular school?

## 19. Voluntary separation

**Transfer.** When applying to another school, teachers apply directly to the principal and are evaluated on the basis of: years of teaching experience, job title/hierarchy, performance as assessed by a school authority and/or colleagues, performance as assessed by external evaluators, and results of an interview (World Bank, 2011c). Teachers may also transfer due to job opportunities or opportunities of a spouse.

**Resignation.** Teachers might resign from teaching for a number of reasons. Better opportunities and wages in the private sector would be an obvious factor. Teachers might resign due to workload or job satisfaction. They may be receiving signals that encourage them to resign, such as negative evaluations and feedback. They might also resign due to their spouse receiving job opportunity in a different region. In addition, some teachers take extended leave for maternity leave, illness, additional studies, and so on.

**Retirement.** Female teachers are eligible for retirement at age 55 or after 20 years of service, with a mandatory retirement age of 60. Male teachers are eligible for retirement at age 60 or after 20 years of service, with a mandatory retirement age of 65 (World Bank, 2011c). Very few teachers in Mongolia continue working beyond retirement age, which differs dramatically from patterns in comparable countries—in the CEECIS countries, a high percentage of teachers are above the retirement age (UNICEF, 2011). Analysis of age data for 26,000 teachers in the MES November 2012 salary survey<sup>15</sup> showed that only 2.1 percent of female teachers over age 55 were working, and only 1.2 percent of male teachers beyond age 60 were working. Virtually no teachers were working beyond the mandatory retirement age.<sup>16</sup>

## 20. Involuntary Separation

**Loss of license.** The teaching qualification is valid for five years after it is awarded. If the teacher has not met the requirements of participating in professional development, the qualification is terminated.

**Dismissal.** If a teacher fails the annual end-of-year performance appraisal three times, he/she is fired. Unsatisfactory results on the external evaluation may also result in dismissal (World Bank, 2011c). Teachers can also be dismissed for excessive absence, misconduct, child abuse, poor performance, or lax procedures in assuring student safety (World Bank, 2011c). Based on interviews, it appears that teacher dismissals are extremely rare.

## II. WAGES

### A. Components of teacher wages

As noted earlier, the system of teacher wages in Mongolia is extremely complex. Wages are defined here as the sum of:

#### *Formal wages*<sup>17</sup>:

- Basic salary
- Monetary bonus for teaching in hard-to-staff schools
- Monetary bonus for good performance by the individual teacher
- Monetary bonus for good overall performance by the school
- Monetary bonus for teaching difficult student populations
- Monetary bonus for teaching a specific subject

<sup>15</sup> MES (2012).

<sup>16</sup> Less than 0.025 percent of teachers were shown to be working beyond the mandatory retirement age; this may simply reflect clerical errors.

<sup>17</sup> Data on the components of wages come from World Bank (2011c).

- Monetary bonus for teaching at specific grades/levels
- Monetary bonus for obtaining additional qualifications
- Payment for overtime
- Payment for extra responsibilities
- Health benefits
- Life and/or accident insurance
- Housing support
- Travel benefits
- Food and beverage benefits
- Scholarships for further study and/or professional development
- Paid annual leave
- Paid sick leave
- Paid maternity/paternity leave
- Travel allowance

***Pension and medical aid benefits:***

- Government contribution to pension fund
- Government contribution to medical aid

***Community and parent contributions:***

- The value of housing, food, services, etc.
- Payments for afterschool tutoring
- Other "gratuities"

As discussed in Chapter 4, the formula that determines teachers' wages is set centrally. In 1998, Mongolia implemented the transition to a per capita grant funding formula. Schools must pay teacher wages out of the variable cost<sup>18</sup> allocation provided through the formula and must cover all other variable costs with the "residual" (what is left after wages have been paid).<sup>19</sup> There is broad agreement that the current funding formula needs to be revised.<sup>20</sup>

The complexity of the system can be traced back to stavka, which continues to influence the system despite a series of major reforms in Mongolia. Mongolia adopted the same teacher salary model as Russia and the Soviet republics, and the problems in teacher management are strikingly similar across the transitional countries in the Caucasus and Central Asia. These include: a low base salary; an unpredictable, fragmented, and non-transparent wage system based on statutory teaching hours, additional teaching hours, supplements, allowances, and bonuses; and a generally compressed salary scale with little differentiation between the starting and ending salary (Steiner-Khamsi and Harris-Van Keuren, 2008).

## **B. The labor market for teachers**

Although teachers' wages are set centrally, there is a "quasi" labor market that probably does influence wages in the long run. Many other factors such as politics, history, and culture may also have an impact. This discussion focuses on two key variables: the number of students and policies regarding student-teacher ratios.

<sup>18</sup> Grants to schools are composed of "variable costs" which are determined by the per capita funding formula and "fixed costs" which are based on historical experience and some negotiation. For a detailed description of the formula, see Moock (2012a). For a discussion of needed reforms, see Moock (2012b).

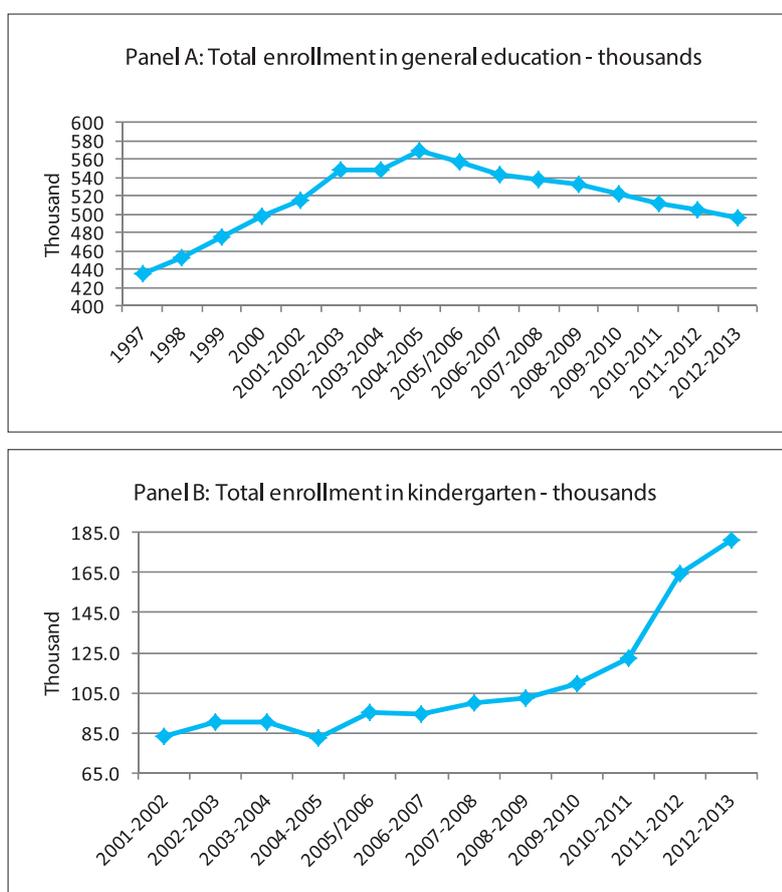
<sup>19</sup> The salaries of school-based administrative staff (principal, teacher manager, accountant, bookkeeper, social worker, doctor or nurse) are not paid from funds in the schools' variable cost allocation.

<sup>20</sup> Moock (2012a) and Moock (2012b).

Over the past decade, Mongolia appears to have moved from a severe teacher shortage in 2002 to a substantial oversupply of trained candidates for teaching positions. This is based on a situational assessment in 2002 and the relative number of teaching graduates per vacancy in 2012. This suggests that the “attractiveness” of the teaching profession has increased greatly over that time period.<sup>21</sup> In 2011, an estimated 5,720 students enrolled in teacher training programs<sup>22</sup>; in the same year, there were only 171 teacher vacancies.<sup>23</sup>

Based on enrollment, the demand for teachers will not grow significantly in coming years, and supply will continue to exceed demand. As shown in Figure 2, while enrollment in preschool has been increasing rapidly over the past few years, enrollment in general education has declined. While the short-term increase in demand for preschool teachers may continue as preschool net enrollment ratios increase, demand for teachers will decline.

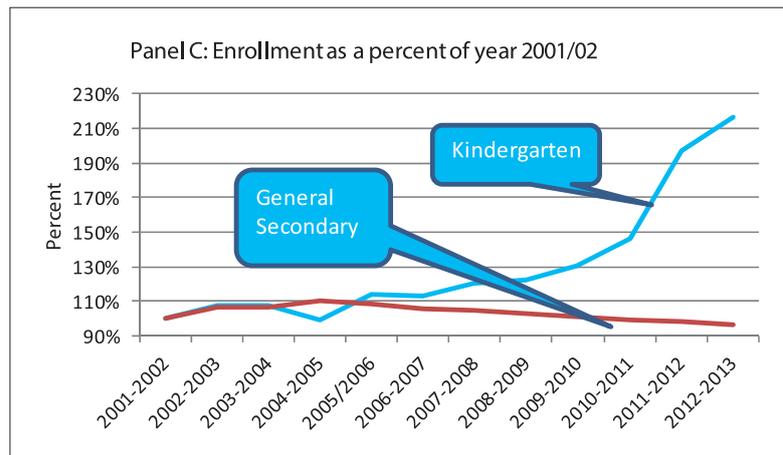
**Figure 2: Trends in enrollment—preschool and general secondary**



21 This is a very tentative observation, as two different indicators are being compared. Comparable data on graduation and vacancies for the earlier periods was not available. These data probably do exist, and this is an area that might warrant further investigation.

22 Enrollment in pre-service education programs is only an indication of supply. Many of these entrants apparently have no intention of becoming teachers. Some will drop out and not earn degrees. However, the ratio of 50 entrants for each vacancy does point to over-supply. Supply could be defined as the number of qualified people who are willing and able to enter teaching at a specific wage.

23 MES, based on interview.



Source: National Statistics Office Annual Statistical Abstract.

Mongolia generally has higher student-teacher ratios at lower levels of the system and therefore requires fewer teachers per 1,000 students than comparator countries.<sup>24</sup> There may be room for some growth in the teaching force, if student-teacher ratios in Mongolia move toward the “norms” of comparator countries. Comparisons between Mongolia and different country groupings at the preschool, primary, and secondary levels are presented in Figures 5 and 6 in Annex 5.1. In each graph, the line represents the student-teacher ratio, and the bars represent teachers per 1,000 students.

### C. What is an “appropriate” wage for teachers?

There is substantial international debate about whether public sector employees are paid too much or too little. Some argue that there are important non-monetary benefits in the public sector (such as job security and more vacation) that should be considered when comparing the wages of individuals (with comparable education and experience) in the public and private sectors. In the case of Mongolia, research conducted in 2006 identified several examples of this: housing, employment for family members, financing of teacher training, and food (World Bank, 2006).

#### *Comparison by occupation – international data*

It is useful to look at how changes in national income affect the earnings of teachers relative to other professional occupations. Per capita income is expected to continue to increase rapidly in Mongolia due to revenues from mineral resources. Time series data on wages for different occupations in Mongolia is not available, but looking at the trends in wage differentials in other countries can be useful. The most comprehensive source of data on occupations and salaries is the ILO October salary inquiry. A standardized dataset of 161 occupations in 171 countries over the period 1983 to 2008 was created by researchers at the National Bureau of Economic Research (NBER).<sup>25</sup> Figure 3 shows changes in the ratio of teachers’ wages to other occupations,<sup>26</sup> plotted against the natural log of per capita income.<sup>27</sup> The analysis suggests that in the long term, the relative attractiveness of teachers’ wages should improve in Mongolia if labor markets are similar to other countries.

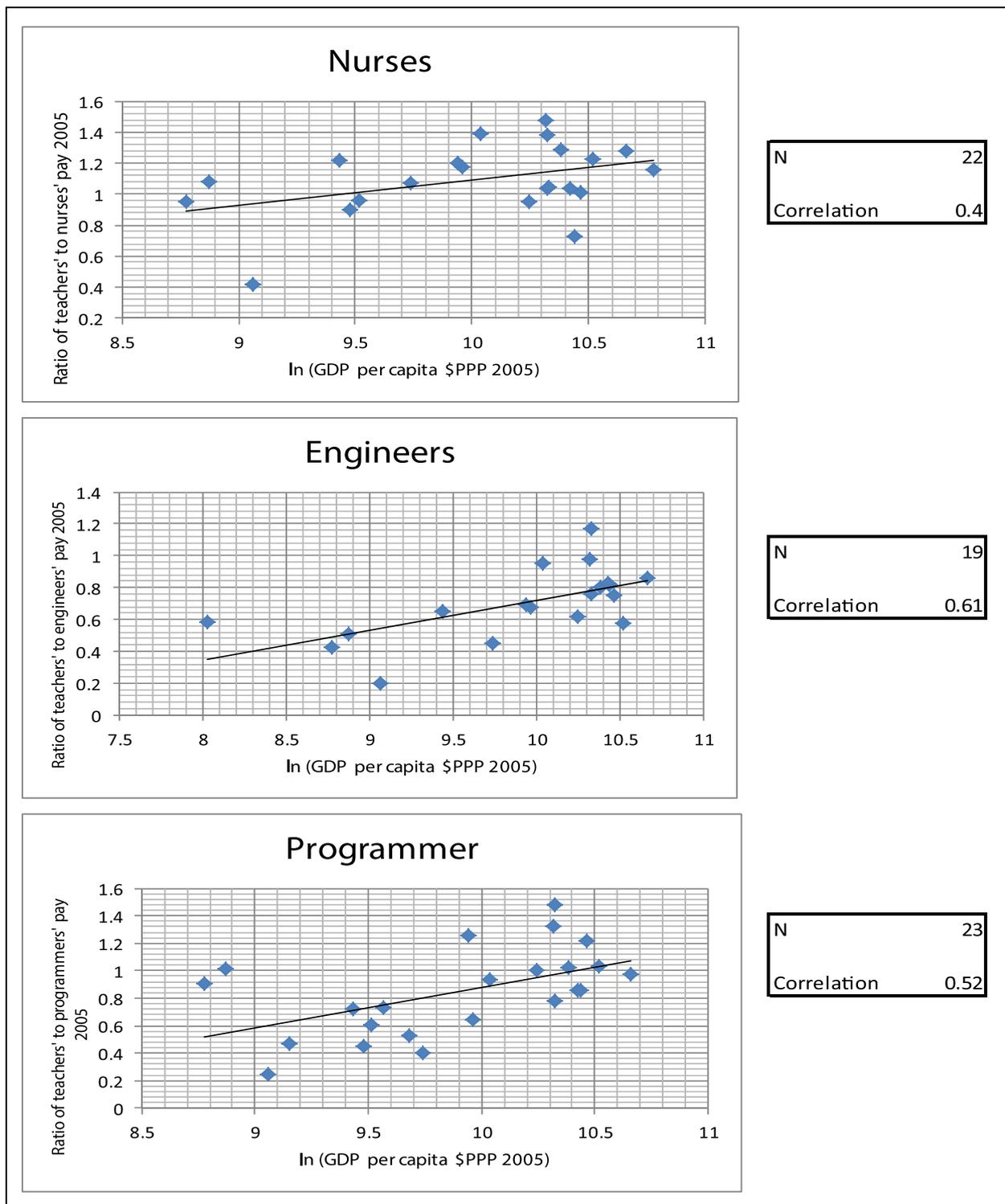
<sup>24</sup> Data are from the World Bank EdStats database and are for the most recent year available. Figures provided in the World Bank EdStats database are generally official figures that have been provided by the ministry of education or national statistics office in each country.

<sup>25</sup> These data are available through the World Bank data port. <http://www.worldsalaries.org/>

<sup>26</sup> For purposes of this analysis, occupations were recoded into six aggregate groups: Artisan, Clerical/Sales, Executive, Laborer, Professional, Supervisor, and Teacher.

<sup>27</sup> The log scale measures percent changes in GDP per capita. Data for GDP per capita are taken from the IMF World Development Outlook database (IMF, 2012). Per capita income is stated in 2005 PPP dollars.

**Figure 3: Teachers' wages relative to wages in other occupations – international comparisons**

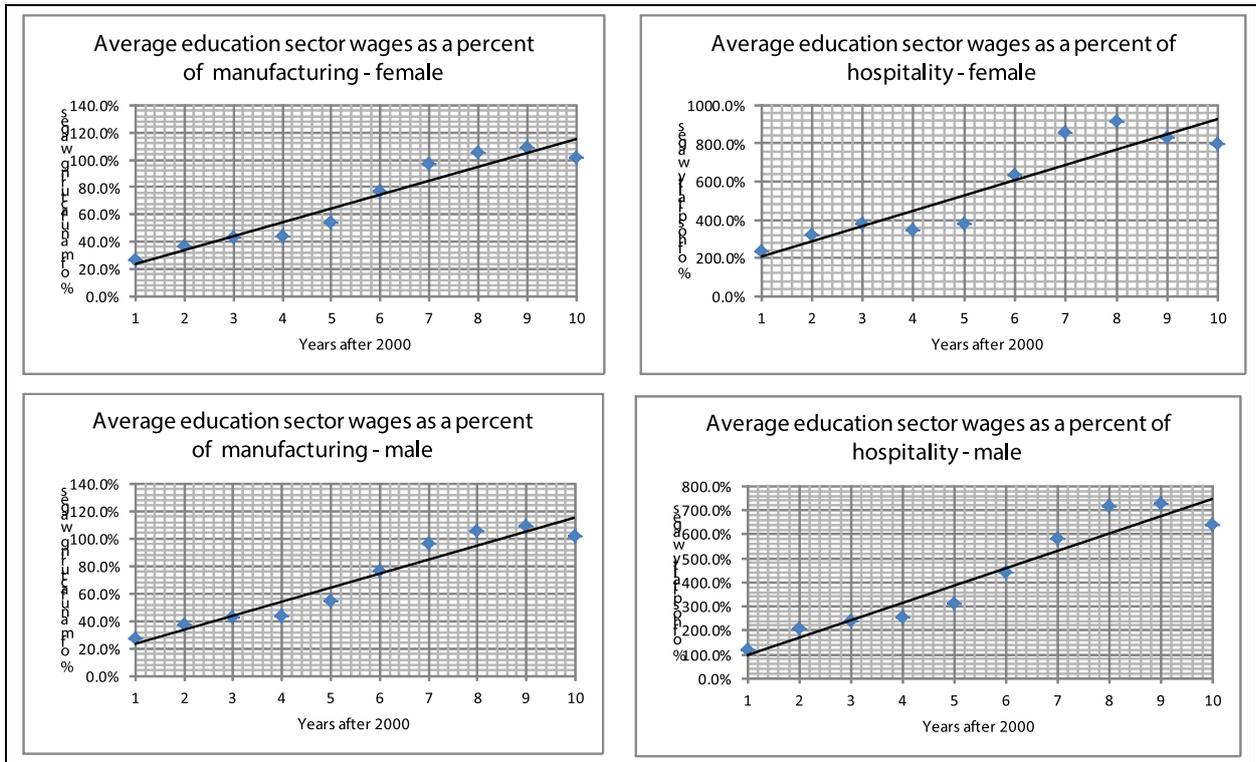


Source: Author's calculations based on World Bank data.

