

Nepal: Education Sector Analysis 2021 (2078 BS)

Government of Nepal
Ministry of Education, Science and Technology
Singhadurbar, Kathmandu

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This report has been prepared based on the inputs from the various experts that have been mobilized in line with the joint terms of reference set by the Ministry of Education, Science and Technology (MOEST) for the 2020 education sector analysis and development of the 2030 education sector plan for Nepal. However, the views expressed in this document may not necessarily represent the official view of MOEST.

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The Government of Nepal, Ministry of Education, Science and Technology (MOEST) prepared this education sector analysis (ESA) to inform to the next School Education Sector Plan (ESP) 2021-2030 development process. The ESA provides an in-depth and comprehensive assessment of the status of Nepal's education system, reviews documents on progress and achievements, identifies key trends and challenges and recommends evidence-based policy choices. It begins with an analysis of the overall status of the school education sector and goes on to an analysis of eight thematic areas including equity and inclusion; quality, relevance and learning outcomes; efficiency and institutional capacity; economic and social impacts of education; governance and management; financing and cost of education, and vulnerability and risks. It is the result of collaborative efforts between the MOEST, education development partners, local education support group, experts and other concerned stakeholders. The analysis was undertaken by various experts under the coordination of MOEST and the support of various development partners. The experts worked within a framework developed by MOEST and prepared this analysis considering the nine studies conducted to provide inputs to ESA, available other data and inputs from various stakeholders.

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Dr. Francis Hitchens coordinated the preparation of the sector analysis document and drafted the overall education sector analysis. Mr. Jimi Oostrum coordinated the local education group throughout the process of ESA and Mr. James Russell supported the ESP secretariat with this task.

Dr. Min Bista and Dr. Lekha Nath Poudel contributed to the preparation of the ESA by reviewing the draft document and preparing the final sector analysis document with their editorial inputs.

As the coordinator of the education sector analysis, I acknowledge all the contributors and supporting agencies as mentioned above for their contributions and continued support. Besides, those persons and agencies who contributed directly to the ESA process, several persons contributed indirectly to this process in various ways that may not be possible to list out here. However, they also deserve credit and our appreciation for their contribution.

I appreciate the hard work done by Dr. Bhoj Raj Kafle and his team at the ESP Secretariat to coordinate the whole ESA preparation process.

Finally, I hope this education sector analysis will provide useful information towards preparing the education sector plan 2021-2030, and work as an important reference for education programme design, implementation and studies.

Dr. Tulasi Prasad Thapaliya
Joint Secretary
Ministry of Education, Science and Technology

EXECUTIVE SUMMARY

Introduction

This education sector analysis (ESA) was undertaken to inform the development of the next Nepal school education sector plan (ESP), which will follow the completion of the School Sector Development Plan (SSDP, 2016–2021¹) in July 2021. Undertaken as an essential part of education sector planning, the ESA provides an in-depth and comprehensive assessment of the current status of Nepal's education system, reviews documents on progress and achievements, identifies key trends and challenges, and recommends evidence-based policy choices. The ESA also examines the enabling environment for the intent of the high-level declaration of the Public School Enabling Decade (PSED). It was carried out in 2020 jointly by the Government of Nepal and education sector development partners, with technical expertise mobilized for specific purposes. The new ESP, which covers the period from 2021/22 to 2030/31, is intended to guide the strengthening of the education sector within the framework of the federal system of governance. The new plan is expected to contribute to the country's ambition to graduate to a Middle-Income Country by 2030 and the goal of a 'Prosperous Nepal, happy Nepali' by 2043. The analysis also provides a baseline of the country's status against the targets in its Sustainable Development Goal 4 Framework.

This education sector analysis recognizes the following imperatives:

- a) The ongoing **federal transition** that has devolved the mandate for basic and secondary education to local governments.
- b) The **COVID-19 pandemic** presents an opportunity to redesign the organization and delivery of education by rethinking teaching-learning processes, focusing on enabling learning environments, and correcting challenges and flaws that hamper the attainment of learning outcomes.
- c) Nepal is entering its **demographic window of opportunity**, which means that during the period of the new plan, the labour force will grow more rapidly than the population dependent on it.
- d) The political drive to restore **confidence in the public school sector**, with the declaration of the Public School Enabling Decade coinciding with the timeline of the new plan.

This ESA was developed through a participatory and consultative process gathering inputs from various stakeholders at all stages. The overall leadership was provided by the Ministry of Education, Science and Technology (MOEST). The analytical and planning work involved in its preparation was coordinated, supported and facilitated by various committee structures,

¹ The SSDP was originally seven-years long (2016-2023), for which a costed program was developed for the first five years. During the 2019 Mid-Term Review, it was revised to a five-year (2016–2021) plan and programme considering the substantial changes in the context and institutional setup.

notably the ESP Steering Committee, Technical Advisory Team and Technical Committee. The emphasis was on ensuring that the rich data on the sector was systematically reviewed by both international and national experts and presented to the government, development partners and stakeholders to identify priorities for the next plan and adapt these to the local and national context.

The ongoing COVID-19 pandemic meant that the ESA studies and stakeholder consultations and engagement had to be carried out remotely and virtually. This limited the collection of primary and qualitative data and the validation of findings. The ESP Technical Advisory Team provided technical guidance throughout the education sector analysis to ensure it was undertaken with adequate understanding and referencing of the context and using available national expertise and evidence. The strong partnership and communication mechanisms established and institutionalized within Nepal's education Sector Wide Approach (SWAp) provided a foundation to complete the ESA.

Context of Nepal's Education Sector

a) The Federal Transition

Nepal is in the midst of major constitutional and institutional transformation. The 2015 Constitution of Nepal introduced a federal structure of governance that devolved a range of governing functions of school education to local governments. At the provincial level, the Provincial Education Development Directorate oversees the education affairs, while at the municipal level this responsibility lies with the Education Unit established within each municipality. With the establishment of these new structures, the regional, district and cluster level entities created earlier have either ceased to exist or their roles are redefined. Several acts and policies have been put in place, but an overall legislative framework, Federal Education Act, is yet to be enacted to guide on how the three tiers of government coordinate and collaborate to accomplish the various education functions. The transition to a new form of governance calls for increased institutional capacity particularly at the local level to govern the delivery of education services related to basic and secondary education.

b) Equity and Inclusion

As a result of the efforts of the government to improve equitable access to basic and secondary education, there has been significant increase in the enrolment of students, including girls, children with disabilities, Dalits, marginalized communities and children from economically disadvantaged families. Despite these gains, there are disparities in educational participation across geographic regions and social groups. Ensuring an education system that is inclusive and equitable in terms of access, participation and learning attainment continues to be the

government's priority. To this end, the need for evidence-based planning and budgeting should be recognized, by, for example, strengthening the Consolidated Equity Strategy and extending the use of the associated Equity Index to rank local governments on the prevalence and severity of disparities in education outcomes. This will help identify the local governments with the highest disparities to inform the targeting of additional resources and interventions. Available data show that there are disparities across the provinces. For example, Province 2 lags behind on a number of education indicators as compared to the rest of the country. Therefore, there is a need to focus attention on Province 2 and other low performing provinces where low enrolment continues to be a major challenge. While Nepal has made significant efforts to institutionalize gender responsive budgeting, this has had limited effectiveness at subnational levels to address gaps and achieve widespread adoption due to inconsistent monitoring and limited availability of disaggregated data. In addition, few budgeting actions have been taken to promote social inclusion.

Learning outcomes have been stagnant in Nepal's public schools since 2012, and there are inequities in learning in public schools based on location of residence (urban/rural), gender, ethnicity, language group, socio-economic status and a host of other factors. It is critical to examine and identify who is vulnerable to marginalization and exclusion and how different types of exclusion affect learning. There is a need to improve pedagogical practices to reflect child-centred, gender-friendly and inclusive practices, and especially for vulnerable and excluded children and children with disabilities. Teachers need to be provided with the knowledge, skills and tools to enable them to adopt new practices of teaching-learning. There is increasing recognition among the policymakers and educators that concrete steps should be taken to advance equity in learning outcomes.

The ESA has identified a number of existing and emerging equity challenges. One such challenge relates to the state of small schools. The devolution of the mandate to close and merge schools to local governments has led to the closure of some small schools in scattered communities and their consolidation in larger schools in less remote locations for improving efficiency and quality. This has impacted the access and retention of students from these small communities as their schools are now further away and they have more difficult journeys to school. Appropriate educational strategies need to be adopted to ensure schooling is accessible to learners in sparsely populated areas. Similarly, there is a risk of increase existing disparities in education outcomes due to the concentration of scarce resources in a relatively advantaged area in the name of model school. This risk, and the benefit from the spill over effect of this approach, needs to be analysed before commenting additional investment.

Children with disabilities have the least access to, and participation in, school education and the lowest learning outcomes. Nepal has a strong track record in developing policies and plans to include and support children with disabilities in education. However, this needs to

be transformed into a conceptual framework within the federal setup that aligns and defines the various modalities that cater to children's needs through special, integrated and inclusive education that limits separation from families, communities and peers.

The sectoral policies, structures and programmes on health, nutrition and school feeding have established coordination mechanisms at different levels of government. However, integrated health, nutrition and school feeding interventions in schools have not been implemented effectively. It is necessary to recognise the benefits of integrated interventions and review the implementation structures, processes and overall accountability system.

c) Quality, relevance and learning outcomes

Nepal's public education has long suffered from continued low levels of student learning outcomes, which is partly due to poor quality teaching. While the role of teachers is central in improving student learning, studies undertaken as part of the ESA point to a number of issues related to teachers. One major issue reported by these studies concerns the quality of pre-service teacher preparation. Current reform initiatives have not been able to address the roots of this problem with the need to introduce massive reforms in pre-service teacher training. In order to improve teacher quality, graduating teachers need to emerge with higher levels of content and pedagogical knowledge. In-service training cannot replace or supplement poor quality of pre-service training. The federal transition has had a major impact on professional development and support structures at local and school levels. Following the abolition of Resource Centres that were staffed by Resource Persons at the local level, the institutional capacity for in-service training and teacher support has drastically reduced. The network of in-service training and support has ceased to function. This has resulted in fewer teachers being trained and more costly training that entails teachers being away from their classrooms for longer. Data point to the need to enhance the status and attractiveness of the teaching profession as a whole by putting in place appropriate reform measures. Nepal has made significant progress in reforming the school curriculum; however, local education offices are not adequately staffed to ensure that schools and teachers effectively implement the curriculum. The lack of school supervisors working in local governments means there is little monitoring and evaluation of whether or not schools and teachers effectively implement the curriculum and foster student learning. The use of data is critical to measure if the curriculum is meeting students' needs and to guide improvements.

The system for the continuous assessment of student performance is also fraught with problems. However, the guidance and management structures for its implementation have yet to be aligned with the federal structure, principally by identifying local government responsibilities for the system. In addition, teachers' capacity to use the system needs strengthening.

d) Efficiency and institutional capacity

Even as dropout and repetition rates are reducing, the poor quality of education indicates ongoing internal efficiency challenges. While Nepali children can expect to be in school for 12 years by their eighteenth birthday, their average learning-adjusted expected years of school (LAYS) comes to only 7 years (World Bank, 2018). The country's harmonized test scores are below the minimum level of proficiency in the Programme for International Student Assessment (PISA). Any efforts to address the internal efficiency of the education system will fall short unless the quality of education is strengthened.

The indicators of net intake to Grade 1 point to the problem of hidden repetition where under-age children are enrolled with the expectation of repeating the grade the following year. Dropouts are a major issue across Grades 1–12 as for every 100 students who enter Grade 1, only 83 complete lower basic (Grade 5) and less than 25 graduate from secondary school (Grade 12). Although this is not unusual in other countries in South and East Asia, it is a serious issue for Nepal with its low capacity to provide secondary graduates with decent jobs as about 60% of each cohort enter the labour force prematurely and are underprepared.

Economic and Social Impacts of Education

The educational attainment of Nepal's labour force is generally low with widespread under qualification for existing jobs. The fact that almost 80% of young people have not completed secondary education (Grade 12) is a key challenge for any economy that aims to transition to higher productivity jobs. Low educational levels imply low potential for productivity growth and economic diversification. Nepal is behind similar countries in the education component of the Human Capital Index (HCI) calculation. Furthermore, there are significant and persistent barriers to female skills development and employment. Three-quarters of new jobs taken up by women between 2008 and 2018 were in non-wage self-employment or unpaid family work.

Nepal's economy mostly comprises small and inefficient markets, dependence on subsistence agriculture, and limited private sector dynamism. Gainful employment for an individual is a function of forces other than education alone, and companies are not creating enough good quality wage jobs to absorb and encourage skilled labour, especially for women. Thus, for the external efficiency of education to improve, private sector growth is very important to enable economic diversification and increased productivity. This would reduce external migration but requires a multi-pronged cross-government approach.

A number of factors beyond education hinder the creation of more and better jobs in Nepal. These include the large working-age population; challenges of topography, transport and logistics; the majority of jobs being in informal and relatively low productivity sectors; and

the majority of small and medium enterprises (SMEs) being micro-sized and finding it difficult to access credit. Creating a stronger enabling environment for SMEs, including access to microfinance, would create more higher quality jobs.

There is a need to create better links between the education sector and the labour market. Although the technical and vocational education and training (TVET) system has faced several challenges, the government has now signalled intentions for meaningful reform. The key to this rests in greater dialogue between the public sector and private and public enterprises. The very limited dialogue between public and private education providers foregoes the opportunity to strengthen the school-to-work transition. Such dialogue is essential for improving the external efficiency of education. There needs to be an environment for private firms and industry groups to provide inputs into the skills development system, to help produce human resources with the skills needed by the private sector.

The COVID-19 pandemic provides uncertainty for Nepal's future labour market growth potential as well as threatening the future of migration and the economic returns this brings for reinvesting in education, skills and the domestic job market. In addition to the impact of the pandemic in the immediate/short term, it is unclear what the medium and longer-term impacts are, and to what extent these will require changes in the institutional set up and structures within the education sector in Nepal and in the country as a whole. Prior to the start of the pandemic, many low skilled, largely male, migrants were leaving Nepal to work overseas in response to a continued substantial demand for low paid unskilled/low skilled labour in destination countries. Remittances from migration remain one of the key drivers for Nepal's economic growth and future investment in education and skills. This coupled with Nepal's low rates of return on education, particularly at basic and secondary levels, provides a disincentive for families to invest in secondary education.

Governance and Management

Attempts have been made to clarify the roles of different tiers of government under the new federal system of governance. However, there are areas to be resolved and federalism will likely take several years to work as intended. The lack of clear roles creates a vacuum in decision-making that induces some actors to decide for others, resulting in confusion and mistrust. As part of this, there is currently a lack of clarity in terms of the formal mechanism to facilitate coordination and communication across the tiers and entities of government.

The administrative and managerial capacity constraints of many local governments to undertake their financial and operational responsibilities, which were earlier handled by central authorities, is generating bottlenecks in implementation. As a result, local governments often struggle to undertake managerial tasks as envisioned. The newly created staff positions in local

government education units have often been insufficient to perform the tasks (particularly the technical functions) assigned to local governments. Provincial governments have a potentially important intermediary role to play in areas such as capacity development, but this is yet to be further defined.

There is a severe human resource constraint in local governments, with many lacking enough key officials and staff, which is amplifying pre-existing disparities. The federal transformation has also created issues surrounding hierarchy (such as senior heads of local government education sections serving under junior officers) that need to be solved to ensure conducive working environments. Furthermore, the roles of education development and coordination units and provincial governments need to be clarified and formalized to allow the envisioned coordination, cooperation and coexistence for undertaking shared responsibilities across the tiers of government.

Managerial capacity at the local and school levels is insufficient to comply with the increased roles and responsibilities that have been put in place since 2015. As the nation is seeking a new departure in school governance, it is imperative to develop appropriate institutional and organizational mechanisms to institute a municipal model of governance of basic and secondary education. Local administrative structures need to be allocated adequate qualified and trained human resources to implement their constitutional mandates. As for teacher management, the system works at the edges of critical issues, trying to comply with regulations on teacher selection, appointment and deployment in a situation where federal regulations are still being drafted.

Financing and Cost of Education

Nepal is gradually increasing domestic funding for its education budget as the share from external funding has declined. Still, there is much that is unclear with the move to federalism in terms of how funds are and will be allocated. Local financial mechanisms and their role in per-student funding need to be clarified at provincial and local government levels, and school-level allocation formulas need revising under federalism. And budget execution does not always align with planning efforts due to issues with school management and education system management, which are strained by the realities of attending, monitoring, and reporting on too many programmes without a clear priorities.

The level of household spending shows a strong demand for education, but also a certain disaffection with public schools. Despite the large additional costs, many families choose fee-paying education as they perceive the better supervision of children and better results as well as the mastery of English and social distinction. This raises questions of equity in access to quality education. In addition, the expense of attending schools can pose economic hardships

for low income families. Family education spending largely depends on financial transfers received from workers abroad and could be constrained by the uncertainty of these transfers due to the ongoing economic and health crisis. The socio-economic impacts are likely to be reflected through increased school drop-outs, child labour and early marriage.

Although Nepal's economy is on the point of becoming a lower middle-income country, it is estimated that as much as one third of Nepali are expected to have been pushed back into poverty by the impact of the pandemic. The economic and social ambitions of the country require a strong investment in human capital to provide the necessary skills required for sustained development.

The continuing concentration of most tax revenues at the central level logically requires a redistribution of centrally collected revenues to sub-national levels. The current mechanisms for the (re)distribution of resources in the public sector is a legacy from the past that is being progressively adapted.

The analysis of the resources available to local governments versus their needs shows the need for an evolution of the current funding mechanisms to reduce disparities. Special attention needs to be given to the remuneration and deployment of teachers, with the former representing the largest proportion of the budget as over 75% of it goes to teacher salaries and pensions. Keeping earmarked funding for teacher remuneration could contribute to geographical equity, with the condition that this funding covers all teachers, and as long as the distribution is based on objective criteria. This would leave infrastructure, maintenance and day-to-day recurrent expenses of schools to be funded from non-earmarked sources by local governments. The federal-level could also consider keeping the control of some activities such as scholarships for minorities, projects that celebrate national identity or framework for curriculum with local governments focussing on service delivery.

Risk and Vulnerabilities

Nepal is ranked as the fourth most vulnerable country to climate risk by the Global Climate Risk Index, and the third-most vulnerable to earthquakes and is 'high risk' in terms of its exposure to hazards and conflicts. There has been a steady increase in the occurrence of natural disasters, driven in part by the consequences of high population growth, haphazard infrastructure development and the effects of climate change.

The transitions and low capacities in local governments, caused by the ongoing federal transition, have increased short-term risk. The federal transition is affecting education service delivery in general and risk mitigation in particular. Education is yet to become a high priority for many provincial and local governments, where resources are often stretched and capacity

underdeveloped. Key legislation is yet to be introduced at the federal level and translated into local policies. The pandemic has further constrained individual freedoms and institutional scope for action, undermining capacities to respond to common hazards.

In recent years, Nepal's schools in some parts of the country have suffered extensive infrastructure damage from earthquakes, landslides and flooding, which has interrupted the continuity of learning. Up to 60% of school buildings still have highly vulnerable structures. Natural disasters also damage teaching and learning and put psychological stresses on students and teachers. And schools are often used as temporary shelters for disaster-affected families. These factors often result in extended school closure, the erosion of quality learning, interruptions to learning continuity, and an increased risk of dropout, particularly for girls.

There have been genuine efforts and commitment within the education sector at all levels, to minimise the loss of learning, while keeping children, teachers and parents safe during the pandemic. Despite several constraints, local governments have responded to the crisis and (to some extent) continued education within a difficult context. The government and teachers' professional organisations have been proactive in training teachers, and it is encouraging that EMIS confirms that the most used alternative education modalities are teacher supported. The COVID-19 pandemic could well serve as a catalyst in galvanising inter-governmental coordination and collaboration. The Nepal Education Cluster has facilitated this through the establishment of the provincial clusters. This could serve as a model for post-pandemic coordination in federal Nepal.

This education sector analysis provides inputs to the development of the new education sector plan which will direct the country to achieve its development goals. The evidence base created by the sector analysis will help establish priorities, strategies and targets for the new plan. The new federal context calls for the new education plan to be selective in its focus and approach prioritising the establishment of adequate local capacity, motivated and trained teachers and targeting interventions in selected areas that lag behind.

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ABBREVIATIONS

AIN	Association of INGOs in Nepal
BS	Bikram Sambat
CEDAW	Convention on the Elimination of Discrimination Against Women
CEHRD	Centre for Education and Human Resource Development
COVID-19	coronavirus disease 2019
CSO	civil society organisation
CTVET	Council for Technical and Vocational Education and Training
DACS	Development Assistance Coordination Section
DHS	demographic health survey
DRR	disaster risk reduction
ECED	early childhood education and development
EDCU	education development and coordination units
EMIS	Education Management Information System
ESA	Education Sector Analysis
ESP	education sector plan
ETC	education training centre (provincial)
FCGO	Financial Comptroller General Office
FP	Joint Financing Partners
FY	fiscal year
GB	girls and boys
GBV	gender-based violence
GDP	gross domestic product
GER	gross enrolment ratio
GESI	gender equality and social inclusion
GoN	Government of Nepal
GPE	Global Partnership for Education
GPI	gender parity index
GVA	gross value added
I IEMIS	Integrated Education Management Information System (web-based)
ICESCR	Convention on Economic, Social and Cultural Rights
ICT	information and communication technology

IDEB	Basic Education Development Index (Índice de Desenvolvimento da Educação Básica)
ISCE	Composite Index of Education Quality (Índice Sintético de la Calidad Educativa)
IT	information technology
JICA	Japan International Cooperation Agency
LAYS	learning-adjusted years of schooling
LBGTI	lesbian, bisexual, gay, transgender and intersex
LEDPG	Local Education Development Partner Group
LFPR	labour force participation rate
LGBT	lesbian, gay, bisexual and transgender
LGOA	Local Government Operation Act
MICS	Multiple Indicator Cluster Survey
MILE	medium of instruction and languages for education
MoEST	Ministry of Education, Science and Technology
MoF	Ministry of Finance
MSEQ	Management System for Education Quality (Colombia)
MTEF	Medium Term Expenditure Framework
NA	not available
NASA	National Assessment of Student Achievement
ND	no data
NEA	National Education Accounts
NEET	Not in education, employment or training
NEGRP	National Early Grade Reading Programme
NER	Net enrolment rate
NGO	Non-government Organisation
NLFS	Nepal Labour Force Survey
NNF	Nepal National Framework for SDG 4
NPR	Nepalese rupee
OOSC	Out-of-school children
PPE	pre-primary education
PSED	Public School Enabling Decade
PTA	parent-teacher association
SDG	Sustainable Development Goal
SEE	Secondary Education Exams

SMC	School management committee
SMEs	Small and medium enterprises
SSDP	School Sector Development Plan (2016–2023)
SuTRA	Sub-National Treasury Regulatory Application
SWAp	sector wide approach
TAT	Technical Advisory Team (ESP)
ToR	Terms of reference
TVET	Technical and vocational education and training
UGC	University Grant Commission
UIS	UNESCO Institute for Statistics
UNESCO UIS	UNESCO Institute for Statistics
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children Fund
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
VAT	Value added tax
WASH	Water, sanitation and hygiene
WFP	World Food Programme

1. INTRODUCTION

This chapter introduces the scope and objectives of Education Sector Analysis (ESA) and describes the methods and processes used for analysis. The Ministry of Education, Science and Technology (MoEST) developed the Terms of Reference (ToR) for carrying out the current sector analysis in close consultation with the development partners. The TOR for ESA is a part of a joint TOR of Education Sector Plan (ESP) preparation, which includes three phases, Phase 1: Communication and Engagement, Phase 2: Education Sector Analysis and Phase 3: Education Sector Planning. The roadmap for carrying out the Education Sector Analysis and the future task of producing the new education sector plan was guided by working in partnership in line with international agreements on aid effectiveness. This ESA will inform education sector planning process by providing relevant information and ideas in several areas of the school education sector. It proceeded using common procedures and operational guidelines to ensure transparency, accountability, results-based monitoring and reporting and increased effectiveness.

1.1 Scope and Objectives of the ESA

This Education Sector Analysis (ESA) has been carried out to support the development of Nepal's new education sector plan (ESP) covering the period from 2021/22 to 2030/31, which will succeed the current plan, the School Sector Development Plan (2016-2021). The ESA analyses the current state of education in the country, highlights the key trends and challenges in the education sector and provides a way forward to guide the strengthening of the education sector under the framework of federal system of governance. It is aimed as a complement to the ESP process by providing an evidence base for the development of the new plan.

Building on the achievements of the SSDP, the ESP requires to address the needs of the education sector for the next 10 years by defining policies and programmes for the medium term within the framework of newly redefined roles and responsibilities of central, provincial and local governments. The proposed ESP is expected to align with the Sustainable Development Goal Four (SDG4)/Education-2030 and serve as a vehicle towards its achievement by 2030. Most importantly, the new plan is expected to contribute to the country's ambition to graduate to a middle-income country by 2030 and achieve the goal of a 'Prosperous Nepal, happy Nepali' by 2043.

Nepal's education sector has long adopted the sector wide approach (SWAp) as part of which the government and development partners have aimed to align development cooperation with national priorities, build capacity and strengthen institutions and carry out the joint monitoring and assessment of performance using aligned indicators. Further institutionalization of the 'one door' mechanism for technical assistance is recognized as a priority to strengthen coordination and avoid duplication and redundancy in the allocation and use of available resources.

Major imperatives for school education sector development

The Education Sector Analysis recognizes five major imperatives for the planning and development of Nepal's school education sector. A brief discussion of these imperatives follows:

1. The federal transition: The ongoing federal transition is the first imperative as there is a need to strengthen collaboration and coordination among the three tiers of government for effective delivery of education services. The transition also has implications for strengthening institutional capacity, especially at the local level in view of the devolved mandate of managing basic and secondary education. The studies undertaken to inform the ESA recognize that this is an ongoing process and an opportunity to design highly contextualized local and provincial level education sector plans under the overarching new federal plan. Selected provinces and municipalities are simultaneously developing their education sector plans to ensure that the new national plan is grounded in the reality of Nepal's 7 provinces and 753 local governments. As local government funding for education is still largely provided through conditional grants, the development of the new plan is timely as it provides an opportunity to help institutionalise need-based budgets.

2. COVID-19: In view of the significant disruptions to the education sector due to the COVID-19 pandemic, it is important that the education sector not only recovers from the pandemic but also uses the lessons learned and experience to become better prepared for future shocks and crises. The nation's education system has witnessed unprecedented levels of learning loss and increased inequality as a result of the abrupt transition to remote learning. National capacity will need to be enhanced to plan and deliver blended modes of learning and educational institutions should be prepared to switch between face-to-face and remote learning in the future. To ensure that student learning is continued during the crises and emergencies, new and innovative ways of teaching and learning have to be explored to consider learning as a process that needs to happen both in schools, at home and in the community, particularly through the effective use of ICTs and other feasible alternatives.

3. Demographic dividend: Nepal is entering its demographic window of opportunity, which was recognized at the start of the previous education sector plan in 2017. Nepal's window of opportunity (when there are more working age people than non-working age people) will be most pronounced during the new education sector plan. During the plan period the labour force will grow more rapidly than the population dependent on it due to the previous decline in fertility rates. The demographic dividend represents the increased prospect for accelerated economic growth which should result in more savings and more domestic resources. The external efficiency of the education sector will have a large influence on the extent that the demographic window of opportunity can drive the economic recovery following the COVID-19 pandemic. In view of the above, it is important that Nepal strengthens its ability to properly educate and train its children and youth to enable them to contribute to the knowledge economy.

4. Youth in need of skills: There has been a long-standing imperative to increase the relevance and quality of education to provide skills for the domestic economy. This is more pronounced now that the pandemic has led to the return of hundreds of thousands of young Nepali, who had been employed in low paid, unskilled labour abroad. This has led to a large decline in the remittance incomes that provided an estimated 24 percent of the country's GDP prior to the pandemic. In addition, a large number of young adults need to enhance their skills to allow them to re-engage in the Nepalese economy while international markets and industries take time to recover and the demand returns for foreign employment.

5. Restore confidence in public schooling: The final major imperative is the political drive to restore confidence in the public school sector in line with the declaration of the Public School Enabling Decade in 2019-2029 (MOEST, 2019), which coincides with the timeline of the new education sector plan. It calls for improvement in the delivery of the public sector while ensuring the quality and relevance of education.

As previously mentioned, this ESA has been undertaken in the first six months of the COVID-19 pandemic, which has seriously impacted the education sector. For example, all learning institutions have remained closed since March 2020². In addition to the pandemic, the ESA has been formulated in an emerging federal transition. As such, it must assess the validity of the available evidence (from various studies, evaluation and joint sector reviews) to understand the education sector in the rapidly changing context. At the same time, it must

² With some exceptions, the majority of public sector schools remained closed until September 2021.

also be acknowledged that the medium and long term outcomes and impacts of these events are very challenging to predict.

The 2030 Sustainable Development Goal agenda

In December 2019, the Government of Nepal introduced the Nepal National Framework (NNF) for SDG 4 (MoEST, 2019a) with the aim of providing pathways and key strategies for the country to achieve children's foundational learning in reading, ensure universal access to secondary education, provide life skills to young people, enhance research-based higher education, and align with the global commitments towards meeting the SDGs.

In the NNF the Government recognizes education as a prerequisite for developing human capital and as a catalyst for the country's plan to achieve developing country status by 2026, middle-income status by 2030 and realize the long-term vision of a Prosperous Nepal, Happy Nepali by 2043. The NNF has been contextualized to contribute to the achievement of the national vision and other commitments, as well as ensuring a Nepal-specific perspective:

"[the] Nepal National Framework has been developed as a national response to contribute to both national vision, and regional and international commitments. In addition, oriental philosophies serve as the foundation for setting Nepal's agenda of education drawing on local cultures, knowledge systems, history, indigenous skills and cosmologies." – (MoEST, 2019a)

The framework also provides a roadmap for operationalizing key strategies. The national level framework is to be adapted into seven provincial NNF implementation plans and 753 local government level NNF action plans, for which provinces and local governments can access technical assistance from MoEST. This process will help ensure shared ownership and accountability across all government tiers for Nepal to meet its 2030 SDG 4 targets.

The alignment between the Nepal National Framework for SDG 4 and the forthcoming new education plan will be paramount in supporting and guiding the government to achieve its goals and targets for the education sector by 2030. A prerequisite for this is the costing of ESP activities and developing a financial simulation model. This will allow the government to understand what an increase or reduction of targets will mean for resource implications, along with establishing a mechanism that allows local governments to access predictable funding and clarity on cost-sharing modalities. It is also crucial to note the funding implications of providing the key minimum enabling conditions of adequate teacher-student ratios, safe classrooms and water, sanitation and hygiene (WASH) facilities.

1.2 Process, Methodology and Limitations

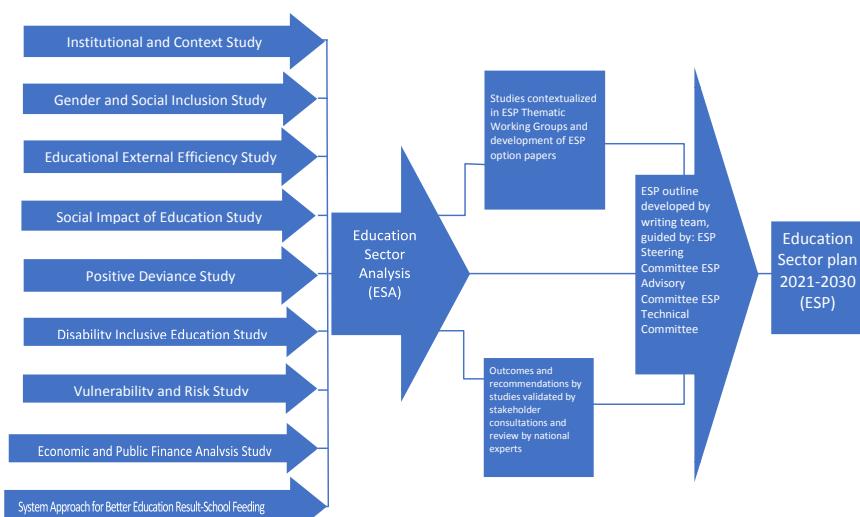
This sub-section describes how the Education Sector Analysis was undertaken and the limitations that were encountered in carrying it out.

Process

The Education Sector Analysis was undertaken by mobilizing relevant stakeholders and experts with support from the Nepal Local Education Development Partner Group (LEDPG) under the leadership of the Ministry of Education, Science and Technology (MOEST). Various committee structures were established to ensure representation and active involvement of key stakeholders, to provide policy direction, technical coordination and to facilitate the analytical work. Nine studies were undertaken by national and international experts to examine critical issues in the education sector. The preparation of the ESA follows a systematic approach using data gathered from various sources to provide a critical analysis of the education sector, document its achievements, its challenges and develop a set of recommendations for consideration in the process of developing the upcoming ESP. The scope and process of developing the ESA provided an opportunity to engage provincial and local officials and stakeholders during its development to ensure that the priorities that will drive the overarching plan's main strategies are aligned with their needs.

Figure 1.1 illustrates the overall ESA process and its linkages to ESP process.

Figure 1.1: ESA development process



The following nine studies, which were carried out in 2020, provided the basis for the ESA:

1. ***The institutional and context study*** reviewed the context, access, equity, effectiveness, funding, quality and management of Nepal's school education sector and its institutional arrangements, structures and frameworks. It presents the strengths and weaknesses of the sector and supports the selection of education policy reform options. The analysis of the institutional context shows the environment within which the education sector operates and suggests the characteristics of an enabling environment for implementation of the new plan.
2. ***The gender equality and social inclusion (GESI) study*** identified disparities in the education sector related to gender and other dimensions of marginalisation, highlighting underlying structural, social, and cultural factors that contribute to exclusion. The analysis assumed that schools, like households, are places where both practices of inclusion and exclusion can be taught and learned. The study identified drivers of disparity related to gender, caste, ethnicity, socio-economic situation, urban and rural location, traditional practices, ability and language.
3. ***The education external efficiency analysis*** examined the relationship between levels of education, employment and earnings and assessed the extent to which the current production of human capital in Nepal corresponds to the demands of the national economy. It further examined the relationship between the employment situation and training in the labour force, and the individual and social profitability of human capital. It also reviewed the employment status of school and higher education leavers in the workplace.
4. ***The social impact of education study*** examined the social and 'non-economic' returns from education in terms of health, civic and social engagement, livelihoods and living conditions and social cohesion and inclusion. This study focused on the extent to which and how the current education system is contributing to equity in Nepalese society. It investigated the most important and significant contributions of education to Nepalese society and the links with employment and economic development, such as improving health, reducing crime, promoting a culture of peace and non-violence, sustainable lifestyles, appreciation of cultural diversity and reducing harmful practices.
5. ***The positive deviance study*** provided evidence on what can be done to unlock quality and learning outcomes by identifying public schools that manage to produce these outcomes despite low resources and challenging contexts. These 'positive deviant' schools outperform other schools in similar contexts with equivalent resources. The analysis identified correlations between their improved outcomes, practices and behaviours; school management; pedagogical approaches and parental and community involvement in schooling.

6. ***The disability-inclusive education study*** analysed the status of disability-inclusive education in Nepal. This includes the provision of services, the concerned legislation, regulations, policies and frameworks at federal, provincial and local levels for the inclusion of children living with disabilities in mainstream school education. The analysis complemented the work done on the disability-inclusive education approach paper by undertaking specific analyses on knowledge gaps.
7. ***The vulnerability and risk study*** was informed by the other education sector analyses to identify the main potential and actual hazards, shocks and stresses that do and could affect the education system. It analysed the capacities of the education system to withstand shocks, respond to the effects of crises, and mitigate their effects, as well as to contribute to conflict transformation, social cohesion, and building resilience at the individual, school, community and system levels.
8. ***The economic and public finance analysis*** was undertaken to review the current and projected levels of resources available for public education and the scenarios of resource availability and fiscal space for ESP 2030 by analysing the trends of past gross domestic product (GDP) and domestic and external resources and projecting future GDP, tax income and public resources. The study had the following three components:
 - a) *The macro economic analysis study* articulated the trend of public resources allocated for education and their distribution by level of education and nature of spending and estimated the contributions of provincial and local governments, households and other non-state actors to education.
 - b) *The public expenditure analysis* captured the expenditure on education at provincial and local government levels from their annual budget allocations and expenditure and from non-state actors (including private education providers and household) where data was available.
 - c) *The cost-benefit analysis* assessed the allocation of resources in the school education sector from an equity perspective; estimated the return on quality early childhood education and development (ECED) in terms of access and completion gains; assessed the impact of non-state actors; and assessed the extent to which the resources allocated to schools relate to the number of enrolled students.
9. ***The Systems Approach for Better Education Results-School Feeding (SABER-SF)*** assessed existing policies, financial capacity, institutional arrangement, programme design and implementation as well as community participation in the school feeding programme. It also analysed policies and programmes on school health and nutrition, and suggested some ways to improving children's health and nutritional status by integrating school health, nutrition and school feeding in school.

The nine study reports were carefully reviewed by the members of the Technical Advisory Group (TAT) and the ESP Technical Committee members. The review reports were made available to the concerned authors of the reports for necessary revision. The ESA team then prepared a summary of key findings and recommendations along with the reflections of the TAT review. These summary reports were further examined by the high level officials of MOEST to ensure that the conclusions and recommendations drawn by these studies are relevant, practical and within the policy context. Subsequently, the ESA team organized one-on-one online conversations with groups of high level officials suggested by the ESP Secretariat to gather their perspectives on specific issues. This process helped ensure the contextualization of the study recommendations.

Drawing from these various reports, a preliminary draft of ESA was prepared, which was shared with the government, development partners and the assigned Technical Advisory Team (TAT) convenors for review and feedback. The second draft of ESA was prepared by incorporating the received feedbacks. The MOEST further reviewed the draft and assigned experts to review and edit the document and prepared the final version of the ESA.

Methodology

The objective of the ESA is to provide an in-depth analysis of recent trends and the current status of Nepal's education system to help identify progress achieved and outstanding challenges. The studies also took stock of other guidance and key reference documents, such as the recent assessments of Nepal's education system by Magrath and Torrano (2020), NIRT and AIR (2017), and the World Bank (2016).

This Education Sector Analysis process was guided by the *Education Sector Analysis Methodological Guidelines* (UNESCO IIEP, World Bank, UNICEF, Global Partnership for Education, 2014), the *Guidelines for Education Sector Plan* preparation (UNESCO IIEP and GPE, 2015) and other diagnostic tools employed by the experts who undertook the studies. The analysis was a joint effort of the Government of Nepal and education sector development partners, with technical expertise mobilized for specific components. A ToR was developed by the Government of Nepal with support from the members of the Local Education Development Partner Group (LEDPG), specifying the steps and phases under the Education Sector Analysis and planning process, as well as the arrangements made to manage and coordinate these processes.

8 The sector analysis experts engaged in various studies were managed by the respective development partner agencies that financed the studies, on the understanding that all

their ToRs and deliverables were aligned with the ESP 2030 ToR and with the overall Education Sector Analysis and planning timeline and process. The ESP Secretariat served as the main point of coordination, including the dissemination of all inception reports, drafts and final studies to the experts and stakeholders for review and consultation, as well as briefings and presentations developed by the experts for the ESP Steering and Technical Committees.

The ESA process aimed to systematically review the rich data on the Nepal education sector generated in recent years through research and the joint planning and review processes under the Sector Wide Approach (SWAp). It then sought to present the findings to the government, development partners and national experts and stakeholders to identify major issues, opportunities and priorities for the next education sector plan, and adapt these to the local and national context.

The authors of the individual analyses that comprise this report consulted a wide range of sources of information. A major source was official government statistics (Flash data) from the school censuses that are carried out at the beginning and end of each school year. This Flash data is compiled and housed in the government's Education Management Information System (EMIS), which is managed by the Centre for Education and Human Resource Development (CEHRD).

Furthermore, the reports on the national assessment of student achievements (NASA) for Grades 3, 5 and 8 and the early grade reading assessment (EGRA) reports produced by the Education Review Office (ERO) were key references when analysing learning achievements. In addition, data was derived from the annual status reports, which are produced by CEHRD to report on the physical and financial progress of the implementation of SSDP and the progress against the annual targets in the SSDP Programme Results Framework (e.g. CEHRD, 2020a). The annual joint sector reviews, the annual budget reviews and supporting documentation (including the annual strategic implementation plans and annual work plans and budgets), the external evaluation of the previous education sector plan carried out in 2016 (Poyck et al., 2016) and the 2019 mid-term review of the SSDP (Bessières et al., 2019) were other important sources of information.

The ESP Secretariat facilitated the overall ESA process and ensured coordination among the various entities involved. The Secretariat established an online ESA library that consisted of data and reference documents, facilitated interviews and consultations with key stakeholders, including representatives from provincial and local governments (as is further elaborated in the next section). To capture the impact of the COVID-19 pandemic

on the Nepal education sector, the study experts were asked to contact their subjects to the beginning of 2020, thus excluding the initial effects of the pandemic. Instead, a dedicated analysis of risk and vulnerabilities was undertaken as part of the ESA and the main findings of a regional situation analysis on the impacts of COVID-19 on education sectors across Asia, including case studies in Nepal, were reflected in this sector analysis.

Coordination

The Education Sector Analysis and planning process was led by the government. The following committees supported and coordinated the preparation of the ESA:

- a) **The ESP Steering Committee**, led by the Secretary of Education, provided guidance and policy directions for planning, reviewed the inputs presented through the planning expert and facilitated inter-ministerial, provincial and local level coordination.
- b) **The ESP Technical Committee**, led by the Joint Secretary of Planning Division, reviewed and facilitated the work progress of the ESP thematic experts and presented issues to the ESP Steering Committee for ratification. It also oversaw and facilitated the studies and research carried out by development partners and other agencies and presented the results to the Technical Committee.
- c) **The ESP Secretariat** is coordinated by the section chief of MoEST's Development Assistance Coordination Section (DACS) and supported by the Technical Support Unit. It was responsible for coordinating issues across the major ESA activities, including mobilizing technical assistance. The secretariat coordinated the work of the ESP thematic working groups that supported the analysis and planning work.
- d) **ESP Technical Advisory Team** is comprised of high-level national experts and representatives from academic institutions and provided guidance throughout the ESA process to the ESP Technical Committee and Steering Committee. It was responsible for determining thematic areas in national education sector-related plans and frameworks and in international frameworks. The ESP TAT also nominated members to review the studies undertaken to inform the ESA and provide the ESP Technical Committee with an assessment on whether these studies had met their objectives and purposes.
- e) **The ESP Consultative Team** was led by the ESP Secretariat and coordinated all activities relating to stakeholder engagement and consultations on the ESA and ESP position papers.
- f) **Twelve ESP Thematic Consultation Groups (TCGs)** have been established, comprised of government, development partners, experts and stakeholder representatives to review the outcomes of the ESA and the stakeholder consultations and based on this

to develop ESP option papers that identify priorities, strategies and key activities in their thematic areas.

The sector analysis was informed by studies undertaken by teams and experts mobilized through the Education Sector Plan Development Grant (ESPDG) from the Global Partnership for Education (GPE), including the deployment of an overall education sector analysis expert to support the consolidation of the input from the different studies and to support the ESP Steering Committee, Technical Committee and Secretariat to ensure the analysis met the requirements and standards set out in the ESP 2030 ToR. Additionally, several development partners (EU, Norway, USAID, WFP) supported the mobilization of sector analysis experts for the studies specified above and aligned with the overall ESP 2030 ToR and the overall ESA and planning timeline and process.

Stakeholder engagement and consultations

The planned stakeholder engagement and broad consultation process that was established with the aim to engage the tiers of government and parents, teachers, school management and communities across the country in the ESA process could not be implemented due to the COVID-19 pandemic travel restrictions and the inability to have face to face meetings. Many of the planned consultations were undertaken remotely. The various committees that were established consisted of officials, experts and relevant stakeholders representing national, provincial and local governments, including teacher representatives, NGOs/CSOs, Dalit organizations and representatives of the national association of rural municipalities and municipal association. Virtual meetings were held with provincial and local education officials at different stages of the ESA process.

The international and national experts who worked on the ESA studies had to be flexible, and rather than gathering primary data through field visits, had to rely on existing data and documentation as the basis of their analyses. Given this, it was critical to engage stakeholders in reviewing the studies and in the development of the ESA to validate and contextualize findings and recommendations.

Key findings and recommendations were extracted from the draft studies and were presented in structured consultations with stakeholders. In addition, key informant interviews were undertaken by phone or online meetings with government officials to discuss central questions extracted for the studies and TAT review feedback. Inputs from the TAT reviews and conversations with government officials were integrated into the ESA to reflect the various stakeholders' perspectives.

Limitations

Timeframe for ESA process: In order to inform the coming ESP, the ESA had to be completed under a strict time limit. The need to involve a large spectrum of actors³ in the review and revision of the key documents added further pressure in terms of achieving these timelines. Thanks to the cooperation and prioritisation of these actors many of these processes could be achieved simultaneously. This enabled an iterative process of development, however further analysis and deliberation is necessary to fully contextualise some findings and recommendations.

Coordination and management of the process: Due to COVID-19 related restrictions, most of the structures that were introduced to undertake the ESA had to be done in a heavily constrained environment. This included the 120-day initial complete lockdown of the country and government offices from mid-March 2020. As a result, activities were moved to virtual modalities. Despite the technological challenges, and the relative unfamiliarity with online working environments, contributors adapted quickly to the new modality.

Unfinished SSDP agenda: When the SSDP ends in July 2021, it is likely that several of its key performance indicator targets will remain unmet. This is largely due to the federal transition processes and the impact of the COVID-19 pandemic. One of the tasks of the new plan will therefore be to attend to the unfinished agenda of the SSDP while pursuing emerging education objectives.

Nepal specific contextual understanding: Due to COVID-19 travel restrictions, most of the experts worked remotely and not all of the research teams included Nepali counterparts who brought deeper contextual knowledge and understanding. The consultations gave experts the opportunity to pose questions and discuss issues with stakeholders in Nepal. However, this approach had limitations as the more nuanced aspects of face to face interactions were lost. Given this limitation, the consultations with government officials and other key stakeholders to examine and discuss ESA findings and recommendations were a critical element in contextualizing the studies.

Complexity of data access process: Some studies found it difficult and time consuming to access needed data. This meant that some studies took longer than planned to carry out to enable the inclusion of the most relevant data.

³ Including joint financing partners (JFPs), other development partners (DPs), civil society organisation (CSO) representatives, experts and academia members of the ESP Technical Advisory Team (TAT) and officials at federal, provincial and local government levels.

2. CONTEXT OF NEPAL'S EDUCATION SECTOR

Nepal has made significant progress in providing educational opportunities for children and young people and much of this expansion has occurred in the last three decades. Nepal's Human Development Index (HDI) value for 2016 was 0.558 (UNDP, 2016),⁴ which meant the country graduated to the medium human development category, positioning it at 144 out of 188 countries and territories. Between 1990 and 2016, the mean years of schooling of those over 18 years of age increased by 2.1 years. In the context of emerging development needs and aspirations of the country, it is imperative to further accelerate the pace of education sector development and provide the sector a new momentum with renewed focus on equity, quality and learning outcomes. In the search for strategies for the next stage of education development, it is important to examine how socio-political, economic, cultural and demographic factors are shaping the education sector. This chapter provides an overview of the context in which the education sector operates in order to understand the trends that have characterized the education system.

2.1 Economic Context

Nepal has made significant progress in many areas, transitioning from a post-conflict status into a country with relatively stable economic performance in recent years. Nepal's gross national income per capita doubled between 1990 and 2015. In 2016 the gross national income per capita was US\$ 730. The country has successfully balanced its historic trade deficit, reduced poverty and made significant socio-economic reforms with the support of age dividends and remittances. Prior to the pandemic, more than 3 million Nepali youth worked abroad, mostly in informal low skilled work, and their remitted incomes were contributing about a quarter of GDP in 2019. However, Nepal has yet to see accelerated economic development as a result of over the last three decades of economic liberalisation through the growth-driving sectors. This section discusses the key economic trends and characteristics in the country.

Decreasing poverty, but economic growth below the South Asian average

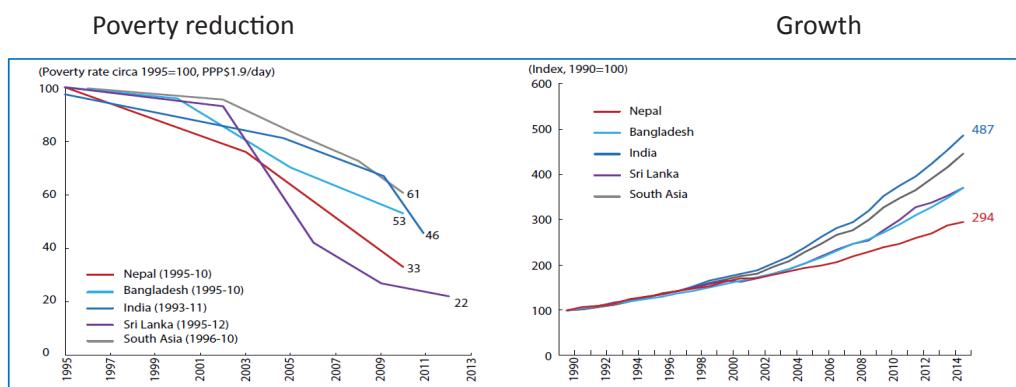
Nepal has made good progress in reducing poverty despite its challenging topography, its exposure to natural disasters and economic growth below the level observed in the

⁴ Human Development Index available at <http://hdr.undp.org/en/countries/profiles/NPL> 9 <https://data.worldbank.org/country/nepal>

region (Figure 2.1). The reduction in poverty is largely due to the flow of remittances from workers abroad which acts as a safety net for many people (World Bank, 2017b). Nepal is now classified as a lower-middle income country, which is an upgrade from its earlier low-income status as per the new classification of the World Bank for 2020/21 (World Bank, 2020).

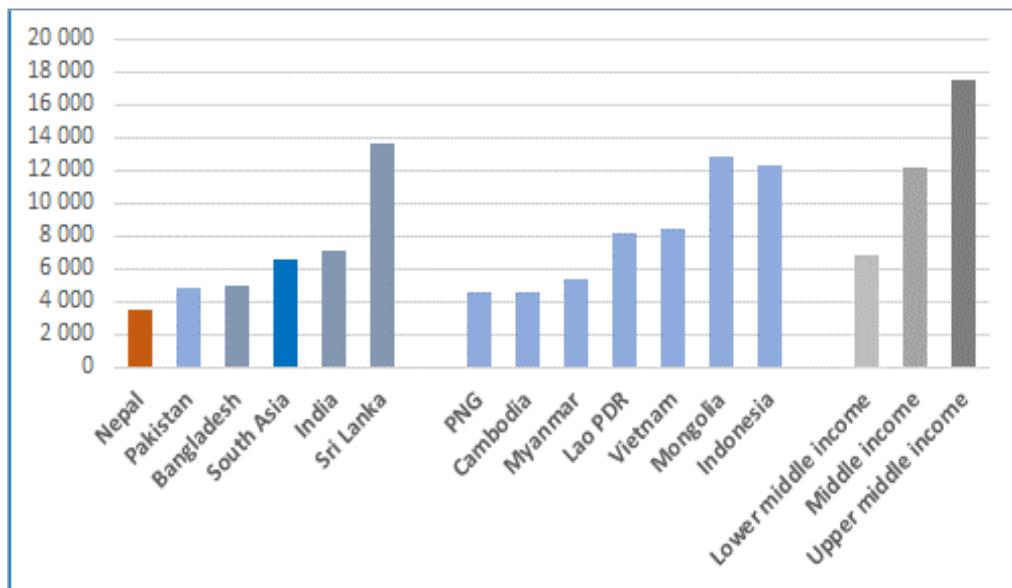
The country aims to rise to a middle-income status and achieve the sustainable development goals by 2030. As is shown in figure 2.1, Nepal has been one of the leading countries in the region in terms of poverty reduction over the past years, with only Sri Lanka being ahead of them. However, this progress is not matched in terms of economic growth with Nepal experiencing the least of this in comparison to other South Asian countries. Furthermore, the economic consequences of the COVID-19 pandemic could undermine capita income, although the major issue is the capacity to maintain a long-term high level of growth.

Figure 2.1: Poverty reduction and growth in south Asian countries



Source: World Bank (2017b)

The figure 2.2 compares GDP per capita of Nepal and other Asian countries, which shows that Nepal's GDP per capita in 2019 was lower than that of all these Asian countries.

Figure 2.2: GDP per capita of Nepal and other Asian countries (US\$, 2019)

Source: CBS, GDP series updated April, 2020

In the past decade, Nepal's Gross Domestic Product (GDP) at current prices tripled from NPR 1,193 billion in 2009/20 to NPR 3,767 billion. In 2019/20, the GDP per capita reached NPR 126,000, which was almost three times the NPR 45,000 in 2009/10. Nepal's gross national income (GNI) per capita rose from \$960 in 2018 to \$1,090 in 2019, surpassing the income threshold for lower-middle income (Table 2.1).

Table 2.1: Nepal's gross national income per capita

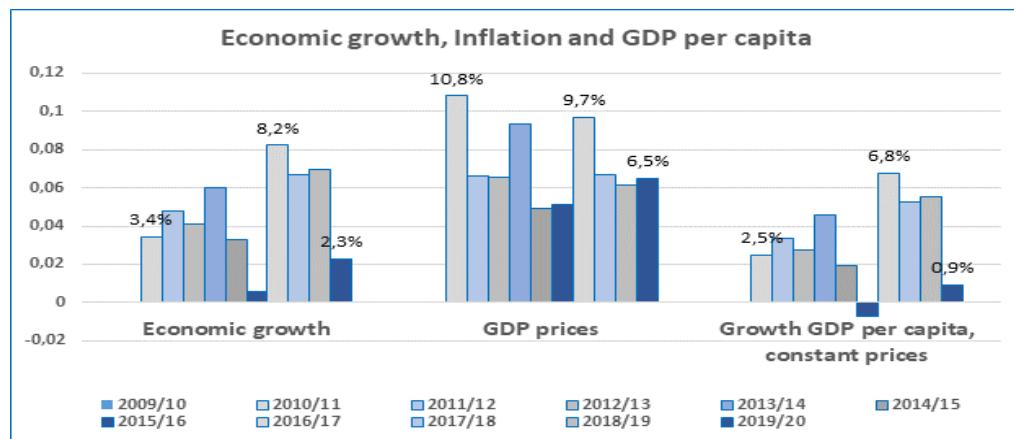
Threshold	July 2018/\$ (old)	July 2019/\$ (new)
Low income	< 996	< 1,026
Lower-middle income	996–3,895	1,026–3,995
Upper-middle income	3,896–12,055	3,996–12,375
High income	> 12,055	> 12,375
Average	960	1,090

Source: Beer Prydz E and Wadhwa D (2019) and World Bank (2020a d 2020b)

The long-term growth of Nepal's economy has averaged 4.6% per year over the last 10 years. In the period between the 2015 earthquakes and the 2020 COVID-19 pandemic, Nepal had a peak growth of 8.2% (in 2016/17). This economic growth has witnessed the improvement in the broad money supply, remittance inflow, and financial sector development. The progress took place despite the massive effects of the devastating earthquakes of 2015.

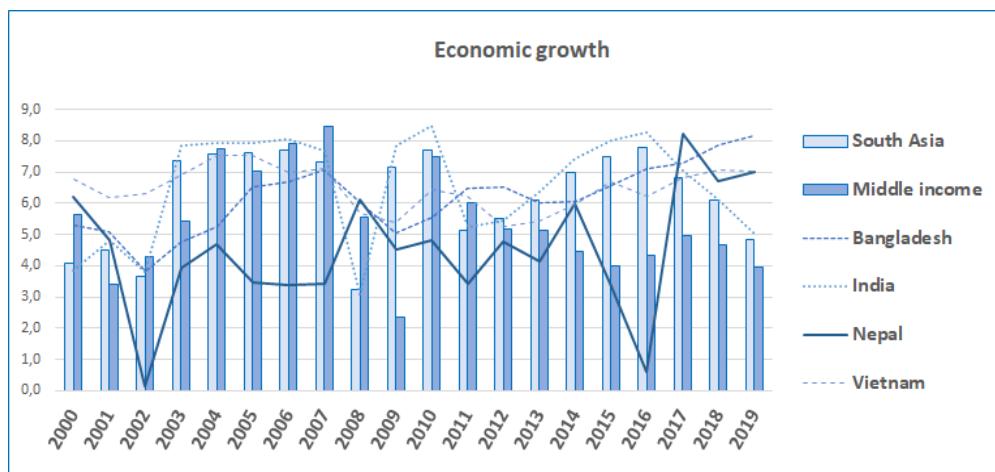
Figure 2.3 shows Nepal's economic growth, GDP prices, and growth GDP per capita at constant prices. The economic growth pattern displays some negative effects of the 2015 earthquakes (0.8% growth in 2015/16) and the COVID-19 pandemic (2.3% growth in 2019/20) in the national economy in 2015/16 and 2019/20 respectively. The 8.2% growth in 2016/17 was largely due to the stimulus of earthquake damage reconstruction activities.

Figure 2.3: Economic growth: comparison to other countries



Source: World Bank database

Nepal's economy has grown at below average for South Asian countries over the last two decades, although it has performed better for the last three years (2017–2019) (Figure 2.4). GDP per capita follows similar patterns. Its growth at constant prices peaked at 6.8% in 2016/17, with negative growth of 0.8% in 2015/16 and only 0.9% growth in 2019/20.

Figure 2.4: GDP per capita, comparisons to other countries

Source: World Bank database

Table 2.2 gives detailed figures for Nepal's GDP and macroeconomic indicators from 2009/10 to 2019/20.

Table 2.2: GDP and main macroeconomic indicators

	2006/ 67 2009/ 10	2007/ 68 2010/ 11	2008/ 69 2011/ 12	2009/ 70 2012/ 13	2010/ 71 2013/ 14	2011/ 72 2014/ 15	2012/ 73 2015/ 16	2013/ 74 2016/ 17	2014/ 75 2017/ 18	2015/ 76 2018/ 19	2016/77 2019/20
GDP current prices, billion NPR	1,192. 8	1,367	1,527	1,695	1,964	2,130	2,253	2 674,5	3,045	3,459	3,767
Economic growth (%)	3.4	4.8	4.1	6.0	3.3	0.6	8.2	6.7	7.0	2.3	
GDP prices, annual increase (%)	10.8	6.6	6.6	9.4	4.9	5.2	9.7	6.7	6.2	6.5	
Composition of GDP											
% primary sector	35.9	37.6	35.8	34.4	33.2	32.3	32.2	30.2	29.2	28.1	28.2
% secondary sector	14.6	14.4	14.4	14.6	14.3	14.2	13.6	13.9	14.3	14.5	13.7
% tertiary sector	49.5	48.0	49.8	51.0	52.5	53.4	54.2	55.9	56.6	57.4	58.1
Trade deficit as % of GDP	26.8%	-24.0	-23.5	-26.8	-29.2	-29.9	-29.8	-33.4	-37.3	-37.6	-32.0
Workers' remittances as % GDP	0.0	18.5	23.5	25.6	27.7	29.0	29.5	26.0	24.8	25.4	19.0
GDP per capita (NPR)	45,40 0	51,60 0	56,900	62,300	71,200	76,200	79,500	93,100	104,60 0	117,30 0	126,000
Growth GDP per capita, constant (%)	** ADD	2.5	3.4	2.7	4.6	1.9	-0.8	6.8	5.3	5.6	0.9
Exchange rate to 1 USD	77.6	73.3	74.0	85.2	93.1	97.6	102.4	107.4	104.5	108.9	112.6

Source: from CBS GDP series, updated April, 2020

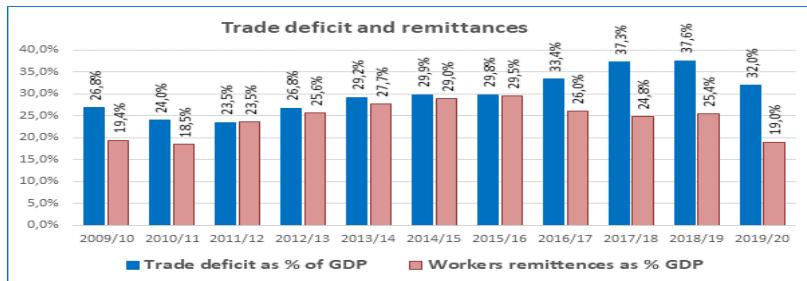
Nepal's tertiary sector (service sector) has become dominant in the composition of GDP and in 2019/20 accounted for 58% of GDP, while the primary sector now accounts for less than one-third of total GDP. However, the primary sector is still very important as it accounts for more than two-thirds of national employment (CBS and ILO, 2018). The agriculture sector is largely informal, subsistence and traditional and employs a majority of the working age population.

The large inflow of remittances over the past two decades has resulted in the more rapid growth of the tertiary sector, including import-based trade such as transport, communication and hospitality.⁵ Nepal has a largely agrarian economy valued at USD 30.6 billion GDP in 2019 which has benefitted from a decade long period of growth. And the contribution of the secondary or manufacturing sector has remained almost constant in the past decade contributing 13–15% of GDP (Table 2.2). Nepal's currency has depreciated against the US dollar over the past decade declining from NPR 77.6 to the dollar in 2009/10 to NPR 112.6 in 2019/20. The Nepalese rupee depreciated by 9.66% from mid-June 2019 to mid-June 2020, compared with just 1.8% in the same period of previous year declining from NPR 109.36 billion in mid-July 2019 to NPR 121.05 in mid-July 2020.

Declining remittance inflows from foreign workers

Nepal's trade deficit increased by almost 10% between 2009/10 and 2019/20. Imports from India and China grew rapidly in the period. In 2017/18, Nepal's trade deficit was -28.9% with India, -24.9% with China and -24.6% with the rest of the world. The sharp fall in the trade deficit in 2019/20 was caused by the impact of COVID-19 pandemic safety measures, which limited economic activity. Nepal's ratios of trade deficit and workers' remittance on GDP between 2009/10 to 2019/20 (Figure 2.5) show that the inflow of remittances has helped in financial repayment (NRB and CBS, 2019). The workers' remittance ratio peaked at 29.5% after the earthquakes in 2015/16 and stood at 19% in 2019/20, while the trade deficit witnessed a high rate of growth over the past decade until just before the COVID-19 pandemic. In 2019/20 the trade deficit and workers' remittances have decreased. The trade deficit decreased from 26.8% in 2009/10 to 23.50% in 2011/12 and then rose moderately for four consecutive years reaching 37.6% in 2018/19.

⁵ Nepal's current account balance of is almost negative. The import to GDP ratio was about 35 and the export to GDP ratio was 3.3 in FY 2016/17.

Figure 2.5: Nepal's trade deficit and remittances

Source: CBS, 2020

Remittances have made a crucial contribution to Nepal's GDP with the amount driven by the high number of Nepali migrant workers and the annual amounts they send back (Table 2.3). Nepal ranks in the top 15 of countries for annual remittances receipts (OECD, 2018). Nepali youths working abroad are caught in the low-skill and low-wage trap, which signifies the need for increasing investment for further education and skill training.

Table 2.3: The foreign remittance to Nepal (2016/17)

	% foreign migration	Annual average remittances per migrant (USD)
India	30.4	\$609
Malaysia	22.3	\$1,889
Gulf Cooperation Council countries	41.5	\$1,819
Other	5.8	\$4,534

Source: World Bank Nepal Household Risk and Vulnerability Survey, 2016 (Walker & Jacoby, 2017)

COVID-19 crisis makes growth perspectives uncertain for 2020/21 to 2022/23

The macroeconomic framework set for Nepal's Medium Term Expenditure Framework (MTEF) for 2020/21 to 2022/23 shows ambitious growth and price expectations compared to the actual economic growth of only 2.3% in 2019/20. The MTEF has a sustained growth rate of 6–7% per year, and GDP per capita growth of 5.3% in 2020/21, 8.6% in 2021/22 and 8.3% in 2022/23 (Table 2.4).

Table 2.4: Macroeconomic perspective in Nepal's MTEF, 2020/21–2022/23

	2015/16	2016/17	2017/18	2018/19	2019/20	MTEF 2020/2023		
						2020/21	2021/22	2022/23
GDP current prices (billion NPR)	2,253.2	2,674.5	3,044.9	3,458.8	3,767.0	4,312.9	5,024.3	5,837.0
% economic growth	0.6	8.2	6.7	7.0	2.3	7.0	9.9	9.6
% GDP prices	5.2	9.7	6.7	6.2	6.5	7.0	6.0	6.0
GDP per capita (NPR)	79,500	93,100	104,600	117,300	126,000	142,000	163,400	187,600
% growth in GDP per capita (constant prices)	-0.8	6.8	5.3	5.6	0.9	5.3	8.6	8.3

Source: NPC, 2020

The COVID-19 pandemic has led to a revision of the growth perspective largely due to the fall in remittances including from India. Nepal's high dependency on the Indian economy means that the country faces more uncertainties due to COVID-19. The preliminary estimates of the effects of COVID-19 on the Nepalese economy anticipate a shortfall of 3.8% in gross value added (GVA) growth in 2019/20 (Table 2.5). It is also estimated that the pandemic will cause more than one million job losses in Nepal and abroad in 2019/20 (Table 2.6). Nearly a half of projected losses are projected among Nepali working abroad (Table 2.7) with between 16–20% of all jobs in this category and 14-18% of all jobs in the industrial sector being at risk. There is expected to be relatively little impact on agriculture with expected job losses of between 0.8% and 1.5%.

Table 2.5: Revision of gross value added (GVA) growth for 2020/21

Classification	Expected growth	Projected growth	Shortfall in growth	Projection for 2020/21
Agriculture (%)	3.63	2.59	1.04	5.38
Non-agriculture (%)	7.34	2.27	-5.08	7.06
Industries (%)	10.82	3.23	-7.59	9.64
Services (%)	6.35	1.99	-4.36	6.31
Total GVA (%)	6.20	2.37	-3.83	6.54

Source: CBS for official growth rates for 2019/20.

Table 2.6: Estimated job losses among Nepali working in Nepal and abroad in FY 2019/20

Classification	Employment (,000)	Job loss range (%)		Estimated job loss range (000)	
		Minimum	Maximum	Minimum	Maximum
Domestic economy	15,905.6	4.1	5.8	657.1	924.4
Agriculture	10,305.0	0.8	1.5	77.3	154.6
Non-Agriculture	5,600.5	10.4	13.7	579.8	769.8
Industries	2,196.4	14.0	18.0	307.5	395.4
Services	3,404.1	8.0	11.0	272.3	374.5
Foreign employment	3,200.1	16.0	20.0	512.0	640.0
Total				1,169.1	1,564.4

Source: Labour force surveys, CBS for total employment

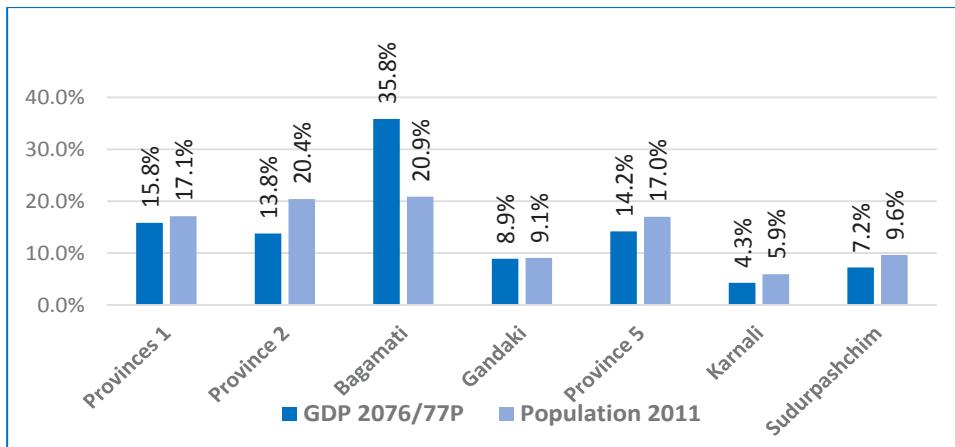
Geographical disparities in wealth

Economic wealth produced by the economy is unevenly distributed over Nepal's seven provinces. Using 2011 census population figures, actual GDP figures for 2019/20 and projected figures for 2020/21, Bagmati province has 36% of the national wealth but only 21% of the population; two and a half times the GDP of Province 2, which has a similar population; five times higher GDP than Sudurpashchim Province, and many times higher than Karnali province (Table 2.7 and Figure 2.6). This is explained by the concentration of industrial and service sector activities in Bagmati province, which is home to the capital city, Kathmandu. Province 2 in the central to eastern Tarai has the lowest wealth per capita, followed by Karnali and Sudurpashchim provinces. The contribution of agriculture and forestry to provincial economies is above the national average of 27.1% in all provinces except Bagmati in gross value added figures (Table 2.8). Agriculture and forestry accounts for more than a third of total GDP in Province 2 (37.7%), Province 1 (36.7%), Sudurpashchim (36.6%), Karnali (34.2%) and Province 5 (33%). The GDP per capita is the highest in Bagmati (NPR 244,000) and the lowest in Province 2 (NPR 96,000).

Table 2.7: GDP per province and % GVA in agriculture and forestry

Provinces	GDP 2019/20		GDP 2020/21 (projected)		Population 2011		% agriculture & Forestry in GVA 76/77
	Million NPR	%	Million NPR	%		%	
Province 1	544,118	15.7	595,760	15.8	4,535,000	17.1	36.7
Province 2	471,120	13.6	519,162	13.8	5,404,000	20.4	37.7
Bagmati	1,257,352	36.4	1,350,268	35.8	5,529,000	20.9	12.9
Gandaki	308,910	8.9	335,258	8.9	2,404,000	9.1	29.9
Province 5	490,578	14.2	534,111	14.2	4,499,000	17.0	33.0
Karnali	143,779	4.2	160,738	4.3	1,570,000	5.9	34.2
Sudurpashchim	242,936	7.0	271,746	7.2	2,553,000	9.6	36.6
Total GDP	3,458,792	100.0	3,767,043	100.0	26,495,000	100.0	27.1

Source: CBS dataset in Peano et al, 2020⁶

Figure 2.6: Share of Nepal's provinces in GDP and population

Source: Peano, 2020⁷

Planned budgets and actual expenditure

Only limited resources have been available to the Government of Nepal in the last decade. Although recent trends in revenue mobilisation have been impressive, they remain insufficient to cover the growing expenditure. As a result, the financing of government budgets still relies upon foreign loans, domestic borrowing and cash balances. The

⁶ Central Bureau of Statistics. National Planning Commission. Government of Nepal: GDP series updated April 2020. Accessed August 2020 at <https://cbs.gov.np/national-accounts-of-nepal-2019-20/> Cited in Peano et al (2020)

⁷ Central Bureau of Statistics. National Planning Commission. Government of Nepal: GDP series updated April 2020. Accessed August 2020 at <https://cbs.gov.np/national-accounts-of-nepal-2019-20/> Cited in Peano et al (2020) and 2011 census data in CBS (2012)

provisional revenue and grants of the Federal Government are almost always higher than the actuals (Table 2.8). The actual revenue grew from NPR 586 billion in 2015/16 to NPR 765.5 billion in 2018/19 and are projected to reach the ambitious targets of NPR 1,325.2 billion in 2022/23.

Actual government expenditure tends to be below planned targets, including during the last five years (Table 2.8). The actual compensation of employees, goods and services, interest, subsidies, grants, fiscal transfers, social security, and other recurrent and capital expenses are usually less than the proposed budgets. Total actual recurrent and capital expenditure almost doubled in the past four years from NPR 493 billion in 2015/16 to NPR 941 in 2019/20. The gap between actual and budgeted figures has been around NPR 200 billion in this period being the highest in 2019/20 at NPR 460 billion. Since the introduction of the federal system in 2017/18, the share of the provinces was highest in 2018/19 at NPR 117.6 billion and of local governments in 2018/19 prior to the COVID-19 period at NPR 211 billion.