**Comparison by sector – Mongolia time series**

Time series data on wages by sector show consistent improvement in the relative wages in the education sector compared to other sectors in Mongolia. Figure 4 shows average wages in the education sector as a percentage of those in manufacturing and hospitality. For both men and women working in the education sector, relative wages grew substantially from the year 2000 to 2010.

**Figure 4: Wages in Mongolia's education sector as % of manufacturing and hospitality - time series 2001-2010**



Source: Author's analysis based on National Statistics Office data.

In May 2012, the government of Mongolia granted a 23-percent wage increase to all civil servants. The old and new salary schedules for the minimum basic salaries are shown in Table 2. Teachers' salaries are in position levels TURB-3 or TURB-4.

**Table 2: Revised minimum salary schedule for teachers - Tugrik per month**

Salary scales	Position level							
	TUBD-1	TUBD-2	TUBD-3	TUBD-4	TUBD-5	TUBD-6	TUBD-7	TUBD-8
Beginning from 1 February 2012								
1	294,465	315,911	351,298	378,428	393,349	440,352	476,387	508,296
2	296,629	318,292	354,036	381,440	396,512	443,988	480,387	512,579
3	302,128	324,341	360,992	389,091	404,546	453,227	490,550	523,394
4	316,078	339,685	378,638	408,502	424,927	476,666	504,750	
5	331,640	356,804	398,324	430,157	447,664	502,814	518,949	
Beginning from 1 May 2012								
1	362,192	388,571	432,097	465,466	483,820	541,633	585,956	625,204
2	364,854	391,499	435,464	469,171	487,709	546,106	590,876	630,473
3	371,617	398,939	444,020	478,582	497,591	557,470	603,377	643,775
4	388,775	417,813	465,725	502,457	522,660	586,299	620,842	
5	407,917	438,869	489,939	529,093	550,627	618,461	638,307	

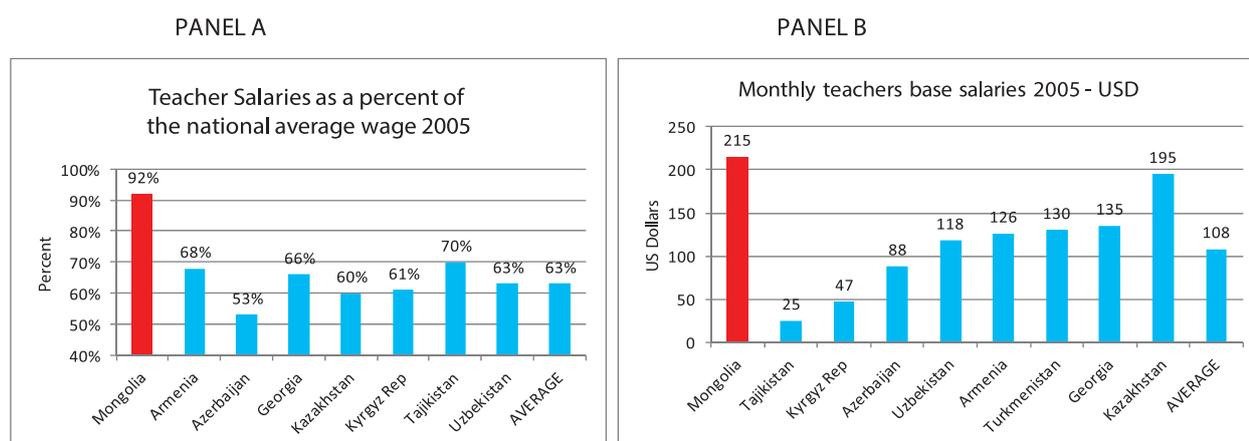
As discussed earlier, the minimum salary schedule (base pay) does not reflect full remuneration. In November 2012, the MES conducted a survey of the wages and "additives" of staff at all schools

(MES, 2012). One of the fields included in the data was a calculation of the ratio of total remuneration (including base pay and all additives) to base pay. Excluding the data in the upper and lower (10 percent) tails of the distribution,<sup>28</sup> both the average and the median value of allowances were calculated to be 27 percent of base salary. Table 5 incorporates allowances to present annual salary figures for 2012 in US dollars, with the highlighted cells in Panel A indicating estimates for starting, after 15 years, and highest teacher wages in Mongolia. Panel B compares estimates of starting, 15 years, and highest teachers' wages based on the OECD regressions and estimates what the corresponding wages would be in Mongolia. The analysis suggests that teachers' wages are 18.7 percent lower than would be expected, based on the OECD norms.<sup>29</sup>

### Comparison to average national wage – transitional states

Teachers' wages in Mongolia have been high relative to other countries that experienced the transition from Soviet to market systems. Panel A of Figure 5, which shows the average basic teacher's salary as a percentage of the national average salary in 2005, indicates that the wage ratio in Mongolia is higher than any of the comparator countries and is almost 50 percent higher than the average of comparator countries.<sup>30</sup> Panel B shows the same information in 2005 US dollars. The 2006 Public Expenditure Tracking Survey noted that under the inherited stavka system, the guaranteed income for teachers (based on 18 to 20 hours of teaching) accounted for only 50 to 60 percent of total income.<sup>31</sup> Adjusting for full income (by including "additives"), these data suggest that in 2005, teachers in Mongolia were earning about 17 percent more than the average national wage.<sup>32</sup>

**Figure 5: Teachers' wages relative to other former Soviet systems 2005**



Source: Lkhagvadorj (2011).

In summary, it appears that teachers' wages have increased rapidly and may be higher (relative to the private sector) than is the case in comparable countries. Public school teachers' wages have increased substantially in recent years (30 percent in 2010, 40 percent in 2012 and 23 percent in 2013). Over the same period, GDP per capita increased by 42 percent.<sup>33</sup> Nonetheless, a comparison with estimates based on OECD data for 34 countries indicates that teachers' wages in Mongolia are about one-fifth lower than the values suggested by the regression model.

28 This is done to avoid the summary statistics being influenced by extreme values that may be an error.

29 The comparison of "observed" teachers wages to OECD estimates has a slight downward bias in that 2012 observed wages are being compared to 2011 estimates.

30 It should be noted that the comparison of 2005 data is prior to Mongolia's major transition to the new 40-hour week.

31 Lkhagvadorj (2011), Table 2. The PER noted that the additional 40-50 percent reflects a combination of salary additives plus income from tutoring and other activities.

32 This figure is based on an additional 27 percent of average base salary applied to the 92 percent value.

33 Growth rates are calculated based on "current" Tukrig in each period, therefore they include inflation.

## E. Unions and Wages

Public sector unions have substantial leverage in pressing for wage increases, and excessive demands may be a factor in stoking inflation. For example, in September 2011, the Confederation of Mongolian Trade Unions (CMTU) issued a Letter of Demand to the government for increases in pay and retirement benefits for employees in the health, education, culture, police, and emergency management sectors. This was followed by a teachers strike in December of 2011. The Minister of Finance raised concerns that “if the wages for the teachers are scaled up, then the inflation will also increase simultaneously.”<sup>34</sup>

In summary, from a number of perspectives, teachers’ wages in Mongolia appear to be adequate. This finding is not consistent with the popular perception that teacher wages are too low. As discussed above, relative to other occupations, sectors, and other transitional countries, it appears that salaries in Mongolia’s education sector have been relatively high and will continue to increase. However, compared to 34 OECD countries for which data is available, teachers’ salaries in Mongolia are 19 percent lower than projected values based on analysis of the OECD data.

## III. IMPACT OF DECENTRALIZATION AND THE IBL ON TEACHER MANAGEMENT

The IBL clearly represents a major policy shift toward greater decentralization. It emphasizes transparency and public participation in the budget process. However, it generally affects the investment budget and increased public participation in use of the Local Development Fund (LDF). In the education sector, most of the recurrent budget goes for salaries which are determined by the central government, a process that has not been changed by the IBL.

Several key points must be kept in mind when considering the possible impact of the IBL on teacher management:

- The IBL incorporates many elements of the Budget Law of 2002 and Public Sector Management and Finance Law (PSMFL), so the Articles discussed here may not represent a change in policy or legislation.
- The IBL was enacted in February 2012 but only began to have impact in preparation of the 2013 budget, so it may be too early to identify how it has/will affect policy and decision making.
- The IBL is intended to stimulate an improved legal framework, amendments to related laws, and the issuance of supporting regulations (Lkhagvadorj, 2013). The impact of the IBL on education may only become apparent once these amendments, laws, and regulations have been developed.

The specific Articles of the IBL that might affect teacher management can be organized into several groups:

### ***Public access and participation***

*Article 6.5.1: Budget discussions and the budget approval process shall be open to the public and information on the budget plan, execution and reporting shall be publicly available in a timely and accessible manner.*

Prior to the IBL, there were provisions for public involvement in budget preparation and execution. In theory, inputs into the annual education budget moved up from the local level. Budget submissions were prepared at the school level and reviewed and approved by the local representative council; they then worked their way up through the system. In practice, however, budgets were determined by the central funding formula, and budget submissions were “adjusted” by aimag departments of education. The “bottom up” process was therefore almost irrelevant. It is possible that as local communities become mobilized to participate in decisions related to the LDF, this spirit may extend to education service delivery.

<sup>34</sup> InfoMongolia (2011).

**Public accountability – budget and expenditure**

*Article 6.5.3: Provide the public with possibilities to oversee the budget process and verify that the budget is executed and spent as approved in the plan.*

In most cases, communities have very limited engagement in the development or review of school-level operation and expenditure. The transition from school boards to school councils entailed a transition from a (somewhat limited) substantive role to a strictly advisory role. If, as suggested by the IBL, there is increased transparency in expenditure, this may lead to a climate of public demand for increased transparency in performance and educational outcomes.

**Broader accountability – outcomes and impacts**

*Article 6.4.7: Any activities, programs, and measures to be undertaken by the state ... as well as their outcomes shall not create inequality for current and future generations.*

It is not clear whether this Article of the IBL mandates that the impact of government-financed programs be assessed. However, it opens the door to such assessment as a means of assessing equity. If that is the case, it would represent a significant change in monitoring the delivery of social services, as outcomes would enter the equation.

In general, it appears that the IBL has had limited direct impact on teacher management to date, but it may have indirect impacts in the context of the general swing back toward decentralization. The spirit of the IBL may be moving toward supporting a broader sense of accountability and looking at efficiency (value for money) and equity. However, as mentioned earlier, the specific impacts will not be known until new amendments and regulations have been put in place.

**IV. LITERATURE ON FACTORS THAT AFFECT STUDENT OUTCOMES****A. School-level measures of student gains**

In Mongolia, there are virtually no examination data that can be used to assess changes in learning outcomes, the ultimate objective of improved teacher management. Although some MES officials have suggested that end-of-year exam results should be comparable because the tests are based on the same national curriculum for each subject and grade, field interviews with principals, teacher managers, and teachers found that practitioners at the school level do not hold the same view. The only standardized national exam is the grade 12 exam. Since this exam is only administered once, there is basis for assessing learning. The national assessment, at the end of each cycle, will be reinstated. However, this only involves a sample of students.

**B. What constitutes “reliable” information on student outcomes?**

While there is an enormous body of research on the determinants of student learning outcomes, most of this research is contradictory. There are so many studies with contradictory findings that it is possible to find a few studies that either support or refute almost any hypothesis. If there were strong relationships,<sup>35</sup> consistent findings would emerge from the majority of well-designed studies.<sup>36</sup>

The relationships appear to be context-specific, therefore it is important that the MES develop policy on the basis of empirical research in Mongolia. While looking at practice and outcomes elsewhere can be very useful, the same relationships may not necessarily be found in Mongolia. Although it may be tempting to replicate policies from high-performing systems such as Korea or Finland, without empirical

<sup>35</sup> Not necessarily causal relationships, but at least consistent ones.

<sup>36</sup> Here “well-designed” means using experimental design or robust measures to control for other factors and having a sample that is large enough for statistical analysis and representative of the population of interest. For example, trying to base policy for all grades on a sample of students who decide to take the university entrance exam would be problematic.

confirmation at home, this is generally a bad practice.<sup>37</sup>

### C. What are some common assumptions?

For decades, most decisions on education policy have not been based on empirical evidence. Many policies and interventions do have an inherent “common sense” appeal, but the underlying assumptions were never rigorously tested. This has resulted in inertia—the same policies and investments are replicated, despite the fact that there is little or no evidence of positive impact. Ministries of education and donor agencies champion specific policies based on inadequate information; over time, some of these recommendations change and are sometimes even reversed.

#### *Some of the most common assumptions about outcomes and teacher effectiveness include:*

**Spending** - Allocations to education should be increased based on the assumption that higher spending will lead to better outcomes. This is often reflected in donor conditionality regarding education’s share of national budgets and insistence that donor funds are additive.

**Credentials** - “Trained” teachers (teachers with credentials) are more effective. This assumption underpins large investments in pre-service degree programs in education.

**Teacher development** - Participation in in-service programs has a significant positive effect on teacher effectiveness.

**Graduate degrees** - Teachers with an academic degree higher than a bachelor’s degree are more effective.

**Class size** - Smaller classes and lower student-teacher ratios yield better student results.

**Teacher attrition** - Teaching should be an attractive lifetime occupation. Teacher attrition results in lower quality, particularly if more experienced teachers leave, therefore personnel policies should focus retaining teachers.

**Dominant government role in service delivery** - Because education is a public good, government should be responsible for service delivery.

**Schooling and economic growth** - High rates of return to years of schooling (reflected in wage differentials) imply that schooling leads to economic growth.

**Higher education subsidies and equity** – It is often argued that without government subsidies, students from economically disadvantaged households would be excluded, and subsidies are justified on the basis of equity.

**Inputs, indicators, and “countables”** - Inputs are often used as proxies for outcomes. Encouraged by donor agencies, there has been over-emphasis on a broad array of international education indicators which focus on counting “bottoms on benches,” teachers receiving training, and so on rather than on increases in student learning.

**Decentralization and school autonomy** - If authority and resources are delegated to schools, student outcomes will automatically improve.

### D. What relationships are not consistently supported in empirical evidence?

**Spending** - There is little consistent evidence (in developing, medium-income, or even high-income countries) that levels of spending are related to student performance, as reflected in international assessments or time series analysis within countries. Higher expenditure certainly does not “guarantee” better results.

<sup>37</sup> The education systems in Korea and Finland are fundamentally different on a range of basic policies.

*Researchers have documented the weak correlation between spending and results in education that emerges from cross-country and within country analysis-whether measured in terms of aggregate spending as a share of GDP, spending per student, or trends over time. (Bruns, Filmer & Patrinos, 2011)*

**Credentials** - A substantial body of correlational studies generally finds little evidence of a relationship between credentials or training and teacher effectiveness. A study of international assessment results in 21 countries found that:

*The most striking result is the weak or even absent correlation of achievement test scores and teacher education and professional training. (Fehrler, Michaleowa and Wechtler, 2009)*

In a number of “natural experiments” in which certified and uncertified teachers taught in similar circumstances, the general finding was that completion of a formal pre-service program has little or no effect on student outcomes. In one study that tracked 50,000 new teachers in New York City, 46 percent of the teachers were certified, 34 percent were not, and the balance were recruited through alternative schemes with very limited training. Training and certification did not have a significant effect (Fehrler, Michaleowa and Wechtler, 2009).

**Class size** - Findings are mixed-there is no consistent pattern indicating that (within a reasonable range) learning outcomes are better in smaller classes (Urquiola, 2006 and Assadullal, 2005). While many individual country studies do show positive results associated with smaller class size,<sup>38</sup> other studies show mixed results within countries, differing by province (Corak & Lauzon, 2009). A large number of country studies show no effect (Leuven and Oosterbeek, 2008), and some country-specific studies even indicate a negative effect (Urquiola, 2006 and Assadullal, 2005). Multi-country comparative studies and meta-analyses generally do not provide consistent evidence that class size makes a difference. In studies that find a statistically significant relationship, the impact is generally quite small, and even if positive, unpersuasive on cost-effectiveness grounds (Funkhouser, 2009).

Increasingly, research suggests that it is more effective to have larger classes with better teachers than to reduce class size (Rivkin, Hanushek & Kain, 2005). The strong performance of East Asian students on international assessments, where class sizes have traditionally been large, is often cited as additional evidence (Tang and Williams, 2000).

**Teacher attrition** - Based on measures of teacher effectiveness, attrition may actually be one of the best strategies for improving student outcomes. Growing evidence indicates that some people are simply not effective teachers, regardless of training, interest, and good intentions. Research suggests that rapid assessment, coupled with the termination of new teachers early in their careers, may be the most cost-effective strategy for increasing student learning (Yen and Ritter, 2009; Bressoux, Kramarz, and Proust, 2009; and McKee, Rivkin, and Sims, 2010). In one analysis of U.S. data, it was postulated that eliminating the least effective five to eight percent of teachers and replacing them with average teachers could move the United States near the top of international math and science rankings and with a present value of future student earnings by USD 100 trillion (Hanushek, 2010).

Another commonly made assertion is that attrition should be avoided because teachers become more effective with experience. There is research confirming that teacher effectiveness does increase during the first three years of teaching, but there is no evidence that the pattern continues beyond that point.

**Government as the dominant provider** - While there is a strong rationale for government financing of basic education, there is increasing evidence that “demand-side” financing may be more efficient than direct government provision. When there is choice and competition, providers have a strong incentive to improve quality.

<sup>38</sup> Selected examples include studies in France (Gordon, Kane, and Staiger, 2006), the United States (Kane, Rockoff, and Staiger, 2008), and Sweden (Lindahl, 2005).

**Education and economic growth** - There is substantial literature on what is termed the “micro-macro paradox.” Analysis shows that returns to individuals are consistently high, but aggregate measures of education have little explanatory power in economic growth models. Part of this paradox relates to the fact that “years of schooling” has traditionally been used as the measure of human capital, and it is becoming increasingly clear that years of schooling is an imperfect proxy measure of learning and competencies. When actual measures of knowledge (using standardized assessment instruments) are included in growth models, the impact of years of schooling is diminished or disappears.<sup>39</sup>

**Higher education subsidies and equity** - In almost all countries, subsidies to higher education are highly regressive. New systems of income-contingent loans are generally seen as a more efficient and equitable approach to addressing access issues.<sup>40</sup>

**Inputs and countables** - There remains a strong culture that asserts that the quality of service delivery and impacts can be “proxied” by quantities of inputs such as the number of professional development events. To a large extent, this mindset has been reinforced by donor organizations that prefer having projects that can be evaluated in terms of “countable” inputs such as share of the budget, number of classrooms constructed, percent of qualified teachers, and number of teachers attending in-service.

**Monetary incentives** - In the substantial body of literature on the impact of incentives on learning outcomes, the international evidence is mixed at best. Research on this issue goes back almost 30 years, and even those early analyses found no evidence that incentives to individual teachers affected student learning outcomes.<sup>41</sup> While some individual studies show a positive impact of monetary incentives, there is no consistent pattern to support the assertion that these incentives are effective.

In the United States where very large experiments with teacher incentives have been conducted, one of the most widely cited studies was a randomized experiment designed through collaboration of the teachers’ union and the New York City Department of Education. This USD 75 million program involved 20,000 teachers. Over the two-year duration of the program, no increase in student achievement took place in the schools where the incentives were provided (Fryer, 2011).

**Decentralization** - Some studies indicate that centralized management has a detrimental effect on efficiency. “There is an association across countries between good performance on international student achievement tests and local- and school-level autonomy” (World Bank, 2011a). Other studies find that this relationship is context-specific, as decentralization appears to reduce learning gains when local capacity is weak.<sup>42</sup>

### E. What relationships are consistently supported by research?

**Socioeconomic status (SES) and educational outcomes** - Students from economically advantaged households) typically have better educational outcomes. A study of more than 650,000 students found that learning outcomes were determined primarily by household SES.

**Years of schooling and earnings** - Over the past 40 years, following publication of a seminal work by Jacob Mincer, hundreds (or possibly thousands) of studies in countries around the world have consistently found that, on average, each additional year of education increases earnings (Mincer, 1974).

**Teachers and learning outcomes** - The teacher is the most important school variable in determining learning outcomes. Substantial research shows consistency in the effectiveness of individual teachers on learning outcomes over different years, even when comparing teachers in the same school teaching

39 Hanushek and Woessmann (2008) and World Bank (2011a).

40 ADB, 2009

41 Murnane and Cohen (1986).

42 Hanushek, Link and Woessmann (2011).

comparable students. That is, some teachers are exceptionally effective, and some are ineffective. This finding emerges from “value added” research, with a range of studies spanning the past 40 years.<sup>43</sup>

Not only do these “high value-added” teachers consistently improve student outcomes year after year, but strong long-term impacts can also be identified through time-series data. A number of studies have combined data on the relationship of student achievement with earnings later in life. By combining these projections of increases in earnings to the impact of an effective teacher, it is possible to estimate teacher effectiveness on earnings. Various studies that apply this approach to U.S. data estimate very large returns to a single year of exposure to a highly effective teacher. For example, assuming a class size of 20 students, this would result in an aggregate gain of USD 214,000 in discounted net present value terms.<sup>44</sup>

A recent landmark study of value added and future outcomes (Chetty, Friedman, and Rockoff, 2012) matched teacher value-added records for 2.5 million students in grades 3-8 in 1988 to income tax records of the same students at ages 25, 28, and 30. They estimated that by replacing an ineffective teacher (low value-added) with an average teacher, the present value of additional earnings for a class of 20 students would be USD 250,000. Moreover, in addition to earnings gains, students in classes with high value-added teachers were more likely to attend college, attend higher-ranked colleges, live in higher SES neighborhoods, and save more for retirement.

Impacts of preschool. An extensive research base shows the impact of early childhood/preschool education on the long-term experience of these children as adults. Investments in preschool are now encouraged by the international donor community, and access in most countries has increased rapidly.

The most widely cited study of the impact of preschool was the Perry Preschool program, started in 1962 in the United States, which was a fairly light intervention for children from disadvantaged communities. Participation in the program was based on random selection, so applicants who were not accepted provided a “control group” for assessing program impact. At age 27, participants in the “treatment group” had significantly higher earnings, lower incidence of arrest, lower incidence of single parenthood, higher educational attainment, and higher probability of being married.

## **F. What might this research imply about Mongolia's educational priorities?**

Short interventions such as having an effective teacher and attending preschool can have significant long-term effects. Both types of interventions were relatively “light” treatments and short in duration—two years for preschool or one year of exposure to an effective (or ineffective) teacher. Interestingly, in both cases (preschool or effective teacher), measures of improved academic performance faded within a few years. Students under either treatment had improved test scores following the intervention, but that advantage decreased each year and was generally gone within about five years. The positive differences then re-emerged many years later in adulthood. It is surprising that these effects could disappear and re-emerge so many years later.

Mongolia assigns an unusually high priority to personal development as a central educational goal. As mentioned in Section I, one of the government's objectives for education, “enabling every child to excel,” receives greater emphasis in Mongolia than in most other countries. Based on numerous interviews at multiple levels of the system, it is clear that this objective is not just a “politically correct” platitude. Using the impact of “value added” gains as an example, the following question could be asked: is it plausible that a large improvement in a student's trigonometry performance (linked to having an effective teacher) could have the lifelong impacts found in these studies?

An alternative hypothesis is that “something” about that teacher changed the students in a profound way, and this change was correlated with both (short-term) higher academic gains and (long-term)

<sup>43</sup> See, for example, Hanushek (1971).

<sup>44</sup> See Hanushek (2011) for a recent review of research linking “value added” teacher measures to future student earnings.

positive adult outcomes. There is no currently available research that identifies the mechanisms by which this long-term change occurs. It may be that the change is a change in the student's character or sense of personal worth. This may be related to Mongolia's concept of personal development.

### **G. What policies appear to improve student outcomes?**

An emerging evidence-based literature suggests that how inputs are used is far more important than the quantity of inputs. The following principles are seen as having a positive impact:

**Accountability based on measured outcomes** - There has been a major shift in recommendations of best practice and priorities.

Education systems are becoming more accountable for results. A ...growing willingness by ... policy makers to subject new reforms to rigorous evaluations of their impacts and cost effectiveness [including] impact evaluation [which] exposes whether programs achieve desired results, who benefits, and at what public cost. (Bruns, Filmer & Patrinos, 2011).

**Evidence rather than ideology** - Traditional "common sense" assumptions should be questioned and subjected to quantified analysis, and policy alternatives should be evaluated with a robust experimental or quasi-experimental design. Assessing policy options in terms of their costs, cost effectiveness, and economic rate of return is also critical.

Robust information and assessment systems with measures of "value added" - Traditional EMIS systems are useful for planning and monitoring implementation, but in most countries, they do not capture information on learning gains. World Bank (2011a) identified "learning gains as a key metric of quality."

**Institutional autonomy and capacity** - Schools (teachers, communities, and principals) should be empowered to make decisions about expenditure, staffing, and management. This should be preceded by capacity building, since transfer of authority and responsibility to schools or communities with low capacity can actually be detrimental.

**Accountability and consequences** - Institutional autonomy is only effective if there is accountability for outcomes, which requires reliable assessment systems. There must be positive consequences associated with success as well as sanctions for non-performance.

Flexible labor markets for teachers and institutional autonomy in hiring and firing - As discussed above, substantial improvements in efficiency and learning gains can be made by identifying ineffective teachers and removing them from the system. Research indicates that transferring students to other classes with effective teachers (even when this increases class sizes) can have an important positive impact. In addition, a number of studies have found that contract teachers, with fewer credentials and lower pay, can actually be more effective than higher-paid civil service employees, particularly when staffing decisions are localized to the school.

**Competition and demand-side financing** - Evidence indicates that greater autonomy at the provider level, together with competition for resources (e.g., through the use of performance incentives or vouchers), can generate strong motivation to improve service delivery (World Bank, 2011a).

**Time on task** - While there has been marked progress in enrollment, it does not necessarily translate into learning. Increasing evidence shows that data on enrollment and various enrollment-based indicators actually provide little information on the opportunity for learning. A recent study of over 100 schools in four countries found that more than half of the school year was lost due to school closures, teacher absences, student absences, late starts, prolonged breaks, and other reasons (USAID, 2010). A great deal of time can also be lost in administrative activities that do not involve learning.

## V. RECOMMENDATIONS

It should be noted that the recommendations presented below are constrained by limited data availability, which is a key area for improvement. Going forward, a critical priority will be to ensure that decisions regarding teacher management are based on empirical evidence generated in Mongolia. Policymakers will need to look carefully at what works and does not work in Mongolia which may require a range of techniques, including pilot projects with random assignment and other experimental designs. Findings from other countries and “expert” advice from development agencies may also be helpful, but ultimately, the best evidence is data coming from Mongolia with analysis done by civil servants or local researchers.

### A. Current initiatives to address weaknesses

The MES is already undertaking efforts to address the five main areas of weakness:

- Inadequate data and information will be addressed by the new EMIS and student assessment systems.
- Inadequate student assessment will be remedied by a new system of standardized annual exams and procedures to track the progress of each student, linking it to information on the school, community, teacher, and household SES.
- Inadequate system for teacher evaluation will be remedied by a new system of teacher evaluation that also includes measures of progress in academic achievement and personal development.
- Weak data analysis, policy, and planning will be addressed by the new Department of Strategic Policy and Planning (DSPP), which appears to have excellent management and staff.
- Legacy of a culture that views teaching as “piece work” is being tackled by reforms of education administration and management being planned by the MES and which will provide more academic freedom and sovereignty for teachers (MES, 2013a).

### B. Short-term recommendations

1. Develop a strategy to ensure that the five key MES “works in progress” are coordinated and linked. It is extremely important that the systems currently being developed are completely compatible (e.g., same ID numbers for students, teachers, and schools) and that they are also compatible with other information systems (e.g., payroll, grants to students, grants to schools, community contributions). The systems should also be designed to be compatible with databases in other ministries—for example, the Department of Statistics (DOS) has generated estimates of SES and poverty for localized geographic areas. In addition, the MES may want to ask other agencies (e.g., DOS, social welfare) to add specific education-related questions to their periodic surveys. For example, more information (e.g., type of school or even school name) could be collected in future household surveys. It is also important that each of these systems is designed to retain data at the lowest level of aggregation possible. Finally, the systems should be designed to accommodate historic data.

One useful strategy would be to have the DSPP and the staff of other departments and agencies develop a comprehensive list of questions that the MES should be able to answer in the future and to identify the data that will provide these answers.

2. Initiate policy dialogue to ensure that the new student assessment system includes standardized measures of student performance at each grade that can be used as a basis for measuring value-added. Ministerial Order A-299 clearly articulates the principle of measuring annual learning gains: “An average of the previous academic year-end performance...[and] at the beginning of an academic year shall be the starting point for the current academic year evaluation.” However, the series of directives on student assessment does not include details on how this will be applied to assessing individual student learning gains. Obviously, it will take several years to design and validate this system. In the short term, the emphasis should be to develop consensus on the principles and objectives.

3. Reform and simplify the criteria that determine teachers' wages and make payments more transparent, which would involve:

- Reducing the number of components of teacher wages, retaining only a few critical additives.
- Introducing monthly pay slips and/or a system where teachers can obtain details of their wages and see what has been paid or deducted along with an explanation of the adjustments.
- Discontinue (or postpone) all "performance-related" additives. Mongolia is well-placed to develop and implement a bonus system based on "value-added" measures at some time in the future.

4. Establish a working group to assure that Mongolia is able to participate in the TIMSS. For various reasons, Mongolia failed to participate in TIMSS in 2007 and 2011. A working group should be established with responsibility for ensuring that Mongolia is able to participate in the next cycle. The working group should develop a work plan to cover all critical steps such as: obtaining a firm commitment at the highest levels of government, identifying the source of funding, ensuring that staff of the MES and other ministries have the capacity to complete all tasks required, and liaising with the International Association for the Evaluation of Educational Achievement (IEA) to assure that all requirements are being met.

5. Collect and analyze data on market demand for, and employment experience of, university graduates with an education degree. Data could be collected to answer three questions:

- What is the motivation of grade 12 graduates who enter these programs?
- How marketable is the credential in the general labor market?
- How do the wages of university graduates with a teaching degree compare to other disciplines in the private sector labor market? How do these wages (and age-earnings profiles) compare to teachers' wages?

6. Analyze labor force and household survey data to assess whether teachers' wages are comparable to private sector wages. It appears that the appropriate data exist, so the analysis should be straightforward.

### **C. Long-term recommendations**

7. Develop and validate a system for measuring annual "value added" that can be associated with individual teachers. This is the most important activity related to understanding the dynamics of teacher reform and moving toward an accountability framework that links policies to student outcomes. Data collection could be incorporated into the new EMIS and student assessment systems.

8. Consolidate documents. In parallel with designing the new EMIS and assessment systems, there should be a plan for cataloguing documents and data that already exist. It would be relatively easy and inexpensive to create and update a database of documents. Each department could be asked to provide electronic copies of reports and other documents that are available, specifying the language(s). Development partners and other stakeholders could be asked to do the same. In addition, the MES provides a range of statistical reports for its own use and for the NSO. Development of a bilingual site with links to data underlying graphs should be considered.

9. Further strengthen the DSPP, review and evaluate tools available from external agencies, and request capacity building support as appropriate. Findings from the 2006 World Bank Public Expenditure Tracking Survey (PETS) contributed significantly to the reforms that started in 2007. A range of other tools have been developed by multilateral and bilateral development agencies, and most agencies provide copies of software and user manuals. In some cases, they also provide technical assistance and training. As time allows, officers in the DSPP could review the range of available tools and arrange to attend training programs for those that seem most appropriate for use in Mongolia.

10. Retrieve and consolidate digital data for prior years. While cataloguing data sources as recommended above might be a substantial undertaking, it would be extremely useful to incorporate data

from earlier years and other systems into the new EMIS. If available, this consolidated database would be useful in a variety of activities related to teacher management:

- Time-series data could be used to begin testing some of the assumptions underlying existing policies.
- The availability of the data would provide an opportunity and incentive to strengthen MES research and analysis capacity.
- Student outcomes reflect cumulative “value added” in lower grades. Historical data are very important in trying to explain differences in student achievement at higher levels and performance on the grade 12 examination.
- Analysis and cleaning of the data would be very useful in the design of the new EMIS and in selecting wording of school survey instruments.
- Time series data would also be very important in addressing equity issues.

11. Develop a methodology to assess the impact of existing pre-service teacher training programs. By combining information from labor market surveys and the new MES teacher and student assessment systems, it may be possible to develop a methodology for assessing the effectiveness of different pre-service programs. Potentially useful analyses might address questions such as:

- How does the effectiveness of teachers trained at different institutions differ?
- Are there differences between those completing the standard preparation program and those (with degrees in other disciplines) who entered teaching through the alternative plan?
- Is there any relationship between grades on the university entrance exam and later teacher effectiveness?
- How do graduates of different institutions differ in their success in obtaining employment as teachers or in the general labor market?

It would also be important to follow the current international debate and research on the usefulness of pre-service training.

12. Develop a similar strategy for assessing the impact of teacher development activities. Teachers have participated in various professional development courses offered by a range of providers, and the MES is now implementing a new policy of standardized in-service training that will be provided by the Ministry. It would be useful to assess the differences in the effectiveness of different types of professional development and training programs and what implications they may have for the design of the new program.

13. Undertake an assessment of the impact of graduate degrees on teacher effectiveness. Once there is a system to measure value added, it will be relatively straightforward to assess whether teachers with post-graduate degrees are more effective and whether the financial “additive” for this degree makes sense. There is some urgency for this assessment, as the MES developed a new “policy targeted to increase the percentage of teachers with a Master’s Degree at the general education schools” (MES, 2012a).

## VI. Conclusions

The discussion above points to numerous areas in which decentralization could have important implications for teacher management in Mongolia (albeit perhaps indirectly), with suggestions for strengthening the system. Using a similar in-depth analysis, the following chapter turns to the health sector, where the new decision space granted by the IBL to the subnational level has significant implications for health care providers. In particular, the chapter looks at provider payment systems, which have been modified by the IBL in many respects, to help inform the design and implementation of Mongolia’s provider payment systems going forward.

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**ANNEX 5.1:**

**Table 5.1: Activities in teachers' terms of reference (TOR)**

ACTIVITIES IN TEACHERS' TERMS OF REFERENCE	
<b>TEACHING</b>	<b>PARENTS AND COMMUNITY</b>
Classroom lessons	Work with parents and community
Support learning process	
Contribute to student development	<b>RESEARCH</b>
	Do Research
<b>STUDENT ASSESSMENT</b>	Write papers, books and guidelines
Develop students assessment tests	
Analysis of student needs	<b>PROFESSIONAL DEVELOPMENT - COLLEAGUES</b>
Assess student learning	Cooperate with other teachers - same subject
Study of student needs and interests	Enhance teacher development
Planning and monitoring student progress	Participate in professional development training
Monitoring	
	<b>ADMINISTRATION</b>
<b>CURRICULUM AND LESSON PLANNING</b>	Renovate lab and classrooms
Planning of curriculum	Keep journals and documents
Study of education standards and curriculum	Organize and participate in Olympiads
Planning and developing the content	Work as teacher on Duty
Choose teaching methods	Work with dorm students
Choose teaching aids and prepare	Work for administrative nomination duties
Prepare lessons	Prepare statistic info needed
Make lesson analysis of itself and others	Organize art and sport activities
Analysis over curriculum	