Table 2.8: Government budgets, revenues, expenditure & MTEF projections (NPR billion)

	2015/16		2016/17		2017/18		2018/19		2019/20		2020/21	2021/22	2022/23
	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Revised	Budget	MTEF	MTEF
Revenue													
Tax and non-tax Revenue	475	485	566	613	730	727	946	840	1,112	827	1,012	1,213	1,431
Revenue sharing with provincial & local govt							114	97	131	100	122	147	174
Federal treasury	475	485	566	613	730	727	831	743	981	727	890	1,065	1,257
Grants	111	40	107	32	72	39	59	23	58	32	61	61	68
Federal govt revenue & grants	586	525	673	645	802	766	890	766	1,039	759	950	1,126	1,325
Expenditure													
Compensation of employees	104	89	132	119	131	111	117	100	145	145	138	1,004	1,062
Goods and services	79	44	100	57	120	56	87	33	74	43	74		
Interest	21	9	23	10	31	16	26	21	27	30	32		
Subsidies	3	1	2	1	1	1	1	1	1	1	2		
Grants	207	171	263	244	185	409	499	443	512	379	500		
Fiscal transfers	0	0	0	0	232	0	0	0	0	0	0		
Social security	69	57	96	87	103	99	113	117	157	102	189		
Other recurrent	1	0	1	0	2	3	2	2	41	3	14		
Capital	209	122	312	209	335	271	314	242	408	239	353	492	672
Recurrent + capital	693	493	929	727	1,139	968	1,159	958	1,365	941	1,302	1,496	1,734
excluding interest	672	485	906	717	1,108	951	1,133	937	1,338	911	1,270	1,496	1,734
MoF financing	126	108	120	110	140	120	156	152	168	132	173	201	221
Total including financing	819	601	1,049	837	1,279	1,087	1,315	1,110	1,533	1,073	1,475	1,698	1,955
Federal	819	601	1,049	837	1,047	846	997	789	1,199	791	1,112	1,698	1,955
Province					7	7	118	110	108	94	100		
Local level					225	234	201	211	225	188	263		

Source: Ministry of Finance (MoF, 2019); Note: Last two columns includes projected figure

A larger fiscal basis, is not sufficient to cover projected expenditure

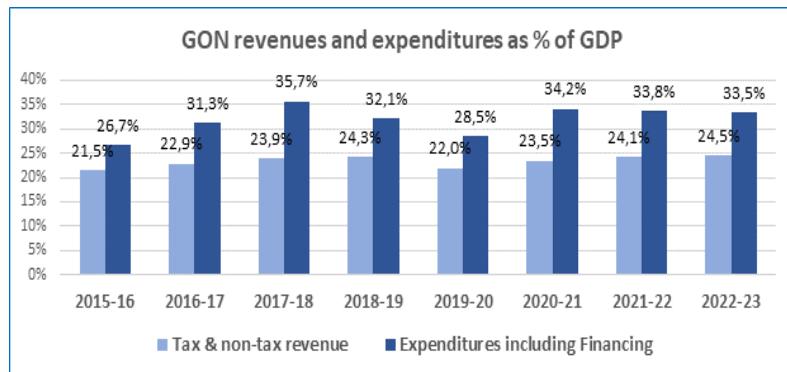
Tax and non-tax revenues have represented around 24% of GDP in recent years (Table 2.9 and Figure 2.7), which is higher than in fiscal years 2015/16 and 2016/17, showing some improvements in the capacity to raise taxes from the economy. The government had set the perspective of 24.5% of GDP for 2022/23. However, expenditure has remained at a much higher level for each of the past five years. The expenditure excluding financing went up to NPR 1,301.9 billion in 2020/21 amounting to 30.2% of GDP. The chronic gap between revenue and total expenditure represents 10.7% of GDP for FY 2020/21 although it is targeted at 9% of GDP in 2022/23, with a lower increase in planned expenditure. Revenues are sufficient to cover recurrent expenditure, but the government has to increase borrowing to repay the debt principal and to fund capital expenditure. The current debt level is rather limited at an estimated 30% of GDP, although it is expected to grow to 41% of GDP in 2024/25 (IMF, 2020).

Table 2.9: Trends in government revenue and expenditure compared to GDP, 2015/16 to 2022/23

	Actuals					Projected		
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Tax & non-tax revenue	485.2	612.6	726.7	839.7	827.0	1,011.8	1,212.6	1,430.9
as % of GDP	21.5	22.9	23.9	24.3	22.0	23.5	24.1	24.5
increase at constant prices		15.1	11.2	8.8	-7.5	14.3	13.1	11.3
Expenditure including financing	601.0	837.2	1,087.3	1,110.5	1,073.4	1,474.6	1,697.6	1,955.0
as % of GDP	26.7	31.3	35.7	32.1	28.5	34.2	33.8	33.5
increase at constant prices		27.0	21.7	-3.8	-9.2	28.4	8.6	8.6
Expenditure excluding financing	493.3	727.4	967.6	958.0	941.1	1,301.9	1,496.4	1,734.3
as % of GDP	21.9	27.2	31.8	27.7	25.0	30.2	29.8	29.7
increase at constant prices		34.4	24.7	-6.8	-7.7	29.3	8.4	9.3

Source: Peano, 2020⁸

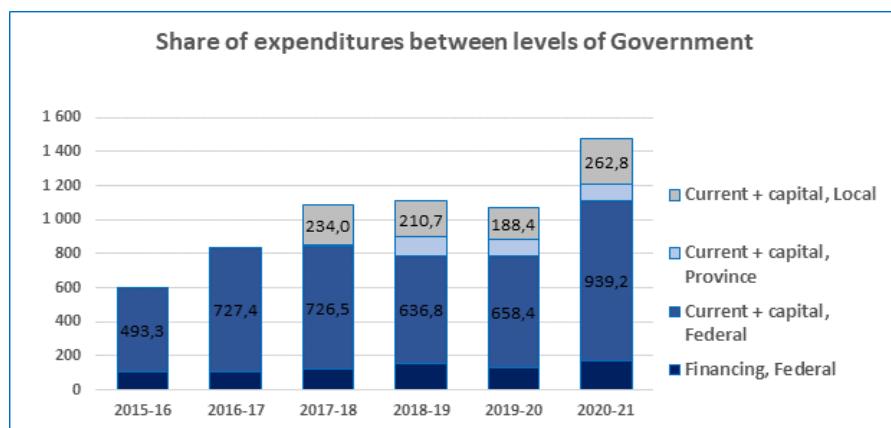
⁸ Central Bureau of Statistics. National Planning Commission. Government of Nepal: GDP series updated April 2020 and Budget speeches (including MoF, 2019). Cited in Peano et al. (2020).

Figure 2.7: GoN revenue & expenditure as % of GDP, including financing

Source: Peano, 2020

Local governments receive major share of financial transfers

The federal system changed the structure for implementing government activities and the share of expenditure between the levels of government. The devolution of large responsibilities to local governments has been translated into higher transfers to them. The recurrent and capital expenditure by local governments planned for FY 2019/21 is NPR 263 billion and NPR 100 billion for provincial governments.

Figure 2.8 Share of expenditures between levels of government

Source: Peano, 2020⁹

⁹ Budget speeches (including MoF, 2019). Cited in Peano et al (2020).

Table 2.10 illustrates the grants transfer and revenue sharing from federal government to provincial and local governments increased from NPR 114.2 billion in 2018/19 to NPR 130.9 billion in 2019/20 and is expected to be NPR 122.1 billion in 2020/21. The equalization grants to provinces and local governments slightly increased in 2019/20 reaching NPR 55.3 billion for provinces and NPR 89.9 billion for local governments. They are expected to remain almost the same in 2020/21. The conditional grants to provinces decreased significantly from NPR 63.1 in 2018/19 to NPR 44.5 billion in 2019/20, while they increased from NPR 109.8 billion in 2018/19 to NPR 123.9 billion in 2019/20 for local governments. The proportion of special, complementary and other grants increased in 2019/20.

Table 2.10: Transfer mechanisms between levels of government

Budget in NPR million	2018/19	2019/20	2020/21
Revenue sharing	114.2	130.9	122.1
Grants to provinces	117.6	108.2	99.9
Equalization grants	50.3	55.3	55.2
Conditional grants	63.1	44.5	36.4
Special, complementary grants	4.2	8.4	8.3
Grants to local governments	200.9	225.5	262.8
Equalization grants	85.2	89.9	90.1
Conditional grants	109.8	123.9	161.1
Special, complementary grants	5.8	11.7	11.6

Source: Peano, 2020¹⁰

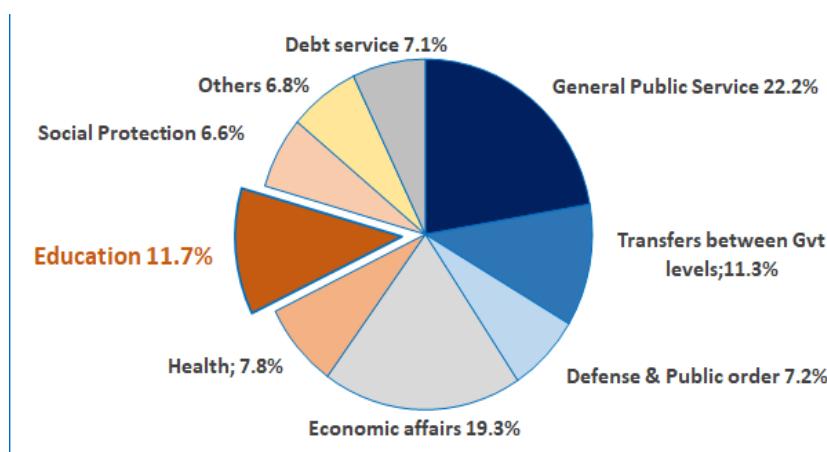
The functional classification of the federal budget

All government expenditure is expected to be NPR 1,474 billion in 2020/21, divided between the three tiers of government (Table 2.11). General Public Services account for NPR 494 billion of this (33.5%, including 11.3% for the transfers to lower levels of government) followed by Economic Affairs (26.4%, including 7.1% for debt repayment) and Education (11.7%) (Figure 2.9).

Table 2.11: Government of Nepal expenditure (NPR million) by function, 2020/21

Function	Total	Federal	Province	Local
General Public Service Including transfers between levels of gov.	494,339.2 (166,231.7)	321,557.9 (1,040.0)	66,571.0 (63,516.2)	106,210.3 (101,675.5)
Defence	49,220.5	49,220.5		
Public Order and Safety	56,285.3	56,285.3		
Economic Affairs	389,000.7	361,577.0	16,141.8	11,281.9
Environmental Protection	11,664.6	10,808.5	239.8	616.3
Housing and Community Amenities	81,860.7	72,319.0	6,783.4	2,758.3
Health	115,062.0	85,050.7	4,600.2	25,411.1
Recreation Culture & Religion	7,234.5	6,572.8	382.5	279.2
Education	172,192.2	56,348.9	5,098.9	110,744.4
Social Protection	97,785.7	92,273.5	56.1	5,456.1
Total Recurrent + Capital + Financing	1,474,645.4	1,112,014.1	99,873.7	262,757.6
MoF- Financing	104,434.7	104,434.7		
Total Recurrent + Capital only	1,301,858.1	939,226.8	99,873.7	262,757.6

Source: Budget speech 2020/21, Ministry of Finance

Figure 2.9: Government's expenditure by function 2020/21

Source: Government's expenditure by function 2020/21 (Budget speech 2020/21, MoF)

Education expenditure mainly comes from the local government component of the Federal budget through the allocation of conditional grants for school education.

Note that the 11.7% of the budget allocated for education does not fully reflect the government's allocations as non-earmarked transfers to sub-national levels are partly used to fund education. This is further discussed in chapter 8 (sections 1 and 2).

2.2 Political Context

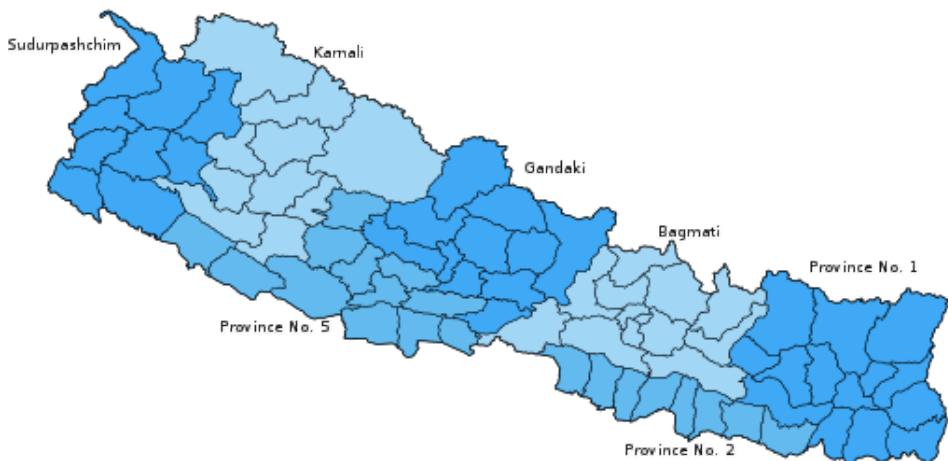
Having gone through a rather lengthy and complex transitions following the end of 10-year long conflict, Nepal enacted a new Constitution in 2015 creating a new political atmosphere filled with optimism for stability and development. The 2015 Constitution introduced a federal structure of governance with major changes in the administrative units and governance responsibilities (Table 2.12). Three tiers of government, comprising a federal government, seven provincial governments and 753 local governments have been established. As provisioned in the new Constitution, the country is going through the major constitutional and institutional changes. The transition from the earlier unitary system to the new federal system of governance is not without its challenges. The new system devolves many of the powers and functions exercised by the central authorities to local and provincial authorities. It is expected to bring development benefits and services closer to people making the service delivery more efficient, effective, transparent and accountable. Along with the shift in the country's overall governance structure, there have been monumental changes in the ways the education sector will be governed and managed.

Table 2.12 shows the distinctive features of the governance structure under the unitary and federal context.

Table 2.12: Nepal pre- and post- federal transition

Unitary system of governance	Federal system of governance
Pre-20 September 2015	Post 20 September 2015
Unitary government	Federal government
5 development regions	7 provinces
14 zones	77 district co-ordination committees
75 districts with district development committees	753 local governments comprising 6 metropolitan cities, 11 sub-metropolitan cities, 276 municipalities and 460 rural municipalities
3,400 village development committees (VDCs)	Local government wards
Wards of VDCs	

Figure 2.10 shows map of Nepal with seven provincial and 77 district boundaries.

Figure 2.10: Map of Nepal showing seven provincial and 77 district boundaries

Social and Cultural Context

Nepal is characterized by cultural, ethnic and religious diversity. The population comprises 125 caste and ethnic groups who speak 123 languages (CBS, 2011). As such, diversity is a strength of Nepali society and should be recognized and respected, with differences acknowledged and valued. Along with these diversities, disparities based on caste, ethnicity and a host of other factors continue to prevail in the country often resulting in discrimination and exclusion. For example, Dalits, people in the remote mountains and hill zones, and a number of the ethnic groups are disadvantaged in many ways compared to people who live in the more accessible areas. Regional variations are also found in development outcomes. For example, the poverty rate in the erstwhile Mid-West and Far Western Development Regions were low compared to other regions (Turner et al., 2019).¹¹ Although the percentage of people below the poverty line (18.7%) has been reduced, more than 5.4 million people live below the poverty line (NPC, 2019); and, women and girls are more likely to be poor, despite their significant contributions to the work force (Oxfam, 2019). Analysis of key indicators by caste, ethnicity, geographic region and household wealth consistently show that unequal health outcomes and service use go undetected in aggregated national data (Ghimire et al., 2019). Historically, the country has a patriarchal social, economic, political and cultural structure in which women and traditionally marginalized groups, in particular Dalits, suffer inequality and exclusion in accessing quality public health, education and livelihoods services (Asia Foundation, 2018).

¹¹ The Mid-West Region covered the Karnali region and the Tarai districts to the south while the Far Western region covered the same area as Sudurpashchim province.

The new Constitution of Nepal is committed to creating an inclusive and equitable society and guarantees people's rights to education, health and livelihoods. The country has adopted progressive laws to counter inequalities, although the effective implementation and level to which they drive change of social and cultural practices and behaviour at the local level is often inadequate (OXFAM International and HAMI, 2019). Early marriage continues in some communities even though Nepal's Civil Code sets the legal age for marriage at 20 years old for males and females in 2017 (Ghimere et al, 2019). Data from the 2019 Multiple Indicator Cluster Survey (MICS) (CBS, 2019) indicate that the rates of early marriage fell to 19% for girls and 5% for boys in the 15-19 years age band. The practice of menstrual seclusion (*Chauupadi*) is prevalent in some parts of Nepal (GoN, 2019). Despite the Supreme Court ban on *Chauupadi*, a national campaign to end child marriage, and legal protections for victims of violence, harmful traditional practices and violent crimes continue with little to no local behaviour change support or protection enforcement (Human Rights Watch, 2020). Insufficient safe shelters, low levels of education and knowledge, and impunity towards perpetrators are driving cases of Chhaupadi, witchcraft accusations, and violent death and suicides, mainly among women from marginalized groups (OHCHR, 2018). Education has a particular role to play in ending such harmful socio-cultural practices.

2.3 Education Sector Overview

The main guiding document of Nepal's school education sector for working towards quality education for all is the seven-year Nepal School Sector Development Plan (SSDP, 2016–2023) (MoE, 2016 part 1), and its costed programme for the first five years to 2021 (MoE, 2016 part 2). The overall goal of the SSDP is:

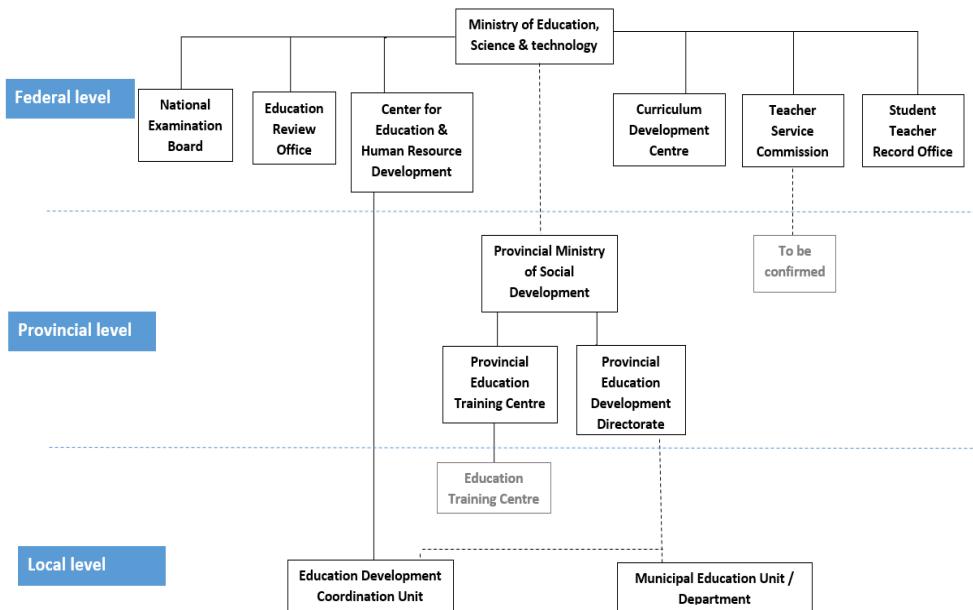
To contribute to socio-economic development and reduce disparities in the country through continuous and inclusive development of its human resources capacity by facilitating all citizens with opportunities to become functionally literate, numerate and develop basic life skills and knowledge required to enjoy a productive life, taking into account the diversity of context and needs with regards to the forthcoming federalisation of the country.

As such, the ongoing transition to a federal system of governance is recognised as one of the major imperatives for the SSDP. The SSDP is discussed in depth in section below.

Figure 2.11 shows the structure of the education bureaucracy under the federal system. Under the new federal structure, the 753 local governments have been given the responsibility for delivering public education, whilst the federal line ministries are primarily

responsible for policy, coordination, quality assurance and setting standards and measures to empower local governments to deliver sectoral services efficiently and effectively.

Figure 2.11 Structure of the government school education sector (MoEST, 2019c)



The 2016 Eighth Amendment of the Education Act realigned the school structure into basic (ECED/PPE to Grade 8) and secondary (Grades 9 to 12) levels of education. As stated earlier, the levels of education in Nepal's schools are now ECED/PPE, lower basic (G1–5), upper basic (G6–8), overall basic (ECED/PPE to G8), lower secondary (G9–10), higher secondary (G11–12) and overall secondary (G9–12). Grade configurations of an individual school or unit may vary. Schools may comprise only some grades, all 12 grades plus one year of ECED/PPE, or any number of grades or levels and parts of levels.

The basic level of education includes one year of ECED/PPE and Grades 1–8. The prescribed age groups for ECED/PPE are three and four-year-olds, with the government prescribing one-year of ECED/PPE for all four-year-olds with the possibility of an additional year provided through local partnerships for three-year-olds.

Schools are counted and disaggregated in terms of units, which can have multiple levels. A school that provides Grades 1 to 12 includes lower basic (G1–5), upper basic (G6–8), lower secondary (G9–10) and higher secondary (G11–12) levels within it and therefore has all four levels but counts as one school.

The three main types of schools in Nepal are public schools (supported by the government and also referred to as community schools), private schools (also referred to as institutional schools, which are supported by parents and trustees) and traditional or religious schools. Based on the nature of government support, public schools can be categorized as:

- community-aided schools (fully government supported for teachers' salary and other expenses)
- community-managed schools (fully supported by the government for teachers' salary and other funds but their management responsibility lies with the community)
- community-unaided (with either partial or no support from the government).

Religious schools comprise Muslim schools (madrasas), Buddhist schools run by gumbas and vihars (hereafter gumba schools) and Hindu schools (gurukuls, Sanskrit and ashram schools – hereafter called gurukuls). These schools receive government support once they are mainstreamed into the formal education system by registering with local governments.

The government is committed to strengthening its public system of education and in 2019 declared 2019-2029 to be the Public School Enabling Decade (PSED). The PSED envisions public schools to become centres of excellence and thereby restore public faith in education. This declaration is supported through the legal and policy framework embodied in the Free and Compulsory Education Act (2018) and the Federal Education Policy (2019). However, the forthcoming Federal Education Act will be important to ensure the legal framework remains aligned with the current federal context.

The Constitution of Nepal (2015) demands a thorough reorientation of the education system through structural and functional reforms, including the policy and regulatory frameworks. The Constitution guarantees the fundamental right to education and lays down the directive principles of the federal government, the 7 provincial governments and the 753 local governments on education and the right to education (Table 2.13). What stands out is that while the role of the local governments has significantly increased and the mandate to oversee school education lies with them, the role of provincial governments is almost entirely connected to concurrent powers and shared responsibilities. Thus, the role of provincial governments is largely yet to be defined in the absence of a legal framework that institutionalizes the cooperation and coordination across the government tiers to execute these responsibilities.

Table 2.13: Education sector-related roles of the three tiers of government

Federal government	Provincial governments	Local governments
Determine national standards for educational institutions		Map schools Manage the permission and regulation of schools Establish, merge and close schools
Formulate national policy, law, regulation and standards	Formulate provincial policies, laws, regulations and standards	Formulate policies, laws, standards and undertake planning, implementation and regulation relating to early childhood education, school education, non-formal education, open and alternative learning, community learning, life-long learning and special education
Carry out national level research	Carry out provincial level research and education	Implement school education and manage school construction and infrastructure
Manage education statistics	Collect provincial statistics and records	Collect local education statistics and records
Project human resource needs	Project human resource needs at the provincial level. Set and manage standards for regulating secondary level teachers	Manage teachers and other school employees
Standardize schoolteachers' qualifications, capacity and regulation	Standardize schoolteachers' qualifications, capacity and regulation at the provincial level	Coordinate and regulate school education
Prepare National Curriculum core subjects and produce sample curriculums for local governments	Prepare and produce school level curricula	Distribute and implement the curriculum

Source: Developed based on the Constitution of Nepal, Annex 9

2.4 The Legal and Policy Context of the Education Sector

Education policies and acts

The National Education Policy (MoEST, 2019b) has been introduced in line with the federal structure to ensure people's right to education through the proper administration of education at all three levels of government. The policy integrates and compiles the various education sector policies into one document.

The Free and Compulsory Education Act was enacted by the Parliament in 2018 to implement Article 31 of the constitution, recognizing the right to education as an enforceable human right. The Act reinforces the duty of the state to ensure free education up to the secondary level (from Grade 9 to 12) and compulsory and free basic education for up to Grade 8.

The new National Education Policy follows the Eighth and Ninth Amendment of the 1971 Education Act, which came into effect in June 2016 and October 2017. The Eight Amendment restructured school education into basic and secondary levels (see above) and established the National Education Council (NEC), led by the minister for education to review education policies and make recommendations to the Government of Nepal. The amendment also outlined examination reforms by establishing a National Examination Board (NEB) and standardizing exams at national, provincial and district levels, including the institutionalization of the Education Review Office (ERO). The Ninth Amendment solved the issue relating to temporary teachers by enabling them to get permanent status once they pass an examination.

Legislation to accommodate constitutional provisions

A number of pieces of legislation have been introduced since 2017 to legislate for constitutional provisions, facilitate intergovernmental coordination and collaboration, and support provincial and local government to unpack and operationalize their exclusive and concurrent powers.

The Local Government Operation Act (MoFAGA, 2017) covers local level governance and the unbundling of functions, including provisions for the management of the transition to a full-fledged federal system until the local executive bodies have developed and put federal arrangements in place. These provisions include work division and performance, joint service arrangements and delegation of authority to wards. The act specifies the functions and responsibilities of districts and district level governance. Section 3, Article 11(2) (Ja) specifies the rights and duties of municipalities and rural municipalities in relation to the provision of education. Schedule 5-9 of the Constitution specifies the 23 functions of local governments related to basic and secondary education. Local governments have become the key actors in managing basic and secondary education with significant power and autonomy. The updated mandate of the district level is coordination and monitoring. This change is reflected in the change of district executive bodies from being district development committees (DDCs) to district coordination committees (DCCs). The act elaborates on the shared and divided responsibilities between the three levels of government.

The 2017 Civil Servants' Adjustment Act (MoFAGA, 2019) and its regulations legislate the balance between the organizational structures of provincial and local governments and their working modalities, as well as balancing the accountability of local government staff and the flexibility they have. The act facilitated the organizational restructuring of the number of employees at local, provincial and federal levels.

The 2017 Intergovernmental Fiscal Framework (MoF, 2017) is important for the effectiveness of the new federal system of governance. Although the Constitution assigns some direct sources of revenue to provincial and local governments, they are highly dependent on intergovernmental fiscal transfers to fund their responsibilities. The framework was followed by the Intergovernmental Fiscal Transfer Management Act (IFMA) (MoF. 2017), which provisions that local governments get 15% of the income generated from value added tax (VAT), and excise duty on domestic products. Of the remaining 85%, 15% goes to provinces and 70% to the federal government. The federal government also needs to distribute 25% of the royalties generated from the use of natural resources to local governments and another 25% to provinces. The act also confirmed the different types of grants of fiscal equalization, conditional, matching and special grants, for provinces and local governments, which the federal government provides annually.

The Natural Resource and Fiscal Commission Act (MoF, 2017), specifies the establishment and operationalization of the Natural Resource and Fiscal Commission (NNRFC). The commission has devised a formula based on parameters such as geographic area, population, cost of service delivery, incidence of poverty and ability to generate financial resources for distributing grants to sub-national governments. It does this for fiscal equalization grants. The commission has devised a formula and methodology for distributing VAT and excise duty among the three tiers of government. Four types of grants are specified:

- **Fiscal equalization grants** extended based on the fund requirements of local governments and provinces, and their ability to generate revenue. It is intended to fill the gap between resource needs and potential by analysing local governments and provinces to make recommendations to the central government.
- **Conditional grants** are provided based on the situation of infrastructure, national policies, programmes, norms and standards. These are mainly earmarked grants provided to local governments for specific purposes, including all activities provisioned under the SSDP.
- **Complementary grants** are provided to provinces and local bodies for specific projects, including infrastructure projects, based on their feasibility and cost. Factors such as a project's impact on society, the availability of required financial, physical and human resources, and projects' importance are taken into account while extending these grants.

- **Special grants** are extended to provide specific basic public services, such as education and health, and to promote socio-economic development in 'left behind' communities, for example to increase literacy in specific locations.

These acts were followed in 2018 by **the Appropriation Act and Allocation Act**, (MoF, 2018) which further regulates provisions of fund disbursement and reporting and the maintenance of fiscal discipline.

2.5 The School Sector Development Plan

In 2016, the SSDP set out to improve the quality of education while safeguarding the achievements made under the previous education sector plans on improving access to education. The plan put more emphasis on equitable access to overcome the disparities suffered by children from disadvantaged groups, children with disabilities and children from remote areas.

The SSDP was designed to address the following major contemporary challenges:

- Supporting 'building back better' after the April and May 2015 earthquakes and improving disaster risk reduction in the aftermath of the damage to school infrastructure and the lessons learned on school safety.
- Setting the scene for the reforms needed by the move to a federal system of government, although the detailed shape of these reforms was not evident in the first years of the SSDP. A smooth transition to federalization in the management of educational services was seen as crucial.

The seven year SSDP (2016–2023) and its five year (2016-2021) costed programme encompasses Nepal's school education sector, including non-formal education, basic education and secondary education.

The SSDP was aligned with Nepal's international commitment towards the SDGs and the Post-Disaster Needs Assessment (NPC, 2015b; NPC, 2015c) and the Post-Disaster Recovery Framework (NRA, 2016). The SSDP was designed to enable the school education sector to complete the unfinished agenda of EFA and ensure readiness in Nepal moving forward to achieve the SDG 4 target of "Ensuring equitable and inclusive quality education and promoting lifelong learning opportunities for all" (NPC, 2015d: 76) by 2030. The quality agenda was at the core of the SSDP through its strong focus on the quality of education and equitable access, participation and learning outcomes.

SSDP's theory of change is based on strengthening the school education sector within and across the following key dimensions:

- **Equity:** Focused on ensuring that the education system provides inclusive and equitable access, participation and learning outcomes. This is achieved through a focus on reducing disparities among and between groups with the lowest levels of access, participation and learning outcomes.
- **Quality:** Targeted at increasing student learning by enhancing the relevance and quality of the learning environment, the curriculum, teaching and learning materials (including textbooks), teaching methods, assessment and examinations.
- **Efficiency:** To strengthen and reorient governance and management systems in the education sector to make them robust and accountable to local governments, while ensuring agreed minimum standards in the teaching and learning processes and the learning environment.
- **Governance and management:** To accommodate the political and administrative restructuring of the education sector in line with needs and the federal context, and to ensure sustainable financing and strong financial management by introducing a cost-sharing modality between central, provincial, and local governments.
- **Resilience:** To mainstream comprehensive school safety and disaster risk reduction in the education sector by strengthening school-level disaster management and resilience amongst schools, students and communities and to ensure that schools are protected from conflict.

The SSDP was designed to be relevant to the needs and priorities of the new federal system of governance. Its implementation is supported by many development partners, including INGOs and NGOs who are members of the Local Education Development Partner Group (LEDPG). The SSDP's five-year costed plan was supported by nine joint financing partners – the Asian Development Bank, European Union, Finland, the Global Partnership for Education, JICA, Norway, UNICEF, USAID and the World Bank. These partners committed to financial support through a Joint Financing Arrangement (JFA). A set of mutually agreed Disbursement-Linked Indicators (DLIs) and the SSDP Programme Results Framework form the basis for triggering joint financing partner disbursements to the government.

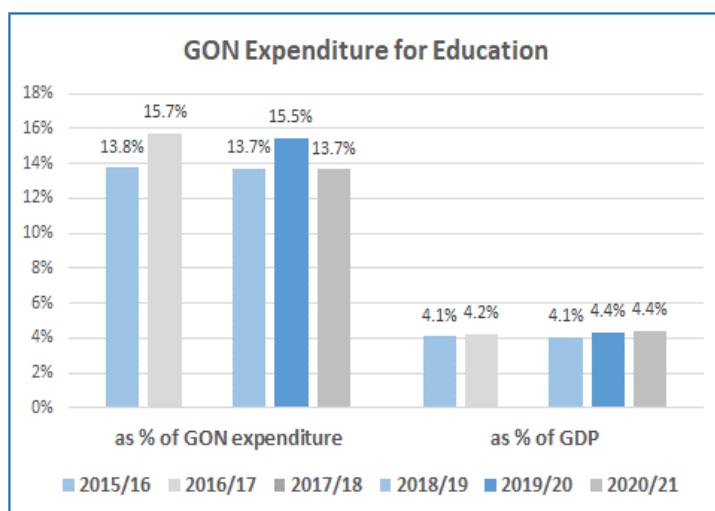
The SSDP Mid-Term Review (Bessières et al., 2019) noted that with a strong focus on quality-oriented policy, the SSDP had engaged in an important set of reforms. However, the implementation of such reforms was found to have been difficult considering the limited human and financial resources, the large number of reform initiatives executed at the same time, the high degree of technical expertise required, and the need to mobilize large number of stakeholders in the reform process. The evaluations completed by the SSDP Mid Term Review team (2019) noted that:

SSDP objectives, activities and implementation guidelines were unevenly known of and understood by stakeholders. The same goes for the ongoing reforms regarding equitable quality improvement: stakeholders at local level (including local governments, teaching teams and parents) do not fully understand some of the key reforms implemented, and do not know how they could support them. (Bessières et al. 2019, p. 4)

The recognition of the challenges during the transition to federalism resulted in the production of an SSDP Transitional Plan and Roadmap for the Implementation of the SSDP in the Federal Setup in October 2019 (MoEST, 2019c). It sets out accountability mechanisms in the changed structure, reaffirmed roles and responsibilities of new and existing institutional structures, and clarified the measures and safeguards to be put in place where uncertainties posed a risk to service delivery. It is expected that the forthcoming Federal Education Act will clarify remaining gaps and solidify the transitional arrangements. The analysis shows that important lessons and experiences have been learned from the implementation of the SSDP. The formulation of the next ESP should build on the achievements and lessons of the current SSDP.

Figure 2.12 shows that education expenses of the government as the percent of total government expenditure were from 13.7 to 15.7 during 2015/16 to 2020/21, and the education expenditures of government were from 4.1 to 4.4 of its GDP.

Figure 2.12: Education as a proportion of government budget and GDP



3. EQUITY AND INCLUSION

Equity and inclusion constitute the foundations for quality education. An equitable and inclusive education system is one that is able to address all forms of exclusion and marginalization, disparities and inequalities in access, participation, learning processes and outcomes. In the context of Nepal, marginalized or disadvantaged people are understood to include members of disadvantaged caste (Dalits) and ethnic groups (Janajatis); religious minorities (particularly Muslims); minority language speakers; those from low income households; those with disabilities; those living in remote and difficult to access areas; those without legal registration as citizens, and people with disabilities. The Consolidated Equity Strategy for the Nepal School Education Sector (DoE, 2014) provides a guiding conceptual framework for understanding social exclusion in the Nepalese contexts and the intersectionality between different factors, including gender and disability. This chapter examines the overall context of equity and inclusion in Nepal and how it is translated into education. It examines how the massive expansion noted in school level education in Nepal in recent years is distributed across different social groups. This chapter builds on gender and social inequality reviews of the education sector such as those conducted as part of the SSRP mid-term review (Terry and Thapa, 2012); the SSRP final evaluation (Poyck, 2016); the mid-term review of the SSDP (Bessieres, 2019), as well as other major reviews (Stenback, 2015).

3.1 Status of Inclusion and Exclusion in Nepal

The 2015 Constitution recognizes Nepal as a multi-ethnic, multi-cultural, multi-lingual and multi-religious country and aims to transform it into an inclusive society by ending exclusion and discrimination based on cast/ethnicity, class, religion, gender or region. Nepal has a strong legal environment for gender equality and social inclusion, and in some cases shows commendable equality parameters in the Asia region. It has ratified many UN Conventions relating to equity and inclusion, including the 1969 Convention on Eradication of Racial Discrimination, the 1966 Convention on Civil and Political Rights, and the 1966 Convention on Economic, Social and Cultural Rights (ICESCR). It has also ratified both the Convention on the Elimination of Discrimination Against Women (CEDAW) and the Convention on the Rights of the Child (CRC). However, Nepal is not a signatory to the Optional Protocol of both the ICESCR and the Convention on the Eradication of Racial Discrimination, which would allow marginalized groups to file complaints against racial and caste-based discrimination.

Nepal is signatory to the 2006 Convention on the Rights of Persons with Disabilities. The 2015 Constitution guarantees a comprehensive set of rights for persons with disabilities and sets out special provisions for their access to education, social justice and proportional representation within local bodies. Nepal adopted a Disabilities Rights Act (MoCWSC, 2017), which widened the definition of disability. In addition, the National Penal Code of 2017 criminalizes discrimination based on disability with heavy penalties any. However, many persons with disabilities from the Dalit and other poor and marginalized communities at times face discrimination as they are unaware of their rights or recourse to justice when violations occur (CRPD, 2018).

Nepal is the only Asian country, and among 23 countries worldwide, to ratify the 1989 International Indigenous and Tribal Peoples Convention (ILO Convention 169). Nepal has instituted several constitutional, legal and policy reforms in light of ILO Convention 169, identifying 59 different indigenous and caste groups for official recognition and more equitable distribution of resources (NHRC, 2019). Towards this end, Nepal constituted an Indigenous Nationalities Development Committee and subsequently formed district coordination committees in all districts to manage greater representation, participation and engagement in decision-making. Indigenous groups have an estimated population of 9.26 million people or 35% of the country's total population in 2019 (NHRC, 2019). Language, culture, literature and the arts of indigenous and endangered communities, as well as mother tongue literacy and training, have been promoted through a number of programmes. A Language Commission has been established to support the protection, promotion and development of the languages spoken in Nepal.

The rights of women, children, Dalits and people with disabilities, as provided in the international laws and conventions, are enshrined in the Constitution of Nepal. The Constitution protects the rights of women (Article 38), the rights of children (Article 39) and the rights of Dalits (Article 40). Measures have been taken to institutionalize gender equality in Nepal's policies, programmes and budgets. In addition, several monitoring mechanisms have been established in an effort to improve accountability towards international obligations for gender equality and social inclusion (GESI). These monitoring mechanisms include the National Human Rights Commission (Article 249), the National Women Commission (Article 253), the National Dalit Commission (Article 255), the Inclusion Commission (Article 258), the Adivasi Janajati Commission (Article 261), the Madhesi Commission (Article 262), the Tharu Commission (Article 263) and the Muslim Commission (Article 264). In addition, there is a Gender Mainstreaming Coordination Committee and the GESI Implementation Committee at federal level, and integrated planning committees at local government level.