Source: Author's analysis of Minister's Order No 351 of 2007

Figure 5.1 Primary student/teacher ratio and teachers per 1,000 students

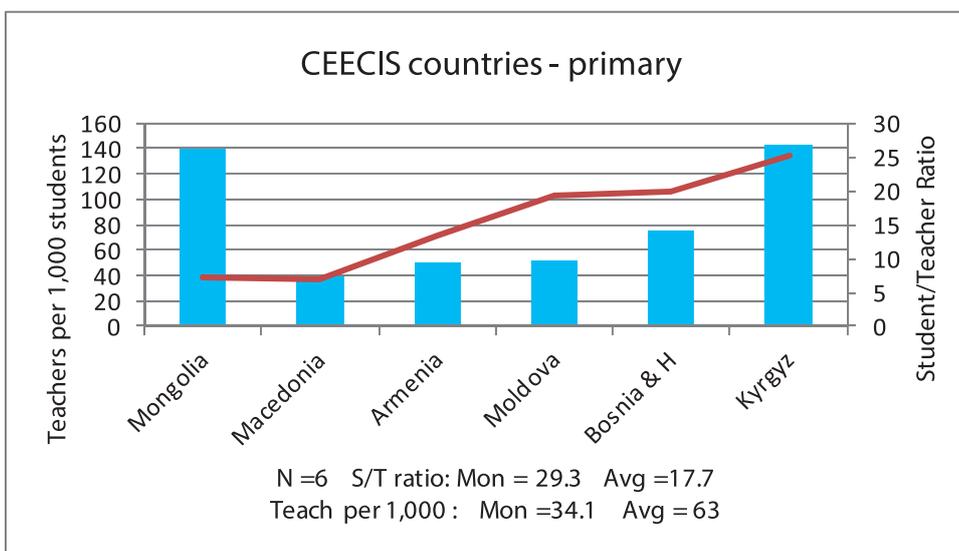
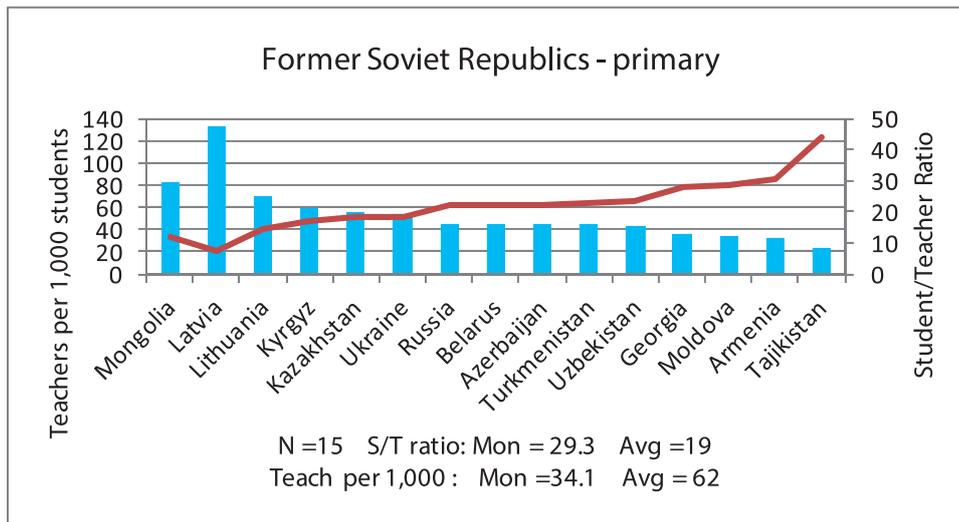
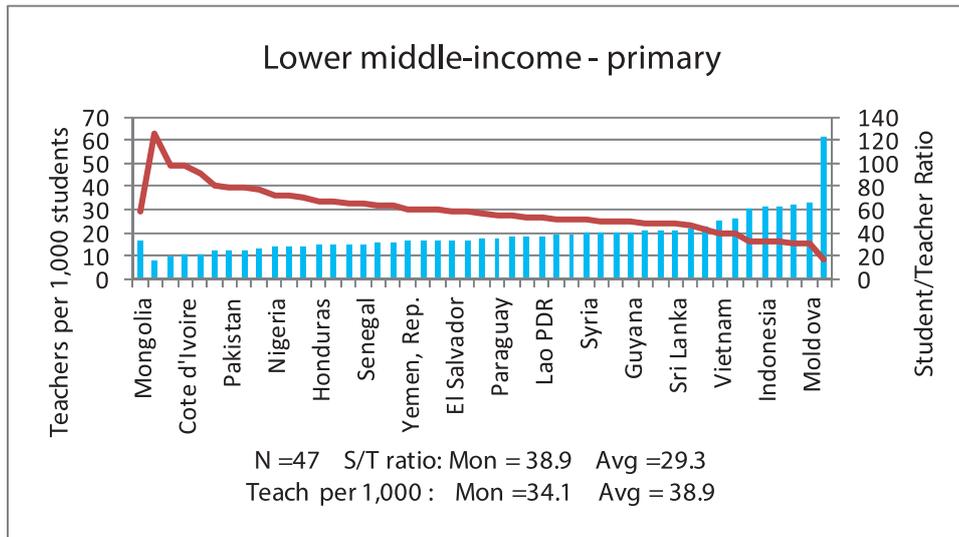
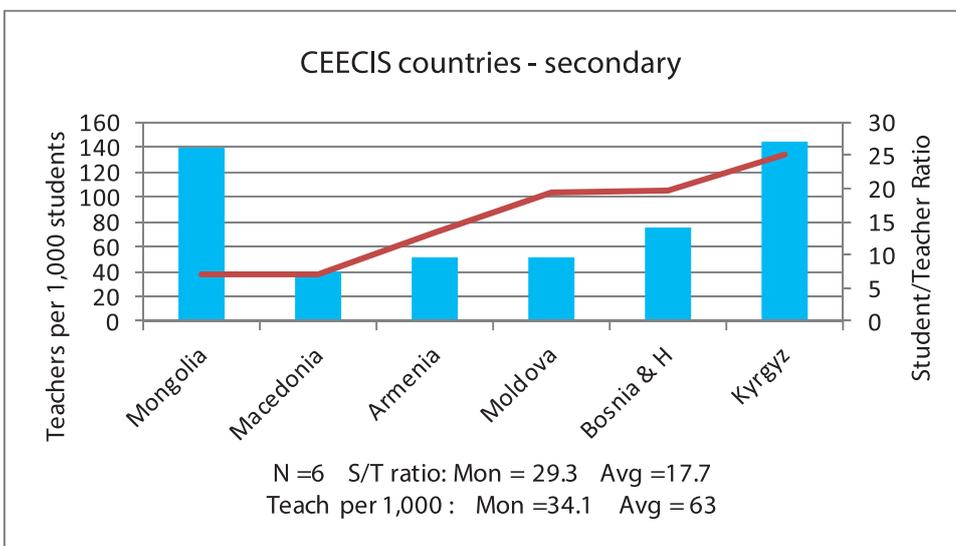
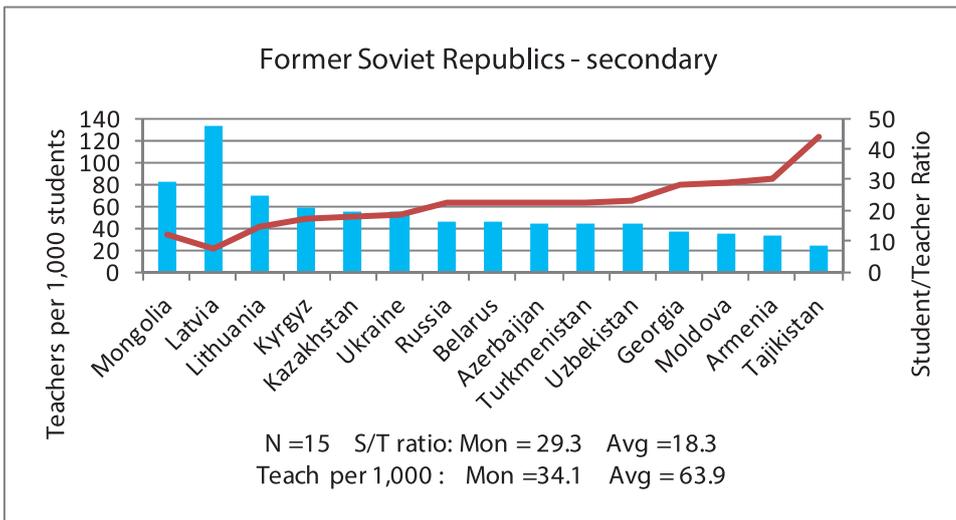
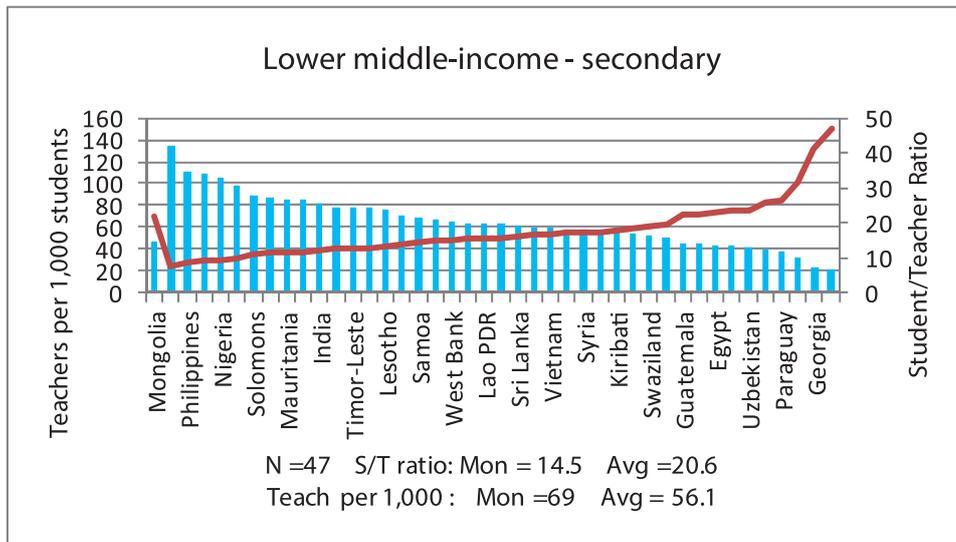


Figure 5.2: Secondary student/teacher ratio and teachers per 1,000 students



## ▲ CHAPTER 6: PAYING HEALTH CARE PROVIDERS IN MONGOLIA: IMPLICATIONS FOR EQUITY, EFFICIENCY AND UNIVERSAL HEALTH COVERAGE

This chapter draws upon an in-depth assessment of provider payment systems commissioned by the Ministry of Health (MOH) to help inform the design and implementation of Mongolia's provider payment systems going forward. Section I provides a brief overview of Mongolia's health financing and service delivery system. The provider payment assessment method is described in Section II, then the main findings are presented in Section III. The implications of the Integrated Budget Law (IBL) are highlighted, particularly in the context of payments to primary care providers. The positive aspects and shortcomings of the current mix of payment systems are discussed, and the design and implementation are compared with international good practices. Section IV then discusses the challenges and limitations of the assessment. The chapter concludes with Section V by providing a roadmap for refining and realigning Mongolia's provider payment system going forward.

### I. THE HEALTH FINANCING AND SERVICE DELIVERY SYSTEM

Achieving access to basic health services for the entire population without risk of financial hardship or impoverishment from out-of-pocket expenditures ("universal health coverage" or UHC) is a challenge that continues to confront most low- and middle-income countries. As coverage expands in these countries, issues of financial sustainability, efficiency, and quality of care quickly rise to the surface. Strategic health purchasing is an important lever to efficiently manage funds for UHC through the definition of what is purchased (which services and benefits the covered population is entitled to receive), from whom services are purchased (which providers are contracted to deliver the covered services), and how and how much the providers are paid. Health care provider payment systems—the way providers are paid to deliver the covered package of services—are an important part of strategic purchasing to balance system revenues and costs in a way that creates incentives for providers to improve quality and deliver services more efficiently. This ultimately makes it possible to expand coverage within limited funds (Langenbrunner, Cashin and O'Dougherty 2009). In practice, however, provider payment systems are often under-utilized as an effective tool to achieve UHC goals (Lagomarsino, et al. 2012).

The IBL has modified many aspects of provider payments in the health sector. Changes have been introduced in budget planning, approval, as well as budget execution rules for primary health care providers. As already discussed in Chapter 1, the IBL has granted new decision space to subnational officials in Mongolia. It increases decision space on budgeting and planning, especially at the aimag, capital city, and soum levels and has also given facility directors significant control over human resources functions, especially hiring, firing, and granting of bonuses and incentives.

In the early 1990s, after 70 years of a socialist system, Mongolia transitioned to a market economy and embarked on reform across all sectors, including health. Since that time, the health system has gradually moved from a centralized "Semashko-style" model to somewhat more decentralized financing and service delivery, with a growing role for private sector providers and private out-of-pocket financing. The main challenge to the system has been to maintain the universal coverage of the socialist period in the face of drastically reduced public funding, while introducing incentives for greater efficiency and improved quality of care. Although population coverage of social health insurance has consistently been over 80 percent, financial protection has continued to erode. Social health insurance was introduced in 1993 to provide a supplemental funding stream to the declining budget. Nonetheless, out-of-pocket payments increased from 14.5 percent of total health expenditure in 1995 to 41.4 percent in 2010 (Tsilaajav, Ser-Od, Baasai, Byambaa, & Shagdarsuren, 2013).

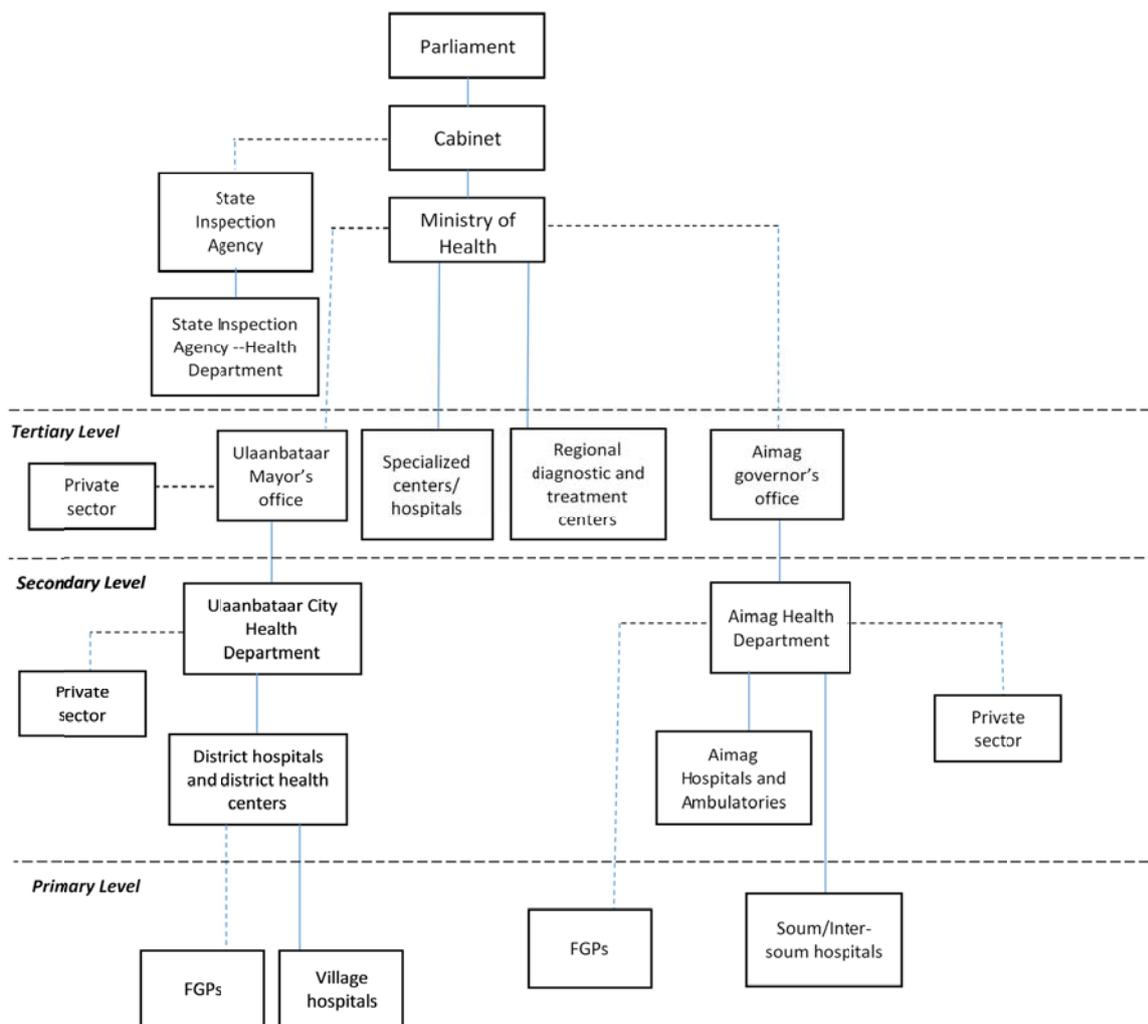
Under the former centralized Semashko model, the health delivery system was publicly owned, hierarchically organized, and financed by general tax funds paid to health facilities using input-based

line item budgets. The Semashko-based financing and delivery model is associated with a wide range of inefficiencies at all levels of the health system (Kutzin, Cashin and Jakab 2010). Input-based line item budgets, in particular, are known to create barriers to matching funding with service delivery priorities and can lead to excess capacity in the system.

Mongolia has taken a number of steps away from this financing and service delivery model. For example, family group practices and soum hospitals were restructured into family/soum health centers to focus more on public health intervention rather than mainly curative services. While soum health centers are public facilities, the family health centers are private and deliver government-funded health services through contracts with the government. Other private providers have been permitted to enter the system and can be contracted by the social health insurance agency, the Social Insurance General Office (SIGO).

At present, Mongolia’s health system is organized according to its administrative divisions, namely: aimags (provinces) and the capital city (Ulaanbataar), soums (districts) and bags (villages). Mongolia has 21 aimags, with each consisting of between 15-27 soums and each soum divided further into 4–8 bags. The two-tier health system includes facilities that deliver primary care at the bag and soum level and those that deliver specialized care, including secondary and tertiary care at the aimag and city level (Figure 1).

**Figure 1. Organization of the health and delivery system in Mongolia**



Source: Adapted from (WHO 2011).

The MOH continues to finance most public health facilities using historical line-item budgets, although family health centers and soum health centers are paid by capitation to deliver basic primary care. The SIGO purchases inpatient services using a case-based payment system with a set of 115 diagnosis-related groups (DRGs). Health facilities can also charge user fees for a limited set of services. Doctors, nurses, and paramedics at government health facilities are civil servants and salaried according to the civil servants' salary schedule. Most non-medical staff such as cleaners and/or maintenance people are contract workers not on the civil servants' payroll. Health professionals are relatively underpaid. The government has made efforts to create incentive schemes for rural workers, primary health care providers, and for specific categories of medical professionals that are in short supply.

The IBL has resulted in changes to the budget allocation and formulation process, specifically for primary health care. As discussed in Chapter 1, primary health care is delegated to the sub-national governments and financed by earmarked transfers. Aimag and Capital City governors are responsible for primary health services and can provide additional financing to health facilities within their region. The Minister of Health must contract with the aimag and Capital City governors within 14 days of the state budget approval. The contract must include the purpose, standard, quantity, and quality of services to be provided, as well the reporting requirements. The Ministry of Health estimates the amount of earmarked transfers available within the budget constraint placed by the central government and sends the estimates to the Health Departments of the aimags and Capital City. At the local level, health facilities submit their budget proposals to the respective governors. The Assembly then discusses and approves the earmarked transfers as part of the local budget. Thus, the earmarked transfers are now part of the local budget allowing aimag and City governors to make adjustments to the health sector budgets under their control.

Although the MOH has identified strategic purchasing-and in particular provider payment-as one of the most important levers to direct limited funds to priority services and populations more effectively, strategic health purchasing has been limited by the continued strict management of all public funds through the Budget Law. The Budget Law stipulates that all budget entities and entities that are partially or fully owned by the government and contracted with public funds are required to follow the law when planning, executing, and reporting on their budgets (Lkhagvadorj 2012). Therefore, even though some new output-oriented payment systems have been used, the Budget Law limits how the payment systems can effectively create new incentives for providers because all funds are planned, disbursed, and accounted for using input-based line item budgets.