Nepal has addressed gender discrimination through several legislative reforms which include promulgating the Safe Motherhood and Reproductive Health Rights Act (2018), the Elimination of Sexual Harassment at the Workplace Act (2015), the Witchcraft-related Accusation (Crime and Punishment) Act (2015), and amendments to existing legislation for ending gender-based violence and promoting gender equality. In addition, Nepal has enacted legal and policy measures to improve overall inclusion with revising 32 acts including Some Nepal Acts to Maintain Gender Equality (2006), the Caste-Based Discrimination and Untouchability Act (2011), the National Action Plan on Implementation of UN Security Council Resolutions 1325 and 1820 (2011), and numerous changes to provisions in national criminal, civil and sentencing codes. In 2007, Nepal's Supreme Court ordered that sexual minorities be guaranteed the same rights as other citizens. In 2011, the Nepal Census included 'third gender' in its population count; and, from 2015, three gender options have been available on passports.

The 2015 Constitution contains the rights of all castes and ethnicities under fundamental rights. The Constitution promotes the appointment of women to constitutional bodies (Article 283) and makes gender inclusion a mandate for political parties (Article 269). Nepal has legislated that at least one third of parliamentary seats be held by women. However, to ensure meaningful participation of women, there is still a need to build institutional capacity to enforce protection mechanisms, improve resource redistribution to address gaps and needs, and resistance to behaviour change in institutions and at local levels (Asia Foundation, 2018).

In 2005, Nepal introduced gender responsive budgeting by establishing a Gender Responsive Budgeting Committee in the Ministry of Finance. Gender responsive budgeting was officially introduced in FY 2007/08 to track progress against CEDAW priorities and progress towards the 2015 Millennium Development Goals and thereafter the SDGs (NDI n. d.). The committee's mandate since then has been to provide policy guidelines on gender responsive budgeting, monitor budget allocations and public expenditure from a gender perspective and to assess the impact of development policies on women and men. However, despite Nepal leading the way on gender responsive budgeting in South Asia, its effectiveness is weak at the sub-national level to address gaps or achieve widespread adoption, and inconsistent monitoring has limited availability of disaggregated data (Ghimire, 2019).

As a result of several constitutional and policy measures, Nepal has made steady progress in reducing gender inequality. UNDP's Gender Inequality Index for Nepal has decreased from 0.67 in 2000 to 0.48 in 2018, lower than the average of 0.52 for South Asia and of

countries with medium human development (0.50) (UNDP, 2020). More organized efforts and targeted measures are needed to address existing shortcomings and improve gender equality in the society.

Nepal's 2015 Constitution guarantees compulsory and free basic education and free secondary education to all citizens (Article 31). These define 'basic education' under Article 2 to mean early childhood education and Grades 1 to 8. Secondary and technical vocational education is said to be provided free of charge (Article 5) to citizens. But, there are no provisions that define or promote equal access to post-secondary education (i.e. post Grade 12), or that relate to the right to education for pregnant or parenting girls. Nepal has not yet ratified the 1960 UNESCO Convention against Discrimination in Education, which are instruments identified as important for countries to advance equity and inclusion in light of SDG 4.

The past decades have seen a dramatic expansion of educational facilities in Nepal. As a result, overall adult literacy (5 years +) of the country increased to 65.9% (female 57.4%, male 75.1%) at the last census in 2011 from about 48.2% in 2001 (CBS, 2012). Despite this success, the potential growth in the education sector has been mired by several problems and challenges. Difficulties in mainstreaming children from excluded or disadvantaged households, especially the enrolment of children with disabilities, low pass rates and poor learning environments leading to poor performance are major generic problems of school education in Nepal.

Overall, a supportive political, legal and institutional environment exists in the country that is built on the principles of equity and inclusion. The education sector's challenge is to translate these principles into educational policies, practices, programmes and outcomes. The new plan should carefully examine the social, cultural, economic and institutional barriers to educational access, participation, learning processes and outcomes. The constitutional vision of creating an inclusive society depends on the extent to which education system can be equitable and inclusive.

3.2 Access and Participation Equity in Education

Nepal has made large progress on enrolment in early childhood education and development /pre-primary education (ECED/PPE)¹², basic education and secondary education in the past decade. Gross and net enrolment rates are similar to the rates of other countries in South

Asia, and gender parity has been achieved in enrolment in basic education. Yet, there are exceptions related to equitable access. It is important to note that Dalit and Janajati enrolment represents 54% of total enrolment in basic education, which indicates progress in access equity for these groups in line with their share of the total population. However, progress in enrolment rates for children with disabilities needs to be significantly improved. The 2011 census reported that about 1.94% of Nepal's population has a disability, but the number of students with disabilities enrolled in basic and secondary education represents only 0.3% of the school-age population, which is substantially lower than the percentage of school-age youth with disabilities in the youth population (see more on this in Section 3.8). Although there are cultural factors at work, there is room for improvement through social campaigns about the participation of children with disabilities in education, and by focusing enrolment initiatives in targeted areas.

Following the adoption of the Consolidated Equity Index by the Ministry of Education in 2014, Nepal introduced a consolidated Equity Index in 2017. The Index, which is integrated into the EMIS uses household and school-based data on gender, geography, socioeconomic status, ethnicity and caste, and disability to measure and rank prevalence and severity of disparity in education outcomes. This provides a measure of the patterns of inequity across local governments and provinces, and informs policymaking and planning on resource allocation and equity-focused sector strategies. The index is computed annually for all 753 local governments, 77 districts and 7 provinces and at the national level to capture the survival, access and learning outcome status of school students. The SSDP has an M&E framework and system in place which uses EMIS data. The Equity Index also makes it possible to identify the relative weight of different drivers of inequity, which helps local and federal governments develop differentiated and targeted strategies across local governments (UNICEF, 2019).

Nepal is highlighted in the 2020 Global Education Monitoring Report (UNESCO, 2020) as having a system of education that is relatively progressive compared to countries with similar levels of educational development. For example, the Global Monitoring Report (2020) points out that, whilst Nepal has a similar overall upper basic education completion rate to the Philippines, the completion rate for the most disadvantaged groups in Nepal (46%) is almost twice that of the most disadvantaged groups in the Philippines (24%).

In terms of gender equity in education Nepal had achieved gender parity in enrolment in basic education prior to the commencement of the SSDP. The gender parity index (GPI) of the net enrolment ratio (NER) for Grades 1–8 reached 1.00 in 2015 and Nepal has maintained close to parity whilst implementing the SSDP. At overall secondary level

(Grades 9–12) enrolment rates have also been close to parity throughout the SSDP (GPI of NER was 0.99 in 2015 and 1.01 in 2019 for Grades 9–12).

Some provinces have achieved gender parity throughout the school system; but in a few other provinces gender disparities continue to exist. According to EMIS 2018/19 data reported in the Flash reports:

- Province 2 (eastern Tarai) had a GPI (of NER) below 0.9 at upper basic (Grades 6–8) and lower secondary (Grades 9 and 10) levels; but at the higher secondary level (Grades 11 and 12), girls had higher net enrolment rates than boys.
- Karnali and Sudarpashchim provinces had a GPI (of NER) below 0.9 for higher secondary level, although the gross enrolment rates at higher secondary level were higher for girls, implying that more over-aged girls were enrolled at this level.

The Multiple Indicator Cluster Survey (MICS) (CBS, 2020), which gives gender parity ratios of net attendance ratios, found a similar pattern nationally, but indicated that gender disparity in secondary education in Province 2 may be greater than indicated in the Flash reports.

Household survey data indicates large disparities in access to ECED based on household wealth. A recent survey conducted as part of a baseline for a child grant programme in 20 disadvantaged districts found that only 18% of young children from the poorest quintile of households attended ECED compared to 70% of children from richest quintile households (EPRI, 2019). Similar patterns have been noted in access to ECED at the national level (OPM, 2018). The data indicate that it is necessary to increase the provision of public (community) ECED to ensure that girls and boys get an equal start in education.

However, once enrolled, girls are more likely to progress through school education than boys. At the basic level, progression rates are higher for girls while dropout and repetition rates are higher for boys. The causes of dropout are likely to be different for girls and boys. More boys tend to leave school under social and household pressure to join the labour force and more girls are likely to drop out due to early marriage and childbearing.

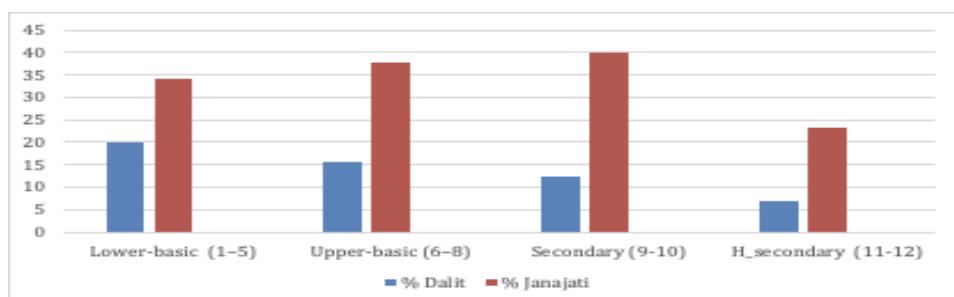
Girls' attendance rates are similar to boys' in lower basic grades, and slightly higher than boys in higher grades (Grades 8–10). This indicates that if menstruation does lead to reduced school attendance for adolescent girls' in some cases, the effect is less than other causes of absence that prevent adolescent boys from attending school. Recent MICS data (CBS, 2020) indicates that menstruation is a cause of social exclusion for only a minority of adolescent girls and women, with 9% reporting that they had not participated

in social activities, school or work due to their last menstruation. However, in Karnali and Sudurpashchim provinces, the incidence of exclusion due to menstruation was much higher (19% and 41% of all respondents respectively). These are the two provinces where reported rates of Chhaupadi are significant (10% and 17% respectively). An analysis of factors associated with gender sensitive schooling found that the presence of a safe space and facilities for girls to change their menstrual pads was significantly related to higher Grade 8 exam pass rates for girls when controlling for school economic conditions (Bergenfield et al., 2019).

According to the Flash consolidated report for 2018/19 (CEHRD, 2019), the dominant drivers of inequality in the 15 districts with the lowest scores on the Equity Index were mostly related to ethnicity (in nine districts), followed by location (four districts) and gender (two districts). The enrolment rates of disadvantaged caste and ethnic groups in basic education have not been tracked by SSDP's Results Framework.

The representation of Dalits in the school population decreases with level of education (Figure 3.1). Dalits account for 20% of lower basic students (Grades 1–5), but only 7% of higher secondary students (Grades 11 and 12). The proportion of Janajati students in the school population drops off above Grade 10. However, among the 21 most disadvantaged Janajati groups,¹³ whilst comprising only a relatively small proportion of the total school population, there is a similar drop in representation beyond Grade 5 (Flash I Report, 2018/19). This pattern could be attributed to the historical exclusion of Dalits and disadvantaged Janajatis and indicates that Dalits are less likely to complete basic education. Janajatis, whilst well represented up to Grade 10 are less likely to enter higher secondary than other social groups.

Figure 3.1: Proportion of Dalit and Janajati students in total school population

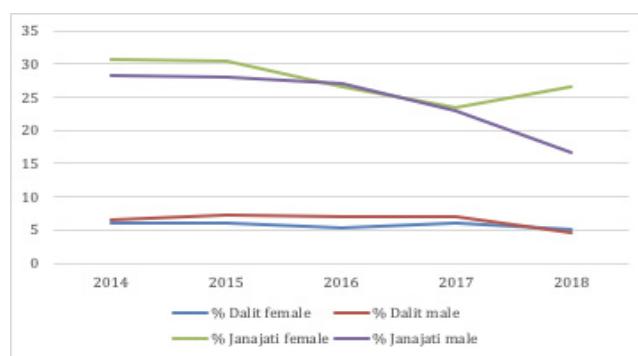


Source: Flash I 2018/19, CEHRD

¹³ These are the 21 Janajati groups which are officially recognised as the most disadvantaged such groups, for which disaggregated data is collected in the EMIS and reported in Flash reports.

The proportion of Dalits at secondary school level does not appear to have changed much over the past five years. At lower secondary level (Grades 9–10) there has been a small increase from 11.1% in 2014 to 11.9% in 2018; but at higher secondary level (Grades 11–12), the proportion of Dalits has fallen, especially among boys, with even sharper falls in the proportion of Janajatis at this level (Figure 3.2).

Figure 3.2: Proportion of marginalised groups in higher secondary school population, 2014–2018



Source: Consolidated Flash Report, 2018/19

Higher secondary enrolment has increased rapidly by over 10% per year between 2014 and 2018. However, the data on the proportion of Dalit and Janajati students indicates that this growth has not been equitable in terms of caste and ethnicity, although it has been equitable in terms of gender. Enrolment data disaggregated by sex, caste and ethnicity indicate that the disadvantages in access are experienced by both boys and girls equally in quantitative terms, with females making up 50% of Dalits and the most disadvantaged Janajatis enrolled at all levels (Flash I, 2018/19). However, the reasons for exclusion are likely to differ by gender. The annual household survey for 2016-17 (CBS, 2019) found a large disparity in access to secondary education based on economic status, with a gross enrolment ratio (GER) in secondary education of only 58% of children from the poorest economic quintile compared to 98.5% of children from the highest quintile. In terms of equity in quality indicators, the pupil–teacher ratio needs to be disaggregated in order to be used as an indicator of quality because it can hide significant inequalities across the country. The average pupil–teacher ratio for Nepal is below 20 students per teacher. This ratio is low when compared to the 33 students per teacher in South and West Asia, and on par with the 21 students per teacher in Latin America. However, the ratio is uneven across Nepal, with a ratio of 1:10 in Grades 1–5 in Gandaki Province compared to 1: 47 in Province 2 (Magrath and Torrano, 2020).

3.3 Enrolment equity by caste and ethnicity

Nepal is explicitly addressing enrolment equity for children from marginalized groups. The Flash and Status reports have data on enrolment for Dalit and Janajati children. There were 5,555,379 students enrolled in basic education in Nepal in 2018/19 (2018/19 Flash Report) of which 2,998,996 were Dalit or Janajati students. This represented 54% of total basic enrolment (Table 3.1). However, the average performance in terms of learning achievement of Dalit and Janajati students is lower than for other students. Multiple factors combined with traditional long-standing disadvantages contribute to the low level of achievement of these students. The government is making efforts to monitor student performance and employs policies aimed at improving learning equity in these student populations. Expanding the use of the Equity Index to all provinces and local governments would be a good step towards monitoring progress in enrolment equity by social group, to promote need- and evidence-based programming and budgeting across all local governments.

Table 3.1: Enrolment of Dalit and Janajati students in basic education, 2018/19

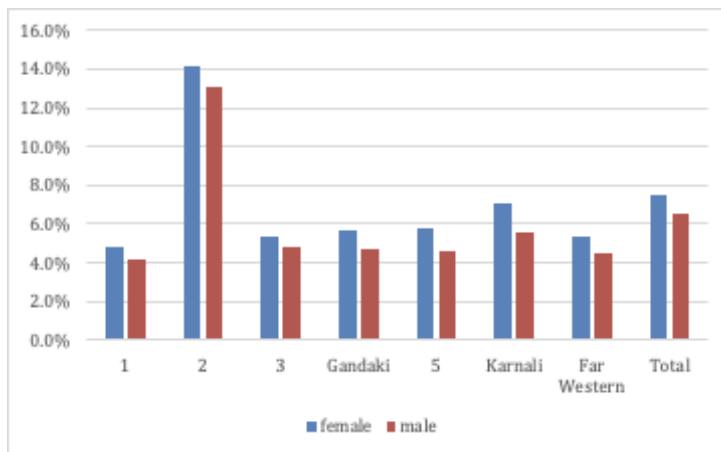
	Public		Private		% of total enrolment in basic education		
	Dalit	Janajati	Dalit	Janajati	Dalit	Janajati	Both groups
Province 1	99,339	326,127	15,039	117,454	2.1	8.0	10.0
Province 2	232,556	148,139	8,949	22,808	4.3	3.1	7.4
Bagmati	69,788	414,660	15,807	186,952	1.5	10.8	12.4
Gandaki	88,519	134,616	18,808	64,753	1.9	3.6	5.5
Province 5	170,235	326,816	25,317	92,512	3.5	7.5	11.1
Karnali	125,014	51,125	4,841	5,527	2.3	1.0	3.4
Sudurpashchim	143,554	62,839	11,990	14,912	2.8	1.4	4.2
Total	929,005	1,464,322	100,751	504,918	18.5	35.4	54.0

Source: Flash Report 1, 2018/19

The data on out-of-school children as reported in the Flash 2018/19 report indicate that about 7% of children of lower-basic level school age (aged 5 to 12 years) and 15% of secondary school-aged children (13 to 16 years) were out-of-school. The out-of-school rates for 5 year olds are in many cases high due to late enrolment. Out-of-school rates for girls are consistently higher than for boys across different ages and provinces (Figure 3.3). This data indicates that, while there is gender parity in access to education for most of the population, there is still gender inequality among the most excluded. All provinces except province 2 have a percentage of out of school children between 4-6% of the total age group population, with Karnali province being a slight outlier with around 7% and all

provinces having percentage wise more girls and boys that are out of school. Province 2 has nearly double the percentage of out of school children and nearly triple that of most of the other provinces, signalling massive disparities across the country. But the data also point to a need to triangulate and validate net enrolment rates together with out-of-school children rates, as it is not possible for girls to be in the majority (as a proportion of the population) in both groups (out-of-school and school enrolled).

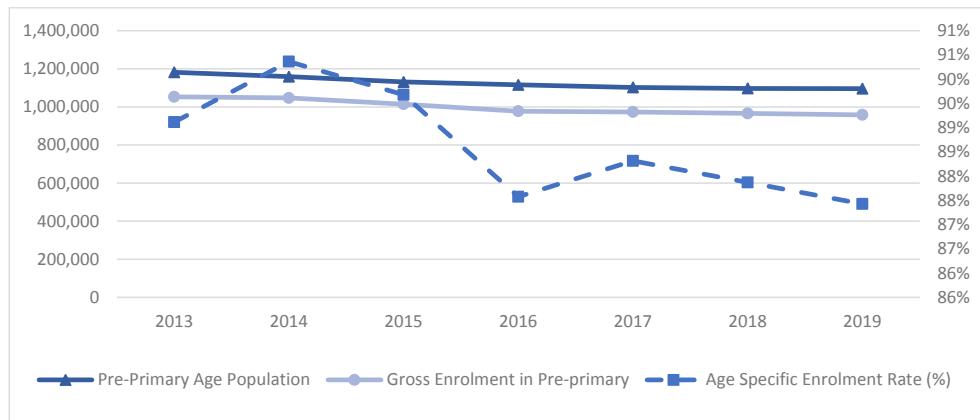
Figure 3.3: Rate of out-of-school children (5–12 year olds) by sex and province, 2019/20



Source: CEHRD, 2020b

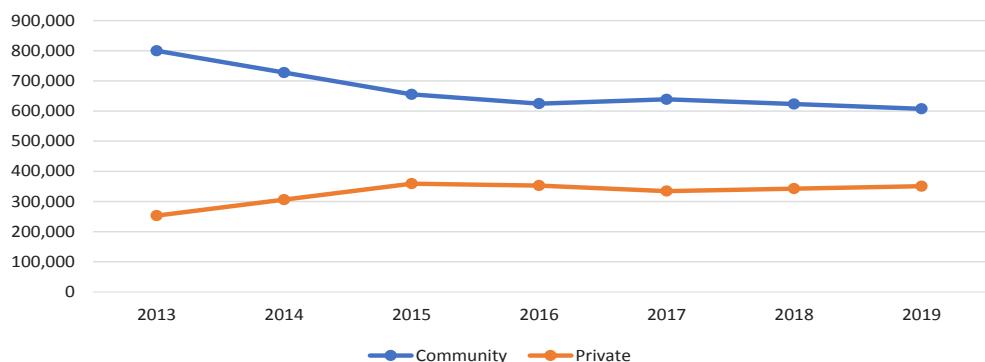
Enrolment and access equity in early childhood development

According to official statistics, in 2019/20, 87% of pre-primary-aged children, amounting to about one million children, attended either a private or a public pre-primary centre (ECED/PPE) in Nepal (CEHRD 2019b, Flash 2). These figures are lower than the enrolment figures for 2013, reflecting a decline in the pre-primary aged population (Figure 3.4).

Figure 3.4: ECED/PPE enrolment and gross enrolment rates 2013/14–2019/20

Source: UIS 2020¹⁴

Official pre-primary enrolment is divided between public schools (56.4%) and private schools and centres (43.6%) in 2018/19 (CEHRD, 2018c, Flash I). In 2013/14 enrolment in private ECED/PPE made up only 24% of pre-primary enrolments while only six years later in 2019/20 the proportion has increased by almost 20 percentage points to 43.6%. As shown in Figure 3.5, over the years ECED/PPE enrolment has shifted from public to private schools. The wide enrolment gap noted during 2013/2014 has narrowed down in recent years.

Figure 3.5: ECED/PPE enrolment by type of school, 2013–2019

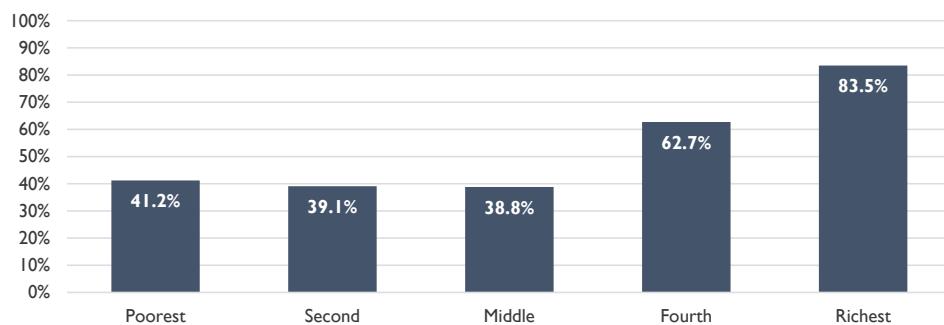
Source: UIS. Enrolment rates for 2014 (2014/15) and 2018 (2018/19) have been extrapolated by the authors)

¹⁴ Adapted from UNESCO Institute for Statistics (UIS) <http://data.uis.unesco.org> (Extracted September 2020)

Multiple factors are attributed to cause this shift from the public to private schools. Obviously, increased per capita income of families is one strong factor. Private schools enrol children as old as 2 years old but mostly children in the age group of 3 to 5, whereas public schools for the most part provide only one year of ECED/PPE for 4-year old children or 2 years of ECED/PPE if demanded by local communities. The perceived quality of private schools and the higher social prestige attached to it can also attract more parents.

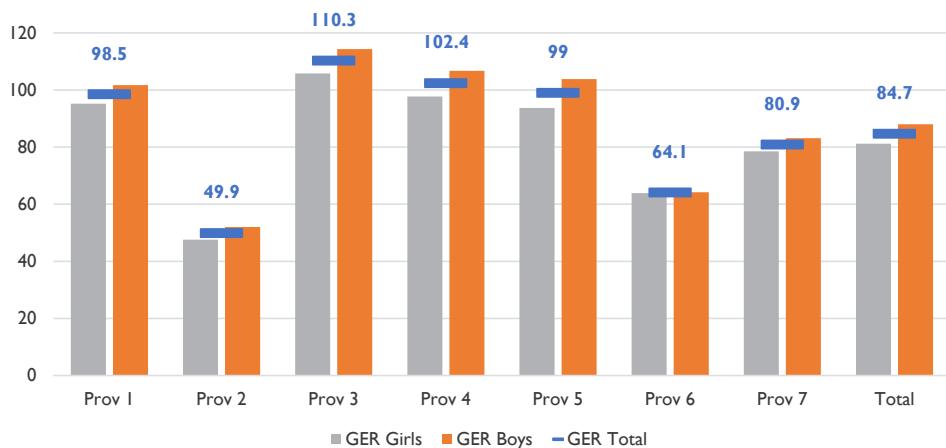
The MICS reported that more children from wealthier households attended ECED/PPE than children from poorer households. Those data show that only 41% of age-appropriate children from the lowest-income quintile but 83% of such children from the top-income quintile attended pre-primary school in 2014 (CBS, 2014) (Figure 3.6). Further research is needed to better understand the enrolment shift to private schools.

Figure 3.6: Percent of ECED/PPE enrolment by income quintile, 2014



Source: CBS, 2014

Equity in ECED/PPE enrolment – There are some disparities in enrolment by province, gender and other groups. ECED/PPE enrolment is widespread in four of the seven provinces, with gross enrolment rates (GERs) of around 100% in 2018/19. In addition, Sudurpashchim province had a GER of 80.9%, slightly below average for Nepal. However, Provinces 2 and Karnali had GERs of 49.9% and 64.1% respectively in 2018/19 – substantially lower than the rest of the country (Figure 3.7).

Figure 3.7: Gross enrolment ratio of 3 and 4-year old children in ECED/PPE by province in 2018/19

Source: Flash Report I, 2018/19. P3 = Bagmati, P4 = Gandaki, P5 = Lumbini, P6 = Karnali, P7 = Sudurpashchim

The differences among provinces are more accentuated by net enrolment rate (NER), which show the percentage of 4-year old children in the country enrolled in ECED/PPE. Province 2 has a much lower ECED/PPE NER than the other six provinces with only 27.3% of its 4-year olds enrolled in ECED/PPE, which is a half of the province with the next lowest NER (53.3% in Karnali province) (Table 3.2). The highest NER is 83.9% in Gandaki province.

Table 3.2: Net enrolment rate of 4-year old children in ECED/PPE in 2018/19 (%)

Province	Girls	Boys	Total
Province 1	72.5	73.9	73.2
Province 2	29	25.5	27.3
Bagmati	81.6	85.3	83.5
Gandaki	80.9	86.6	83.9
Province 5	74.5	79.6	77.2
Karnali	54	52.7	53.3
Sudurpashchim	59.6	62.3	61
Total	61.8	63.7	62.8

Source: Flash Report 1, 2018/19

In terms of gender equity in ECED/PPE, the results show similar GERs and NERs for boys and girls within each of the seven provinces (Table 3.3). However, access equity for both

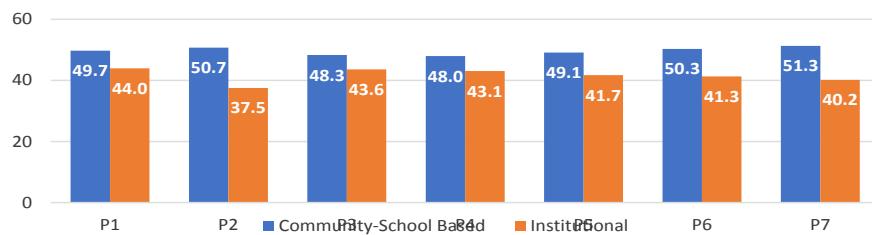
sexes varies significantly among the provinces, suggesting the need to analyse in detail how ECED enrolment can be increased in Province 2 by examining (and then addressing) the root causes of low enrolment, such as poverty, cultural factors, physical access and other causes. An average of 67% of new entrants to Grade 1 had prior ECED or PPE experience in 2018/19 (Table 3.3). This bodes well for less under-age entry to Grade 1 and to lower the percent of intentional repetition while children reach the official age of entry into Grade 1. However, close to 30% of children are still entering Grade 1 without ECED or PPE experience.

Table 3.3: Percentage of new entrants to Grade 1 in 2018/19 with ECED or PPE experience

Province	Girls	Boys	Total
Province 1	71.9	71.3	71.6
Province 2	61.2	62.6	61.9
Bagmati	68.2	66.3	67.2
Gandaki	79.7	79.3	79.5
Province 5	67.4	66.1	66.7
Karnali	61.5	63.6	62.5
Sudurpashchim	64.7	67.4	66.1
Total	66.7	67	66.9

Source: Flash Report 1, 2018/19

As mentioned above, when examined at the aggregate level, enrolment in ECED/PPE is fairly equitable for boys and girls. However, significantly fewer girls enrol in private schools than boys. Girls' enrolment is fairly equitable in public schools, at around 50% of enrolment in all seven provinces. By contrast, in 2018/19 there was a significantly lower share of girls' enrolment in private schools in all provinces ranging from as low as 37.5% in Province 2 to 44% in Province 1 (Figure 3.8). Overall, girls' share of enrolment in private ECED/PPE is about 6% points lower than boys' share. As discussed later in this chapter, this reflects a preference for families to invest in boys' education, with parents more inclined to pay for sons to attend private schools while sending their daughters to public schools (CAMRIS International, 2017).

Figure 3.8: Percentage of girls in ECED/PPE enrolment by type of school, 2018/19

Source: Flash Report I, 2018/19. P3 = Bagmati, P4 = Gandaki, P6 = Karnali, P7 = Sudurpashchim

ECED/PPE enrolment of children with disabilities – In 2018/19, 3,262 children with disabilities enrolled in ECED/PPE (Table 3.4), representing about 0.3% of ECED/PPE enrolment. The Flash data shows more boys with disabilities than girls enrolled in ECED/PPE, which is likely the result of discrimination against girls with disabilities who tend to be more vulnerable than boys with disabilities. This proportion is far below the 1.94% of Nepalese or projected as having a disability (513,321 people) by the CBS according to 2011 census data (CBS 2012: Table 24). Alongside this, the ability to detect disabilities in ECED/PPE-aged children remains an issue worldwide and in Nepal.

Table 3.4: Students with disabilities enrolled in ECED/PPE in 2018/19

Province	Public	Private	Total	% girls	
				Public schools	Private schools
Province 1	399	124	523	43.9	38.7
Province 2	192	299	491	36.5	36.1
Bagmati	498	200	698	44.6	40.5
Gandaki	206	68	274	42.7	55.9
Province 5	354	412	766	41.8	36.9
Karnali	170	17	187	50.6	52.9
Sudurpashchim	229	94	323	43.7	43.6
Total	2,048	1,214	3,262	43.4	39.3

Source: Flash Report 1, 2018/19

ECED/PPE enrolment of Dalit and Janajati children – As reported in the 2018/19 Flash Report, Dalit children made up 16.4% of ECED/PPE enrolment – a bit less than their share of enrolment at the basic education level. Most of these Dalit children (70%) were enrolled in community ECED centres rather than private ones. On the other hand, Janajati children made up 37.1% of ECED/PPE enrolment, a bit higher than their share of enrolment at the basic level, and they were evenly split between public and privately run ECED/PPE centres.

3.4 Equity in Learning

Gender gaps in learning outcomes, as measured by the National Assessment of Student Achievement (NASA), appear to have reduced over the last decade, and overall differences between girls and boys scores in recent learning assessments have been minimal (Turner et al., 2019). The 2015 NASA Grade 3 assessment indicated that girls outperformed boys in Nepali but scored the same in mathematics (ERO, 2016). The Grade 8 NASA, conducted in 2017 indicated small but significant differences in scores by sex, with girls achieving higher scores in Nepali and science, and boys achieving higher scores in mathematics (ERO, 2018). Learners from rural schools scored significantly lower than their urban counterparts and there was a strong association between the timeliness of textbook availability and student achievement.

Similar patterns were observed in the 2018 Grade 5 NASA assessment (ERO, 2019), which also showed that Dalit and Janajati students performed significantly below the national mean in mathematics. Dalit students also performed below average in Nepali while the performance of Janajati students was equal to the national mean. Findings of The Data Must Speak Positive Deviant study (UNICEF, 2021) corroborates the NASA study's conclusions. Schools with a higher proportion of Dalit or Janajati students were found to have lower promotion rates than those with higher proportions of Brahmin and Chhetri students. The NASA analysis found that the socioeconomic status of students had a low effect on scores in mathematics and a medium effect on Nepali language scores. However, it was noted that students can perform better irrespective of their home language. For example, students in Province 2 scored higher in mathematics than students from other provinces, in spite of the relatively low socioeconomic status and high proportion of non Nepali speaking households in that province.

Many children's lack of access to education in their own language and this remains a barrier to many of them developing literacy skills. The recent mid-line impact evaluation of the early grade reading programme demonstrated that only 26.3% of Grade 3 Nepali mother tongue learners and 2.9% of Grade 3 non-Nepali mother tongue learners in six cohort districts were reading at national benchmark levels that indicate fluency and comprehension (Bessieres, 2019). In the 2018 Grade 5 assessment, the performance of children from Nepali speaking households was significantly higher than those from households where other languages predominated (ERO, 2019). However, the main home language was not found to be linked to achievement in mathematics.

In terms of learning equity, the evidence shows that urban students, Nepali speakers and students at private schools have higher achievement than rural, speakers of other

languages and public school students (ERO, 2018). Furthermore, girls perform better than boys in Nepali, while boys perform better than girls in maths, science, and English; although overall learning levels for both groups is low (Magrath and Torrano, 2020). ECED experience has also been identified as a strong indicator of later academic performance. ECED experience was associated with relatively large increases in later promotion rates. However, it noted that the effect may not be entirely causative as ECED experience may also be associated with higher socio-economic status (UNICEF, 2021).

Furthermore, the gaps in test scores between advanced and low-performing students have remained unchanged since 2012. The SSDP Mid-Term Review found that learning outcomes in poor rural districts and among disadvantaged students and at-risk students are well below average, and most schools are ill-equipped to correct these large disparities in learning outcomes.

Test scores also vary regionally across Nepal with students in Bagmati and Gandaki provinces, and particularly the Kathmandu Valley in Bagmati province, outperforming the rest of the country. The results of the Secondary Education Examination (SEE), which students take at the end of Grade 10, show significant differences by province. About 93% of students in Bagmati and Gandaki provinces passed the SEE exam in 2016 while less than 75% of students passed the exam in Province 2 and Sudurpashchim province. Students in the Kathmandu Valley consistently score higher than those in the other areas of the Mid-hills and mountain and Tarai regions on a variety of subjects in Grades 1–8. The difference can be significant – for example, in Grade 8 maths, the average score of Kathmandu Valley students was nearly double that of students in the Tarai in 2016. This distinction is likely to be driven, in part, by the high proportion of private schools in the Kathmandu Valley.

3.5 School-related Gender-based Violence (SRGBV)

School-related Gender-based Violence (SRGBV), which involves acts or threats of sexual, physical or psychological violence in and around schools, has consequences in learners' lives and can have negative impact on learning outcomes. Comprehensive large scale studies examining the SRGVB phenomenon in Nepal are lacking; however, data generated from small-scale studies and evaluations points to the fact that this is a key cause of concern and serious efforts are needed to address this. UNESCO estimates that 56% of boys and 45% of girls aged 13 to 15 years have experienced bullying in Nepal, with sexual bullying reported by 10.7% of boys and 9.6% of girls (UNESCO, 2019). Understanding the extent to which this bullying and other forms of violence are based on discriminatory attitudes to gender and ethnicity is difficult to distinguish from just the survey data.

While robust, systematic large-scale studies are yet to be conducted, a baseline study for an adolescent life skills programme in Morang district (Ghimire et al., 2019) found corporal punishment to be common and severe in many schools, despite being illegal. The sexual harassment of girls on the journey to and from school is common in some parts of the country and was noted as the most commonly reported concern around school-related gender-based violence (GBV) reported by girls (Ghimire et al., 2019; Square One, 2019).

The end line evaluation of the USAID and UNICEF's 2013 to 2019 programme to eliminate GBV in schools in four districts indicates common attitudes to and the prevalence of GBV in schools (Square One, 2019). The programme took a broad definition of GBV, which included corporal punishment delivered by teachers or parents, sexually or provocative teasing, and insults. The evaluation noted a substantial increase in the proportion of children who viewed various forms of GBV as unacceptable (from 36% in 2013/14 to 70% in 2019), and an increased proportion of children reporting that they felt safe in schools (from 41% in 2016 to 55% in 2019). Girls reported that they were sometimes victims of sexual teasing on the way to and from school, with 76% saying they felt safe. Even at the end line, the study indicated a high prevalence of GBV with 81% of students reporting they had seen or heard of an incident. But most of those who had witnessed an incident had taken action as a result, often reporting it directly to an adult or the school complaints box.

In the case of lesbian, gay, bisexual and transgender (LGBT) people, there are hardly any studies on LGBT experiences in the Nepali education system. However, anecdotal evidence suggests teachers and students might be experiencing unacceptable discrimination and/or bullying as a results of their sexual orientation or gender identity.

3.6 Access to Tertiary Education and Employment Outcomes

Female graduates from secondary schools in Nepal have greater access to tertiary education than male graduates. The GER for females in tertiary education in Nepal was 12.8% in 2018 compared to 12% for males. When considering the GESI dimension of education it is important to note the extent to which reducing inequalities in education is contributing to the reduction of wider inequalities.

The 2017/18 Nepal Labour Force Survey (NPC and ILO, 2019) found wide gender disparities in the labour force and employment. The rate of female participation in the income generating labour force was found to be 26%, which is less than half of the male participation rate (54%). Secondary education appears to greatly increase the probability of women being involved in the paid labour force, but makes a smaller difference for men.