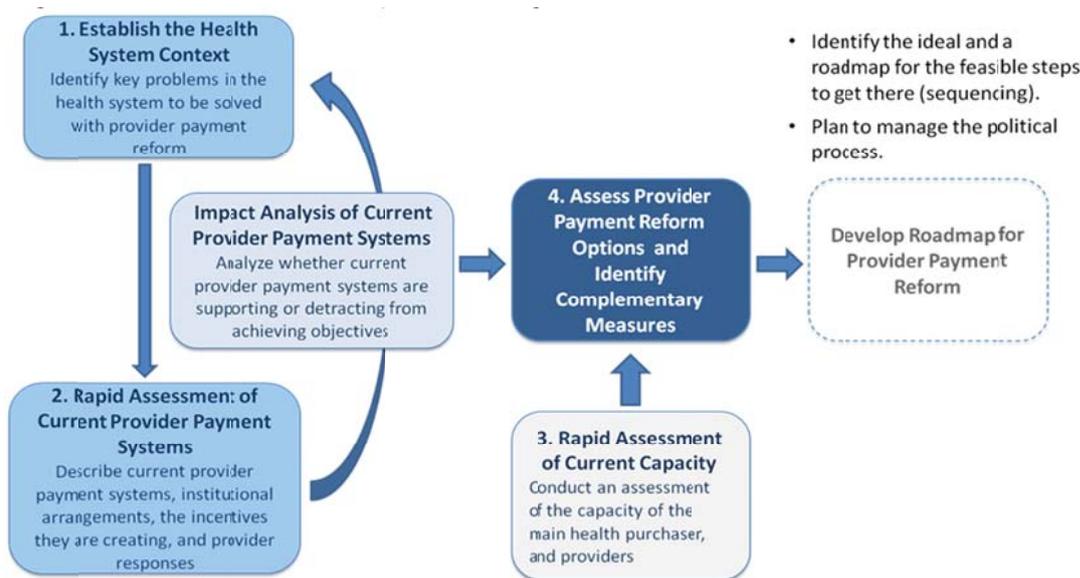
## II. PROVIDER PAYMENT ASSESSMENT METHOD

This chapter is based on a study conducted using the Joint Learning Network for Universal Health Coverage (JLN) Provider Payment Diagnostic and Assessment Guide. The Guide was developed by the JLN, together with the World Bank, World Health Organization (WHO), and other partners (JLN 2012).<sup>1</sup> The assessment was a cross-sectional qualitative study with the main results based on stakeholder perceptions, supplemented by analysis of normative policy documents.

The JLN Guide is a process guide for systematically examining current provider payment systems in view of health system objectives and the current managerial capacity of health care providers and health purchasers. The strengths and weaknesses of the design and implementation arrangements for current payment systems and the incentives they are perceived to create are compared against internationally accepted guiding principles and benchmarks ("international good practices"). The output of the process is a roadmap for improving the country's provider payment systems developed through consensus among stakeholders on the interpretation of the assessment results (Figure 2).

<sup>1</sup> This assessment was one of two country field tests of the JLN Provider Payment Diagnostic and Assessment Guide. The first field test was carried out in Vietnam during February-June 2013 (Nguyen, et al. 2015). Researchers from Vietnam provided some support to the Mongolia assessment team through video conferencing, and the Mongolian team referred to the Vietnam report to help structure and interpret the findings.

**Figure 2. JLN provider payment diagnostic and assessment process**



Source: (JLN 2012).

The JLN Guide provides a structure for gathering qualitative information on the range of provider payment systems used for different health facility types (“provider payment method mapping”), standard aspects of payment system design and implementation arrangements, and the results of the payment systems. For example, stakeholders are asked to describe which services are paid for by which payment methods, how payment rates are set, how funds are disbursed, and financial relationships with other providers. Stakeholders are asked open-ended questions about the strengths and weaknesses of each payment system and closed-ended questions about whether each payment system contributes to any of 16 pre-defined positive and negative health system results. Local researchers adapted the instrument to the specific context of Mongolia.

During the course of the assessment in Mongolia, a multi-stakeholder working group was convened to identify the objectives of the assessment, guide the design and implementation, and interpret the findings. The working group was convened at the beginning of the assessment, once for a mid-term review of preliminary findings, and for a final workshop to interpret the results and make recommendations for a roadmap to improve Mongolia’s provider payment systems going forward.

The working group identified the key stakeholders to be interviewed to include the MOH, SIGO, and public and private providers at all levels of the health system. The final sample included respondents from 35 health care providers, two departments in the MOH, the UB Health Department, SIGO, and the Ministry of Finance (Table 1).

**Table 1. Sample of respondents**

Facility Type	Number sampled
Central hospitals and specialized centers	3
District health complexes and maternity homes	4
Aimag general hospitals	3
Regional diagnostic and treatment centers	1
Soum and inter-soum hospitals	2
Soum health centers	4
Family health centers	6

Sanitoria	2
Private hospitals	5
Private pharmacies	5
Ministry of Health, Department of Policy and Planning	1
Ministry of Health, Department of Finance and Economics	1
Ulaanbaatar Health Department	1
Social Insurance General Office	1
Ministry of Finance	1

### III. RESULTS

#### A. Overview of the Mix of Provider Payment Methods

Currently, three different payment methods are used by health purchasers in Mongolia: line-item budgets, case-based hospital payment using DRGs, and fee for service for direct payments by clients (Table 2). The mix of payment systems received by an individual provider varies widely, even within one provider category. Line item budgets, for example, make up only 12 percent of total revenue for some tertiary providers but more than 80 percent for others. Overall, however, the line item budget payment system still accounts for at least half of all revenue for most public providers. Revenue from DRG payments varies from less than 10 percent of revenue to more than 80 percent, but on average, both public and private hospitals receive about 30 percent of their revenue from DRG payments. Family health centers and those soum health centers paid by capitation receive 100 percent of their revenue through capitation payments. Fee-for-service is a small share of total revenue for all public providers, reaching a maximum of 10 percent but more commonly less than 5 percent of total revenue for a single provider.

**Table 2. Overview of provider payment systems used in Mongolia**

Type of Provider	Purchaser/Payment Methods (% of revenue)		
	Ministry of Health	Social Insurance (SIGO)	Clients
Central hospitals and specialized centers	Line item budget (12-83%)	Case-based payment using DRGs (7-83%)	Fee-for-service (4-10%)
District health complexes and maternity homes	Line item budget (17-100%)	Case-based payment using DRGs (0-80%)	Fee-for-service (0-3%)
Aimag general hospitals	Line item budget (58-60%)	Case-based payment using DRGs (30-40%)	Fee-for-service (1-10%)
Regional diagnostic and treatment centers	Line item budget (60%)	Case-based payment using DRGs (34%)	Fee-for-service (6%)
Soum and inter-soum hospitals	Line item budget (75-96%)	Case-based payment using DRGs (4-20%)	Fee-for-service (0-5%)
Soum health centers	Line item budget or Capitation (100%)	-	-
Family health centers	Capitation (100%)	-	-
Sanatoria	-	Case-based payment using DRGs (19-90%)	Fee-for-service (No response)
Private hospitals	-	Case-based payment using DRGs (10-30%)	Fee-for-service (70-90%)
Private pharmacies	-	Reference prices	Fee-for-service

### ***Provider Revenue Caps***

A notable feature of Mongolia's mix of payment methods is that each provider faces a global cap on all revenue sources. Revenue that is higher than expected from one source such as fee-for-service payments would be offset by a reduction in other sources, so total payments in one year from all revenue sources would not exceed the cap. Each health facility's revenue cap is estimated based on its projected budget requirements by line item. For soum health centers, the cap is based on the previous year's expenditures, while for family health centers, the cap is based on the catchment population multiplied by the capitation rate. For hospitals receiving line-item budgets, DRG revenues, and fee-for-service revenue, the share of the total projected revenue expected from DRG and fee-for-service revenue based on historical utilization is subtracted from the cap, and the remainder is paid to the providers as line-item budgets. Caps are also imposed on payment to private providers based on their historical billing to SIGO with incremental increases.

*"The hospital estimates budget requirements and projects DRG and "own" income (fees, ancillary activities). The MOH reviews and sets the total budget (less than requested) and the MOH budget covers the shortfall between this number and DRG/own income. We must then live within this total budget." -Central Hospital*

How health provider revenue caps are formed varies widely. Some health providers develop the budget proposals that inform their revenue caps based on the previous year's budget execution or historical utilization, while others consider input requirements such as bed capacity and staff. Some providers attempt to factor in the needs of the catchment population, including morbidity and mortality patterns.

*"The budget proposal is estimated based on human resource norms, population, and morbidity. For example, we estimated that we will employ so many of new staff but neither hiring of new staff nor remunerations have increased." -District Health Complex*

*"The budget is based on previous year historic expenditure level and doctors view on medicines." -Aimag General Hospital*

*"In addition to prices, we look at various cost estimates such as volume of cases for this year and add 10% of it for the next year." -Inter-Soum Hospital*

The final revenue caps appear to be somewhat arbitrary. None of the providers reported having a clear understanding about the basis for the final approved revenue cap.

*"We assemble Departmental requests for hospital budget, justify it based on prior budgets, trends in volume, staff, bed utilization. The proposed budget is then heavily cut by MOH-cut in half." -Aimag General Hospital*

*"We make and send our budget. Our budget is not approved as it is. It is cut. We do not know why." -Soum health center*

*"The budget is mostly reviewed and allocated based on the previous year's performance and suggestions of relevant departments and the MOH. The human factor is great in decisionmaking." - Ministry of Finance*

The provider revenue cap is a hard cap. The respondents all reported that it is impossible to exceed the cap. This feature of provider payment policy has been effective for containing overall costs in Mongolia's system.

*"It creates incentives for people to work within approved budget. Sometimes, instead of doing 1 thing we perform 2-3 works with the budget for 1. We try to be efficient as much as possible."*  
-Regional Diagnostic and Treatment Center

*"It is not possible to over spend budget money. The budget is approved therefore we are told to work within the budget limit. We have not run with debts before."* -District Health Complex

Although overall costs are well-managed in the system through the hard caps, some individual providers do report deficits and incur debts to suppliers.

*"We incurred debt in heating costs due to dzud in winter. So, we sent many letter to resolve this but nothing has been decided. We paid to the company out of the budget for this year and paying the debt off only today. We heat up 3 rooms with an electric heater and did not start the heating until December. In such a way, the savings were made from heating costs to pay off the debt."*  
-Inter-Soum Hospital

*"The funds are never enough and in some cases we run into deficit."* - Soum Health Center

Providers are not permitted to keep any surpluses generated from lower-than-expected volumes or efficiency gains.

*"When there is a savings, it is accumulated and taken back by the MOF at the end of year. It is not possible to use it for operations. Revenue from paid services exceeds the plan every year, however it is taken back by the treasury. It is not possible to over-spend budget money. The budget is approved therefore we are told to work within the budget limit. We have not run with debts before."* -District Health Complex

According to the respondents, the most problematic aspect of the provider global revenue caps is that they are formed, executed, and accounted for using input-based line items with little flexibility to move across expenditure categories once they are approved. This is because all public funds flow through the treasury system and are subject to the restrictions of the Budget Law. Although a positive feature of the mix of payment systems is that all revenue sources are pooled, thus largely avoiding the conflicting incentives that are often created by different payment methods from multiple revenue sources, the potential benefits of the output-oriented payment systems are reduced significantly.

*"The DRG payment gets mixed with line item payment and therefore the situation is similar to the previous payment system."* -District Health Complex

*"The budget law is very tough. Health insurance is being restricted by the budget law therefore becomes barrier for its improvement."* -District Health Complex

*"DRG payments are increased in order to fund quality of care and costs of services provided to the insured. But when the Ministry of Finance calculates the budget it affects this system and causes problems."* -SIGO

### ***What has changed under the IBL?***

Under the IBL, the responsibility for setting the revenue cap for primary health care providers has shifted away from Central Government and to the aimag/Capital City level. Previously, the Ministry of Health set the budget cap separately for family health centers and soum hospitals, based on capitation for the former and the previous year's spending for the latter. Now the budget cap is allocated by the Department of Health (DOH) in each aimag, which receives the aimag's global budget cap from the MOH. The method for setting the budget cap remains the same for the two types of hospitals. The only

difference is that there is one budget cap set for both family health centers and soum hospitals.

Part of the responsibility for preparing and approving the budget has also shifted to the aimag/Capital City level. Based on the budget cap, soum hospitals formulate the budget proposal for the next year using a line-item budgeting technique. Family health centers do not submit budget proposals to the aimag DOH. Instead, they report on their catchment population which is counterchecked with figures produced by local statistical office. The aimag DOH compiles the budget proposals from all providers funded by the state budget and health insurance fund (HIF) and submits them to MoH. Meanwhile, aimag/Capital City governors submit the budget proposal to the local citizens' representative Khural, and the lump sum budget is approved for implementation of special mandates of the government such as primary health care delivery in each soum and district. The citizens' Khural has limited authority to make changes in the budget, however, due to the following restrictions in the IBL:

- transfers of special purpose subsidies for base expenditure of local budget and other sectors are not allowed;
- debts and receivables are not allowed; and
- the standards, quantity and quality targets, and accessibility of services must not be affected.

A key difference is that the budget for family health centers and soum hospitals are no longer approved separately. Prior to 2013 when the IBL became effective, budgets for family health centers and soum hospitals in each aimag were approved separately within the portfolio of the Minister of Health. Since 2013, the budgets for the two types of primary health care providers are combined and approved as "the special purpose transfer for primary health care" for an aimag/capital city. Table 3 illustrates this difference in the case of Arkhangai Province.

**Table 3: Budget for Arkhangai aimag health care providers in 2012 and 2013**

Arkhangai aimag MOH-funded health care providers	2012	2013
	<b>10,178,501</b>	<b>10,527,044</b>
Aimag general hospital	3,678,468	4,156,244
Soum health center	3,681,032	0.0
Inter-soum hospital	655,344	759,912
Health center/Health department	1,780,070	865,187
Center for natural FOCI	179,915	212,849
Family health center	203,673	0
Special purpose transfer for primary health care	0.0	4,532,852

Unlike earlier, aimag/Capital City governments and local treasury offices now have a bigger role to play in the execution of family health center and soum hospital budgets. Once the budget is approved, MOH develops quarterly and monthly spending plans for family health centers and soum hospitals that sets overall limits, which are then approved by aimag/Capital City governors. The family health centers and soum hospital then go through two major steps to start spending their annual budgets. For each budget entity, the aimag/Capital City governors submit requests for "authorization for budget financing" and "authorization for budget spending" once or twice a month. The local treasury offices then review authorizations for budget financing and issue the authorization for spending within two days.

The IBL has not resulted in changes to the way in which the budget for primary health care is disbursed. Budgets are disbursed according to each line-item category for soum hospitals and on a lump-sum basis for family health centers.

However, the IBL has improved the level of flexibility that soum hospitals have in budget execution. Soum hospitals no longer need prior endorsement or permission from MOH or MOF to make adjustments

for amounts lower than 10 million MNT. They can now approach the soum governor and soum citizen's Khural for adjustment within the quarterly and monthly recurrent budget plans.

In summary, the provider payment cap has been retained and continues to play an effective role in controlling costs even after the IBL. The only major changes under the IBL are that the aimag/Capital City governors have a greater role to play in setting the provider payment cap for family health centers and soum hospitals and in budget approval and execution. Soum hospitals have a little more flexibility in spending from their line item budgets. Family health centers, which were always paid on a lump-sum basis, continue to enjoy the high level of flexibility in spending as before.

## **B. Payment system design and implementation arrangements**

Provider payment systems include both technical design features and implementation arrangements. Technical design features include the parameters, bases, or calculations used to compute payment rates, the services paid through the method, and the cost items covered. Implementation arrangements refer to the rules for disbursing, using, and accounting for payments and the relationships between purchasers and providers, between different providers, and among other actors. Both design features and implementation arrangements affect the incentives payment systems create, the consequences for the system, and whether health system objectives are supported.

Key aspects of provider payment system design and implementation arrangements for the payment systems in Mongolia are presented in Table 4. In the following sections, the design features and implementation arrangements for Mongolia's provider payment systems are presented and compared with international benchmarks and good practices.<sup>2</sup>

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<sup>2</sup> Langenbrunner, Cashin, and O'Dougherty (2009) and Kutzin, Cashin, and Jakab (2010) provide international benchmarks and good practices for the design and implementation arrangements for provider payment systems.

**Table 4. Design and implementation arrangements for provider payment systems in Mongolia**

Payment System	Design Features			Implementation Arrangements		
	Basis for Payment	Services	Cost Items	How payments are disbursed, used and accounted for	Caps	Surpluses and deficits
Line item budget	Varies by provider Historical budget, input norms, catchment population, cost estimates, morbidity/mortality burdens, etc. Residual of provider revenue cap after DRG and fee for service revenue deducted Final budgets approved by 38 line items	Preventive services Basic primary care Outpatient specialty consultations Diagnostic services Inpatient stays Medicines and blood products Rehabilitation services Traditional medicine Transportation for referrals	Salaries Medicines Supplies Administrative costs Minor repairs and equipment Training	Funds are disbursed, used and accounted for according to 38 input-based line items Budget is paid monthly in equal instalments	Hard budget cap; over-runs are not reimbursed	Deficits are not allowed Surpluses are returned to the Treasury
Case-based payment using DRGs	115 case groups based on initial study by external consultants Payment rates set as tariffs for case groups rather than base rate x case group weight Tariffs set by MOH and approved by joint order of three ministers based on the survey of variable cost and economic conditions. Private hospitals receive 50% of DRG tariff	Outpatient specialty consultations Diagnostic services Inpatient stays Medicines and blood products	Salaries Medicines Supplies Administrative costs Minor repairs and equipment Training	Funds are disbursed based on claims made by providers for inpatient admissions in each DRG Funds are used and accounted for according to input-based line items A percentage of high-cost DRGs is paid directly to the physician	Hard budget cap; overruns are not reimbursed	Deficits are not allowed Legally providers are permitted to retain up to 50% of surpluses, but in practice it is not allowed Surpluses are returned to the Treasury

Payment System	Implementation Arrangements					
	Design Features	Basis for Payment	Services	Cost Items	How payments are disbursed, used and accounted for	Caps
Capitation	Base rate is calculated by MOF primary care allocation formula Payment is adjusted for age/sex groups (0-5; 5-16; 16-49; 49-60 and >60) and higher payments for ger population Payment is made to providers based on the estimated registered population	Preventive services Basic primary care	Salaries Medicines Supplies Administrative costs Minor repairs and equipment Training	Sum hospitals are paid according to line items Family health centers are paid monthly by lump sum and can allocate expenditure across line items	Capitation is a capped payment system by definition Hard budget cap; over-runs are not reimbursed	Sum health centers are able to retain surpluses by line items If above 5 million MNT they must obtain permission from the MOF. If lower, permission can be granted by aimag health departments Family health centers can retain surpluses and use flexibly, but they pay 10% tax
Fee for service	Fee schedule approved by Ministries of Health and Finance Unclear how fees are calculated	Preventive services Basic primary care Outpatient specialty consultations Diagnostic services Inpatient stays Medicines and blood products	Salaries Medicines Supplies Administrative costs Minor repairs and equipment Training	Fees are paid in cash and revenue can be allocated flexibly up to the line item limits in the provider's budget cap; expenditures are accounted for by budget line items	Hard budget cap; over-runs are not reimbursed	Excess fee revenue over the provider budget cap is returned to the treasury

### Line-Item Budgets

Line-item budgets are paid to providers as the residual of their revenue cap after other revenue sources are deducted. As discussed above, all public providers in Mongolia start with an annual revenue cap that is based on a line-item budget. Revenue from other sources is projected and deducted from the revenue cap, and the residual is paid to providers in equal monthly instalments according to approved line items. The basis for the budget and rules for disbursing, spending, and accounting for budget funds all have shortcomings compared to international benchmarks and good practices (Table 5)<sup>3</sup>.