The labour force participation rate for secondary educated females was found to be 44% compared to 57% for their males counterparts. Among those in paid work, there remain large gender disparities in monthly earnings as the median monthly earning of females was NPR 12,000, compared to NPR 18,000 for males in 2017/18. Females continued to deliver most of the unpaid work as 90% of females participated in housework and unpaid care work (compared to only 40% of men) and 66% of women participated in substantial activities producing goods for the use of their households including food production, fetching water and firewood, and house building (compared to 51% of men).

3.7 Increased Efficiency and Quality at the Cost of Quality

Looking at the initiatives introduced in the previous education sector plans and current SSDP, there is a risk of initiatives and programmes being introduced in the name of efficiency and quality that increase existing disparities in education outcomes. There is the example of model schools, which were introduced as a key strategy in the SSDP to establish schools with a high level of quality that would serve as a model and resource centre for surrounding schools within their local government areas. These model schools were intended to have a ‘ripple effect,’ through which the improvements would spill over to other local schools. The establishment of these schools is expensive. They are estimated to have taken up 13–21% of the total non-salary education budget in 2020/21. In comparison, all scholarships provided by the government to students in basic education combined constituted 7% of the non-salary education budget in the same year (Holden, 2021). This investment is a high per student investment and is not scalable and requires budget to be prioritized away from other activities. Furthermore, the model schools have not demonstrated a positive effect for schools where children from marginalized groups study.

The devolution of the management of school education to local governments, including the mandate to open, close and merge schools, has accelerated the drive for efficiency by consolidating scattered smaller schools into larger schools in more urban areas. Although consultations confirmed that local governments often put measures in place to facilitate transport to these bigger schools, this probably increases risks for vulnerable students as they need to travel longer distances, increasing exposure to bullying, harassment and road traffic. Furthermore, these mergers in the name of efficiency are likely to increase the student-teacher ratios, which already are heavily skewed in favour of the capital and the Mid-hill areas of the country.

3.8 Disability Inclusive Education

The 2015 Constitution commits Nepal to develop an inclusive society and clearly states that all children, including children with disabilities, have the right to compulsory and free education up to Grade 8:

"Children with disabilities] with visual impairment, by means of Braille script, and with hearing and speaking impairment, by means of sign language, shall have the right to free education as provided by law' – Constitution of Nepal, 2015, p.23

Moreover, people with disabilities and those who are financially poor are guaranteed additional financial support to continue their higher education.

The 2017 Education Act includes a provision for providing education to children with disabilities. It commits to provide 'special education' in special settings for children with visual impairment, low vision, hearing impairment, autism, intellectual disability, severe disabilities and physical disabilities and who are hard of hearing. The Act defines the term 'special education' in terms of education provision for children with disabilities in separate schools. On the other hand, 'inclusive education' is defined as a process of educating children in the regular education system. Furthermore, the 2019 Compulsory and Free Education Act (2018) details the roles and responsibilities of local governments to provide compulsory and free education to all children in Nepal up to Grade 8. The Act notes that local governments should develop local information systems to collect and update the data of children, including children with disabilities. Based on the needs identified in their data, local governments should then support the provision of education for all students. The 2019 Federal Education Policy (MoEST, 2019b) commits to providing appropriate education opportunities for children with disabilities through the provision of both regular schools and special schools as required.

The latest census (2011) found that almost half of Nepal's population was below the age of 24 with children aged between 0-14 years making up 29.5% of the population. It also reported that persons with disabilities represented 1.94% of the population while children (0-14 years of age) with a disability made up only 0.34% of the population (92,012 children). The 2011 census found the most common form of disability among under 15-year-olds to be physical disability (37%), whose needs will primarily be related to physical access and transport to school. The need can vary significantly in hilly and Tarai areas. The needs of deaf-blind children are very different to the needs of children with visual impairment. The costing and financing requirements will also vary across different types of disability.

And the dropout rate and learning outcomes tend to be different for different types of disabilities. The latest MICS found that for some type of disability, the overall learning goals need to be redefined and adapted.

The 2011 census reported that amongst children with disabilities, 30% were not attending school as their access was restricted mainly by long distances to school, lack of mobility and parental attitudes (MoE, UNICEF and UNESCO, 2016).

Table 3.5: Distribution of disability types in 2011 census (single response) (CBS 2012)

Type of disability	Aged below 15	Age 15 and above
Physical	37.02%	39.48%
Speech problem	16.70%	10.88%
Blindness/low vision	15.27%	17.34%
Deaf/hard of hearing	11.03%	14.67%
Mental	5.09%	6.27%
Intellectual	4.51%	2.63%
Deaf-blind	1.31%	1.72%
Multiple	9.06%	7.01%

Table 3.6: Proportion of children who did not attend school who had a functional difficulty

	2018/19 (2075)	2019/20 (2076)
Had functional difficulty	12.12%	7.02%
Had no functional difficulty	7.49%	7.54%
% who did not attend	8.09%	7.48%

Source: CBS 2020 (MICS 6)

Nepal currently has three types of education provision for children with disabilities – special, integrated and inclusive education. Among the more than 35,000 public and private schools in Nepal, there are only 32 special schools and 361 resource classes. The distribution of the 361 resource classes is shown in Table 3.7 with 46% of classes for deaf students, 32% for students with an intellectual disability and 22% for blind students. The Kathmandu Valley has the least resource classrooms (only 1.1% of all such classrooms) while only 23.5% of these classes are in rural municipalities. The rest are in urban municipalities. On the other hand, 9 of the 32 special schools are in the Kathmandu Valley alone, 15 in Bagmati province and none in Sudurpashchim province.

Table 3.7: Distribution of resource classes (among 361 resource classes)

Province	Blind	Deaf	Intellectual disability	Total
Province 1	16	37	27	80 (22.2%)
Province 2	6	22	12	40 (11.1%)
Bagmati	13	22	13	48 (13.3%)
Gandaki	12	22	21	55 (15.2%)
Lumbini	17	24	18	59 (16.3%)
Karnali	7	22	8	37 (10.2%)
Sudurpashchim	7	16	15	38 (10.5%)
Kathmandu Valley		1	3	4 (1.1%)
Grand Total	78 (21.6%)	166 (46.0%)	117 (32.4%)	361 (100%)

Access for Students with Disabilities

While the 2011 census found 1.94% of the population or 513,300 people to have some kind of disability, Tables 3.8 and 3.9 show that despite the increases in enrolment in the academic years 2018/19 and 2019/20, a large percentage of children with disabilities remained out of school. As is seen in Table 3.8, the proportion of children enrolled in school education that had been identified as having at least one disability matched the proportion of population reported as having a disability in the last census. However, a sharp drop in this percentage occurred in the academic year 2016/17, which is likely to have been caused by the effects of the 2015 earthquake, as the earthquakes happened at the beginning of the 2015/16 academic year and the 2017 percentage presented in the table is based on the EMIS data from academic year 2016/17.

Table 3.8 Proportion of basic and secondary enrollees with disabilities for 2015/16-2019/20

Year	Students	Percentage of all enrolled students having disabilities in school education level						
		Grades 1-5 Lower basic	Grades 6-8 Upper basic	Grades 1-8 Basic	Grades 9-10 Lower secondary	Grades 11-12 Higher secondary	Grades 9-12 Secondary	Grades 1-12)
2015	Girls	1.88	1.42	1.74	1.16	0.63	0.99	1.59
	Boys	2.15	1.57	1.98	1.30	0.72	1.11	1.82
	Total	2.02	1.49	1.85	1.23	0.67	1.05	1.70
2016	Girls	2.24	1.57	2.03	1.18	0.72	1.02	1.82
	Boys	2.55	1.68	2.28	1.37	0.89	1.21	2.08
	Total	2.39	1.62	2.15	1.27	0.80	1.11	1.95
2017	Girls	1.24	0.91	1.13	0.80	0.60	0.72	1.04
	Boys	1.39	1.00	1.27	0.85	0.55	0.74	1.16
	Total	1.31	0.95	1.20	0.82	0.58	0.73	1.10
2018	Girls	1.23	0.91	1.12	0.81	1.05	0.90	1.07
	Boys	1.36	0.99	1.24	0.83	0.78	0.81	1.14
	Total	1.29	0.95	1.18	0.82	0.92	0.86	1.10
2019	Girls	0.90	0.65	0.81	1.31	0.19	0.86	0.83
	Boys	1.06	0.72	0.95	1.34	0.22	0.92	0.94
	Total	0.98	0.69	0.88	1.33	0.20	0.89	0.88

Source: Flash I reports 2015/16-2019/20

Table 3.9 shows the status of students with major types of disabilities at both basic and secondary levels from the past academic year (2019/20). The proportion of children with disabilities in the total enrolment at basic and secondary level are similar with 0.88% and 0.89% respectively and children with physical disabilities make up around 60% of the total enrolment of disable students. Interestingly, the percentage of children in EMIS identified as having an intellectual disability (around 30%) is much higher than that emerging from the 2019 MICS.

Table 3.9: Proportion of basic and secondary enrollees with disabilities by type for 2019/20

	Type of disability	Grades 1-8 (Basic)	Grades 9-12 (Secondary)	Grades 1-12 (Total)
1	Physical disability	0.36%	0.50%	0.53%
2	Intellectually impaired	0.26%	0.04%	0.10%
3	Hearing impaired	0.16%	0.07%	0.09%
4	Blind	0.02%	0.03%	0.03%
5	Low vision	0.11%	0.15%	0.08%
6	Deaf and blind	0.02%	0.00%	0.00%
7	Speech-related disability	0.14%	0.10%	0.06%
	Overall %	0.88%	0.89%	0.88%

Source: Flash I report 2019/20

School attendance records for Grades 1–8 show that only 40% of students with disabilities attended school in 2019/20 compared to 70% of students without disabilities. Furthermore, a study by Aide et al. (2016) of children and adolescents with and without disabilities reported that the tendency of school attendance among children with disabilities decreases with age. The study reported that only 35% of 5 to 10 years old children with disabilities had attended school whereas the corresponding figure for 11 to 20 years old children was only 30%.

The study recommends that school and classroom conditions should be made conducive to enable them to accommodate children with all types of disabilities. It is emphasized that special attention should be given to the needs of girls with disabilities, who are more vulnerable to reduced participating, learning outcomes and completion of education than boys with disabilities.

Measures for disability-inclusive education

Every child is unique and has his or her own set of abilities or disabilities. Each child learns in different ways and at different pace. Inclusive, learner-friendly, and barrier-free environments should therefore be created in every school and community so that all children can be enabled to develop to their full academic, social, emotional and physical potential. A child's academic potential cannot be developed separately from their social, emotional and physical potential, as they are interdependent aspects of a child's development. The disability-inclusive education posits that meaningful engagement of children with disabilities in education depends on the extent to which multi-dimensional barriers that exist at the household, school and community levels are removed. As emphasized by UNESCO and UNICEF (2018), schools should be prepared in such a way that entire environment - infrastructure, learning materials, teacher training and support and the curriculum and assessment systems - is disability friendly and welcoming.

When schools and their communities are inclusive of children with disabilities, they are likely to be more sensitive to needs and barriers related to other dimensions and thereby much more likely to provide a quality and enabling learning environment for all children, regardless of their gender, socio-economic status and ethnicity. Disability-inclusive education facilitates all children's access to the educational opportunities and skills needed to participate in social and economic development. In doing so, disability-inclusive education serves as an entry point into inclusive education, which is defined as a process of reaching out to all learners by addressing all forms of exclusion and marginalization, disparities and inequalities in access, participation and learning outcomes.

Additionally, inclusive education aims to improve the overall quality of education as it uses more flexible and innovative teaching methods, flexible or adaptable curricula, and assessment methods that account for the different capacities and learning styles of students based on their individual differences. The approach is also instrumental in increasing access to schools and participation in the education process and in school life. It results in positive changes at school level and teaching in classrooms leading to better quality education for all children. Nepal's school education system needs to be transformed to provide 'inclusive and equitable quality education' for all children by 2030 as committed under SDG 4. A review of the current provision, both on the supply and demand side, reveals that much needs to be done to realize disability-inclusive education.

Supply-side

Training: The government provides a one-month to 45 day long training programme on special education for teachers (Hunt and Poudyal, 2019). However, not all teachers benefit from the training, and those that do experience gaps, for example, instruction in sign language (a factor constraining the quality of education of deaf students) is lacking in the training. A 2017 study found that 47.33% of 150 basic level school teachers had inadequate knowledge while none had adequate knowledge about learning disabilities (Ghimire, 2017).

Scholarships: The Special Education Policy, 1996 provided for scholarships for students with disabilities and Braille books for special schools and resource classes (MoE, UNICEF and UNESCO, 2016). The SSDP expected to provide extra financing to schools serving children with special needs, in the form of scholarships, which are meant to cover medical expenses, transport, aids, books and learning materials (GPE and DIE, 2018). A 2018 study found that the scholarships for children with disabilities were considered (by teachers, students and families) as relatively impactful both in terms of needs and of the amount given, even if there were problems related to transparency, amount and information (Vertex, 2018).

Infrastructure: Many schools, classrooms, playgrounds and toilets are difficult for students with disabilities to access. With limited flat land available for developing schools, schools in hilly areas are even more challenged to make their infrastructure accessible to all, with buildings often being scattered across uneven sloping land. The EMIS does not have data on the accessibility of classrooms, toilets and other school infrastructure. Nepal's National Curriculum framework (2007) provides for creating more child-centred and inclusive education environments in schools, including accommodation for children with disabilities (MoES, 2007).

Learning materials: The SSDP reiterated the lack of relevant learning materials and the too high reliance of teachers on textbooks for teaching (MoE, 2016a). Not all instruction materials have been converted into accessible formats like Braille and audiobooks. And the provision of Braille books and audiobooks is an extra financial burden on already resource constrained schools. The production of learning materials for children with disabilities is not localized as schools are not equipped to produce Braille books using Braille typewriters or produce large colourful reading materials. Localized production has the potential to reduce cost of these materials as well as provide more customized and contextualized materials in line with the National Curriculum Framework, which calls for the development of student-centred textbooks.

Demand side

In addition to adequate and accessible infrastructure, the attitudes of teachers, parents and peers play a key role in educating children with disabilities. Recent times have seen an attitudinal shift regarding persons with disabilities as they are now recognized as right-holders having the right to education without discrimination and on the basis of equal opportunities (UNESCO IIEP and UNICEF, 2018).

A study of 21 schools and their students, parents, teachers, head teachers and local and district authorities (ILRC, 2019) found that:

- 90.5% (19) of the head teachers were aware that children with disabilities had the right to free education;
- 87.5% (21) of the local authorities were unaware of the rights of children with disabilities related to education;
- 52.6% of the head teachers preferred special schools for children with disabilities while only 15.8% preferred inclusive education.
- 8 (42%) of the head teachers, 24 (40%) of the teachers, and 25 (41%) of the parents/family members believed that children with disabilities could lead a full life if they were provided with appropriate opportunities and education; and
- 23 (39%) children without disabilities and 76 (86%) children with disabilities had positive views on the possible academic success of children with disabilities.

Problems of bullying and intolerance often negatively influence the demand for inclusive education. Effective leadership from school principals, parents, staff and raising awareness among peers and parents can reduce these risks on the demand side. Research findings on the barriers to education of children with disabilities (CWDs) released in 2014 showed that stigma and discrimination are common across caregiver and child interviews; derogatory

language is used at home and in the community; violence, bullying, and prejudice against children with disabilities are committed by peers and teachers; and there is a misconception that children with disabilities are uneducable and are liabilities of families and the society (Plan International, 2014).

In addition, a 2011 study by Human Rights Watch found that special education teachers lacked motivation. This is perhaps due to society's low regard and discrimination against them stemming from the low teacher education standards that the government requires and the limited budget for building their capacity (Hunt and Poudyal, 2019). Despite these barriers, many parents also recognize the importance of education for their children with disabilities to give them a better chance in life (UNICEF, 2020c). Many families believe that children with disabilities learn better in boarding schools or specialized institutions than in their care or in regular schools due to the limited capacity of parents and regular schools to provide proper support.

Costing and financing

The great benefits of inclusive education to societies come at substantial financial costs. The cost to households is one of the main reasons for children with or without disabilities to drop out of school. Fees and the costs of learning materials associated with the education of children with disabilities are likely to be greater than for other children. The extra costs will include for travelling to school and buying adapted learning tools such as Braille books and audio books. Schools also bear the extra cost for making the learning environment inclusive. Costs include remodelling infrastructure (ramps, customized furniture etc.), providing specialized materials (audio/visual and Braille learning materials), and specialized human resources (inclusive education trained teachers). Resource sharing and subsided services (like transport) can reduce the costs to families and schools.

Despite a substantial part of the national budget being spent on education annually (15.9% in 2017), special provision for inclusive education within this expenditure is yet to be understood and analysed. SSDP's 2016/17 annual work plan and budget allocated NPR 130 million for special education programmes.

Monitoring

The 2011 census, the National Living Standards Survey (CBS, 2011), the Nepal Multiple Indicator Cluster Survey (CBS, 2020) and the EMIS are the major sources of disability statistics in Nepal. The different definitions of disability makes comparisons between the

data difficult. The EMIS needs to be strengthened to capture data on demand as well as for the supply side of the school education service delivery.

EMIS allows for defining disabilities when uploading student data against the following seven categories: (i) physically disabled, (ii) mentally disabled, (iii) deaf, (iv) blind, (v) low vision, (vi) deaf and blind, and (vii) dumb. This presents a challenge in terms of categories like 'dumb' and 'mentally disabled' as they not only represent an offensive language but also imply inferiority or have negative connotations. Hence, terminologies that are appropriate and globally acceptable should be used. This presents a challenge in terms of using the data for need-based planning for children. For example, the term 'mentally disabled' includes a wide array of disabilities, such as autism, psychotic disorders, anxiety and depression, etc. which all require distinctively different support mechanisms. Furthermore, this classification is not fully aligned with the global standardized approach for monitoring children with disabilities in EMIS established with support from UNICEF and UNESCO¹⁵, which classifies children by vision, hearing, gross-motor, fine-motor, intellectual, communication, and/ or behaviour and socialization. The current approach also does not allow to determine level of difficulty participating and learning due to an impairment, which has replaced the previous notion of 'severity' in terms of 'physical disability' could be a child that is missing a limb but has adapted ways to compensate for this in terms of occupational functionality but it could also refer to a child with a disorder that severely affects its mobility and self-sufficiency, such as cerebral palsy. Finally, the current specifications in EMIS do not cover intellectual and learning disabilities, such as attention deficit hyperactivity disorder (ADHD) and dyslexia.

For the undertaking of the periodic NASA reports for grade 3, 5 and 8, the information collected with regard to the students' disability/disabilities is limited. In the 2018 NASA for grade 5 students, desegregation was limited to difficulty with 'seeing/ hearing' and the study did not cover any resource classes and/or special or integrated schools.

The National Framework for Child-Friendly Schooling for Quality Education was developed by the Department of Education (DoE, 2010). The standards provide a description of what is expected from schools for all learners, including children with disabilities including:

- teachers having knowledge and skills on inclusive principles and practices;
- teachers' being aware of learners' unique and individual needs; and
- SMCs and principals monitoring how teachers provide support to all learners in the classroom.

The Equity Index as described under section 3.1 allows for disability to be included in the computation of the equity scores as a driver of disparity. However, due to the small numbers of children with disabilities currently recorded in EMIS as enrolled, weightage should be applied to allow for significant influence on the equity index score.

The SSDP is endeavouring to strengthen diagnostic and referral mechanisms, the collection and analysis of disaggregated data in the EMIS, and to make the collection and use of data on students with disabilities more robust by integrating data from other sources and validating the data through feedback mechanisms within the school community (Hunt and Poudyal, 2019).

3.9 Impacts of School Feeding Schemes on Equity and Inclusion

School feeding programmes not only help improve access by increasing school enrolment and attendance, but also improve participation and learning by increasing school completion and scores on cognitive and mathematics tests, and equity by improving gender and social inclusion in school education. A recent review of evidence undertaken by UNESCO, UNICEF, NORAD and the World Bank group (Mundy et al, 2019) found that school feeding is one of the two interventions with the strongest evidence of impact on equity and inclusion in education (the other being conditional cash transfers). Moreover, school feeding improves students' health and nutrition and supports social protection by transferring the value of school meals to households' available resources. Also, school feeding programmes that are properly designed and appropriately linked with local agriculture can provide additional benefits to farmers, traders and wider communities and local economies. The cost benefit analysis of Nepal's school feeding programme (WFP, 2019) estimated that every US\$1 invested in school feeding in Nepal could result in the creation of up to \$5.2 in the country's economy.

All the reviews and studies for school feeding undertaken so far in Nepal, including the end-line evaluation of food-based school feeding (Khanal, 2019), have shown the contribution of school feeding in improving enrolment, attendance and learning achievements of students. The evaluation also recognised school feeding as gender sensitive and supporting inclusiveness and addressing social taboos. The cost-benefit analysis also identified an average increase in basic schooling due to school feeding of +0.9 years in comparison to students without school meals. These achievements are enhanced among poor and disadvantaged children in food deficit areas.

Nepal's school feeding programme was initiated in 1974 in selected schools. By financial year 2019/20, school feeding covered 43 districts with:

- the government-funded cash-based school meals programme for ECED/PPE to Grade 5 students in 34 districts and for children from targeted communities in other districts; and
- the World Food Programme (WFP) supported food-based school meals for ECED/PPE to Grade 8 students in selected schools programme in 9 districts.

As of FY 2020/21, the school feeding programme has been extended to all ECED/PPE to Grade 5 public school students.

Despite its significant contribution to education, health and nutrition outcome, the System Approach for Better Education Result-School Feeding (SABER-SF) 2020 analysis of WFP (Poudel & Haag, 2020) identifies the following challenges to the implementation of the programme:

- Linking and fully integrating it with other school health and nutrition interventions.
- Developing school feeding infrastructure in schools.
- Developing an efficient and sustainable organizational setup.
- Improving nutrition, dietary diversity and food safety of school feeding and linking it with local agriculture production.
- Ensuring adequate and sustainable financing, based on a per child costing.
- Managing the programme effectively across the three tiers of government.
- Monitoring the programme effectively and carrying out periodic evaluations.

The study also demonstrated the need to strengthen the capacity of local governments to implement school feeding programmes.

3.10 Underlying Causes of Exclusion

The power and potential of education to improve social cohesion and reduce exclusion and violence in society depends primarily on the political economy of education and the wider society:

"the interaction of political and economic processes in society: the distribution of power and wealth between different groups and individuals and the processes that create, sustain and transform these relationships over time" (Pherali et al, 2011).

Education systems are part of the political process as school curricula and teaching practices can be used to promote political ideologies that can enhance social cohesion

or exacerbate hatred and xenophobia (Dupuy, 2008). Nepal is characterised by complex power relationships and hierarchies that define and shape the status, roles and interactions between different caste and ethnic groups and vice-versa. A study (Vaux, 2011) on the potential peace building role of schools as zones of peace (SZOP) demonstrates this point by cautioning against a simplistic analysis of the positive effects of schools as zones of peace recognising the highly political nature of education and the risk of schools' neutrality being compromised.

From a post-conflict and post-disaster perspective, one of the primary purposes of a successful education system in Nepal is to socialize a new generation of engaged "citizenry who fully embrace the new constitution ideals of a multi-caste, multi-ethnic, multi-lingual, and multi-cultural society" (GPE, 2017). These are complex, multi-dimensional issues that cut across all areas of life and require holistic and multi-sectoral approaches. There is very little rigorous research on the direct impact of education on social cohesion and practices of exclusion in society.

Education can play an important role in identity development, which contributes to enhanced social cohesion. Pherali et al (2011) found that education had a strong role in identity development in Nepal. This has more recently taken shape in the new Peace Education syllabus and textbooks that no longer feature demonising stereotypes and instead promote respect for diversity (Pherali et al, 2011). Curriculum interventions for what educationalists refer to as 'Learning to Live Together'¹⁶ (including peace, civics and history education) can be very successful for promoting social cohesion (and peace) if designed and delivered appropriately (Naylor, 2015), as it stated that:

...opportunities to study different religions and traditions have helped to promote understanding among students of different religious groups, and that 'carrier' subjects including history, second languages, social sciences, physical education and art are used to teach Learning to Live Together competencies. – Naylor, 2015

Considering the evidence, it would be good to review, update and broaden the Peace Education syllabus so that it focuses on all key aspects of identify formation and social cohesion and that 'carrier' subjects are used to complement and reinforce the learning.

Education can also deepen social divides between groups and increase exclusion. Pherali et al. (2011) outline the various ways in which politics influences education in public

¹⁶ 'Learning to Live Together' is a term that refers to the area of curriculum content which includes peace education, values and life skills education, human rights education, citizenship or civics education and history education reform.

schools in Nepal and the potential danger of a deepening social divide between private and public school educated children if these deep-rooted issues of governance are not resolved. Achieving the right balance between promoting and celebrating ethnic identity and developing a common national identity is also key to the education sector's ability to contribute to enhancing social cohesion. This can be particularly challenging in a federalised system and requires a long-term behavioural and cultural change approach where key messages are reflected and reinforced in policy, management and administration structures, teacher professional development, and recruitment performance management practices. CEHRD's Social Management Framework (SMF) for the SSDP, which was first produced in 2017 and updated annually to align to the new federal structure, is a positive step towards improving access, equity, quality and sustainability of education services for indigenous and vulnerable groups, which in turn is likely to improve social cohesion. The new education plan (2021-2030) should include activities to ensure full implementation of the Social Management Framework and adherence to it in schools.

It would be helpful for planning the new education sector plan to update the political economy analysis of education carried out in 2011 by Pherali to have a clear picture of the relationships and power dynamics at play at all levels of government to inform the best approaches to enhancing social cohesion and reducing exclusion through education. Many sources, including the 2016/17 Education Sector Analysis (NIRT and AIR, 2017), highlight the lack of clarity about who is responsible for what and the challenges in establishing accountability for delivering education. This is both a challenge and an opportunity as Nepal embarks on the next phase of planning of education. Clarifying the intent, role and responsibilities of the workforce at all levels, including policy-makers and teachers with regards to the national ambition for identify formation and social cohesion, would provide a roadmap for reform; but it must be in the context of a wider, multi-sector agenda.

The language of instruction is a powerful tool that can foster a sense of shared identify or fuel violence (UNESCO, 2011). It is closely linked to questions of ethnicity and culture and the political economy questions explored earlier (Seel et al., 2017). Three major factors that contribute to the social inequalities that divide groups and promulgate social exclusion are:

- the lower status afforded to non-dominant language speakers;
- learning disadvantages resulting from the disconnect between home and school languages; and
- limited opportunities for civic engagement and participation in decision-making for people unable to speak Nepali (Seel et al., 2017).

Language is a major part of recent debates around the form of Nepal's new federal system. On the one hand, federalism is a way to acknowledge and celebrate the histories and cultures of the many different ethnic groups by devolving power to the local level. On the other hand, there is a view that promoting identity-based federalism can create new divisions and further marginalise smaller ethnic groups.

The 2017 study by Seel et al. on the medium of instruction and languages for education (MILE) provides a thorough analysis on the current situation in Nepal, an overview of the global evidence and best practice in language of instruction and the following clear recommendations for next steps, which should be considered and integrated as appropriate into the new school education plan:

- Develop a comprehensive MILE policy which fits in the wider context of language planning for federalism and the broader vision for the education sector.
- Follow options for selecting and sequencing languages as mediums of instruction or subjects.
- Ensure effective MILE and embed and create an enabling environment for effective practice to take root and be sustainable (including integrating progress indicators in the EMIS and coordination with other policies such as the inclusive education and ECED policies).
- Work in collaboration with other sectors given the cross-cutting nature of issues of language and ethnicity.

Education can make a significant contribution to state building and peace, starting in the early years. Thompson (2015, p.7) concludes that "education can help develop identities and deal with the legacies and grievances of previous conflict, improving social cohesion and moving societies towards reconciliation"; and this is particularly powerful in the early years. Early childhood development interventions have been found to promote constructive social behaviour, including positive communication among children, parents and communities in Uganda (Smith, 2015). Scholars, such as Heckman's (2015) argue that quality early childhood education "provides persistent boosts in socio-emotional skills even if the effects on cognitive skills diminish in the short run." An evaluation of an early childhood development programme in Nepal across 38 communities found significant positive effects on transition to school, attendance, school readiness and performance in school as well as 'community building' which, in turn fostered social cohesion (Save the Children, 2003). As in the case of social cohesion, for these effects to be reconciled in terms of peace building, the curricular content and educational processes must be 'conflict sensitive', acknowledging the legacies of the past and consistently promoting respect and peace (Naylor, 2015).

Early childhood is often the time where parents and the community are most involved in their children's education. Combined with the well-documented impacts on social and emotional skills, this makes ECED/PPE one of the most powerful stages of education in terms of improving social and human development outcomes through education. In planning for the next education plan, it would be helpful to understand the impact of quality early childhood education on social and human development and define the most relevant interventions to capitalise on this opportunity in Nepal, starting by closing the disparities in access to ECED/PPE by disadvantaged groups.

Lessons from peacebuilding and prevention interventions in communities can inform approaches to peacebuilding and prevention education in schools. An evaluation of interventions in Colombia, the Democratic Republic of the Congo and Nepal found positive impacts on awareness, active citizenship for peace, cohabitation and reduced discrimination, reduced violence and increased support to vulnerable groups in the community (McGill et al., 2017). These achievements were attributed to:

- building the capacity, knowledge, skills and experience of children and youth through training and opportunities to develop skills through involvement in youth associations and clubs;
- supportive families who encouraged their children to participate in peacebuilding activities and efforts (this was particularly important for female youth in Nepal who faced greater restrictions on mobility); and
- challenging cultural attitudes, beliefs and practices that affected peacebuilding efforts, such as discrimination towards certain groups, and traditions that undermined gender equality including early marriage.

Similar to the above ideas on education for sustainable development and global citizenship education, schools can be centres of excellence for developing knowledge, skills and capabilities for peacebuilding in students in collaboration with families and local communities.

Low educational attainment is a cause and a consequence of child marriage. Countries with the highest gender disparities in secondary enrolment include the countries with the highest rates of child marriage (Onagoruwa and Wodon, 2017). Education reduces rates of child marriage which affects girls disproportionately. In Nepal, 32% of girls marry before the age of 18 (7.9% before the age of 15) (CBS, 2020). In South Asia, rates of child marriage are much lower for adolescent girls with than without secondary education (Nguyen and Wodon, 2017). Results from The Economic Impacts of Child Marriage project provide strong support for promoting girls' education as one of the most powerful ways to

“protect girls from marriage while providing them with the tools to lead healthier, more productive and empowered lives” (Wodon et al, 2017). Conversely, child marriage greatly reduces the likelihood of girls completing secondary school and reaping the economic and social benefits of better educational outcomes (Wodon et al, 2017). Nguyen (2017) reported that for every year that a girl is married before she turns 18, there is a reduction of 4–10 percentage points in the likelihood of her completing secondary school. In Nepal, marrying at 13 years versus 18 years of age increased the number of live births she would have by 25% (Nguyen and Wodon, 2017).

Education is known to reduce domestic and intimate partner violence (Savadogo and Wodon, 2017) and other forms of violence against women and girls (VAWG). Such violence is estimated to affect at least a quarter of married women in Nepal (Solotaroff et al., 2014). Findings from a meta-analysis across South Asian countries, including Nepal, highlight the importance of multi-sectoral efforts that address violence against women and girls risk factors at the individual, household, community, private and structural levels of society (Solotaroff et al., 2014).

Girls’ education enhances female participation in decision-making, which further enhances the aggregate social benefits for family members (Birdsall et al., 2005). This includes health, child education and wellbeing metrics. However, a World Bank study found very little of the predicted change in female decision making resulting from increased educational attainment in Nepal (Onagoruwa and Wodon, 2017). This may be due to other societal factors that hinder women’s ability to participate in household decision-making. Evidence from Nepal shows that strong female role models inspire young adolescent girls who look upon them as agents of change (Ghimire and Samuels, 2014).

Social cohesion and exclusion in society are complex and multidimensional, requiring a well-coordinated cross-sector responses. Nonetheless, education can play a significant role in fostering and encouraging social cohesion.

3.11 Findings and Recommendations

Finding 3.1: Address geographical disparity - There is considerable geographic disparity with learning outcomes in certain provinces lagging well behind others (especially Province 2). Achievement of Nepal’s SDG 4 commitments is dependent on significantly decreasing this disparity. The continuous monitoring of the Equity Index should be used to inform targeted, complementary health and nutrition programmes and the subsequent monitoring of their effects.

- **Recommendation 3.1.1:** Develop a costed plan to accelerate progress against key indicators for Province 2 based on the projected investments and reforms that need to be reflected in the provincial ESP to enable this province to progress towards the situation of the other provinces on indicators of equity, quality and learning outcomes.

Finding 3.2: Build on efforts to reduce disparities through support schemes – The various scholarship programmes have helped increase the access and participation of many children from marginalized groups in school education. However, this has not happened for all disadvantaged children, most notably for children with disabilities. The introduction of the Consolidated Equity Strategy and the Equity Index are making disparities measurable and allowing comparisons and systematic approaches to develop interventions in response. However, there has been no systematic evaluation of its effect and impact.

- **Recommendation 3.2.1** – Carry out a cost-benefit analysis of the effectiveness of the scholarship programmes and schemes, taking into account how they align with other social protection schemes and relate to the needs they are envisioned to cover. Based on this, design a need-based and effective comprehensive scholarship programme for the forthcoming education sector plan.
- **Recommendation 3.2.2** – Carry out a process evaluation of the Consolidated Equity Strategy to understand to what extent the strategy and the mechanisms developed through it have helped establish an enabling environment for increased equity-based planning, budgeting and implementation in the school education sector.

Finding 3.3: Continue strengthening institutional capacity to increase access and participation equity – While Nepal has made significant efforts in gender responsive budgeting, its effectiveness is weak at subnational levels on addressing gaps or achieving widespread adoption, and inconsistent monitoring has limited the availability of disaggregated data. In addition, there are very few responsive budgeting actions related to social inclusion. Pedagogy within schools has not been adjusted consistently to reflect child-centred, inclusive practices, and especially for vulnerable or excluded children, with teachers often lacking the tools or guidance to adopt new practices. More advocacy and attention is needed to raise awareness of the learning potential from mother tongue education and to address the reality of multiple mother tongues in classrooms and schools. Unlike gender equality, social inclusion was not defined nor tracked as a key performance indicator in the SSDP.

- **Recommendation 3.3.1** – Building on the conceptual framework of the Consolidated Equity Strategy, approach gender equality and social inclusion as interrelated in the planning and budgeting of the next education sector plan, rather than as a standalone issue.

- **Recommendation 3.3.2** – Explore the establishment of a formative research facility to be linked to the implementation of the new ESP and provide regular inputs to the joint sector reviews on the drivers of disparity in access and participation.
- **Recommendation 3.3.3** – Review and update the recommendations made based on the Medium of Instruction and Languages of Education (MILE) study (Seel, Yadava & Kadel, 2015) in close collaboration with other sectors, ensuring alignment and consistency with other language-related policies; and integrate these accordingly in the new ESP.

Finding 3.4: Stagnant learning outcomes and learning equity limitations – Learning outcomes have been largely stagnant in Nepal’s schools since 2012, and there are large inequities in learning in public schools between urban middle-class students and students from rural areas, at risk students, and students who learn in a language other than their mother tongue. The Equity Index is tracking learning equity and guiding the allocation of resources for more equitable outcomes. The use and continuous refinement of the Equity Index should be priorities for monitoring sector performance. The ability to use the index effectively depends on the regular and steady measurement and reporting of the components of the index, and the use of the findings.

- **Recommendation 3.4.1** – The government should focus on a few key priorities and allocate its scarce managerial resources to making sure these policies are well implemented. To this end, the development of the Equity Index as a tool to complement the continuous monitoring and reporting of learning outcomes is a positive action that should continue, keeping in mind that the index is a complementary tool for tracking the effects of policies. Measuring and reporting learning outcomes and analysing them in parallel with the Equity Index provides a good tool for feedback on policy performance. As such, schools should be held accountable for the access and learning outcomes of their students as measured through different student assessment tools, the EMIS and the Equity Index.
- **Recommendation 3.4.2** – As part of the planning and target setting process, the government and its partners should develop a monitoring strategy for social inclusion that goes beyond out-of-school and enrolment rates at the basic education level and considers learning outcomes and access to secondary. The education workforce should also be monitored from a social inclusion perspective.

Finding 3.5: Develop and implement interventions that can address the underlying causes of exclusion – Nepal has made many progressive commitments on gender and inclusion and initiatives like the Equity Index demonstrate the government’s transformation of policy commitments into tangible progress. There is legislation against harmful practices and discrimination, but a lack of monitoring and enforcement mechanisms for behaviour

change. Often local implementation is inconsistent, particularly on the enforcement of regulations against discrimination and violence in schools, which are major constraints to retaining girls in secondary education.

- **Recommendation 3.5.1** – Include ‘social cohesion’ as a cross-cutting objective and priority of the next education plan to give the education sector a platform for targeted interventions that can be planned for, funded, delivered and evaluated.
- **Recommendation 3.5.2** – Review, update and broaden the Peace Education syllabus to focus on all key aspects of identity formation and social cohesion, and ensure that ‘carrier’ subjects are used to complement and reinforce the learning.
- **Recommendation 3.5.3** – Update the political economy analysis of the education sector to fully understand the power and relationship dynamics that drive social exclusion in the education sector and design a long term behavioural and cultural change programme that covers the education workforce at all levels in administration and in classrooms.

Finding 3.6: Further safeguard gender equality and social inclusion arrangements – Federalization has highlighted local technical capacity gaps. Local non-formal power dynamics and discriminatory norms affect participation and significantly influence actors who have budgetary and planning authority. Social management frameworks have been put in place by the federal government to protect vulnerable and indigenous communities. However, it is not clear if these have taken into account cultural, social and socio-economic challenges that emerge for students from at risk groups (for example, children have seen school closures in their communities). Furthermore, overall equity needs to be one of the main considerations for allocating non-salary education programme budgets to increase quality to ensure this does not increase disparities.

- **Recommendation 3.6.1** – Review and consolidate management and safeguarding frameworks developed with joint financing partners to protect vulnerable and indigenous communities in the education sector into a comprehensive social management framework for the entire ESP. The roles and responsibilities of the gender focal points at all tiers of government needs to be clearly articulated.

Finding 3.7: Children with disabilities are most marginalized in terms of education outcomes – Children with disabilities suffer the largest disparities among all vulnerable groups on access, participation and learning outcomes. Nepal has a good track record developing policies and plans to include and support children with disabilities in education. However, their implementation should be carefully planned and executed.

- **Recommendation 3.7.1** – Develop a roadmap for mainstreaming disability-inclusive education by taking stock of existing institutional arrangements and capacity, also informed by the analysis and diagnostic studies that are being currently undertaken. Ensure the roadmap includes a strategy to move children with disabilities through the system towards the most inclusive modality appropriate for their needs.

4. QUALITY, RELEVANCE AND LEARNING OUTCOMES

This chapter analyses the status of educational quality, relevance and learning outcomes in basic education (Grades 1–8) and secondary education (Grades 9–12) using the most recent evidence from assessments and reports. In addition, it reviews the status of technical and vocational education and training (TVET) in schools in light of the current interest in expanding TVET. The different analyses of Nepal's education sector seem to have a common thread with respect to education quality of teachers being a key factor in the development of quality education. So, this chapter particularly looks at teacher quality and other inputs to assess the factors that affect the quality of education in Nepal.

The quality of education is a complex concept that is defined by many interacting inputs into the education process. The concept consists of multiple dimensions and is often understood in terms of the quality of teaching and learning processes (teachers' knowledge of content, pedagogical practices, and capacity to implement inclusive education approaches), teacher motivation and incentives, school curricula, school management, learning outcomes and funding (facilities and materials). So, in understanding the quality of education, it is essential to examine the core dimensions that are associated with the concept.

4.1 Quality of Teaching and Learning Processes

Although there are well documented problems with teaching performance in Nepal, these problems seem to be symptoms of a deeper problem with the nature and scope of teacher training in the country. This section therefore sets out to examine the root causes of problems with the quality of teaching and to assess the factors that impede the translation of the existing training knowledge and skills into actual teaching-learning processes in the classroom. It will also examine the determinants that affect teacher motivation.

In Nepal, teacher quality is understood in terms of teachers' knowledge of the content and pedagogical knowledge – both of which are in need of substantial improvement. Studies undertaken in Nepal have reported challenges with respect to both the aspects of teacher quality. It is reported that teachers (particularly secondary school maths and science teachers) often have limited understanding of their subjects. For example, Schaffner et al. (2020) in a study found that Grade 9 and 10 maths and science teachers had difficulty answering basic subject matter questions correctly. Many of the questions in their review

covered topics foundational to the Grade 9 and 10 curriculum. Pedagogically, many teachers spend too little time on required subjects (particularly Nepali) in early grades, use teacher-centred and rote learning techniques, and make minimal use of meaningful assessment data (Magrath and Torrano, 2020; Singh, 2015; Room to Read, 2014). Ensuring that teachers have adequate content and pedagogical knowledge should be the responsibility of pre-service teacher training programmes. These programmes should be supplemented by in-service training on pedagogical issues specific to the problems that teachers encounter in classrooms; i.e. in-service training should derive from assessments of students' educational outcomes.

The high percentage (97%) of basic education teachers who have been trained (Table 4.1), should be set against the context of key indicators on teacher quality (NASA test scores) not being met in terms of Grade 5 student competencies in key subjects (ERO, 2018).

Table 4.1: Results for indicators for teachers in lower basic school, 2013–2019

Indicator	2013	2014	2015	2016	2017	2018	2019
Number of teachers	178,534	183,922	187,684	190,219	197,797	199,436	201,075
Percent of trained teachers	92.19	93.58	94.42	97.01	97.28	97	97.29
Pupil–teacher ratio in lower basic (Grades 1–5)	25.63	23.93	23.1	22.42	20.91	20	19.74

Source: UIS – <http://data UIS.unesco.org/>

Most educational assessments reviewed for the ESA touched on the symptoms of the deeper problem of teaching quality; but they tended to brush over the basic problem that the system of teacher training is in need of substantive reform at the pre-service level. The current system of teacher training relies on three separate building blocks, which are weakly coordinated: i) pre-service training at universities, ii) in-service training provided by MoEST and local governments, and iii) teachers' inherent motivation and external incentives provided by administrators at MoEST and school levels.¹⁷

The Government of Nepal has advocated for the continuous professional development of teachers. Since launching the School Sector Reform Plan in 2009, the government has promoted continuous professional development shifting the focus from one-off exercises with teachers to an ongoing, comprehensive approach that advances creativity, critical thinking, and leadership skills among teachers (British Council, 2020).

¹⁷ Personal interviews with Bhojraj Kafle, Development Aid Coordination Section, MoEST, 19 June 2020, and Toyanath Khayal, Education Training Center, 6 October 2020.

Various stakeholders play a role in the pre- and in-service training of teachers in Nepal. These include CEHRD's Teacher Training Section (TTS) and provincial-level education training centres (ETCs), faculties/schools of education within universities, the Teacher Service Commission, NGOs, local governments and model schools – all of which can facilitate mentoring and networking among teachers.¹⁸ However, the precise role and responsibility of each stakeholder is not clear. These blurred lines of responsibility have led to coordination challenges and issues with the provision of quality professional teacher development (British Council, 2020).

Pre-service training

Some discussions regarding education quality point to the inadequacy of current minimum qualification requirements to become school teachers at different levels. Currently, the minimum qualifications of lower basic, upper basic and lower secondary and higher secondary are SLC/SEE, Grade 12, Bachelor and Master respectively. In addition to the minimum academic qualification, a 10-month teacher training is required for those who have graduated from the faculties other than education. However, except one-year BED for Bachelor degree holders, such 10-month training courses for teacher training are not available.

It is necessary to improve the quality of pre-service training to increase the effectiveness of school level teachers. The pre-service training or teacher preparation course that universities provide does not seem to be fully connected with the pedagogical requirements at the classroom level. It could be argued that the one year teacher preparation course is insufficient to erase the influence of received pedagogical practices from teachers' basic and secondary schooling where knowledge has mostly been delivered through rote learning and repetition. Therefore, it is important to re-examine the role of pre-service preparation in the transformation of pedagogical knowledge and practice among its graduates. This issue is extremely important and cannot be emphasized enough.

This review recommends that the required qualification for basic education teachers be aligned with that of secondary teachers (i.e., bachelor's degree). To implement this, it would be necessary for MoEST to work with universities to attract better entrants to the teaching profession, and to strengthen pedagogical practice during pre-service training. Attracting better entrants would be a multi-year effort at increasing the pool of suitable

¹⁸ Model schools are a strategy of CEHRD to strengthen secondary education whereby schools that apply effective teaching practices act as 'support centers' for surrounding schools (Bessières et al. 2019).

candidates for the teaching profession, increasing the rigour of pre-service training, and making salaries competitive. These efforts would have to be complemented with improved teacher management and teacher accountability.

It is important to note that although secondary education teachers in Nepal already must have a bachelors' degree in education, there is no evidence that they are more effective teachers for this than basic education teachers. Secondary education teachers may not be able to promote students' achievement in part because students are underprepared in basic schools. However, there is also evidence of weak pedagogical practice even among more highly trained secondary teachers, including relying on teacher-centred, rote learning approaches. Therefore, it will not be sufficient to simply apply the pre-service training approaches used on basic education teachers to secondary education teachers. Instead, the entire pre-service training process needs to be re-envisioned.

In-service training

The second building block in teacher quality relates to overcoming the inadequate in-service training where the current system does not regularly follow up on the application of training in the classroom, its effectiveness, or even its impact, on teacher content knowledge and pedagogical knowledge (British Council, 2020). One critical result of inadequate pedagogical training is that the quality of teaching in public schools remains low, even after substantive in-service training. MoEST's recognition of this problem led to a renewed effort under the SSDP to improve in-service training, with mentoring by master teachers as a key component. Evidence from the midline evaluation of the National Early Grade Reading Programme (NEGRP) indicates that it was not frequently occurring in 2018 (NORC, 2018).

Despite all the strategies to reform in-service training, the best way to increase its quality is to improve the quality of pre-service training. As such, there is a need for MoEST to engage universities in a dialogue to address the quality of pre-service training and reduce the gap between the skills teachers are required to have (aligned with high quality pedagogical approaches) and the pre-service instruction offered to them. Increasing the quality of pre-service training would reduce the need for in-service training to the degree that it is being offered now.

CEHRD's Teacher Training Section (TTS) has developed in-service training packages that cover a range of topics, including subject-matter knowledge, the use of information and communication technology (ICT) in education, reaching learners with disabilities, early

grade reading, and leadership training for head teachers (Bessières et al., 2019). As per the SSDP's guidance, each teacher should receive at least a 30-day training once every 5 years.

Despite the above progress on in-service training, the teacher training programme is plagued by unclear roles, limited capacity, and low-quality training that limit its impact. Until recently, these training courses, which include workshops, self-study exercises and counselling, were carried out through 29 regional education training centres (ETCs). With the transition to federalism, the number of ETCs has been reduced to seven placed under the provincial governments. The impact of this recent reduction in the number of ETCs has yet to be assessed but is obvious that this has been a dramatic reduction in terms of the system's capacity to provide in-service training. Furthermore, with teachers having to travel longer distances to reach the seven provincial ETCs, and trainings thereby also becoming more costly in terms of the arrangements that need to be made, the current situation seems to decrease the reach and effectiveness of in-service training.

The transition to federalism that triggered a realignment of structures and roles has created a vacuum in in-service training. As originally envisioned, teacher professional support (TPS) for basic education teachers (Grades 1–5) was provided by resource persons and head teachers. The phasing out of resource persons and centres during the transition to federalism created a gap in the teacher professional support system. In the revised system, schools fall into the three categories of i) those which have fully implemented teacher professional support, ii) those which have partially implemented it, and iii) those that have not implemented it or implemented it poorly. Teachers in schools that have only partially implemented teacher professional support have infrequent and irregular mentoring (though teachers might have positive perceptions of this mentoring), while those which have poorly implemented the support have rare and less effective mentoring. Only schools which have fully implemented the support have in-house teacher learning groups, and as far as is known, no schools have had teachers participate in cluster-level teacher meetings.

The in-service training that provincial-level ETCs provide appears to be inadequate as a 30-day training once every 5 years is not continuous training. A 2018 evaluation of ETC training raised questions about the skill level of trainers and the difficulty of transferring skills learned in the training to the classroom (Acharya and Upadhyay, 2019). With their number reduced, ETCs may also lack the capacity to expand (Bessières et al., 2019). Meanwhile, local governments do not appear to have adequate capacity and the means to fill the gap. Despite the commitment that local governments express towards quality education, in-

service training is largely seen as the responsibility of federal and provincial governments (Neupane et al., 2020).

Many small-scale studies indicate troubling concerns over basic and secondary teachers' ability to integrate in-service training into their teaching practice. For example, the NEGRP includes a 10-day, in-service training for teachers along with coaching and continuous training. However, classroom observations at the midline of the programme did not find evidence of improvement in teacher classroom practices, such as readiness/preparation and more child-centred pedagogy, as a result of the training (NORC, 2018). There was no difference between treatment and control groups in terms of teaching practice.

The school level efficacy of teacher professional support largely relies on head teachers or basic level in-charges. However, these personnel often find that administrative and other responsibilities make it difficult for them to dedicate their time to teacher professional support. And the lack of resource persons has constrained implementation of the system (Maharjan et al., 2020).

A study on classroom practices found that teachers relied on rote teaching approaches, even after receiving training in student-centred pedagogy (Singh, 2015). Teachers spent the majority of their class time using in-class reading as a pedagogical approach whereby a teacher or student read a paragraph from the textbook after which the teacher explained the paragraph. Teachers in the study provided a range of reasons for not implementing student-centred approaches, despite their training. Although this study covered only a small sample, the themes it presented highlight continuing challenges in the current in-service teacher training module. Similar findings are reported in SSDP's Mid-Term Review, where teachers and head teachers could not use child-centred approaches because of overcrowded classrooms (Magrath and Torrano, 2020). More large scale, systematic studies are needed to examine classroom practices and identify factors and teachers' behaviours that contribute to learning.

The delivery of a 15-day pilot training (10 days in person, 5 days of self-study) for Grade 9 and 10 science teachers including new teaching methods such as using teaching aids made from locally available materials did not have a positive impact on students' test scores (Schaffner et al., 2018). Several possible reasons were suggested for lack of impact: i) low quality training-of-trainers, ii) incomplete training of many teachers due to poor scheduling where teachers did not want to attend training because it was after working hours, and limited uptake of self-study, iii) low technical knowledge among trainees, and iv) low initial level of preparation among Grade 9 and 10 students (Schaffner et al., 2018 ; Acharya and Uprety, 2019).

To remedy these hindrances, the evaluators of the concerned pilot effort suggested to provide more support to trainers through in-service training, scheduling training during working hours, integrating materials to allow immediate uptake of new techniques in classrooms, enhancing in-classroom coaching and mentoring, tailoring training to the level of teachers' knowledge and training teachers on how to work with below grade-level students. Pre- and in-service training needs to focus on the underlying philosophy and concept of student-centred pedagogy rather than content, and a few techniques. Teachers should have ample time during training to practice techniques and discuss how to apply them in their classrooms (Singh, 2015).

The preparation and systematic use of lesson plans is not part of the pre- or in- service training curriculum, and due to the absence of these being required to be shared and reviewed, it is unclear how many teachers develop these on a regular basis and whether these include the application of pedagogical techniques and activities. Small scale initiatives of introducing lesson plans in combination with other management support in selected public schools has shown promising results in terms of the overall improvement of the quality of education and learning outcomes (CSN, 2019).

In summary, in-service training should not be used to provide instruction that is not received in pre-service training but as the provider of practical advice that can have direct impacts on student performance. In-class coaching by experienced teachers and the monitoring of classroom practices must be a critical component of in-service training. As such, in service training packages need to be developed with a pragmatic and action-oriented design and be able to be adapted to the various levels of competency teachers obtained in their pre-service training, but cannot replace the lack of pre-service training.

Teacher motivation and incentives – salaries and professional development

Teacher motivation also constitutes one of the essential building blocks of teacher quality, which generally includes teacher financial and professional incentives and accountability. Teacher motivation has long been a contested policy issue in Nepal and there have been some studies examining teachers' motivation level. A study of early grade reading (EGR) teacher motivation found association between teacher satisfaction and motivation and the performance level of schools. Teachers in high performing schools reported the greater degree of satisfaction and motivation as compared to those working in low performing schools (NIDR, 2020). While most teacher respondents were motivated, some identified job insecurity, the large workload of early grade reading teachers, poor student achievement, limited recognition and praise, and lack of access to ICT as demotivating

factors. Furthermore, a 2017 study by Save the Children found that the majority of teachers started out motivated when they begin the career, but over the years lost motivation. Teachers reported that discriminatory policies and practices for non-permanent teachers, political favouritism in providing rewards and incentives, and a lack of institutional support and recognition for innovative teaching had decreased their motivation over time (Save the Children, 2017).

Singh (2015) and Magrath and Torrano (2020) report that permanent teachers have few incentives to improve their content knowledge or pedagogical practices because there is no direct connection between their classroom performance and salaries or promotions. However, with the new decentralized system, where local governments and schools have authority over teacher deployment and professional advancement, the incentives and accountability need re-examining. Although Nepal has a career track that promotes a positive relationship between teacher advancement and the performance of their students, its implementation is not without challenges and needs further strengthening to ensure teachers are motivated and accountable to build student achievement as a component of their professional growth.

A range of options can be considered to enhance accountability and incentivize teachers to continuously improve their pedagogical practices, including school report cards, in-classroom observations, the use of dashboards on school walls that inform parents about students' performance and schools' performance relative to other nearby schools, more efficient and effective use of school budgets, and student learning outcomes (Arcia et al., 2014). Consultations with key officials and experts raised the issue that accountability requires leadership and management to use monitoring tools as genuine performance assessments rather than as ritual processes. This requires feedback mechanisms where other school actors (peers, parents, management) are involved to validate findings.

The current incentive structure is tied to school-level grants that rewards schools that perform well in terms of education outcomes. This practice does not serve the purpose of lifting teacher and student performance consistently across all schools. The 2017/18 Flash data shows that all public schools in the country received operation and management grants, and grants for extra-curricular activities and community mobilization. However, only 1,800 (5%) of the 35,000+ basic education schools also received performance-linked grants based on the amount of time spent by them on teaching. Access to this grant is being implemented phase-wise, so this lower coverage is less concerning than it appears. However, the grant focuses primarily on student attendance, rather than the time they

spend on learning. In principle, this is a good reward, but it only underscores that the vast majority of schools did not deserve a reward, and even this reward only focuses on attendance rather than learning. This reflects an incentive structure that may be insufficient to motivate teachers and schools to improve their performance.

Teacher salaries are based on established salary scales tied to the level of formal education, in-service training and seniority. On the surface, teacher salaries seem competitive in Nepal's current labour market; but no rigorous analysis has been carried out of the distribution of salaries showing the proportion of teachers under different salary levels, levels of formal education, and years of experience. Such an analysis would be welcome before addressing the career ladders to be offered to teachers, which is important for attracting better entrants to the profession.

In addition, *rahat* (relief) teachers, who are paid less than permanent teachers and take their positions, are being hired in increasing numbers to keep salary costs down. As a result, *rahat* salaries are now an increasing share of school budgets. This practice indicates that higher salaries are not being used as vehicles for recruiting or retaining teachers, which could affect teacher motivation. Indeed, there is limited evidence internationally that higher teacher salaries are directly linked to higher performance. However, there is plenty of international evidence that non-monetary rewards and community recognition can go a long way to motivate teachers (Arcia et al., 2014; Demas and Arcia, 2015). With the advent of federalism, there are great opportunities for schools and local governments to devise ways to motivate teachers and take actions that should advance learning, such as increased teacher attendance, more time on-task, more direct engagement with students, and less teacher-centred pedagogical practices.

Regarding professional development, the education system needs to align the financial responsibilities of the federal and local governments. The federal government pays teachers through conditional grants; however local decisions about salary increases and subsequent teacher promotions may then have implications for nationally funded benefits such as pensions. If local governments were to make autonomous decisions on promotions, there would have to be some federal oversight, because pensions and retirement funding – which may be centrally managed, have budgetary implications for the national treasury. While this area is not normally examined in education sector assessments, it does require attention because it can have critical negative implications for the budget and performance of the overall education system, as well as result in negative and politically driven decisions on the budget and teacher policies.

Teacher gender has frequently been a topic of interest both from the research and policy perspectives. It is particularly important to examine the role of gender because teachers are believed to play an important role in student learning. What role, if any, then does the gender play? About 43 percent of teachers are female in Nepal. Students were more likely to progress to next grade in schools with more female teachers (UNICEF, 2021). The association is stronger for girls and could indicate that hiring more female teachers could be beneficial for girls' education. This is consistent with evidence in other contexts such as India (Muralidharan & Sheth, 2015), China (Eble & Hu, 2020) or francophone Africa (Lee, Rhee, & Rudolf, 2018). Elsewhere, research on teacher gender has shown mixed results. Following an analysis of education data from 30 developing countries, the Global Monitoring Report (UNESCO, 2015) concluded that in countries where girls experience cultural and social barriers in their educational participation, female teachers' presence has the potential to make a positive effect on girls' schooling.

4.2 School and Teacher Management

School management¹⁹

School and teacher management continues to be a major concern for policymakers in Nepal's education sector because the managerial capacity of MoEST is limited in light of the many programmes and policies it has to implement and track.

Education sector management comes under SSDP Result Area 3 on strengthened sector management and governance. The latest reports (Status Report & Flash Report I, 2018/19) cite the major improvements of implementing the web-based Education Management Information System (EMIS), and developing and applying the Equity Index (CEHRD, 2018a [Status report] and 2018b [Flash report]). These are significant achievements that can help MoEST and decision makers monitor the effect of policies on education sector performance. Current plans for system management are based on the targets outlined in the SSDP. Table 4.2 shows the indicators used by MoEST to monitor the current system.

Given this prioritization, MoEST's management of the current system refers only to training percentages and training certification. As such, these indicators do not convey information on important aspects of school management such as budget planning, the alignment of funding with policy objectives and the management of teacher incentives towards improving their performance and accountability.

Table 4.2: Monitoring results for MoEST indicators of teacher professional development and management, 2015/16 to 2020/21

Indicators	Baseline (2015/16)	Year 3 (2018/19)	Year 5 (2020/21)
Increased provision of qualified and trained teachers			
Percent of trained ECED/PPE teachers	NA	NA	88.4
Percent of ECED/PPE teachers with required qualification	93.7	95.5	97
Number of trained subject teachers in maths, science, and English	NA	4,500	9,000
Number of schools with subject teachers (maths, science, English), Grades 6–8	NA	1,000	3,000
Number of schools with subject teachers (maths, science, English), secondary education	NA	500	1,500
Certification training, basic education	NA	10,700	7,400
Certification training, secondary education	NA	3,000	1,500
Number of teachers trained in ICT and e-resources	NA	1,000	1,000
Percent of female teachers, basic education	38.8	42	45
Percent of female teachers, secondary education	15.1	18	20
Strengthened teacher management and accountability			
Number of schools with separate, full-time head teacher positions	-	6,165	6,165
Number of districts where teacher performance incentive scheme is rolled out	-	40	75

Source: Flash Reports I, 2018-21

The main current challenge to education sector management in Nepal is the ongoing adjustment to the new federal structure. This is requiring a radical transformation of local and central government functions and responsibilities, as well as the dissolution of an overly bureaucratic culture (Magrath and Torrano, 2020). This challenge requires resolving the following two key issues:

- The weak managerial capacity of personnel, especially among those who are essentially teachers promoted into managerial positions in schools (such as head teachers and primary in-charges), without any proper management training – a common problem in education systems across the world.
- Inadequate and ineffective coordination between local and provincial governments due to the new federal system largely bypassing the provincial level.

This is an area of concern as there are some managerial and substantive functions that would properly be scaled at the provincial level, such as school supervision, database management and monitoring provincial indicators for improving system performance. These concerns should be taken into account when preparing the Federal Education Act.

Nepal is undergoing a transition in transferring management authority from the federal to the local government level where managerial capacity is relatively less and often there

is little education management expertise. This transition is corroborated by the fact that there is not yet a Federal Education Act and by the fact that local governments are devising and implementing policies that should come under MoEST. The transition has led to instances where federal plans and indicators differ from provincial plans and indicators as was found with both model schools and plans for the distribution of scholarships at local level. This lack of coordination also affects teacher deployment, the curriculum, educational standards, and student assessment, where there is disagreement about the authority of local governments on these issues resulting in confusion at the school level. These problems will remain until a new Federal Education Act is created, which in itself will require a process of reconciliation between provincial and federal rules that could take some time. Given that these same concerns have been expressed with respect to ECED, it is recommended that MoEST ensure that the Federal Education Act is consistent on these issues across educational levels.

Teacher management and accountability

Current policy objectives of the teacher rationalization strategies in the SSDP include:

- a decentralized process of teachers' recruitment and deployment, where the Teachers Service Commission (TSC) is responsible for teacher licensing and recruitment; and
- an enhanced role for SMCs in teacher recruitment and teacher management in community-managed schools, and teacher management in community schools.

As noted earlier, teachers can be permanent or temporary, or rahat. Permanent teachers must be licensed by the Teacher Service Commission, while temporary teachers need only to be approved by local government education offices. Until 2018, these functions were the responsibility of the erstwhile district education offices, which have not been replaced by an equivalent office under the new federal structure. As a result, the hiring and firing of locally recruited teachers is happening without clear authority.²⁰ As per their mandate defined in the Constitution, community-managed public schools can hire temporary teachers using their own funds. Because rahat teachers cost less, their hiring has increased in the last few years, under a quota system administered by MoEST (Bhom and Singh, 2015). Other related policies include the priority recruitment of female teachers (who continue to be under represented in upper basic and secondary levels), Dalits, and people from disadvantaged groups, as well as the implementation of a transparent recruitment process for teachers who are already licensed by the Teacher Service Commission.

Teacher management, including the rationalization and filling of teacher quotas at the local government level, has been flagged as a major issue as it often leaves classes without a teacher for periods of time. Many schools do not have sufficient number of teachers, with a 2018 assessment by the teacher professional development and management thematic working group showing that around 500 small schools did not have a single teacher position (Nepal, 2019²¹). An effect of the insufficient number of teachers is that junior teachers are moved to cover classes where other teachers are absent, with priority being given to continuing the higher grades.²²

Teacher management is an ongoing concern in Nepal, especially under federalism. Despite devolution, teacher deployment remains under federal central influence, and the allocation and quality of teachers is uneven between provinces. The current teacher rationalization and redeployment plan is not yet operational, as it is being revised as part of the drafting of the new Federal Education Act.

Teacher accountability is also a work in progress in Nepal. With the increased autonomy of schools and the heightened authority of local governments to deploy teachers and hire temporary and rahat teachers, it is likely that the evaluation of teacher performance, managed by headmasters and SMCs, will help make teachers more accountable. For now, it is too early to tell how accountability will be tracked under federalism, but MoEST and local governments should seriously consider measuring and reporting school performance through appropriate measures. In some countries, student report cards have proven to be a very effective localized approach to improve teacher accountability. Evidence from randomized control trials in Pakistan and Liberia on the effect of report cards on learning, found positive and significant impacts on student test scores, even when parents had low or no literacy. In Uganda, student report cards were found to be very effective at improving school management because of their effects on improved accountability (Arcia et al., 2014; Andrabi et al., 2009; Piper and Korda, 2011; Barr et al., 2012).

A National Teacher Competency Framework was developed in 2015 and includes standards relating to teachers having competencies in formative assessment, being able to assess and adapt instruction accordingly, inclusive practices, differentiation of instruction for various types of learners and student centred pedagogy (MoE, 2015). However, this has not been effectively rolled out after the initiation of the federal transition and no systematic assessments are taking place of teachers against the standards in the framework.

²¹ See also MoEST 2019e School Sector Development Program Teacher Rationalization and Redeployment Plan (2016/017-2023)

²² Interview with Dr Kamal Pokhrel at the Sudurpashchim PMSD2023

4.3 Curriculum Reform

The government is in the process of substantially revising the school curriculum. The Curriculum Development Centre, a central-level agency, is responsible for establishing the curriculum used by all public and private schools in the country from ECED/PPE to Grade 12. The National Curriculum Development and Evaluation Council, headed by the Education Minister, brings together officials from the Curriculum Development Centre, CEHRD, MoEST, universities and outside experts to develop the curriculum, accompanying guides, and learning materials for government approval.²³ In 2019, the Council approved a new National Curriculum Framework that highlights the importance of locally developed curriculum, expanded access to education and the promotion of ICT, soft skills and job skills (Bessières et al. 2019; British Council, 2020). Based on the new National Curriculum Framework, the Curriculum Development Centre is piloting a revised curriculum for Grades 1–3 and plans to revamp the curriculum for all grades within five years. There is a need for the training and orientation of teachers, SMCs, and local governments on the development and use of local adaptations to the curriculum, and of local content and teaching materials within the framework of the national curriculum.

A notable element of the National Curriculum Framework is the ability of schools to adapt the national curriculum to their own needs. The National Curriculum Development Framework allows local governments to develop local curricula including mother tongue for grade 1-8, which covers 15- 20% weightage of the total curriculum for basic education. Some local governments have taken measures to develop curricula in local languages. This is particularly important in the early grades in communities where local languages are commonly used. Learners in such communities have a critical need for curricular materials that allow for their mother tongue to be the language of instruction so they can gain the skills to facilitate transitioning to Nepali instruction in later grades.

However, while local governments may be eager to adapt the National Curriculum Framework to their circumstances, most of them need to strengthen their capacity to do so. Due to the centralized nature of the education sector up to 2015, only the central government has experience and proficiency on curriculum development, so local governments are unable to make adaptations (British Council, 2020). For effective implementation of national curriculum, teachers need to receive sufficient training on curriculum implementation and/or adaptation. As most teachers and local officials need to develop the skills related to the curriculum development, implementation/adaptation and monitoring, there is a need to take measures towards this direction.

²³ The National Curriculum Development and Evaluation Council was established in 2017 by the ninth amendment to the Education Act.

4.4 Learning Assessments and Outcomes

Since 2011, MoEST has been carrying out the National Assessment of Student Achievement (NASA) of Grade 5 and 8 students as Nepal's nationally representative, large-scale assessment exercise. A sample of students from at Grade 5 and 8 are tested in Nepali, math and science, and the results are widely disseminated. A similar test, the National Assessment of Reading and Numeracy (NARN), is used in Grade 3. Using funds from the federal government and donors the Education Review Office conducts NASA. NASA results are considered robust and are used reliably to inform education decision making.

NASA results have been consistently disappointing. The NASA 2018 results show that 70% of Grade 5 students fell below the basic level in maths, and 55% below the basic level in Nepali. This is problematic given that social returns to education come out as much higher when the analysis makes adjustments for learning outcomes rather than simply using the number of years in school (Korin, 2020). Learning outcomes for maths, language, and science show a wide variation with the maths and Nepali test scores among the high-achieving students. Some studies examining the factors that determine student performance in tests scores (Bhatta, 200; Pangeni, 2014) have identified almost 30 significant factors including school inputs and classroom practices, student-related factors, household characteristics, and context variables.

A component of the SSDP strategy for improving learning outcomes is the National Early Grade Reading Programme (NEGRP), which aims to improve the reading skills of students in Grades 1–3. Current pilot efforts are underway in 29 districts and are expected to reach 38 districts by the end of the SSDP before being extended to the rest of the country. There is evidence that the programme is having some positive impacts on children's reading, as well as on teacher motivation and parent engagement. What remains to be seen is whether scaling the programme up across the country will have the same effects as in the pilot phase, given the difficulties associated with the transition to federalism. It is important that MoEST closely monitors the expansion of NEGRP to see if the improved outcomes of the pilot can be maintained.

Since 2009, schools have employed the continuous Assessment System (CAS) at the previous primary and currently basic education level, comprising formative and summative assessments. When combined with remedial support, these assessments have been effective in improving learning outcomes in schools. Moreover, the National Curriculum Framework for School Education (CDC, 2020) provides guidelines for carrying out classroom assessments of student performance. These guidelines are published online and are given

to teachers during their in-service training courses. Teachers initially learn about how to carry out student assessments in their pre-service courses at university, in-service training, and conferences and workshops. However, classroom assessment practices are generally not aligned with the National Curriculum Framework and are often weak. Some teachers also struggle to develop and administer tests for the Continuous Assessment System that accurately measure student learning (British Council, 2020).

4.5 Findings and Recommendations

This section outlines the key findings around education quality, relevance, and outcomes and associated recommendations.

Finding 4.1: Teachers' content knowledge and pedagogical practices – Low teacher quality is one of the challenges that calls for urgent actions to address the roots of the problem with the need for reform at the pre-service level. To improve education quality, graduating teachers need to emerge with significantly higher levels of content and pedagogical knowledge. In-service training cannot replace or supplement poor pre-service training.

The federal transition has had a major impact on professional development and support structures at local and school levels. The institutional capacity for in-service training has been drastically reduced with the abolition of resource centres and positions at the local level and the many fewer education training centres. This has resulted in less teachers being trained at higher costs and teachers need to spend more time away from their classrooms to attend training.

- **Recommendation 4.1.1** – Institutionalize collaboration between government and universities delivering pre-service teacher training and the teacher professional development units at CEHRD, the Curriculum Development Centre and the provincial education training centres to improve in-service training and the links with pre-service training.
- **Recommendation 4.1.2** – Re-examine the role of university training for the transformation of pedagogical knowledge into practice among graduates. The quality of pre-service education should be enhanced to provide teachers with sufficient content and pedagogical knowledge to be able to focus on student-centred learning, as well as strategies that support teachers to increase their time on task, such as efficient classroom management techniques and pedagogical approaches that emphasize moving students to a period of sustained practice of content. Training should also provide teachers with strategies to engage lower performing students.

- **Recommendation 4.1.2** – There is a need to enhance the professional quality of teacher educators who train teachers at universities and design professional development schemes for university teacher trainers.
- **Recommendation 4.1.3** – Develop a comprehensive framework for teacher standards and competencies that includes a mechanism to monitor the quality of teaching and learning throughout a teacher’s career including pre-service training, and provide criteria to inform self/peer/external performance evaluations.
- **Recommendation 4.1.4** – The requirement for teaching basic education should be elevated to a bachelor’s degree instead of the current Grade 12 pass. Teachers should have an academic degree and a teacher professional preparation course for 1–1.5 years that includes intensive internships in classrooms.
- **Recommendation 4.1.6** – In-service training should respond to specific pedagogical issues experienced by teachers in classrooms, not to addressing generalized shortcomings during pre-service training.
- **Recommendation 4.1.7** – Introduce a mechanism to establish clusters of some local governments, depending on number of teachers, schools, regions and/or needs for providing professional development and support to teachers, and repurpose previous district education office buildings as professional development and exchange centres.

Finding 4.2: Teacher motivation and incentives - A lack of teacher motivation can be harmful for student learning. For now, teacher motivation and incentives are factors that affect students’ learning, but have not been properly addressed at the school level. Salaries are a factor to attract better entrants to the profession, but this has not been analysed in terms of improving the quality of entrants or as a mechanism for motivating teachers as salaries are not associated with performance.

- **Recommendation 4.2.1** – The dissolution of district education offices and resource centres and resource persons has left a major gap for the management of and professional support for teachers. Local governments need support from the federal and provincial governments to build local capacity to implement a new structure that provides an effective technical support mechanism. Retired teachers could be hired or teams of expert teachers could be organized by local governments to provide such support and local governments should invest in models for effective mentoring.
- **Recommendation 4.2.2** – Develop a teacher incentive and motivation component in the new ESP. This should be based on mapping the proportion of teachers under different salary levels, levels of formal education, and years of experience to gain understanding on the career path to be offered to teachers. It should also include a review of non-monetary incentives and salary increases that are linked to the

performance of teachers in the classroom and teachers' advancement of content and pedagogical knowledge.

- **Recommendation 4.2.3** – Develop a peer support scheme where teachers are assessed by veteran teachers who are considered technical leaders by their peers and students, and where teachers can ultimately serve as peer mentors and move into leadership functions. These are difficult and rigorous standards that may take time to achieve, but the experience of high-performing countries, such as Finland and Korea, has demonstrated that they are effective techniques for improving teachers' accountability, education quality, and learning among all students.

Finding 4.3: School curriculum and standards – Nepal has made significant progress reforming its school curriculum; however, some local governments are not staffed to support the schools and teachers to effectively implement it. Schools and local governments regularly monitor a comprehensive set of school level indicators that are inputted into the EMIS. However, without qualified education data specialists in local governments, there will be no adequate monitoring and evaluation system to support and hold accountable schools and teachers to implement the curriculum and meet standards for student growth. There is only limited local capacity to use the data for informing and guiding planning and implementation of education services.

- **Recommendation 4.3.1** – Explore the development of a policy that defines the role of provincial governments to monitor and evaluate schools' alignment with and achievement of curricular standards to establish systematic evaluation that create a continuous feedback loop between schools and local governments.
- **Recommendation 4.3.2** – Train teachers on developing local curricula and reflect this skill in the standards and competencies used for teacher training. Simultaneously, set up a mechanism to facilitate the mapping and exchange of high quality local curricula developed by local governments and use these in pre-service and in-service training courses alongside the National Curriculum Framework.

Finding 4.4: School and teacher management and accountability – Managerial capacity at the central and school levels is insufficient to comply with the many policy issues identified in numerous reports, evaluations, and policy recommendations undertaken since 2015. This is a consequence of having too many recommendations without a sense of priorities and sequence and insufficient or misallocated human resources.

- **Recommendation 4.4.1** - The education sector needs to define the main priorities and the sequence of policies to be implemented to be more effective in managing the system. Focusing on teacher quality and learning equity should be the main objectives that drive school and system management decisions.