**Table 5. Design and implementation arrangements for the budget payment system in Mongolia compared with international benchmarks**

Payment System Design and Implementation	International Benchmarks	Mongolian Situation
Basis for the budget	Budgets based on inputs least desirable	Budget based on 38 input-based line items
	Budgets based on projected volume, historical claims or some other cost/utilization data more desirable	
	Budgets based on population, poverty or other proxies for health need most desirable	
Budget execution	Budget disbursed by detailed line items least desirable	Budget disbursed strictly by 38 line items
	Budget disbursed by large groups of line items more desirable	
	Budget disbursed in lump sum most desirable	
	Expenditure controlled by detailed line items least desirable	Expenditure strictly controlled by 38 line items; heavy administrative burden to move between line items
	Expenditure controlled by large groups of line items more desirable	
Expenditure flexibility (based on need) most desirable		
Caps, deficits and surpluses	No budget or payment cap least desirable	There is a hard budget cap, overruns are not allowed
	Soft budget cap more desirable	
	Hard budget cap or overruns carefully managed and controlled most desirable	
	Any surpluses are taken back and leave the health sector least desirable	Providers do not retain any portion of surpluses
	Surpluses retained by health sector and reallocated to other priorities more desirable	
Providers are allowed to keep at least some portion of surpluses, with some financial accountability most desirable		

A health facility budget is a prospectively agreed sum within which operating expenses of the facility must be contained (Dredge 2004). The basis for the budget can be the inputs historically used by the facility (staff, building, and supplies), projected volume of services, or projected needs of the population (case-mix adjusted volume of services accounting for other factors such as poverty, geography, etc.). Budgets based on inputs, as in Mongolia, are considered to be the least desirable since they are the least closely linked to population health service needs, while budgets based on projected needs are considered to be the most desirable (Langenbrunner, Cashin and O'Dougherty 2009, Langenbrunner and Wiley 2002).

<sup>3</sup> The international benchmarks on provider payment system design and implementation were developed and ranked by least to most desirable characteristics by consensus of the multi-stakeholder working group. These benchmarks should not be considered international evidence and are not generalizable beyond the interpretation of Mongolia's provider payment assessment.

International good practices suggest that budget payment systems with fewer line items and greater flexibility for expenditure are more desirable (Langenbrunner and Wiley 2002, Langenbrunner, Cashin and O'Dougherty 2009, Kutzin, Cashin and Jakab 2010). In Mongolia, however, the Budget Law strictly controls how budgets are disbursed, spent, and accounted for, with little flexibility to reallocate expenditures and no ability for providers to retain any surpluses from efficiency gains. Movement between line items is reported to be difficult, with burdensome approval requirements. A number of providers reported having savings in one line item but not being able to move funds to cover deficits in others. In fact, the lack of flexibility to allocate spending was noted as a problem more frequently than the inadequate amount of the budget.

While the IBL itself does not require providers to either claim or disburse the budget expenditure by line-item expenses, it has led to some improvements, albeit limited, in the level of flexibility that providers have. The MOF recently approved roughly 15 groups of line-item expenditure items, under which there are 55 detailed line-item categories. Not all groups or detailed categories of line-item expenses are used by health care providers. Adjustments between these groups require permission from the aimag/district governor and treasury office for secondary care providers and from MOH and MOF for tertiary hospitals. The MOF has allowed for greater flexibility in shifting between line items within one group without seeking permission from MOH or MOF. In this respect, the IBL certainly made a step forward compared to the previous arrangement.

As the survey findings in Chapter 3 show, at the governor level, there is a growing perception that health facility directors have the authority to reallocate spending in some respects. Most respondents (37.5 percent) said that the MOH and aimag/Capital City Treasury Fund had the authority to reallocate spending across categories in the budget. Around 28 percent also said that the aimag/capital city governor could reallocate spending across categories. At the DOH, the majority (95 percent) of respondents thought that MOH had the power to reallocate spending across categories. Meanwhile, at the facility level, directors were responsible for budget reallocation. The majority of respondents at the governor and health facility levels said that public health facility directors had the authority to reallocate spending within categories in the budget.

At the same time, the hard budget cap is implemented effectively. As mentioned earlier, total expenditures in the system are well-controlled.

### ***Case-Based Hospital Payment Using DRGs***

In 2006, Mongolia introduced case-based payment using DRGs for inpatient services purchased through its social health insurance system. The payment system started with 22 case groups and was expanded to 115 groups in 2010. The payment system is effectively a flat-rate tariff for cases in each of the groups. Private hospitals get paid 50 percent of the DRG tariffs paid to public sector facilities. The design and implementation of the DRG-based payment system in Mongolia is compared with international good practices in Table 6.

**Table 6. Design and implementation arrangements for the DRG-based payment system in Mongolia compared with international benchmarks**

Payment System Design and Implementation	International Benchmarks	Mongolian Situation
Basis for the case payment	Hospital-specific payment rates linked to historical budgets least desirable	Base payment rate estimated from costing studies (now outdated)
	Base rate calculated from cost historical claims or some other cost/utilization data more desirable	
	Single base rate derived from pool of funds available for hospital services applied to all hospitals with appropriate adjustments (e.g., geography, teaching hospitals) most desirable	
Case groups and weights	Unclear basis for case groups and weights least desirable	115 groups capture some variation in cost per case Co-morbidities not captured No outlier payment
	Case groups reflect some variation in cost per case (e.g. small number of groups; department based groups) more desirable	
	Case groups that capture significant variation in cost/case with cost weights based on relative costs across case groups with adjustments for co-morbidities and outlier cases most desirable	
Payment execution	Payment disbursed by detailed line items least desirable	Budget disbursed by strict line items
	Payment disbursed by large groups of line items with some activity-based component more desirable	
	Payment disbursed according to activity most desirable	
	Expenditure controlled by detailed line items least desirable	Expenditure controlled by strict line items; heavy administrative burden to move between line items
	Expenditure controlled by large groups of line items more desirable	
Expenditure flexibility (based on need) most desirable		
Caps, deficits and surpluses	No budget or payment cap least desirable	There is a hard budget cap, overruns are not allowed
	Soft budget cap more desirable	
	Hard budget-cap or overruns carefully managed and controlled most desirable	
	Any surpluses are taken back and leave the health sector least desirable	Providers do not retain any portion of surpluses
	Surpluses retained by health sector and reallocated to other priorities more desirable	
	Providers are allowed to keep at least some portion of surpluses, with some financial accountability	

Compared with international benchmarks and best practices, the DRG-based payment system is a step in the right direction. In terms of the design of the payment system, the 115 case groups appear to be appropriate for Mongolia’s health service delivery system and the current capacity of the purchaser and provider. The case groups are widely perceived as appropriate for capturing much of the cost variation across the types of cases common in Mongolia.

*“It is beneficial because there are variations by diagnostic groups. It is not possible to pay for all cases at same rates.” -Regional Diagnostic and Treatment Center*

*“Every disease is financed differently which is good and fits reality.” -Soum Hospital*

*"It is good that we get paid differently for different diseases. It is flexible and precise." -Soum Hospital*

*"[The DRG payment system] is similar to numbers and costs of diseases prevalent in Mongolia." -Private Hospital*

However, the system does have some shortcomings. The main shortcoming providers raised about the design of the DRG-based payment system is that it does not account for co-morbidities, so cases within a DRG are paid the same regardless of whether the patient has complications or any additional diagnoses. There is also no mechanism to pay for outliers (particularly high-cost cases in a DRG).

*"Only one DRG is allowed, and some patients have two or more diseases. There is no surcharge for complex cases, or higher DRG for multiple diagnoses." -Central Hospital*

*[The DRG-based payment system] does not compensate for very high cost patients." -Provincial General Hospital*

*"It is weakness that there is little variance in the level of payment rates between diagnostic groups. We get paid same regardless of case complications." -District Health Complex*

Several providers specifically noted that while maternal care is paid for through the budget, they do not receive DRG-based payments for services related to complications and co-morbidities of pregnant women.

*"We do not get reimbursed for treatment of co-morbidity of pregnant mothers. It is said that the care for pregnant women is funded by the government budget. However, they have many co-morbidities and we treat their conditions. Say that one mother has three different illnesses and she was seen by three doctors, but health insurance pays for the first diagnosis only. This is a big shortfall of the payment method." -Province General Hospital*

*"A pregnant woman might have chronic illness, and in this situation it should be possible to give additional payment with another cost weight or coefficient." -District Health Complex*

As noted above, payment rates to private hospitals are set at 50 percent the rate paid to public hospitals for each case group. The basis for this payment differentiation is not clear.

*"Every hospital should be reimbursed same within the health insurance payment system. Private hospitals get paid 50% of the payment rate of the government hospitals. We don't agree to this payment arrangement. Health services are provided at same level and quality regardless of ownership, public or private." -Private hospital*

Final DRG payments in Mongolia are fixed tariffs and are not made up of case groups, relative cost weights, and base rate. Although this type of DRG payment calculation is used by a number of OECD countries such as England, France, and the Netherlands (Cots, et al. 2011), it is more desirable according to international good practices to have a formula-based system made up of separate payment system components. Having a separate base rate and relative cost weights gives the purchaser two levers to establish appropriate relative prices for different types of hospital cases while remaining budget-neutral by adjusting the base rate upward or downward depending on available resources and actual volumes of cases (Langenbrunner, Cashin and O'Dougherty 2009).

In terms of implementation arrangements, the DRG payments are subject to the same Budget Law restrictions as the line-item budget. It therefore has the same strengths (hard budget cap) but also the same weaknesses (lack of flexibility to reallocate DRG revenue across line items and no possibility for providers to retain any surplus).

*"It is not possible to shift between line items. Also if we focus on prevention and have fewer admissions we get paid less from insurance." -Provincial General Hospital*

### Capitation

The MOH pays family health centers and some soum health centers through a per capita payment system (capitation).<sup>4</sup> Mongolia's capitation system is consistent with international benchmarks and good practices, although some shortcomings make it difficult to capture all of the potential benefits of the payment system. The design and implementation of the capitation payment system in Mongolia is compared with international good practices in Table 7.

**Table 7. Design and implementation arrangements for the capitation payment system in Mongolia compared with international benchmarks**

Payment System Design and Implementation	International Benchmarks	Mongolian Situation
Base Rate	Provider-specific payment rates linked to historical budgets least desirable	Base payment rate determined by an allocation formula of Ministry of Finance; same for all providers; adjustments for age/sex and ger population
	Single base rate calculated from historical claims or some other cost and utilization data more desirable	
	Single base rate derived from pool of funds available for primary care applied to all providers with appropriate adjustments (e.g., age/sex, geography) most desirable	
Population Registration	No free choice of provider and population assignments made based on inaccurate and/or non-transparent data least desirable	No free choice of provider Population assignment based on outdated population registers No mechanism to account for mobile population
	Population assignment based on accurate population registers more desirable	
	Free choice of provider with up-to-date enrollment database to capture births, deaths and migrations and mobile populations most desirable	
Payment execution	Payment disbursed by detailed line items least desirable	Capitation budget disbursed lump sum according to base rate and enrolled population
	Payment disbursed by large groups of line items with some activity-based component more desirable	
	Payment disbursed according to activity most desirable	
	Expenditure controlled by detailed line items least desirable	Expenditure is flexible across line items (for family health centers, which are non-budget organizations)
	Expenditure controlled by large groups of line items more desirable	
	Expenditure flexibility (based on need) most desirable	
Caps, deficits and surpluses	No budget or payment cap least desirable	There is a hard budget cap, and overruns are not allowed; family health centers retain surpluses
	Soft budget cap more desirable	
	Hard budget-cap or overruns carefully managed and controlled most desirable	
	Any surpluses are taken back and leave the health sector least desirable	
	Surpluses retained by health sector and reallocated to other priorities more desirable	
	Providers are allowed to keep at least some portion of surpluses, with some financial accountability	

<sup>4</sup> In 2000, Mongolia restructured its urban primary care sector into a model of family group practices, now called family health centers. Soum hospitals were restructured into soum health centers.

Although the calculation of the base rate in Mongolia follows international good practices, providers complain that the rate is too low. Each family health center and soum health center is paid a fixed amount for each registered person to provide all necessary primary care. There are adjustments for six age/sex groups, and providers serving populations in ger districts are paid a higher rate. The base per capita rate is set through an allocation formula of the MOF, and there are persistent complaints that the rate is too low and not updated annually for inflation.

*"Payment rates are not adjusted annually. They are not adjusted to the annual inflation." -Family Health Center*

*"Rates are fixed, they do not fit reality. Prices are rising. But rates are fixed. It was the same for the last 5 years." -Family Health Center*

The main shortcoming in Mongolia's capitation payment system is the way the population served by each primary care provider is estimated. Currently, the population does not actively choose the family health center or soum health center to which they are assigned. The population reports of the National Statistics Office are used to estimate the number of people served by the family health centers and soum health centers. Those reports are up to two years outdated and do not account for mobile populations, which are significant in Mongolia with large seasonal variations.

*"The financing is done based on registered population. In such case expenses for people who have come without official notification in registry about movement from soums are not reflected." -Family Health Center*

*"In 2012 the population number is 8,009, however we got paid for 7,800 persons then there were 9,200 we served in real life." -Family Health Center*

*"Mongolia has low populations in rural areas, but the places with more population and migrants risk depleted financing. Because there is no information system or database, there is no basis for transferring funds between facilities based on population movement." -Ministry of Financer*

For family health centers, the capitation implementation arrangements are in line with international benchmarks and good practices because these are not budget institutions and are therefore granted more flexibility. Capitation payments are made as a monthly lump sum to family health centers, and the providers can allocate their funds across line items as needed. They are also permitted to retain any surpluses, although surpluses are subject to 10 percent tax. Most providers report that payment rates are so low that they never generate a surplus. Soum health centers are budget institutions, and their capitation payments are subject to the Budget Law, although the soum health center in the assessment sample reported having flexibility to allocate funds across line items.

*"We shift between expenses. For example, if we save on food then we use the saving for fuel." -Soum health center*

*"We have a right use the funds for any cost item." -Family Health Center*

*"If we generate a surplus, we can keep it and pay 10% in tax. We can use the rest as we see fit--buy furniture, etc. Same facilities in ger districts have had problems with higher heating, staffing bills and have had to cut back on staff." -Family Health Center*

*"If it works out that there is a surplus, it will be our profit. However, we do not make a profit rather incur insufficient funding often. Under the current capitation payment rates it is not possible to make profit." -Family Health Center*

### *Fee for Service*

Secondary and tertiary hospitals in Mongolia can charge patients directly for some diagnostic services and tests outside of the guaranteed package of services according to an approved fee schedule. The regulations on fee-for-service were approved by the joint order of the Ministers of Health and Finance in 2006. Private providers have more flexibility in setting their fees than public providers. The design and implementation of the fee-for-service payment system in Mongolia is compared with international best practices in Table 8.

**Table 8. Design and implementation arrangements for the fee-for-service payment system in Mongolia compared with international benchmarks**

<b>Payment System Design and Implementation</b>	<b>International Benchmarks</b>	<b>Mongolian Situation</b>
Basis for Fees	Fees calculated with no cost basis (or outdated cost basis) and no policy considerations are least desirable Fees calculated with some cost basis more desirable Fees calculated based on good average cost estimates and adjusted for policy considerations are most desirable	Basis for calculating fees is unclear; fees are differentiated between secondary and tertiary hospitals
Bundling of Services	Highly itemized fee schedules (unbundled) least desirable Fee schedules with some bundling of services (not too many items and not too few) most desirable	No bundling of services
Payment execution	Payment disbursed by detailed line items least desirable Payment disbursed by large groups of line items with some activity-based component more desirable Payment disbursed according to activity most desirable Expenditure controlled by detailed line items least desirable Expenditure controlled by large groups of line items more desirable Expenditure flexibility (based on need) most desirable	Payment made in cash from patient to provider according to services delivered Expenditure controlled by strict line items; heavy administrative burden to move between line items
Caps, deficits and surpluses	No payment cap least desirable Soft payment cap more desirable Hard budget-cap or overruns carefully managed and controlled most desirable Any surpluses are taken back and leave the health sector least desirable Surpluses retained by health sector and reallocated to other priorities more desirable Providers are allowed to keep at least some portion of surpluses, with some financial accountability	Fee-for-service revenue is limited by incorporating it into hard budget cap Providers do not retain any portion of surpluses

Whereas private hospitals rely on fee-for-service payments for more than 70 percent of their revenue, fee-for-service is kept to a very small share of public hospital revenue. As described earlier, the projected fee-for-service payments are incorporated into the hospital's annual budget cap.

*"Effectively, [fee for service] revenue is capped because SHI payments are reduced if total revenue exceeds expectation due to increase fee revenue." ~Central Hospital*

Public providers also report that fee-for-service revenue is low due to the socioeconomic situation, particularly in rural Mongolia.

*"It is difficult to provide services to people living below minimum living standards. About 80-90% of patients have hard lives and are poor. Many have debt." ~Province General Hospital*

*"If we set high price, no citizens will be able to pay. We try to set prices as suitable as possible to all parties." ~Regional Diagnostic and Treatment Center*

Public providers are not permitted to retain any surplus if their budgeted fee-for-service revenue is higher than expected. However, the provincial hospital claimed that some of the surplus is carried over to the next year.

*"Revenue exceeded by 47 million MNT for 2013. Exceeded revenue becomes the surplus for us and taken back to the MoF. There is no such thing as bonus." ~Regional Diagnostic and Treatment Center*

*"At the end of the year MOF or treasury takes back [any surplus]. However, 20% of total surplus is paid back next year." ~Province General Hospital*

In terms of design, the fee schedule is for itemized (unbundled) services with no clear basis for setting the fees, so there are no incentives to deliver the services efficiently. Secondary hospitals complain that their fees are set lower than for tertiary hospitals, although they deliver comparable quality.

*"Tariffs are very different for secondary and tertiary care providers. Tertiary care providers charge higher fees than secondary care providers for the same quality of services." ~District Health Complex*

*"There are difficulties because there are no uniform instructions, regulations or tariffs." ~Ministry of Finance*

### **C. Positive and Negative Consequences of the Current Payment Systems**

During the interviews, stakeholders were asked to identify the main strengths and weaknesses of each payment system. They were then asked specific questions about whether in their view the payment systems contributed positively or negatively to four sets of consequences: (i) equity and access to services, (ii) efficiency, (iii) quality, and (iv) financial sustainability. All responses throughout the interviews were coded and compiled into those four categories and related sub-categories (Table 9). The responses were categorized as positive or negative consequences in each category. For example, if a respondent stated that a payment system does not contribute to fair and equitable distribution of resources across the population, the response was coded as a negative consequence of the payment system on equity. In the sections below, each figure shows the number of times each type of positive and negative consequence was noted by the respondents.

**Table 9. Positive and Negative Consequences of Provider Payment Systems**

Equity in access to services	Population	Does the payment system contribute to fair and equitable distribution of resources across the population?
	Geographic	Does the payment system contribute to fair and equitable distribution of resources across geographic areas?
	Provider	Does the payment system contribute to fair and equitable distribution of resources across providers?
	Case Mix	Does the payment system contribute to fair and equitable distribution of resources across different types of cases?
Efficiency	Efficiency	Does the payment system help health facilities manage resources more efficiently?
	Over-use	Does the payment system make it beneficial or more profitable for health facilities to deliver too many services? Deliver services in a costly way? Increase unnecessary referrals?
	Payment Delays	Does the payment system contribute to payment delays to providers?
	Administrative Burden	Is the payment system administratively burdensome?
Quality	Quality	Does the payment system make it beneficial or more profitable for health facilities to provide higher quality of care?
	Primary Care	Does the payment system make it beneficial or more profitable for basic care to be delivered at the primary level?
	Prevention	Does the payment system make it beneficial or more profitable for health facilities to focus on health promotion, prevention and chronic disease management?
	Responsiveness	Does the payment system make it beneficial to be responsive to patients?
Financial Sustainability	Provider Viability	Does the payment system help health facilities stay financially viable and avoid deficits?
	Provider Autonomy	Does the payment system help increase the autonomy of health facilities?
	Cost Containment	Does the payment system help total expenditures stay within available resources?

### ***Line-Item Budget***

The line-item budget is generally seen as an important source of guaranteed, stable income that is important for provider financial viability. The compiled responses related to perceived positive consequences of the line-item budget are presented in Figure 3. For some providers, the budget drives efficiency and limits over-use of services-but this is largely due to the hard constraint and limited funds. Very few provider responses indicated any positive consequences of the budget for equity or quality.

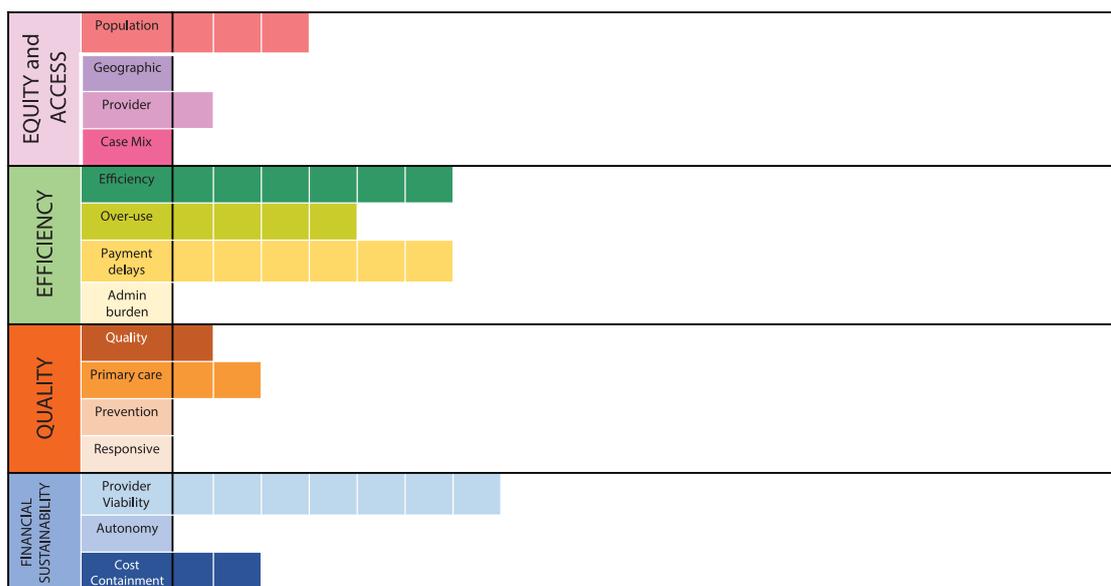
*“The idea is correct. Payment based on monthly schedule reduces risks. However, the budget is not sufficient or in short.” -National Specialty Hospital*

*“The budget gives assurance for uninterrupted and continuity of operations and no risks to sustainability.” -District Health Complex*

*“Since we don’t get enough money we must economize.” -Province General Hospital*

*“We try to avoid or reduce hospitalization, and try to pay more attention to public health. We have an understanding that by reducing hospitalization we can save some money.” -Soum Health Center*

**Figure 3. Perceived positive consequences of the line-item budget payment system**



In spite of some positive consequences noted by stakeholders, the line-item budget was associated with significantly more negative responses than any of the other payment systems (Figure 4). The rigidity of the budget and inability to keep surpluses are widely viewed as the main barriers to efficiency and quality.

**Figure 4. Perceived negative consequences of the line-item budget payment system**



Nearly all providers noted that the line-item budget has negative consequences for efficiency due to the lack of flexibility to shift expenditures across line items as needed.

*“There is no incentive or bonuses for efficient operations. We save on electricity and water fairly sufficient, however the saving is taken back to the treasury.” -National Specialty Hospital*

*"We do not see any advantages. Saved expenses are not shifted to expenses that are in short. Thus, this payment method is not very useful. If you save on food it is not possible to use for medicines. It is restricting efficient resource use." -National Specialty Hospital*

*"Quality will not improve if we do not have an approved budget that meets our needs. The strict line item budget makes it difficult to manage variable costs such as medicine, which can vary substantially depending on the conditions we treat." -Regional Diagnostic and Treatment Center*

*"Very limited capacity to improve efficiency. For only a few line items resources can be spent effectively." -District Health Complex*

*"It is difficult to purchase assets since there is no such line item." -Soum Hospital*

*"[The budget] is not flexible. It is impossible to initiate anything. It suffocates aspirations and provides no opportunity for development and expansion." -Soum Hospital*

The line-item budget is also perceived to have negative consequences for equity. In terms of population, geography and distance are not taken into account. For equity across providers, the budget does not reflect the complexity of cases that different providers manage.

*"Not equitable across providers because payment is not proportional to burden of the services they provide." -Central Hospital*

*"Districts that have a smaller population than ours receive the same budget. This means that the budget is allocated regardless of the size of the population and geographical condition." District Health Complex*

*"Does not consider distance, which is a weakness. Examining patient at longer distance takes more money. But the cost is calculated as the same." -Soum Hospital*

### **Case-Based Hospital Payment Using DRGs**

The DRG-based payment system is well understood by providers and largely viewed positively. Respondents noted many positive consequences of the DRG-based payment system (Figure 5). It is the only payment system that is perceived by providers to promote equity, efficiency, and quality. In particular, they perceive it as fair since it pays providers for activity.

*"We do not get paid for the total operations of the hospital but for providing services for particular patients. It is more flexible and directs the payment to services or operations. In general, we would like to get paid by each case. It would be good if government funded share is same as by the insurance system." -National Specialty Hospital*

*"The advantage is that payment is made based on service provision." -District Health Complex*

Several providers also noted that the case-based payment system creates incentives to be more efficient in treating individual cases and reduce unnecessary services.

*"It does prevent doctors from ordering unnecessary tests or procedures." -Central Hospital*

*"[The DRG-based] payment system makes us provide services within resources." District Health Complex*

At the same time, there do not appear to be serious negative consequences for quality. Having clinical guidelines in place may be an important factor in protecting quality with the stronger efficiency incentives of case-based payment.

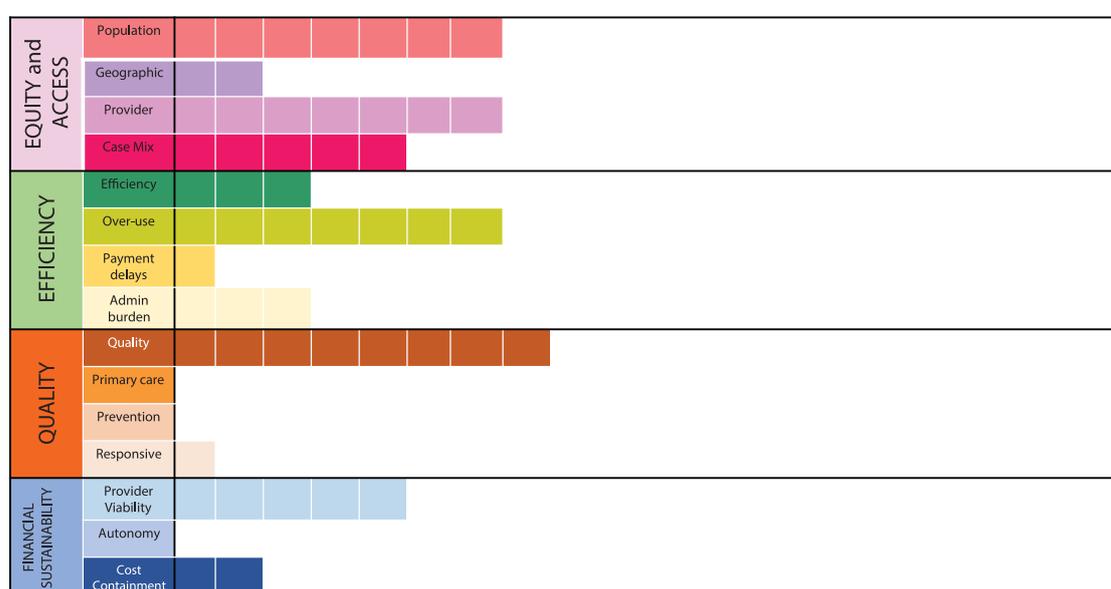
*"[The DRG-based payment system] enhances quality because payment is related to need." -Province General Hospital*

*"We have been able to introduce new technology." -Province General Hospital*

*"As for quality, we provide full treatment according to our conditions. After surgery a patient will stay for 4 or 5 days. I think it is OK for the DRGs provided." -Soum Hospital*

*"We try to follow standards. There is no incentive for skimping on care." -Soum Hospital*

**Figure 5. Perceived positive consequences of the DRG-based payment system**



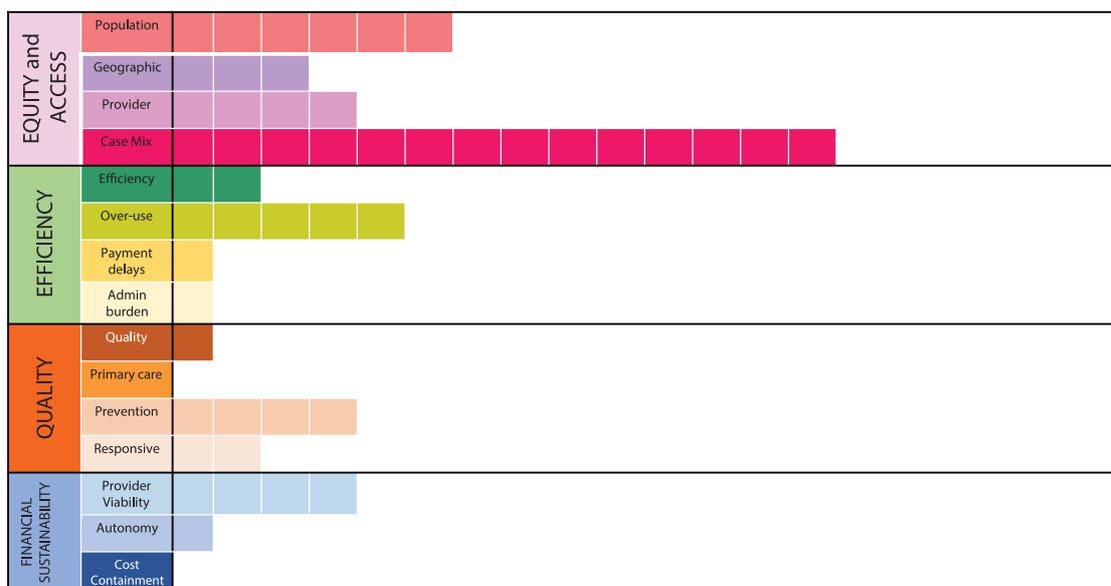
The main perceived negative consequence of the DRG-based payment system is that it does not promote fairness and equity. As discussed earlier, current case groups do not account for complications and co-morbidities (Figure 6). A number of stakeholders also noted that the DRG-based payment system does not promote equity because there is no adjustment for different geographic areas.

*"[The payment rate] is the same for all areas and that is not fair." -Sanitorium*

*"[The DRG-based payment system] does not contribute to geographic equity because no difference." -Soum Hospital*

*"[The payment rate] is exactly the same. It does not reflect specific characteristics of geography." -Soum Hospital*

**Figure 6. Perceived negative consequences of the DRG-based payment system**



Although perceived negative consequences of the DRG-based payment system are not widespread, several providers noted that the system could possibly lead to unnecessary hospital admissions. However, this may have more to do with the way benefits are structured under the health insurance system and the focus on inpatient benefits. One provider also noted that there may be an incentive to avoid more complicated patients.

*“Even if a person is not interested to get hospitalized, for the hospital it is the only way to get paid. This creates an incentive to go after money and poor quality service.” -Province General Hospital*

*“Prevention is not funded by social insurance, hence if we have fewer admission we get paid less from insurance.” -Province General Hospital*

*“This payment system might result in unnecessary readmissions, but not here.” -Province General Hospital*

*“There is an incentive to avoid sicker patients because we are cautious about resulting accountability to them.” -Province General Hospital*

*“[The DRG-based payment system] does not give incentives for health promotion because payment is only made if the patient is sick. There is no funding for prevention and chronic diseases.” -Soum Hospital*

**Capitation**

The capitation payment system is widely perceived to have positive consequences related to efficiency, equity, and access to services for the population (Figure 7). It allows funds to be used for outreach, and providers have the flexibility to allocate funds across line items according to their needs.

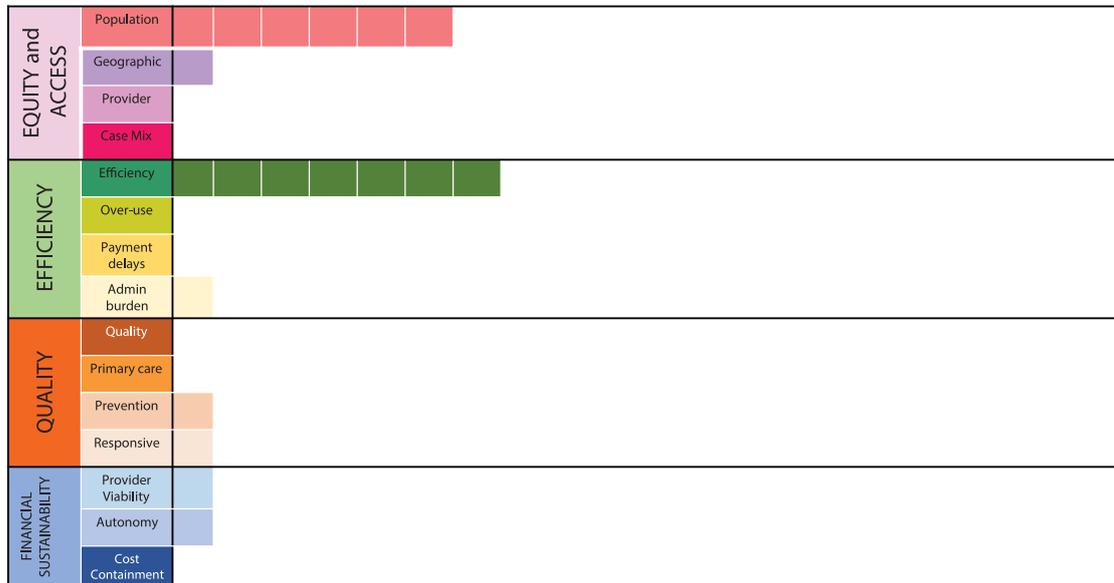
*“We get a lump sum and can decide how to use it most effectively, which encourages smart planning.” -Family Health Center*

*“We can use funds very flexibly to address the particular needs of the population.” -Family Health Center*

“Payments are based on population and meeting patient needs.” ~Family Health Center

“Capitation is an easy method to provide primary care in a fair and equitable way. It has an important role.” ~MOH Department of Finance and Economics

**Figure 7. Perceived positive consequences of the capitation payment system**



Capitation is the only payment system that is perceived to encourage health promotion and prevention.

“It enables us to reach out to the population and provide services to every person.” ~Soum Health Center

“It enables us to focus on public health and prevention, because we do not have to rely on service revenue.” ~Family Health Center

“Since payment is based on population, we can reach out, even to those who do not seek services.” ~Family Health Center

However, capitation is perceived to have some negative consequences. For example, as it is currently implemented in Mongolia, capitation does not create any specific incentives to improve quality of care or limit excess referrals (Figure 8).

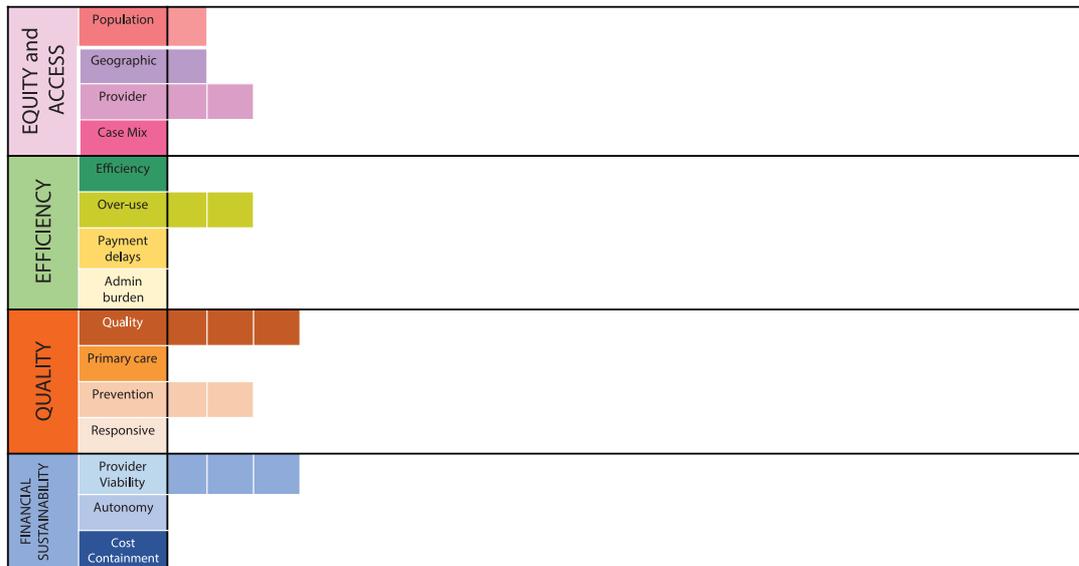
“[Capitation] tends to create incentives for referral and it is impossible to control quality of care.” ~MOH Department of Policy and Planning

“It is easy to calculate funding of the health facility, but [capitation] does not provide good incentives based on results.” ~MOH Department of Finance and Economics

Respondents also noted some negative consequences related to the low capitation payment rates and the inadequate consideration for mobile populations. One provider also noted that the capitation payment system has negative consequences for equity because there is no discrimination across geographic areas.