- **Recommendation 4.4.2** – Strengthen the pre-service training system so that they are able to produce competent teachers. This is a long-term issue that needs to be addressed by federal authorities in collaboration with MoEST, universities, and the Ministry of Finance.
- **Recommendation 4.4.3** – Review the engagement of universities in designing and implementing more demanding pre-service training to attract better entrants to the teaching profession and elevate the pedagogical quality of basic education. Attracting more qualified and talented entrants to the teaching profession could also require offering a career trajectory or path that leads to more competitive salary packages and sets up a system of accountability and rewards to make sure teachers feel recognized or sanctioned according to clear performance expectations.²⁴
- **Recommendation 4.4.4** – For teacher management to succeed, there is a need to create a climate of personal accountability in a positive way, making sure teachers are confident that it will be noticed when they do their job well. Measuring and rewarding good performance is a key component of this approach, and it should be clear that, in most cases, the rewards can be non-monetary and still have a big effect on teachers' motivation. Experience with non-monetary incentives has worked very well in several developing countries and regions.
- **Recommendation 4.4.5** – Head teachers play a critical role in determining how teachers are helping their students reach their learning outcomes. However, most head teachers are preoccupied with administrative duties and do not serve as pedagogical and/or supervisory leaders. There needs to be a model that builds a strong link between head teachers and local governments in order to best meet the diverse needs of specific schools and students. A strong link needs establishing between schools SMCs, head teachers and local governments.
- **Recommendation 4.4.6** – The Teacher Service Commission should revise the criteria for selecting head teachers to prioritise their roles as instructional leaders as well as administrators. The selection criteria need to emphasise good academic and professional qualifications, management skills, and being energetic and motivated with strong leadership qualities. Once selected, local governments could have an appointment mechanism that matches candidate head teachers to the most appropriate schools rather than assigning them randomly. Promoted heads who have developed successful schools should be used as instructional leaders by local governments and assigned to schools with the greatest needs. They should be acknowledged and used as mentors for other head teachers.

²⁴ See Arcia et al. (2014) For examples of different approaches to teacher motivation and incentives.

- **Recommendation 4.4.7** – Confirm teacher quotas for all local governments in line with approved teacher student ratios, develop a costed rationalization plan as part of the first phase of the ESP and develop a teacher (re) deployment and rationalization plan.
- **Recommendation 4.4.8** – To improve school and teacher accountability for student learning outcomes, local governments should be supported to use the EMIS to produce school report cards that report on student and teacher performance, allowing parents and local governments to compare their schools' performance against that of other local schools.

Finding 4.5: Classroom-based assessment – The continuous assessment system is a good way to carry out classroom-based assessments of student learning. However, the guidance and management structures on the implementation of the system have yet to be updated to fully align with the federal structure including to identify the associated responsibilities of local governments. Furthermore, the capacity of teachers on using the system should be strengthened through pre- and in-service training.

- **Recommendation 4.5.1** – Assessment of student learning should be a central part of pre- and in- service teacher training, combining classroom practice with courses. This training should focus on teachers' employment of assessments as formative and summative assessments embedded in classroom practice to support them to understand the learning needs of their students.
- **Recommendation 4.5.2** – Explore the introduction of local assessment systems for local governments and schools to monitor student achievement that they can use to understand how they are performing in terms of learning outcomes, as well as which students are learning, which students are not, and why. This system should be linked to the EMIS and classroom-based learning assessments to be validated by the NASAs. The Education Review Office could be instrumental in offering provincial education development directorates (PEDDs) (linked to their role of adapting local curriculum as well), education development coordination unit (EDCUs) and local governments technical assistance through skills training such as the design of localized test items.

5. EFFICIENCY AND INSTITUTIONAL CAPACITY

This chapter analyses the efficiency of Nepal's education system and its institutional capacity. In doing so, it reviews the indicators of internal efficiency to examine access, learning equity, and education quality, and the links between education and the labour market. The chapter also reviews the evidence on the capacity of different levels of government to deliver education services, and the policies that need to be in place to ensure education quality within the context of the evolving structure of institutions under federalism.

Nepal has made notable progress on enrolment of school education. However, the indicators of entry into the education system and completion of the school education as well as the quality of education, hint at some issues that need resolving. The institutional capacity to deliver the education including the roles and responsibilities in decision making related to management and service delivery in the school education sector at central and local levels is important factor for efficient education system. Identification of gaps that affect the functioning of the education system helps planning for improvement in institutional capacity and the efficiency of education system.

5.1 Internal Efficiency in Nepal

In Nepal, only about a quarter of students who start Grade 1 complete Grade 12, suggesting problems with education quality and relevance that result in low completion rates.²⁵ To examine these trends in more detail, it is necessary to look at the indicators of internal efficiency. It begins by exploring enrolment by grade and different dimensions of equity then looks more closely at internal efficiency factors.

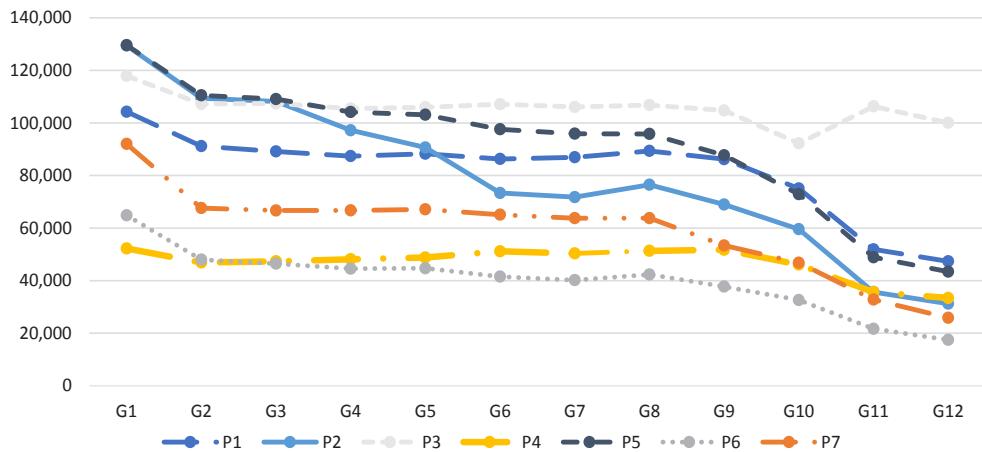
Enrolment and survival trends

The historical evidence from government data on the progression of enrolment in the seven provinces serves to understand the importance of examining the indicators of internal efficiency to look for clues on the problems that affect Nepal's education sector. For school year 2019/20, the data shows that the number of students enrolling gradually declines

²⁵ Although, as discussed further in Chapter 5, some students who enrol in TVET programmes after Grade 10 are not captured in the EMIS data presented here.

from Grade 2 to 8, except for Province 2, where enrolment declines steeply from Grades 1 to 6 relative to the other provinces (Figure 5.1). Beginning in Grade 9, enrolment steadily declines in most provinces through Grade 12.²⁶

Figure 5.1: School enrolment by grade per province in FY 2018/19



Source: MoEST Flash and Status Reports. P3 = Bagmati, P4 = Gandaki, P6 = Karnali, P7 = Sudurpashchim

The gross intake rate for Grade 1 was 124% in 2018/19 (Table 5.1), which is about 20% points higher than in similar countries in South and East Asia (UNESCO UIS).²⁷ The gross intake rate in Grade 1 represents the number of new entrants, regardless of age, expressed as a percentage of the population of the official basic education entrance age. In 2018/19, the population of children of school age for Grade 1 was about 550,000, while the number of new entrants to Grade 1 was approximately 804,000 (Table 5.1).²⁸ A high intake rate in Grade 1 is usually associated with the enrolment of over and under-age students. In Nepal, it is typically due to under-age students enrolling in Grade 1, who are subsequently pulled out of school early and re-enrolled in Grade 1 the following year. Because of the way school statistics are recorded, they are accounted for as new entrants in the following year, while in reality, they are hidden repeaters, not dropouts. There is also evidence of over-age children enrolling in Grade 1, particularly those graduating from private ECED/PPE centres, although more analysis of this trend is needed. In the case of both over and under-age students, the use of teaching and classroom resources is higher than if children entered school at the appropriate age.

²⁶ Note that the dip in enrolment in Grade 10 for Province 3 seems to be a data issue as enrolment goes up in Grade 11.

²⁷ UIS data. <http://data UIS.unesco.org/>

²⁸ Flash Report 1, 2018/19

Table 5.1: Trend of entry into Grade 1 schooling Indicators, 2012/13–2018/19

Indicator	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Gross intake ratio to Grade 1 (%)	166.9	160.6	159.4	150.6	150.3	137.1	123.9
New entrants to Grade 1 (in '000s)	1,008	948	922	855	836	820	804
Percent of over-age students in Grade 1-5 (%)	na	28.2	27.3	27.7	28.5	28.2	28.0

Source: Source: UIS : <http://data.uis.unesco.org/>and Flash Report I, 2018/19. The 2017/18 numbers are interpolations by the author

About 7.6% of students enrolled in lower basic education (Grades 1 to 5) and about 3.95% of students enrolled in upper basic education (Grades 6 to 8) are repeaters who re-enrolled in the same grade as the previous year. The number of repeaters in 2018/19 (301,000 in lower basic and almost 74,000 in lower secondary) was about 40% less for lower basic and 21% less for lower secondary compared to 2012/13 (Table 5.2):

- The proportion of primary enrollees who were repeaters has declined from 11% in 2012/13 to 7.6% in 2018/19.
- The proportion of lower secondary repeaters has declined less – from 5.19% in 2013 to 3.95% in 2018/19.

However, with the advent of liberal promotion policy, and possibly less stringent grading, the decline in repetition rates does not necessarily indicate an improvement in internal efficiency – especially given the continuing weakness in education quality.

There has also been progress in the survival rate – the proportion of children entering the Grade 1 who reach Grade 5 (the last grade of lower basic), regardless of repetition. The reported survival rate for Grades 1-5 was 73.5% in 2015/16; which is about 10% points lower than in other countries in South Asia (including Bangladesh, India, Pakistan, and Sri Lanka) and about the same as countries in West Asia such as in the Arabian Peninsula, Iraq and Turkey.

The medium term trend on dropouts has also improved. The number of dropouts from lower basic education halved from 451,000 in 2012/13 to 221,000 in 2016/17.²⁹

²⁹ Early school leavers are defined as the number of students in a cohort enrolled in a given school year who are no longer enrolled in the following school year and did not complete the grade or level of education they were enrolled in.

Table 5.2: Repetition and dropout indicators for basic (G1–8) and secondary (G9–12) schooling, 2012/13–2018/19

Indicator	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Percentage of repeaters for Grade 1-5	11.05	10.22	9.98	8.79	7.64	8	7.6	
Percentage of repeaters for Grade 6-8	5.19	4.89	4.56	4	4.4	4	3.95	
Survival rate to grade 5 (%)	60.36	70.1	76.85	73.55	
Early school leavers from Grades 1-5 (number)	451,146	375,902	275,738	197,855	221,258	

Source: UIS: <http://data.uis.unesco.org/>. Note: The 2017/18 numbers are interpolations.

In school year 2018/19, an estimated 103,000 children of lower basic school age (5-9 years old) and about 640,000 children of school age (Grades 1 to 10) were out of school (Table 5.3). These figures show that almost 4 out of every 100 (3.7%) children of lower basic level school age were out of school.³⁰ Across basic and lower secondary education, the rate of out-of-school children has decreased from 12.3% in 2015/16 to 9% in 2018/19.

Table 5.3: Out of school (OOSC) children by education level, 2013/14–2018/19

Indicator	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
OOSC Grade 1-5 school age (number)	30,866	49,866	49,332	101,223	102,304	103,384
OOSC basic and lower secondary school age (Grade 1 to 10) (number)	933,560	835,401	737,865	640,329
Rate of OOSC Grade 1-5 school age (%)	1	1.66	1.67	3.52	4	3.7
Rate of OOSC of basic and lower secondary school age (%)	12.31	11.32	10	9

Source: UIS: <http://data.uis.unesco.org/>. Note: The 2017/18 numbers are interpolations.

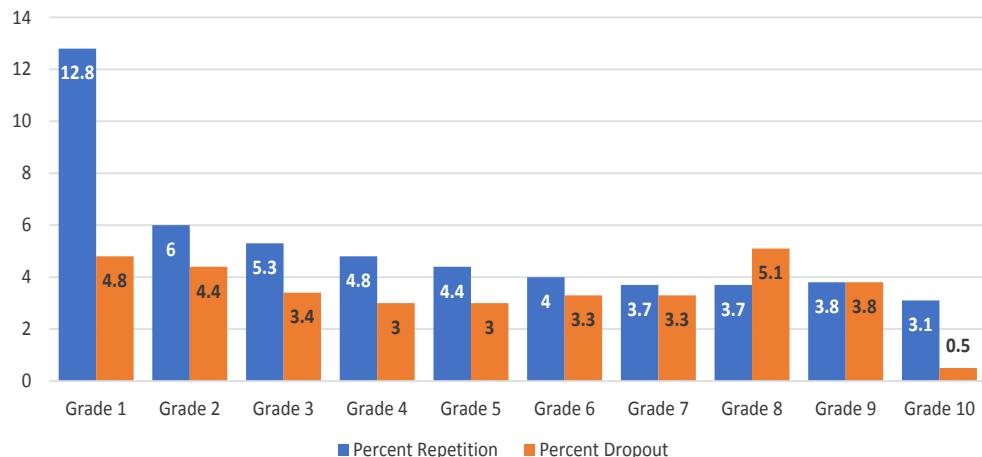
Repetition and dropout

In recent years, including in 2018/19, repetition rates have peaked at Grade 1, while dropout rates peak at Grade 1 and again at Grade 8 (Figure 5.2). The peak at Grade 1 for both repetition and dropout rates indicate that school readiness is an important issue. As mentioned previously, about 30% of children entering Grade 1 have no ECED/PPE (CEHRD, 2019a). Many of these children may be under-age and prematurely enrolling in Grade 1 because an ECED/PPE programme was not available in their area. As a result, these first graders often need to repeat that year. Some students in Grade 1 are also over-age, as

³⁰ It is important to note that the completion rate is calculated on a cohort basis for children of primary school age. Consequently, its estimation excludes over-age children.

many 5 and 6-year-olds are not yet in school and subsequently start late (UNICEF, 2016). Over-age students are at particularly high risk of dropping out. The situation improves with Grade 2, with about half as many children repeating as in Grade 1, and both repetition and dropout rates steadily decline through to Grade 5 (CEHRD, 2019a).

Figure 5.2: Repetition and dropout rates by grade, 2019/20



Source: Flash I 2018/19 (CEHRD, 2019a)

In recent years, including in 2018/19, the dropout rate began to rise slightly in the upper basic level (Grades 6–8) peaking at Grade 8. Several factors might explain this trend including the following:

- Several schools offer classes only at the lower basic level, but not at the upper basic level (CEHRD, 2018c).
- As children become older, they are more likely to have to help at home, which puts them at risk of falling behind at school. Studies of dropouts at the basic level in Nepal have found that more than a half leave school to help with household chores, particularly in rural areas (Wagle, 2012).
- Children may begin to work outside their homes or engage in seasonal migration (UNICEF, 2016).
- Affordability, because the costs of school materials, uniforms, and exam fees increase as children remain in school.
- Poor quality teaching, which means that students are unprepared to progress further in grade level, especially to pass their Grade 8 exams (UNICEF, 2016; Bessières et al., 2019).

The reasons for dropping out of school are complex and numerous and are connected to issues of accessibility, affordability, quality and the relevance of education (Sarkar, 2004, Devkota and Bagale, 2015). For example, physical distance, discrimination, and the exclusion of disadvantaged groups, including girls, can push children out of school. Families might not be able to afford the direct, indirect, and opportunity costs of education. The quality of infrastructure and teaching may be poor, while parents and children may feel the curriculum is irrelevant to their needs or values.

All these issues play a role in Nepal. In the 2010/11 National Living Standards Survey of households, 25% of respondents reported dropping out of school due to poor academic progress, which reflects inadequate quality of education (CBS, 2011). Children who fail a grade and subsequently need to repeat are at particularly high risk of dropping out (UNICEF, 2016). Twenty-two percent of respondents said they had dropped out because they needed to help at home, which indicates issues with affordability, while 17% dropped out for marriage pointing to challenges with discrimination and negative social norms for girls (Wagle, 2012). Children with disabilities, especially in rural areas, and children who speak a minority language are also more likely to drop out, which is another indicator of discrimination as well as poor accessibility (UNICEF, 2016; Aide et al., 2016). Other studies have found a high level of apathy toward education among parents and children, reflecting issues with relevance (Manandhar and Sthapit, 2012). Addressing these issues requires coordination with policies aimed at improving the rural economy, improving access to social services, and improving the productivity of poor people, all of which are related to education quality and educational attainment.

Moreover, identifying the root causes of why students drop out means acknowledging the different challenges that boys and girls face (CAMRIS International, 2017). While affordability and economic or socio-cultural challenges among parents affect the ability of both boys and girls to stay in school, other important factors are gender-specific. Older boys typically drop out due to pressure to support their families, including migrating abroad for work. By contrast, the reasons for girls dropping out include household chores, forced marriage, and menstruation. Another fundamental challenge for girls is the unequal treatment they receive from parents and communities. As indicated by the higher enrolment of boys in private schools, Nepali parents are more willing to invest in the education of sons (UNICEF, 2016; CAMRIS International, 2017; Naylor and West, 2020). As such, any effort to address drop-out rates in Nepal must address discriminatory practices.

Students in certain regions and population groups are also more likely to repeat a grade or drop out, including Dalit and Janajati children. In 2017, 20% of 5 year olds from Janajati

communities and 30% from Dalit communities were not in school, compared to less than 10% across the country at large. The proportion was particularly high for boys, with nearly 40% of 5-year-old Dalit boys out of school. Because these children enter the school system late, they face a higher risk of dropping out (Bessières et al., 2019). Students with disabilities also face a higher risk. As reported in the 2018/19 Flash report, only about one-third of children with disabilities transitioned from lower to upper basic education (Grade 5 to Grade 6). This suggests that schools are unable to accommodate these students in higher grades, which in turn suggests that schools need to create an enabling school environment for students with disabilities (especially girls) to learn alongside their peers. This will not be an easy task in the short run, but experiences in middle income countries indicate that it requires a sustained long term effort. This is more of a political and cultural decision, than a budget decision. Finally, more than a half of out-of-school children in Nepal reside in the Tarai (Magrath and Torrano, 2020). Other factors increase the risk of dropping out in the Tarai region, including overcrowded schools (the Tarai has the highest student–teacher ratios in the country) and long distances to schools in remote, rural Tarai communities (Bessières et al., 2019).

After peaking in Grade 8, the dropout rate falls significantly in the lower secondary level, especially in Grade 10. The repetition rate also falls slightly. This is at least partly due to a switch in 2016 to a letter-grading system in Grade 10 exams, which has had the effect of reducing the number of students who fail (MoEST, 2019d).

Many students do not make the transition from basic to secondary education (Grade 8 to Grade 9), because they tend to enter the labour force and the curriculum is less relevant to their lives, as explained previously under the reasons for dropping out. While the survival rate to Grade 8 stood at nearly 80% in 2019/2020, the survival rate to Grade 10 was only about 60%, which means that 40% of students either repeat or drop out of school before leaving school after completing Grade 10. Even fewer students transition to higher secondary (Grades 11 and 12), with the survival rate from Grade 10 to Grade 12 reaching only 24%. It should be noted that some of these students leave at Grade 10 to enrol in TVET programmes, which is not captured in the EMIS. No data for repetition rates are provided for the higher secondary level, because students are allowed to take Grade 12 classes even if they fail Grade 11. However, there is evidence that students continue to drop out of school even in Grade 12. According to the National Examination Board, in 2017/2018, the number of students sitting for exams in Grade 11 was about 333,000 and about 299,000 for Grade 12, which reveals a gap of about 34,000 students or 10% of 11th graders, who likely dropped out (MoEST, 2018).

Many girls drop out of secondary school because of early or forced marriage. As already mentioned, in 2010/11, 17% of respondents had dropped out of school for this reason (CBS, 2011). Girls in Nepal tend to marry at a younger age than boys. As reported in the Nepal Demographic and Health Survey, 5% of girls in 2011 married before age 15, and 29% were married between the ages of 15 and 19 years, versus only 7% of boys (CBS, 2020). The risk of dropping out because of marriage is higher in the Tarai, where cultural factors push girls to marry younger (Wagle, 2012). However, while marriage disproportionately affects female students, overall, girls are more likely than boys to finish school with the survival rate to Grades 8, 10 and 12 higher for girls than boys (Table 5.4).

Table 5.4: Survival rates by sex, 2019/20

Grade	Girls	Boys
Survival rate to Grade 8	79.6	79.1
Survival rate to Grade 10	61.6	59.1
Survival rate to Grade 12	24.6	23.4

Source: Flash I Report 2019-20

The transition rate of students from the lower to upper basic level in Nepal (Grades 5 to 6) was 82.4% in 2015/16 (Table 5.5). This transition rate is defined as the number of students admitted to the first year of upper basic (Grade 6, lower secondary under Nepal's previous education structure) expressed as a percentage of the number of students enrolled in the final year of primary education (Grade 5) in the previous year. The current transition rate is very much on par with the rates in neighbouring countries in South Asia, but lower than in East Asia. As education quality increases, and as the curriculum becomes more relevant to the lives of students, educational attainment is likely to increase. The completion rate for the upper basic education (Grades 6 to 8) stood at 70% in 2015/16.³¹

Table 5.5: Transition to lower secondary (grade 6-8) and completion rates, 2012/13–2015/16

Indicator	2012/13	2013/14	2014/15	2015/16
Transition rate from lower to upper basic (Grades 6-8)(%)	87.51	87.3	87.47	82.38
Completion rate, lower basic (Grade 1-5) (%)	..	76.23	79.70	83.16
Completion rate, upper basic (Grade 6-8) (%)	..	65.57	67.63	69.68

Source: UIS – <http://data UIS.unesco.org/> (2014/15 numbers are interpolations)

³¹ A completion rate at or near 100% indicates that all or most children and adolescents have completed a level of education by the time they are 3 to 5 years older than the official age of entry into the last grade of that level of education.

The lower basic completion rate tends to be correlated with levels of family incomes (Table 5.6). In 2015/16, the lower basic completion rate for students in households in the lowest 20% of income – also referred to as households in extreme poverty, was almost 82%, while the lower basic completion rate of children from households with the highest 20% of income was almost 95%. This 13 percentage points gap between the lowest and highest income quintiles shows the differences in educational attainment associated with poverty. Such a gap showcases the need to monitor enrolment equity, learning equity, and the incidence of poverty, to inform how to reduce the gap in educational attainment between the poor and the non-poor. Obviously, such a difference has an impact on targeting of social and health programmes – such as school lunches and micronutrient interventions, which should help keep children in school and improve educational attainment.

Table 5.6: Lower basic (Grades 1-5) completion rates by income quintiles, 2013/14 and 2015/16

Indicator	2013/14	2015/16
Completion rate, Grade 1-5, poorest income quintile (%)	73.75	81.75
Completion rate, Grade 1-5, second income quintile (%)	67.17	80.92
Completion rate, Grade 1-5, middle income quintile (%)	73.65	76.18
Completion rate, Grade 1-5, fourth income quintile (%)	80.11	83.96
Completion rate, Grade 1-5, the richest income quintile (%)	91.15	94.68

Source: UIS – <http://data UIS.unesco.org/>

Education quality as an indicator of internal efficiency

The quality of education affects dropout and repetition rates, and is itself a measure of efficiency in the education system. As mentioned in Chapter 1, there is evidence that the quality of education in Nepal is lacking. This is reinforced by the country's learning-adjusted years of schooling (LAYS), a measure of education outcomes developed by the World Bank. The number of LAYS indicates both the quantity and quality of a child's education, incorporating the number of years a child can expect to be in school by their eighteenth birthday, as well as test scores that have been harmonized to allow for country comparisons. In 2017, the expected years of school for a child in Nepal stood at about 12 years – not very far below the level in more developed countries, reflecting improvements in school enrolment in Nepal. However, test scores in Nepal come in the bottom 50% of all countries in the world. The country's harmonized test score in 2017 was 369 with a score of 400 corresponding to minimum proficiency in the Programme for International Student Assessment (PISA), the world's largest testing programme (World Bank, 2020c). As a result, Nepal's learning-adjusted expected years of school is only about 7 years – significantly less than in more advanced countries where children can expect 12 or more learning-adjusted years of schooling.

5.2 Institutional Capacity

This section explores the issues related to the roles and responsibilities in decision making on management and service delivery in the school education sector at central and local levels, and identifies gaps that affect the functioning of the education system, and its coverage and performance.

The transition to the new federal setup

Two basic references were used to assess this capacity: The Status Report for 2017/18, which documents the implementation of the SSDP (CEHRD, 2018c), and the Local Government Operation Act (LGOA) (GoN, 2017), which is the legal framework for the operational management of the education system under federalism. The Act describes the role of local governments in providing education, and by inference, the role of MoEST. The Act lays out certain significant operational changes from the previous system, some of them directly related to the quality of education (Table 5.7). The most basic function of the system – opening schools, which addresses the key issue of access equity, is now in the hands of local governments, while it was managed at the central level before federalism.

Another important role is the authority to conduct examinations, which was the responsibility of district offices at the basic level and central offices for secondary levels. The responsibility of conducting basic level examinations has now been transferred to local governments. The oversight of system operations, a critical factor in ensuring quality and equity, has also been transferred from the central to the local government level.

The functions that remain centralized or managed above the local level include teacher certification and licensing, curriculum development and reform, the transfer of teachers, and secondary level examination and certification.

Table 5.7: Transfer of authority for education management in 2017

Function	Previous to 2017 Authority under Education Act	Current Authority under LGOA 2017
Opening new schools:	Central and district level	Village or municipal council
Conducting examinations:	District level for basic level exams, central level for secondary exams	Basic level exams: village- or municipal-level executives. Secondary: central level
Feedback on local-level policies:	National Education Council	Village or municipal council
Auditing education quality:	Education Review Office (ERO) at centre	ERO and Village or municipal-level executives
Oversight and management of schools:	District education councils	Village or municipal level education committees
Policy preparation for educational development:	MOE, District education councils	MOE, Village or municipal executives
Selection and promotion of teachers:	Teacher Service Commission	Teacher Service Commission
Teaching license:	Teacher Service Commission	Teacher Service Commission
Curriculum modifications	Curriculum Development Centre (CDC)	CDC and LG (for local curriculum)
Management, monitoring, and operation of schools:	School management committees	Village or municipal executive/ school management committees
Appointment of teachers:	School management committees	School management committee/LG
Transfer, or merger of public schools:	Central Government of Nepal	Village or municipal executive and council
Transfer of teachers:	District, regional, or central offices	Central level

Source: Adopted from Neupane et al., 2018

From the point of view of institutional capacity, the Status Report for 2017/18 (MoEST, 2018c) clearly states the major constraints and areas for improvement related to the operations of the previously centrally executed functions, such as the opening of new schools, planning and implementing examinations, school audits and inspections, and policy development and oversight. The Report identified the two major improvements that needed to be made to increase institutional capacity:

- ensuring that collaboration, coordination, and communication between federal, provincial and local governments is prioritised in the functioning of the education system, and
- strengthening local government capacity for education service delivery.

To accomplish these major improvements, the Status Report correctly identified the following key areas for action:

- The clear demarcation of roles and responsibilities between local, provincial and central levels of government in implementing policy and delivering services.
- Providing adequate managerial and policy training to SMCs, including the school heads.
- A clear message to local governments on the need to maintain access and learning equity, as well as student learning, as the overarching goals of the education system.

The provincial government as potential support hub

Whereas the mandates of the federal government and the local governments have been defined clearly within the school education, the roles and responsibilities of the seven provincial governments seems less defined. The abolition of district education offices has left a gap to support training, pedagogical supervision, monitoring and the management of examinations among other key functions that require to be coordinated across local governments. Provincial governments have the potential to be the prime agency for capacity enhancement of local governments.

5.3 Findings and Recommendations

Finding 5.1: Poor education quality is compromising internal efficiency - Even as dropout and repetition rates are somewhat reducing, the poor quality of education indicates ongoing challenges with internal efficiency. Any effort to address the internal efficiency of the education system will fall short unless the quality of education improves.

- **Recommendation 5.1.1** – The government needs to focus on education quality in order to reduce repetition and drop out of students, which would increase educational attainment, and eventually increase the productivity of the system. Focusing on the components of education quality as discussed earlier, i.e. teacher pedagogical and content knowledge, school and teacher management, motivation and incentives, and using learning outcomes as the overarching objective should improve internal efficiency over time.

Finding 5.2: Hidden repetition, over-age enrolment and dropouts – The indicators of net intake to Grade 1 point to the insidious and costly problem of hidden repetition whereby children under the official age are enrolled with the expectation of repeating the grade the following year. However, the prevalence of repeaters, mainly in Grade 1, leads to the inefficient double use of teaching and school resources. These children should be identified and directed to ECED/PPE before they enrol as under-age students. A remedy for the issue of over-age enrolment is encouraging families to enrol their children at the proper age.

Dropouts are a major issue across Grades 1–12. For every 100 students entering Grade 1, 73 complete lower basic and fewer than 25 graduated from secondary school (at Grade 12) (CEHRD, 2020b). Nepal has a low capacity to provide secondary graduates with decent jobs, this is a serious economic issue as about 60% of each cohort enter the labour force prematurely and are underprepared.

- **Recommendation 5.2.1** – Purposeful repetition should be measured and monitored by the EMIS as it represents a significant drain on schools' resources. This would be a first step in dealing with the operational aspects of classifying Grade 1 children who leave early and then re-enrol in the same grade the following year. In addition, MoEST has to offer families the alternative of enrolling these children in ECED/PPE.

Finding 5.3: Institutional capacity – There is a severe human resource constraint in both the number and capacity of local government staff, with a significant number of governments not yet having key education officers. Within this, pre-existing disparities across provinces are further amplified. Furthermore, the role of the EDCUs and provincial governments needs to be clarified and formalized to allow the envisioned coordination, cooperation and coexistence for undertaking shared responsibilities across the tiers of government. This has created much conflict and demotivation, which in turn has hindered positive collaboration at the local government level.

- **Recommendation 5.3.1** – Local education plans and budget allocations need to link directly to school improvement plans and be flexible to the diverse needs of individual schools. School specific needs have to be considered versus blanket decisions that every school needs the same resources.
- **Recommendation 5.3.2** – Develop a plan to expand local government education units to meet the scope of their responsibilities for the education sector. Provincial governments can help build the capacity of local governments to empower them to perform their roles.
- **Recommendation 5.3.3** – The new ESP needs to articulate a specific approach to capacity development for the short, mid and longer terms, including clear responsibilities of provincial government in terms of providing technical support, which should be based on the findings of a needs assessment.
- **Recommendation 5.3.4** – Local governments have been rapidly given very large responsibilities for school education with no transitional phase for developing their capacity. Appropriate measures must be taken to build human and institutional capacity within the local governments to enable them to handle the roles and responsibilities assigned to them.

6. ECONOMIC AND SOCIAL IMPACTS OF EDUCATION

This chapter discusses the extent to which the education system of Nepal contributed for economic and social development. It begins with the analysis of the linkages of education to the labour market and reviews the contribution of education to economic growth as well as social development. The analysis identifies gaps and finally it provides some recommendations for the next education plan to mitigate the identified gaps.

6.1 Education's Links to the Labour Market

Labour market data, structure and education background

The declining level of fertility of women of childbearing age over the past 30 years has resulted in Nepal having a relatively larger working age population. It's 2018 working population was 20.7 million out of which 7.1 million were employed and 908,000 unemployed (Table 6.1) while defining employment as work performed for others for pay or profit (CBS and ILO, 2019). Labour force participation is thus low, at only 38.5% of persons of working age. And women participate at a much lower rate than men, with only 26.3% of women of working age being part of the labour force in 2018 compared to 53.8% of such men. While there are more women of working age – 125 women per 100 men, only 59 women are employed per 100 men. There are thus gender inequalities in the labour market.

Table 6.1: Basic employment indicators (2017/18)

Employment indicators	Total	Male	Female	Urban	Rural
Working-age population (15 years and older) ('000)	20,745	9,208	11,537	13,293	7,452
Labour force ('000)	7,994	4,958	3,036	5,543	2,452
Employed ('000)	7,086	4,446	2,640	4,903	2,184
Unemployed ('000)	908	511	397	640	267
Labour force participation rate	38.5%	53.8%	26.3%	41.7%	32.9%
Employment to population ratio	34.2%	48.3%	22.9%	36.9%	29.3%
Employment rate	88.6%	89.7%	87.0%	88.5%	89.1%
Unemployment rate	11.4%	10.3%	13.1%	11.5%	10.9%

Source: CBS and ILO (2019)

The International Labour Organization (ILO) calculates the labour force participation rate (LFPR) for Southern Asia (including Nepal) at 54.2%, while it is 62.2% for the Asia-Pacific region (ILO, 2018a). India has a rate of 51.6% and Bangladesh 58.3% – all substantially higher than Nepal's 38.5%.³²

The majority of Nepal's working age population are thus not in paid employment, or in the process of seeking employment. Not surprisingly, the participation rate is lower in rural than urban areas. Most Nepalese are 'employed' producing goods and services for their own use. The 2017/18 Nepal Labour Force Survey (NLFS, CBS and ILO, 2019) found that approximately 12.3 million people of working age reported to have been involved in producing goods for their own use in the 30 days prior to the interviews. This indicates an undeveloped formal economy with limited transformation out of agriculture and subsistence into more productive economic activities.

Using the definition of LFPR from previous surveys; i.e. including subsistence activities, gives Nepal a higher LFPR than comparable countries (Ruppert Bulmer et al., 2020) at 80.3% for men (which is similar to other countries), but 74.9% for women, which is higher than any other country in the region.³³ The difference between the two LFPR rates is a clear illustration of the dominance of informal and low productivity activities in the Nepalese economy.

The 2017/18 Nepal Labour Force Survey further emphasises the challenges of Nepal's labour market, namely the high rate of 'labour underutilisation'. The composite indicator of labour underutilisation suggests that 39.3% of those with some kind of attachment to the labour market were underutilised in 2017/18 (CBS and ILO, 2019: p.17). The numbers are even more discouraging for youth, and especially for women. Unemployment is highest among young people, and while they constitute about 48% of the labour force, they represent 69% of the unemployed. Table 6.2 shows the employment to population ratio (EPR) and LFPR for Nepal and three age groups.

³² The 2017 ILO statistics illustrate the necessity of having changed the statistical employment definition. Nepal apparently has an LFPR of 82.9%, much higher than Singapore's, which is 67.7%.

³³ This statistic (Ruppert Bulmer et al., 2020) shows quite some deviation compared to the LFPRs in India and Pakistan of 23-24%, and Bangladesh of roughly 35%.

Table 6.2: Age and employment

	Employment to population ratio			Labour force participation rate		
	Male	Female	Total	Male	Female	Total
All ages (above 15)	48.3%	22.9%	34.2%	53.8%	26.3%	38.5%
15–24 years	31.2%	15.4%	22.5%	38.9%	20.3%	28.6%
25–34 years	66.0%	32.3%	46.1%	74.9%	37.6%	52.8%
34–44 years	71.0%	33.1%	49.1%	76.8%	36.7%	52.8%

Source: CBS and ILO (2019)

Overall, there are more jobs of higher than average quality now than there were over a decade ago which has resulted in the improved welfare of workers (Ruppert Bulmer et al., 2020). While almost three-quarters of men aged 25–44 years participated in the labour force in 2017/18, this figure is only a little more than one third for women. Youth between 15 and 24 years are less integrated in the labour force, and relatively few are employed. As some youth may still be in school or undertaking vocational training, this is not necessarily a serious concern. However, many young people in Nepal are ‘not in education, employment or training’ (NEET).

According to ILO statistics, Nepal’s NEET rate is 35.3%, which is much higher than other countries in the region, and well above the averages for both Asia, and low income countries (Table 6.3). Interestingly, India and Bangladesh have the highest proportion of women who are NEET. This suggests that cultural and institutional barriers limit female participation in labour markets.

Table 6.3: NEET rates for Nepal, 2017/18

NEET ratios (age 15–24)	Male	Female	Total
Nepal	21.5%	46.6%	35.3%
India	14.3%	48.3%	30.4%
Bangladesh	9.8%	44.6%	27.4%
Sri Lanka	16.8%	35.4%	24.7%
Asia and Pacific	13.2%	36.3%	24.2%
World: Low income countries	13.1%	26.0%	19.5%

Source: Compiled from ILO statistical database³⁴

While the NEET rate is normally seen as a labour market indicator, it is also an implicit indictment of the education system. People are considered to be in education if they are in formal or non-formal education, but not if they are in informal learning (ILO n.d.). Informal learning is defined as forms of learning that are intentional or deliberate but not institutionalised. It is thus less organised and less structured, and not considered as education for calculating the NEET rate.