“If rates were higher they could do more outreach, and perhaps reduce admissions.” ~Family Health Center

**Figure 8. Perceived negative consequences of the capitation payment system**



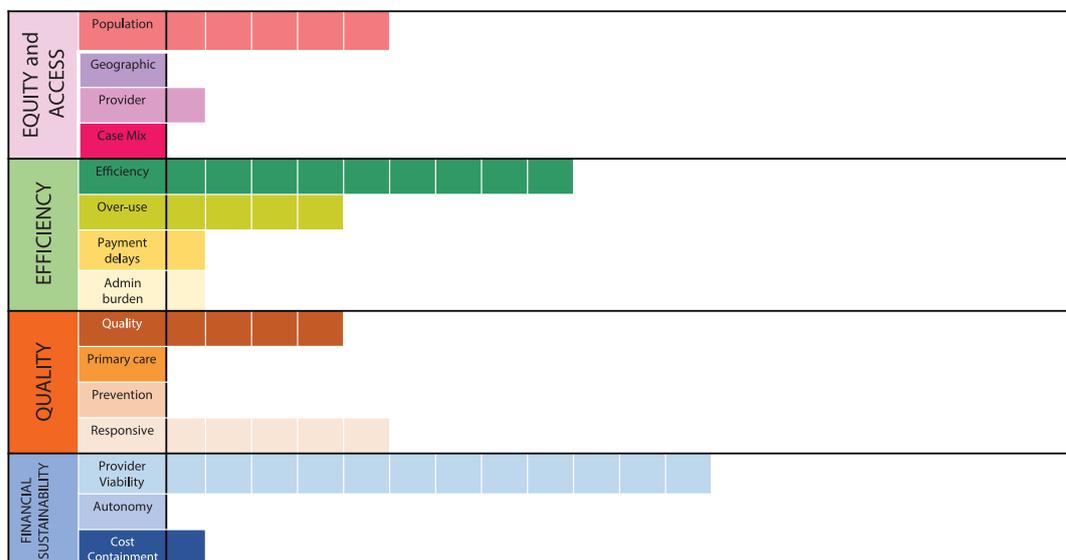
**Fee for Service**

The fee-for-service payment system is perceived as bringing several positive consequences without the negative consequences typically associated with fee-for-service payment systems, especially cost escalation and over-use of high-cost services (Figure 9). This is because Mongolia tightly controls the fee-for-service payments and limits them to services outside of the benefits package with revenue included within the providers’ overall revenue caps. The socioeconomic situation in the country also limits capacity for out-of-pocket spending among users of the public system, but this is something that could change as Mongolia’s economy continues to develop and as demand for more and higher-tech health services increases.

“There are efficiency gains from extra motivation without over-use of high-cost services.”~Soum Hospital

“Does not promote high-cost services because it is difficult for Mongolian condition. People have varying capacity to pay.” ~Private Hospital

**Figure 9: Perceived positive consequences of the fee-for-service system**



The cash income from fees, although low for public providers, is perceived as being helpful for financial viability and is used by most providers to improve the quality of their services.

*“Fee payments help with financial viability because this is our own revenue and prevents from shortages.” -Soum Hospital*

*“Helps with quality because we have cash.” -Soum Hospital*

*“Direct cash payment is made to the health facility. Drug suppliers prefer to be paid by cash. Therefore, it enables us to buy drugs and supplies needed for patient services.” -Private hospital*

*“We use it to upgrade the hospital, buy and upgrade equipment.” -Private Hospital*

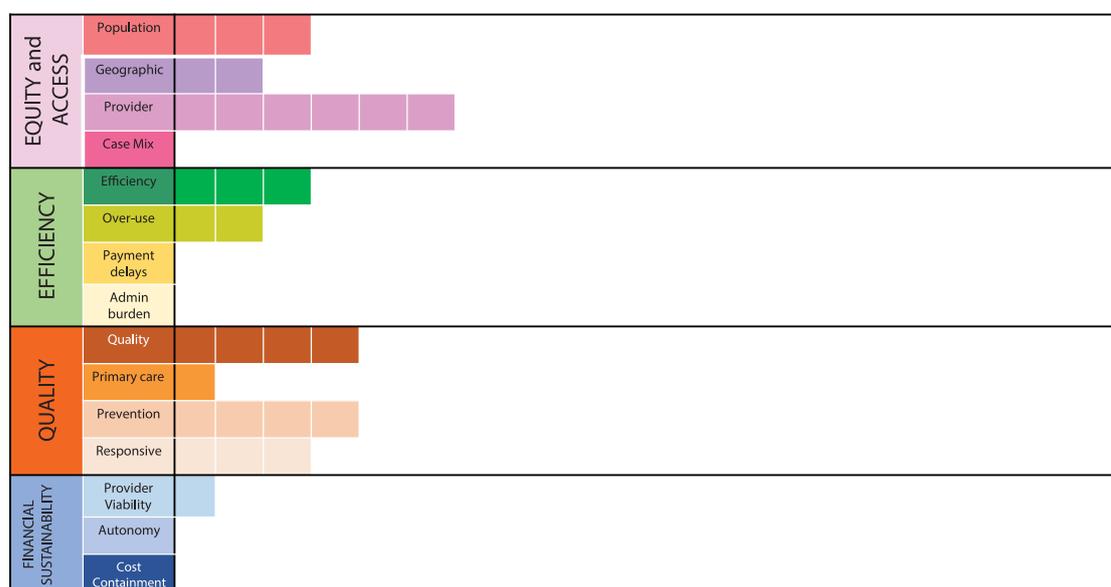
*“We provide small bonus to staff and help out with their social problems.” -National Specialty Hospital*

Despite these positive consequences, there are some perceived negative consequences of the fee-for-service payment system (Figure 10). The negative consequences relate mainly to poor understanding of the fees by the population.

*“Lots of complaints from patients because they do not understand why social insurance is not paying in full, and they have to pay fees.” -Private Hospital*

*“There is poor understanding of regulations by patients so we face difficulties and resistances sometimes.” -District Hospital*

**Figure 10. Perceived negative consequences of the fee-for-service payment system**



#### IV. CHALLENGES AND LIMITATIONS OF THE ASSESSMENT

Implementation of the provider payment system assessment encountered a number of challenges. In general, provider payment literacy is weak among stakeholders in many low- and middle-income countries, which was a challenge also encountered in the Mongolia assessment. Variable understanding of specific terminology may have impacted the results. The terminology used to describe provider payment results also was found to be too abstract for some respondents, so responses sometimes provided less in-depth

discussion than expected. In addition, although the structure and content of the assessment guide were adapted for the Mongolian context, it is possible that key issues were missed because there were not specific questions to capture them.

The assessment only yielded information about the perceptions of stakeholders regarding the design, implementation, and results of the provider payment systems currently in use. Provider understanding and perceptions of the design, implementation, and incentives created by payment systems are a key factor in the effectiveness of payment systems in supporting health system objectives. While the assessment cannot provide a quantitative estimate of this effectiveness, it can shed light on the root causes of the failure of higher levels of health spending to generate significant progress toward key objectives and provide guidance on key bottlenecks that need to be addressed.

## V. POLICY IMPLICATIONS AND ROADMAP

At the end of the assessment, the results were discussed to reach consensus on the interpretation, conclusions, and implications for the roadmap to improve Mongolia’s provider payment systems under the upcoming revision of the Health Insurance Law. The conclusions and implications for the roadmap are summarized below.

### A. Supporting Health System Objectives

The provider payment systems as currently designed and implemented in Mongolia are only moderately supporting priority health system objectives agreed in the first stakeholder planning meeting for the assessment (Figure 11). The objective of achieving universal coverage is supported by the overall provider budget cap, which is enabling effective cost containment. This financial discipline is more likely to make it possible to use additional resources to expand effective coverage. However, efficiency objectives are not supported by the payment system implementation arrangements, particularly the line-item budget restrictions. Other objectives include stimulating competition, promoting primary care, improving child health care, and increasing accessibility of medicines.

**Figure 11. Effect of Current Provider Payment Systems on Health System Objectives**

Objective	Effectiveness of Current Provider Payment Systems	
Achieve universal coverage	+	<ul style="list-style-type: none"> <li>• Providers perceive greater access among the population</li> <li>• Copayment policy and capitation adjustments may be enhancing equity</li> <li>• Cost containment may make it possible to deepen coverage</li> </ul>
Cost efficiency at the macro and micro level	+/-	<ul style="list-style-type: none"> <li>• Effective budget cap helps macro efficiency</li> <li>• Capitation is promoting micro level efficiency</li> <li>• DRG is unclear</li> <li>• Line item budget constraint limits micro level efficiency</li> </ul>
Right incentives for different stakeholders	-	<ul style="list-style-type: none"> <li>• Little incentive for health promotion, prevention or shifting to primary care</li> <li>• Some incentives for skimping on care (budget) and excess admissions (DRG)</li> <li>• But no obvious incentives for high-cost services, over-referral</li> </ul>
Stimulate competition in the health sector	?	No clear relationship between provider payment systems in place and competition
Promote primary care	-	Little incentive for health promotion, prevention or shifting to primary care
Improve child health care	-	Little incentive for health promotion, prevention or shifting to primary care
Increase accessibility of medicines	?	Pharmacies perceive that access to medicines has increased for people but when caps are reached the burden is shifted to the patient.

### B. Summary of Strengths and Weaknesses of Current Payment Systems

Overall, the results of the provider payment assessment show that the payment systems complement each other and that all bring some positive features. For example, providers appreciate the guaranteed,

stable portion of revenue that comes from the budget. They also understand the activity-based payment through DRGs and think it is fair. They rely on the small amount of fee-for-service revenue to supplement their total revenue and provide some staff motivation.

The overall budget cap at the provider level is effective at containing costs and forcing some efficient behavior. Providers are generally accepting of the cap and report that they adjust their service delivery decisions to manage within the cap and avoid deficits. Some providers complain about the cap, but in most cases, it is more an issue of how the cap is set rather than the cap itself.

Following the IBL, part of the responsibility for setting the budget cap for primary health care (family health centers and soum hospitals) has shifted away from the central government to aimag/Capital City government. The budget cap continues to operate as before and serves as an effective mechanism for containing costs and improving efficiencies. The main difference is that the budget cap as well as the budget spending plans prepared by the health facilities are approved by lawmakers at the aimag/Capital City level. In principle, this implies there is scope for ensuring that local level priorities are reflected in the budget cap and spending plans. However, it is too early to see these effects in practice.

There is little evidence of the adverse consequences often associated with the different payment systems. The potential negative consequences of several of the payment systems—such as increased admissions with DRG payment, skimping on care with budget payment and capitation—are effectively kept in check with the global budget cap and widespread awareness of and respect for clinical guidelines. Fee-for-service has not driven over-use of costly services and general cost escalation, as it does in many health systems. This is largely because fee-for-service payment is used in a targeted way and subject to the overall provider cap. Fee-for-service revenue is also limited by the socioeconomic context in Mongolia.

Several provider responses indicated a strong influence of professional ethics and a lack of desire to treat health services as a market good that can generate a profit. This perspective could face pressure, however, as national and household incomes grow and demand for more and higher-technology services grows. Mongolia will have to continue to manage the pressure of increasing fee-for-service revenue for providers.

In spite of these positive aspects, there are serious limitations in the current design and implementation arrangements of the provider payment system that affect incentives to improve efficiency and shift resources and service delivery to primary care and prevention activities. Universally, stakeholders view the line-item budget as the major constraint to using resources effectively and meeting the needs of the populations served. Most providers also responded that being able to keep at least some surplus when they keep their volume of services below their cap would not only serve as a motivation to use resources more efficiently, but it would also make it possible to invest in service delivery improvements to better meet population needs.

The constraints associated with line-item budgets have been alleviated only marginally under the IBL. To begin with, the IBL only affects the budget processes of family health centers and soum hospitals. Secondary and tertiary care providers are not affected by the IBL. Family health centers' budgets are set on a capitation basis, and the budgets are allocated on a lump-sum basis. This has not changed under the IBL, and family health centers continue to enjoy a high degree of flexibility in how they spend the budget. Soum hospitals' budgets continue to be set on a line-item basis, although the IBL has resulted in greater flexibility in spending across categories for soum hospitals.

Most providers noted that payment rates do not include adequate adjustments for geographic differences in the cost of delivering care. In the Mongolian context, low population density, the remoteness of many villages, and severe weather conditions create enormously variable challenges and resource requirements for providing basic services. Most stakeholders consider adequate geographic adjustment to payment rates to be one of the most critical issues for improving the allocation of resources across

providers and the population.

Last but not the least, good management information systems are vital for strengthening provider payment mechanisms and strategic purchasing capacity. Since 2005, the health sector has been making efforts to implement a health management information system strategy. The Ministry of Health uses Health-info software for collecting, integrating, and processing the routine health statistics. Most tertiary and secondary hospitals use hospital information systems, however hospitals have to keep paper records as the legal framework for electronic recordkeeping has not been fully instituted and regulated effectively. For example, linkage to social health insurance is still quite basic, as there is no electronic exchange of information between health care providers and health insurance. Use of IT at the primary care level is limited to basic word-processing and the use of spreadsheets. Information on ICT in the private sector is limited, although newly established private health care providers use the latest developments in hospital information systems. A more integrated, preferably electronic information system would help improve performance monitoring and therefore efficiency and quality of service delivery.

### C. Roadmap

The assessment does not suggest that the general structure and mix of payment systems in Mongolia need to change. It is important to continue to prevent potential adverse consequences of the different payment systems, which is easier than reversing them in the future. For example, it is recommended that Mongolia continue to implement the cap on all revenue sources for providers, limit fee-for-service, and strengthen clinical guidelines and the referral system.

Based on the stakeholder consultation meeting, it was agreed that the roadmap should focus on three key areas:

- The public financial management rules (line-item rigidities and retaining a portion of surpluses),
- Improving the technical design of the payment systems to better link payment rates to appropriate volume projections and case mix, and
- Refining geographic adjustments.

Based on the urgency and feasibility of different recommended steps as well as the timing of the revision of the Health Insurance Law, the draft roadmap (summarized in Figure 12 below) is partitioned into three main phases:

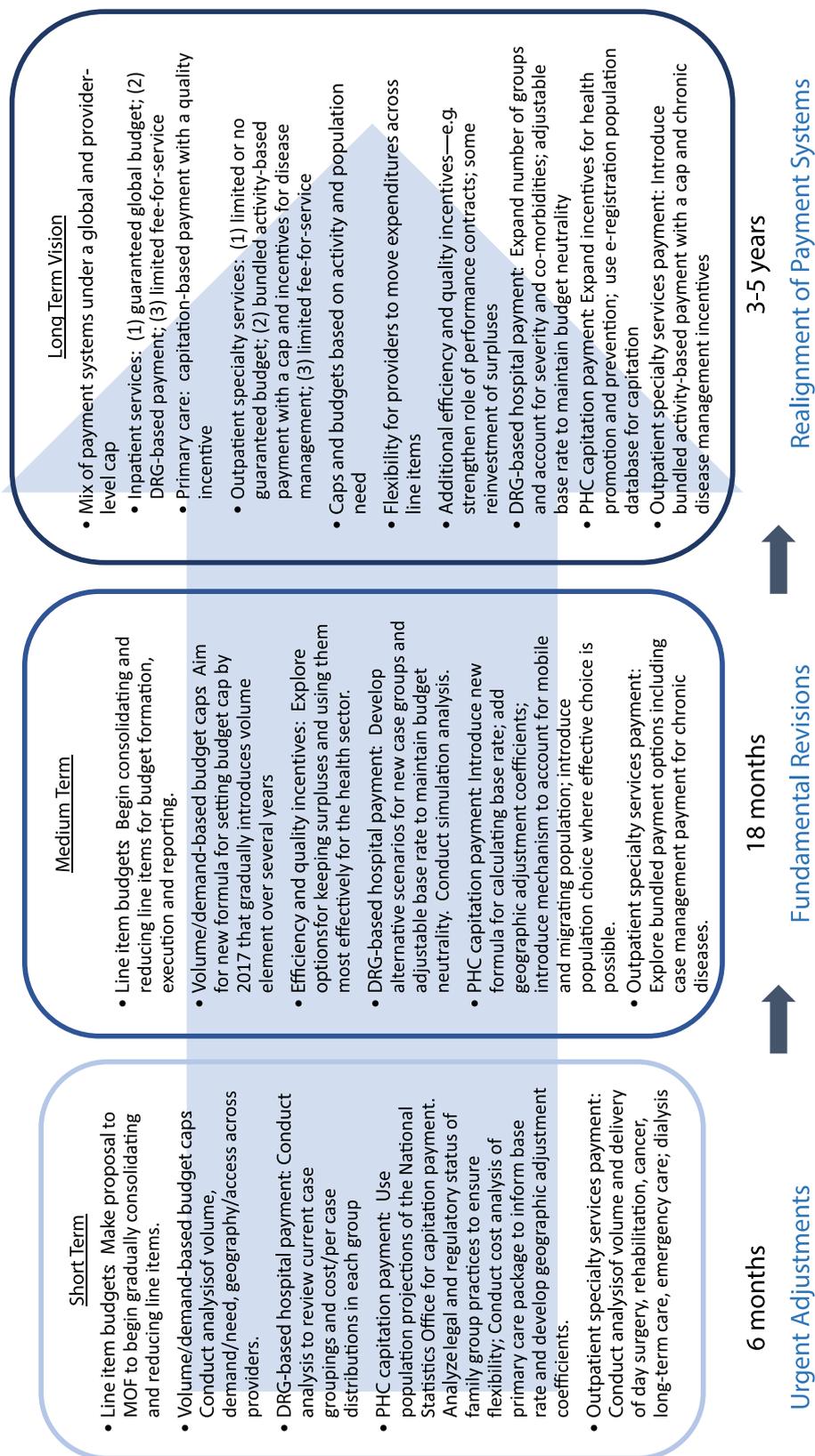
1. Urgent adjustments: the next 6 months
2. Fundamental revisions: the next 18 months
3. Realignment of payment systems: 3-5 years

The urgent revisions focus on putting in motion a dialogue to better exploit the flexibility that currently exists in the Budget Law, immediately refining the basis for estimating population for capitation, and beginning analysis for future phases. For example, analysis should begin immediately to develop the parameters for moving toward budget caps based on volume and other estimates of population health need and to refine the case groups for the DRG payment system to better capture variation in the severity and cost of different categories of admissions and to include adjustments for co-morbidity. Options for payment for outpatient specialty services also need to be explored. A top priority is to develop a technical basis for geographic adjustment for payments under all of the different payment systems. Targeted cost analysis may be needed to accurately estimate the impact of geography, population density, and climate conditions on the cost of delivering health services.

The vision for the roadmap is to lead toward a mix of payment systems that builds on and enhances the current mix: guaranteed global budget (replacing the line-item budget); refined DRG-based payment for inpatient services; appropriate payment for outpatient specialty services (to be determined); and expanded primary care capitation with incentives for quality of care and health promotion. The provider

cap will continue but should be developed based on parameters that reflect population health need, such as case mix-adjusted volume. The constraints of the Budget Law will be eased by gradually exploiting existing flexibility, including consolidating line items to only three (personnel, recurrent costs, and capital) and retaining surpluses at the sector or provider level to reinvest in the health delivery system.

Figure 12. Roadmap for Refining and Realigning Provider Payment Systems in Mongolia



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