A high NEET rate indicates that the formal and institutionalised part of vocational education is underdeveloped, and that much of the training in Nepal happens in families, work places, local communities and daily life. While this may provide individuals with skills sufficient to enter local professions, it does little to improve the productivity of individuals and of society. NEET persons do not have access to opportunities to improve future employability through investment in skills, nor do they gain experience through employment. As a result, it is a group that is particularly at risk of long-term exclusion from the formal labour market.

Labour market structure

Most Nepalese still work in agriculture with it being what three out of every four women do for a living (Table 6.4). Comparing 2016 figures to 2020 estimates shows a small but perceptible movement from agriculture into manufacturing and services. This is to a significant degree due to growth in the tourism sector, that in 2016 employed about 8% of the labour force.

Table 6.4: Percentage of workforce by sector, 2016 – 2020 (estimate)

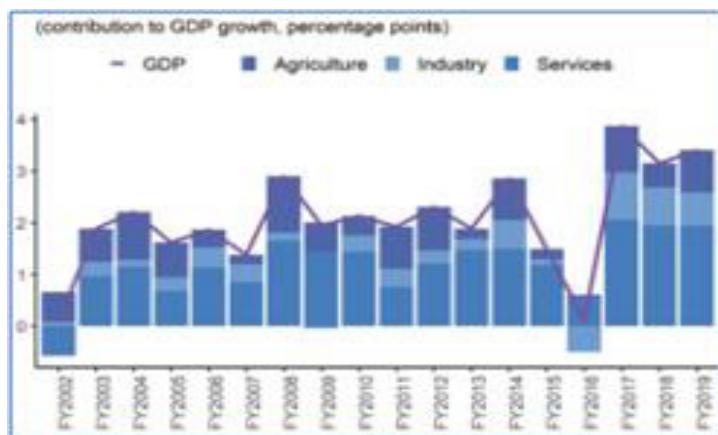
	2016	2016	2020	2020
	Male	Female	Male	Female
Agriculture	67.0%	64.5%	52.3%	74.4%
Manufacturing	7.7%	7.9%	10.6%	5.8%
Construction	6.0%	6.9%	12.5%	2.3%
Mining, quarrying, electricity	0.5%	0.5%	1.0%	0.2%
Trade, transport, accommodation, admin services	11.5%	12.6%	17.1%	9.0%
Public administration and other services	7.3%	7.5%	6.6%	8.3%
Total	100%	100%	100%	100%

Source: ILO statistics³⁵

³⁵ This covers people of working age in formal employment and/or self-employment

This corresponds well with the growth profile of Nepal's gross domestic product (GDP), as the services sector has been a key engine for growth over the last three years (Figure 6.1). This movement into more productive sectors is as expected; but the movement has been slow.

Figure 6.1: Sectoral contributions to GDP growth, Nepal 2002–2019



Source: World Bank Group, 2019

The gradual move of employment into more productive sectors has resulted in more rural-urban migration for jobs, especially in company-based wage employment. This has largely been focussed in the Kathmandu Valley and has included greater diversification across sectors and increased economies of scale with the move from self-employment to cooperative production in urban centres (Ruppert Bulmer et al., 2020).

However, almost two thirds of all employment is still in the informal sector, including work in enterprises that are neither incorporated nor registered with authorities. A private household enterprise selling and/or trading goods in their locality is a typical example of the latter.

Table 6.5: Formal and informal employment

	Male	Female	Total
Formal	40.3%	33.5%	37.8%
Agriculture	1.3%	1.2%	1.3%
Non-agriculture	39.0%	32.3%	36.3%
Informal	59.7%	66.5%	62.2%
Agriculture	14.0%	33.6%	21.2%
Non-agriculture	45.8%	32.9%	41.0%
Total	4,446,000	2,640,000	7,086,000

Source: CBS and ILO (2019)

One third of all working women work in informal agriculture. This figure reinforces the impression of a highly gender-segregated labour market, with women dominant in low productivity, informal activities – whether working for others or themselves. If subsistence activities are also included in employment, of the 15.7 million employed workers in 2017/18, as many as 93% had informal jobs (defined as not covered by social security) (Ruppert Bulmer et al., 2020:27).

The 2018 Nepal Labour Force Survey also covers activities that produce goods for own final use. In many countries, this is an important part of total production and is key to sustaining the livelihoods of many households. Approximately 12.3 million individuals (or 59.3% of people aged 15 years and above) were involved in at least one such activity in Nepal in 2017/18. About 57% of fully employed females and 41% of fully employed males were also working on producing goods for their own final use.

The education background of the labour market

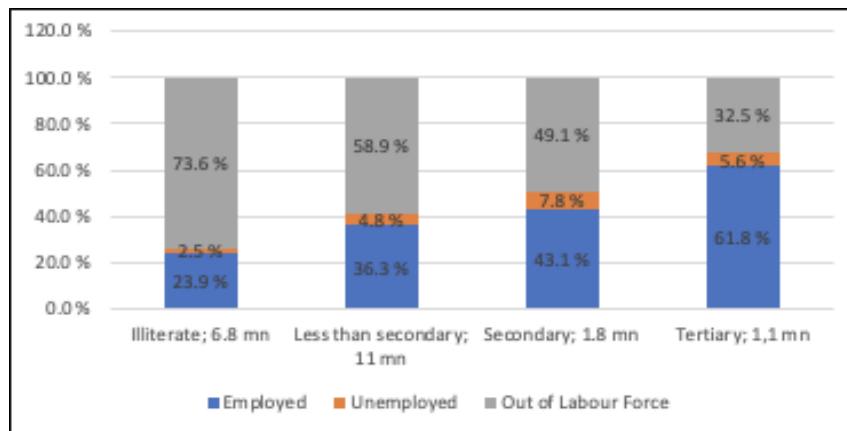
Approximately 79% of Nepal's working age population had not completed secondary education to Grade 12 at the time of the 2017/18 Nepal Labour Force Survey. This is a key statistic for understanding the slowness of economic transformation from subsistence agriculture to higher productivity activities. The labour force generally lacks the basic skills needed to venture into activities that yield a higher return per hour's work.

As explained above, labour force participation is generally low in Nepal, but increases with education levels (Figure 6.2). ³⁶ Despite this, almost a third of those with tertiary education were not in the labour force in 2017/18. Also, there was a distinct gender difference at

³⁶ Note that the NLFS classifies a person as employed when he/she has worked for at least one hour during the reference week.

this and other education levels. While almost 74% of males with a tertiary education had joined the labour force, only around 56% of such women had done the same.

Figure 6.2: Education and employment status – working age population



Source: CBS and ILO, 2019

In 2017/18, the unemployment rate was higher for men, although it is not clear why. The NLFS found that 92% of those with tertiary education were employed in the formal sector. People with secondary education were split, with about a quarter working in informal enterprises and three quarters working in the formal sector. Approximately 46% of those with less than secondary level education worked in the formal sector, while only 16% of those classified as illiterate and those with no schooling worked in the formal sector.

Table 6.6: Education level, employment and gender

	Labour force participation rate			Unemployment rate		
	Male	Female	All	Male	Female	All
Total population	53.8%	26.3%	38.5%	10.3%	13.1%	11.4%
No secondary	51.6%	23.7%	35.5%	10.0%	13.0%	11.1%
Secondary	57.0%	43.8%	50.9%	14.0%	17.1%	15.3%
Tertiary	73.9%	56.4%	67.5%	8.7%	7.7%	8.4%

Source: CBS and ILO, 2019

6.2 Contribution of Education to Economic Growth

Relevance of education to the labour market

Nepal's economy is not robust enough to absorb all the incoming entrants to the labour market. Nepal's population is becoming more urbanized, and with this shift in location, education takes on a major role, because urban labour needs higher levels of manufacturing and soft skills. However, due to the low absorptive capacity of the domestic job market, many Nepalese now work abroad, principally in India, Malaysia and Persian Gulf countries. In 2018, 3.8 million Nepalese were working for wages inside Nepal while 2.8 million were working in other countries. Most migrant workers are male, and about two-thirds of them are under 35 years of age. About 85% of these migrant workers have not finished secondary education to Grade 12 (Ruppert Bulmer et al., 2020; Sigvaldsen and Ndaruuhutse, 2020).

Remittances are very important to the Nepalese economy, and accounted for almost 29% of GDP in 2017, which is three times the contribution of foreign aid. Nepal ranks fifth in terms of the contributions of remittances to GDP around the world (Maher, 2018). About 3.5 million Nepalese workers send money from abroad, especially from Malaysia, Qatar and Saudi Arabia, and nearly 70% of those workers are in unskilled positions. Their motivation to migrate can be explained by the fact that about 40% of them were unemployed in Nepal.

Remittances help families meet their food and non-food expenditure. They are also strongly associated with increased education, better access to health services, and a 20-percent reduction in poverty to 2018 (Maher, 2018). Remittances behave as an export commodity for Nepal, with human labour as the exported item and the revenues from the export being in the form of remittances. Viewed in this way, Thiemme (2005) suggests that remittances may contribute to an over valuation of the Nepalese rupee, which would make Nepalese products less competitive in the region. Moreover, relying on remittances seems to have induced some laxity in policies aimed at attracting foreign direct investment to Nepal (Thiemme, 2005; Bansak et al. 2015; Sapkota, 2013).

Still, the benefits have had positive effects on alleviating poverty and seem to be strongly linked to net reductions in the percentage of the population living in extreme poverty. The proportion of the population living in extreme poverty declined from 46% in 1996 to 25 % in 2011. About 40% of that reduction was linked to remittances.³⁷ Intuitively, unless

³⁷ Calculated as the percent of the population who live with less than \$1.9 per person per day. The percent of people under the extreme poverty line is probably increasing significantly due to the COVID-19 crisis due to the low levels of economic activity in the Gulf countries, because of the pandemic and the drop in oil prices.

Nepal's economy begins to grow its internal demand for labour, the skills the education system produces would slowly align with the needs of the international labour market, especially in construction and labour-intensive services.³⁸ Such transformation is already happening as there seems to be an increased demand for TVET, which is currently being discussed within the Government of Nepal.

Nepal's domestic job market has shown a healthy growth of 7% per year on average over the past five years, distributed across different levels of skilled labour. Manufacturing and hotels and restaurants have increased their demand for labour significantly in recent years, but with lower labour productivity than other sectors of the economy. In contrast, finance, real estate, transport, and communications have shown bigger gains in labour productivity and, by inference, offer better paying jobs. However, the negative impact of the COVID-19 crisis in the Gulf countries will most likely increase the domestic pressures for employment, because a high percentage of migrant workers will come back home (Ruppert Bulmer et al., 2018; Sigvaldsen and Ndaruuhutse, 2020). The impact of their return on employment and wages is yet to be determined.³⁹

The weakest link between education and employment in Nepal is in the large segment of the job market where the required skills and labour productivity are low. In 2019, about 68% of employment was concentrated in informal jobs with low labour productivity with 30% in farming, 16% in construction, 14% in retail and 8% in manufacturing. About 75% of these workers have less than secondary education (to Grade 12). However, a substantial number of employers need workers with skills in marketing, management and technical areas. In that regard, many of the returning workers may meet this need because of skills acquired while working abroad.

Growth in the domestic labour market is currently constrained by low access to investment and operating capital for small companies, and the excessive regulation of formal employment. As a result, it is very difficult for Nepalese entrepreneurs to compete with low-cost producers in India and Pakistan. All the same, employers would like access to better-skilled labour to make them more competitive. Therefore, there is a clear connection between education and skills and potential employment, even in difficult labour markets.

A critical issue for employment growth is the lack of opportunities for women, who tend to be displaced by men when there are strong pressures in the unskilled labour market.

³⁸ As in the case of Mexico and countries in Central America, remittances from workers in the United States have not produced investment on a large scale, primarily because these flows affect mainly consumption. There is evidence that remittances reduce poverty and increase the construction of homes and the creation of microbusinesses, but the impact on direct investment is small (Desilver, 2018)

³⁹ The rest of this section is based on Ruppert Bulmer et al., 2020

Analysing the multi-pronged approach to increasing the number of jobs for women is beyond the scope of this analysis, but involves the four interrelated paths of:

- enhancing the labour productivity of small and medium-sized companies
- reforming labour market policies and the business environment
- preparing women and youth for the entrepreneurial job market
- improving information on the functioning and trade-offs in the migrant job market, and developing a better financial market for remittances to improve their use in domestic investment.

The employability of education system leavers and graduates

Statistics point to the difficulties that many young Nepali people have finding work, with Nepal's NEET rate being a worrying indicator. That 35% of young people between the ages of 15 and 24 years are not in any form of employment, study, or formal training does not bode well for exploiting the country's demographic dividend. Approximately 69% of job seekers in Nepal are between 15 and 34 years old. In 2017/18, 15–24 year olds accounted for 38.1% of the unemployed suggesting that “young Nepalese people who left school early found it difficult to enter employment” (CBS and ILO, 2019).⁴⁰

It is not only in Nepal that the transition from school to labour market is a challenge. According to an ILO regional study of Asia and the Pacific, while young people have increasingly higher levels of education, “even the more educated youth consider that a future of stable, well-paid employment is a rare find” (Elder, 2014:1). The lesser educated have an even harder time finding jobs with decent incomes, often leading them to look for employment overseas.

The survey that the ILO (2018a) report is based on lists several findings of relevance for Nepal (Elder, 2014:2):

- Many young people are not benefiting fully from the educational system. The principal reasons for never attending school or leaving school early are ‘economic reasons’. The implication is that household poverty will perpetuate itself.
- Results show that investing in education brings positive returns to youth in terms of wages and access to ‘better’ jobs. A young person with a tertiary-level degree can earn more than double the average monthly wage of a young person without formal education (and more than five times that of ‘own-account workers’⁴⁰). A recent USAID study found that each additional year of schooling of young wage and salaried

⁴⁰ Own account workers work with one or more partners, hold the type of job defined as a self-employed, and do not continuously engage any employees to work for them.

workers in Nepal provided them with an average of a 6.1% higher wage (USAID, 2020b). Workers with an undergraduate degree earned a 10% wage premium whilst those with a master's degree earned a 15% wage premium. Despite this, with the cost of capital in Nepal standing at 12%, only investment in a master's degree provides positive net returns.

- Countries in the Asia-Pacific region have an average youth unemployment rate of 14.2% with Cambodia having the lowest rate (3.8%) and Nepal the highest (28.9%).⁴¹
- The youth labour market in the Asia-Pacific region is profoundly influenced by gender issues. Cultural traditions that dictate the roles of women are evident in the sectoral distribution of employment as well as in the lower labour force participation rate for women. USAID (2020b) found a higher average rate of return for female workers compared to male workers, reflecting educational attainment by gender with a higher proportion of male respondents having lower educational attainment than female respondents. Some indicative reasons for this include women with better education being more likely to look for employment outside of agriculture and educated female workers tending to have better occupational attainment levels compared to male workers. These results match global trends.
- The qualifications mismatch was high among young workers in the five surveyed countries in USAID (2020b). Over 50% of young workers in Bangladesh, Cambodia and Nepal were undereducated for their assigned work. This reflected the higher shares of youth with lower basic-level education or below in the three countries.

The 2015/16 school-to-work transition survey from Nepal (ILO, 2016) added several interesting findings:

- The results did not show a significant correlation between the levels of education and a young person's transition to the labour market. Tertiary and general secondary educated youth both needed an average of 6.9 months to complete the transition to a first stable or satisfactory job. The corresponding figure for lower basic educated youth was 8.1 months.
- Two-thirds of Nepalese students (66%) showed a preference for future work in the government/public sector. They wanted secure jobs in government; but this sector has a limited ability to absorb many young people.
- About 90% of young workers were involved in Informal employment, with similar rates for young men and women.

⁴¹ These figures are based on a 2013/14 survey (Elder, 2014). The more recent NEET numbers do not indicate major changes, rather, in the case of Nepal, they have worsened.

The ILO country study for Nepal (Serrière and CEDA, 2014:42) found that "...the level of education does matter in terms of labour market transition, although its influence is not as clear as it might be." About 64% of 15–29 year olds with tertiary (non-vocational) education, had made the transition to stable employment. Those with less than lower basic education had an almost similar completion rate to stable employment (62%). However, for youngsters with a secondary education and those with a post-secondary vocational training, the numbers were less encouraging. For both groups, less than half (47% for both) had transited into stable employment.

The labour market in Nepal does not seem to work very well for its youth. Another indication of the difficulties is that Nepal was "the only country of the 27 in which the School to Work Transition Survey was run in 2012 or 2013 where more working youth expressed dissatisfaction than satisfaction⁴² with their jobs" (Serrière and CEDA, 2014:38).

The change in the definition of employment used in the 2017/18 Nepal Labour Force Survey (CBS and ILO, 2019) makes comparison with more recent employment statistics difficult. There are, however, few indications of any major improvement in the employment situation of school leavers and graduates. This is perhaps best seen in the NEET ratio and the large numbers of labour migrants.

Future labour market needs in Nepal

A 2017 Overseas Development Institute study (Lemma et al., 2017:2) outlined four main sectors for future growth in Nepal of tourism, ICT, light manufacturing and agro-processing. These were identified based on their potential to create productive jobs, to promote structural transformation away from agriculture into higher-value services and industry, and to re-orientate the labour market towards export markets. The study found that the majority of the companies had to spend significant resources to provide on-the-job training to workers as most of them lacked core skills.

The 2017 study found that the fastest growth in recent years had been in the ICT sector (21% annual growth) followed by the tourism sector (18.1% annual growth). The analysis showed that the tourism sector had limited further expansion prospects whereas expansion prospects were strong for the ICT sector. It also found good expansion prospects for some agro-processing products. Female participation in the manufacturing and tourism sectors was around 25% whilst it was only 20% in the ICT sector due to a more limited pool and

⁴² The level of 'satisfactory employment' was according to whether jobholders considered their jobs a good 'fit' with their desired employment path.

the limited capacity of women to do night shift work. By contrast, female participation was 33% in the agro-processing sector with one third of companies employing more than 50% women. Table 6.7 shows the situation of wages in the three sectors plus light manufacturing in 2017.

Table 6.7: Average wages and annual wage growth by sector (2017)

Sector	Employee salaries (2017) At junior, intermediate and senior levels	Employee salary trends
Tourism	Junior: Minimum wage of NPR 15,000/month Intermediate: NPR 15–20,000/month Senior: NPR 20–50,000/month	Reported salary growth of 10% to 30% per year
ICT	Junior: NPR 21,700/month Intermediate: NPR 50,140/month Senior: NPR 135,000/month	Reported growth of between 10% and 20% per year
Agro-processing	Reported as on par with minimum wages	Estimated to be on par with minimum wage trend
Light manufacturing	Junior: NPR 13,750/month Intermediate: NPR 25,000/month Senior: NPR 40,500/month	Reported growth on par with inflation

Source: Table 4 on page 5 of Lemma et al. (2017)

Companies in all sectors except agro-processing said they found it hard to retain labour, with most hiring unskilled labour or skilled workers with little experience, providing on-the-job training and then finding staff retention to be a challenge. In the agro-processing sector, hiring skilled technicians was challenging and most highly skilled labour (engineers, machine operators, upper-level management) was brought in from India (around 5% of all workers). Whilst this is a small percentage, the better provision of technical engineering and machinery courses through TVET and higher education in Nepal could help reduce these skill shortages, but may well also encourage further emigration to better paying jobs abroad.

A more recent review (World Bank, 2018a) outlined hydropower, tourism, agribusiness and cement as having strong and unexploited comparative advantages for future growth. However, the review identified skills shortages in several of these areas. It also highlighted that better skills training is needed (both basic and specialist skills) as part of what TVET offers as there is a mismatch between what companies need and what technical skills training TVET institutes provide. A 2016 TVET Labour Market Survey (CTEVT, 2016) identified similar sectors that required low and mid-level technically skilled labour (with

the addition of health). This survey also found that the demand for TVET graduates was underestimated as most employers felt that graduates with no experience had sufficient skills.

In the area of tourism and hotel management, the previous Education Sector Analysis (NIRT, 2016) noted scope for expansion but few degree programmes in these areas, demonstrating a mismatch in the supply of skilled labour. Similarly, World Bank Group (2018c) commented that Nepal scored low in relation to global inclusion, higher education and skill development.

These findings show that Nepal has challenges in both the supply of skilled labour from existing TVET programmes as well as gaps in its provision in some course offerings. And World Bank Group (2018a) highlighted two key constraints to growth including infrastructure gaps (especially roads, energy and water) and limited competition.

Future labour market growth also depends on an enabling environment. One study noted that even where people have the relevant skills, many lacked links to prospective employers (social networks) making it hard to access jobs (ACIN, 2016). Among the as many as 2.8 million working-age Nepalese who work abroad, almost all are men (95%), most are under the age of 35 (66%) and 85% have less than secondary education (Ruppert Bulmer et al., 2020: 43-44). Important policy considerations to provide a more supportive enabling environment for employment include:

- fostering the productivity and growth of small and medium enterprises
- improving the business environment and labour market policies
- facilitating Nepal's integration in regional and global markets
- increasing the individual, family and economy-wide benefits of migration
- preparing and connecting women and youth to better job opportunities including entrepreneurship
- establishing synergy between migration, labour markets and education (Ruppert Bulmer et al., 2020).

Compared to the education profile of those who stay in Nepal, the most visible difference of those who go to work abroad⁴³ is the larger proportion of labour migrants that have some education (at least basic), but have not completed grade 12. According to the World Bank's (2020) jobs diagnostic study:

⁴³ This statement does not include those employed in the informal sector in India.

"In 2018/19, 56% of total permitted migrants worked as construction workers, laborers, cleaners and helpers; only 0.2% were hired into professional or high-skilled occupations." – Ruppert Bulmer et al., 2020:46)

The people who leave are thus mostly 'unskilled'. The same study found it unlikely that workers returning to Nepal have acquired highly technical skills transferable to the Nepalese context; although many will have gained valuable work experience. The migration of people with a higher level of education is mostly related to tertiary studies, with Australia being a major destination.

Although the low skill level of most migrants reflects the missing job opportunities in the domestic job market; it primarily reflects the substantial demand for unskilled labour in the destination countries. For young people with perhaps failed or negative experiences from Nepal's education system, with few job alternatives outside subsistence or family vocations, foreign jobs are understandably a major attraction. The main attraction is probably foreign wage levels. A cleaner in Qatar earns twice the new minimum wage in Nepal (NPR 13,450 a month) and more than the average salaries of many professionals employed in Nepal such as entry level basic school teachers, civil service holders of non-gazetted level 2 engineers and entry level staff at the bank. Thus:

"...in economic terms, domestic returns to education are very low compared to external returns; for youth willing to migrate, there is little incentive to continue their studies in Nepal". – Ruppert Bulmer et al., 2020:49

The skill profile of migrants does not indicate a major brain drain in the sense of Nepal paying for the expensive education of its youth who then work to benefit other countries. What Malaysia and the Gulf states seem to primarily demand is cheap and hardworking unskilled labour – which Nepal has an abundance of, and which it is not able to engage itself in meaningful activities back home. People with poor job prospects in Nepal earn solid foreign incomes and the remittances support household incomes and spending back home. Migration works much like a pressure valve for excess male labour and is also a key driver for Nepal's economic growth model through the dividend of remittances. However, this has left workers who have remained in Nepal in low quality low productivity jobs (Ruppert Bulmer et al., 2020).

6.3 Social and Non-Economic Returns to Education

A body of evidence is available and growing that demonstrates the power and potential of education to transform societies by promoting health and social mobility, expand choice and enhance institutional effectiveness. Lochner (2011) found that education can reduce

crime, improve health, lower mortality, and increase political participation. The case for the power and importance of education is clear and the Government of Nepal and its partners have demonstrated their commitment to basic, secondary and lifelong learning. The more difficult question is how to ensure that education has maximum impact on social and human development outcomes. Where there is sufficient evidence, this review identifies the key factors that contribute to the positive impact of education on social and human development in Nepal and globally beyond the well-established links between education, income, choice and access to services.

Overwhelming evidence points to girls' and women's literacy as the leading factor in achieving the greatest social development gains over and above years of schooling that does not consider learning. This points to the importance of quality and access and the criticality of the universal, early conceptual and procedural mastery of basic skills, especially by girls (Spivack, 2020). Kaffenberger et al. (forthcoming) suggest that improving women's literacy (one aspect of learning) accounts for one-third to a half of education's impact on an aggregate measure of the four indicators of child mortality, fertility, women's empowerment and financial practices (Spivack, 2020). The new ESP should reiterate and strengthen the country's commitment to and focus on girls' education.

Education systems themselves are part of the political process. The extent to which education can impact positively on social development outcomes, particularly but not exclusively those relating to civic engagement and social commitments, depends greatly on the political economy of education, i.e.:

"the interaction of political and economic processes in society: the distribution of power and wealth between different groups and individuals and the processes that create, sustain and transform these relationships over time" – Collinson, 2003:3

Planners must seek to fully understand the political economy of education and the barriers to achieving:

"a new generation of engaged Nepali citizenry who fully embrace the new constitutional ideals of a multi-caste, multi-ethnic, multi-lingual, and multi-cultural society' in the context of education" – NIRT, 2016:ii

It is important that the new ESP addresses the political economy barriers to achieving its long-term vision in collaboration with other sectors and plans given the cross-cutting nature of the issues.

Over the last 15 years, Nepal has made important progress in education outcomes including a faster increase in expected years of schooling than neighbouring South Asian countries. Nepal also performed better than its neighbours in quality-adjusted years of schooling in 2018. Despite this progress, this has not produced the anticipated improvements in economic and labour market productivity with an agricultural worker in Nepal's value-added production being only 17% of the South Asian average and the country ranking near the bottom in labour productivity (USAID, 2020b: 19-21).

There is a substantial international body of evidence that shows the positive relationship between education, GDP per capita, individual earnings and poverty reduction (UNICEF, 2015). While the studies show variable impacts, they support the hypothesis that providing more education increases individuals' productivity and employability, and overall incomes. UNICEF found that:

"Globally, the average private return for one additional year of education was found to be a 10% increase in income, according to computations from more than 800 surveys in 139 countries." – UNICEF, 2015:8

For Nepal, data from 2010 show that each additional year of schooling can raise earnings by between 8% and 10% (World Bank Group, 2019:4). These show a general trend in decreasing economic returns to lower basic education (Grades 1–5) from 14.6% in 1998 to 9.7% in 2010, compared to increasing economic returns at secondary level (Grades 9–12) from 0.9% to 5.1%, and at tertiary level from 9.8% to 23.1%. Returns were higher for men than women at primary level, but higher for women than men at secondary and tertiary levels (Montenegro and Patrinos, 2014:29). This demonstrates the need for a greater number of women to complete secondary education as this will provide greater income earning potential for them.

A more recent study (USAID, 2020b:9-21) showed that Nepal's returns to education have remained low for over two decades. It showed that Nepal's average returns to education are 6.1% and in the bottom third of the 97 reporting countries. The internal rate of return of 7.9% during the working life of a Nepalese person is lower than the 12% cost of capital, providing little incentive to remain in school for an additional year. When coupled with Nepal's weak domestic economy and limited market opportunities in other countries, this provides a further disincentive to continue formal education beyond a basic level. This is reflected in the latest labour market survey (CBS and ILO, 2019), which found that only 21% of Nepal's workforce had completed at least secondary education (to Grade 12). These low returns to education provide a disincentive for families to invest in education, which is further compounded by the weak demand from businesses for skilled labour.

It is only when a student has completed a master's degree that the rates of return rises to 15%, which is higher than the 12% cost of capital and thus justifies the investment. The wage premium for workers with higher education reflects the growth in the ICT, tourism, banks and financial institutions, which require mid to high-skilled workers. The many international development agencies operating in Nepal, which require advanced skills, may be another contributing factor.

6.4 Findings and Recommendations

Finding 6.1: Educational attainment and under qualification - The educational attainment of Nepal's labour force is generally low, leading to under qualification for existing jobs. Almost 80% of young people have not completed secondary education to Grade 12, which is a key challenge for any economy that wants to transition into higher productivity jobs. Low educational levels imply low potential for productivity growth and economic diversification.

- **Recommendation 6.1.1: Secondary education** – A core priority for MoEST in the next education sector plan should be to increase access to and the completion of quality and relevant secondary education for more students. This will require communities, families, schools, TVET institutes and employers working together to help break the vicious cycle of low levels of education resulting in low productivity and limited higher wage job growth resulting in disincentives to invest in more education. This requires further analysis on the potential and modalities that can be applied for public-private partnerships in Nepal to build sufficient infrastructure.

Finding 6.2: Persistent gender disparities – There are significant and persistent barriers to female skills development and employment, leading the majority of women into informal, low productivity agriculture. Three-quarters of new jobs taken up by women between 2008 and 2018 were in non-wage self-employment or unpaid family work.

- **Recommendation 6.2.1** – The ESP should include strategies to increase the proportion of girls who complete secondary education to Grade 12. The ESA social impact analysis (Korin, 2020) identified this as the investment that would provide the highest return in terms of overall progress for the country.

Finding 6.3: The external efficiency of education is hampered by Nepal's economic structure – Nepal's economy is comprised of small and inefficient markets, dependence on subsistence agriculture and limited private sector dynamism. Gainful employment for an individual is a function of more forces than education alone, and companies are not creating enough good-quality wage jobs to absorb and encourage skilled labour, especially

for women. Thus, private sector growth-enabling economic diversification and increased productivity is important for the external efficiency of education to improve. This would help reduce the pull of external migration, but requires a multi-pronged cross-government approach. The external efficiency of education is the product of many elements that prepare and facilitate the entrance of an individual to productive life.

- **Recommendation 6.3.1** – To maximise the impact of education on health outcomes, planners should consider ways to:
 - value, promote, develop and embed the skills of cooperation, problem-solving, critical thinking, resilience and self-efficacy at all ages and stages of development/education, which evidence suggests is more likely to maximise health outcomes for learners and society as a whole; and
 - structure, organize, deliver and monitor appropriate multi-sectoral, school-based programmes that simultaneously improve health, nutrition and education outcomes.

Finding 6.4: More focus on employability by education – There is a need to create better linkages between the education sector and the labour market as they are interdependent. This includes focussing on skills development (transferable and soft skills as well as technical/academic skills) to produce a well-educated workforce and focussing on growing enterprises that can create new jobs. It will also require better career advice and guidance for students to help orient them to different future career opportunities. This requires increased interactions amongst relevant government departments, SMEs, micro-credit initiatives and other private sector providers.

Finding 6.5: Restructuring the TVET sub-sector and engagement with the private sector – The government has signalled the need for meaningful reform to address the challenges faced by the TVET system. The key to this will rest in greater private-public enterprise dialogue, which will require among other things, changed attitudes. The limited dialogue between employers and education providers is a missed opportunity to strengthen the school-to-work transition. Such dialogue is essential for improving the external efficiency of education. Private firms and industry groups need to be given the opportunity to provide systematic inputs into the skills development system so that demand translates into adequate supply.

- **Recommendation 6.5.1: Public-private partnerships** – Key actions to consider in developing the next education sector plan should include establishing formal public-private partnerships between schools, TVET providers and employers with clear accountabilities to communities for the following:
 - Updating school and TVET curricula to make them relevant for developing needed

- workplace and transferable skills including through practical work placements as an integrated component of TVET courses.
- Ensuring that course offerings, especially in TVET, are in areas that link to current and future labour market demand and growth.
 - Providing career advice and guidance for students to create greater awareness of different career options and pathways. Provide apprenticeships or work experience placements for students.
 - Providing both on-line platforms and other forms of outreach to better match those entering the job market with job opportunities.
 - Improving the regulations governing private sector participation in the education sector so that private sector associations work in favour of the whole sector and don't just promote the views and interests of private providers (USAID, 2020b:21).
 - Create collaborative and joint arenas for dialogue between the private sector and the government for assessing issues and priorities within the TVET sector. A prioritised topic for discussion needs to be how to increase funding and resources to the sector.
 - **Recommendation 6.5.2: International examples** – MoEST should learn from public-private partnerships in the region. The government can explore successful international examples from which lessons and best practices can be drawn.
 - **Recommendation 6.5.3: TVET reform** – MoEST should draw from UNESCO's Strategy for TVET which outlines key policy areas and actions for TVET reform including increasing the relevance of TVET systems to equip all young people with the skills required for decent work including entrepreneurship and designing efficient and effective funding mechanisms for the sustainable development of the TVET sector (UNESCO, 2016). This could be funded in part through a 0.5-2% training levy as has been done in other countries in South East Asia or through the creation of a National Skills Development Fund as has been done in India. However, this has to be done within the economic and political context of Nepal.
 - **Recommendation 6.5.4: TVET management and systems** – Creating a better understanding of how the TEVT components in the school system and CTEVT system are/are not aligned and integrated is imperative. This ought to be a prioritised area for further study by the government and its education sector donors. For this, it is recommended to revisit the following recommendations from the 2017 Education Sector Analysis (NIRT, 2016:125):
 - Integrate TVET programmes under one structure instead of being fragmented into multiple programmes under various ministries and offices.
 - Finalise the vocational qualifications framework.

- Strengthen the TVET information management system to improve governance and transparency.
- Connect the formal and non-formal systems and actors in TVET to create pathways for the further development of TVET participants.
- Assess how traditional methods of skill and knowledge transfer can be documented and linked to the qualifications framework.
- Recommendation 6.5.5: On-the-job training – MoEST and the Ministry of Labour, Employment and Social Security should encourage employers to change recruitment practices and provide on-the-job training and apprenticeships as part of public education streams.

Finding 6.6: COVID-19 disrupting the structure of Nepal's labour market – The COVID-19 pandemic is making Nepal's future labour market growth potential uncertain as well as threatening the future of migration and the economic returns this brings for reinvesting in education, skills development and the domestic job market. It is not yet clear whether the pandemic will only have short to medium-term impacts or whether it will cause longer term change. Remittances from migration are a key driver for Nepal's economic growth and future investments in education and skills. This coupled with Nepal's low rates of return to education, particularly at basic and secondary level, provides a disincentive for families to invest in secondary education.

- **Recommendation 6.6.1 – Monitor demand on the domestic and global market as economies recover-** Undertake an annual review of available evidence and data to check whether assumptions made at the onset of the ESP remain valid in terms of skills and type of labour required at both the Nepal and international market and validate the findings form these with key stakeholders and providers in the TEVT sector.

Finding 6.7: Further need to understand education as a catalyst for a cohesive society – All interventions that expand access to quality education for all learners will positively impact the social development of the nation. However, social norms, culture and political processes can either accelerate or hinder the potentially positive effects of education on social development depending 'how' education is planned for and delivered at all levels of the system. This signals the need for further research into what works in specific contexts in Nepal based on a thorough up to date understanding of the political economy of education and potential barriers to interventions that seek to enhance civic engagement and social cohesion in schools or indeed undermine equitable access for girls and marginalised groups where gains from education are greatest.

- **Recommendation 6.7.1 –** ESP planners should consider the following while developing

the new ESP to maximise the impact of education on civic engagement and social commitments:

- Make civic education an integral part of education and training to close the inequality gap in civic participation in later life.
- Train, support and empower local governments to promote and enable schools and teachers to integrate civic education, foster debate and discussion in classrooms, maximise participatory forms of learning.
- Train, support and empower teachers to run a whole school approach to education for sustainable development (ESD) and global citizenship education (GCE). Existing training programmes could be used as starting points to develop more localized programmes that meet the needs of the variety of contexts and challenges faced in different parts of the country.
- Enhance and maximise participatory forms of learning, even in resource poor settings where teacher–student ratios may be high.
- Leverage the successes of the Child-Friendly Local Governance Strategy (MoFALD, 2011) to inform an approach to enabling youth-led movements in schools.
- **Recommendation 6.7.2** – The government should consider possible measures to maximise the positive impact of education on social cohesion and reduce practices of exclusion in society.

Finding 6.8: Girls education and school completion as a dominant driver for prosperity – A focus on the quality of teaching and learning and universal, gender-equitable, access to education is essential to maximise social returns on investments in education. The impact of girls and women’s education on social development indicators overwhelmingly points to the importance of gender equity in access and quality and the criticality of the universal, early conceptual and procedural mastery of basic skills, especially for girls (Spivack, 2020).

- **Recommendation 6.8.1** – MoEST should encourage teachers to teach in ways that challenge social norms on gender roles and actively model and promote behaviour change in the classroom and with parents, whilst also recognising that this requires wider change at every level of society from government to communities and families.

7. GOVERNANCE AND MANAGEMENT

This chapter reviews the governance and management system of Nepal's education sector focusing on governance at the federal and local levels, school administration, monitoring and evaluation, and human resource management, etc. The chapter also reviews the status of school governance and management and identifies possible causes of current problems, maps the stakeholders involved in school governance and management and discusses the impacts of governance on education service delivery.

7.1 Overview of Government and Management System

The main piece of legislation that currently governs the education sector is the Local Government Operation Act (LGOA) (GoN, 2017), which specifies the power and authority of local governments under the federal system. Given the scope of federalism and the predominant role given to local governments and schools, it is to be expected that Nepal's education system will be in a state of transition for some time as roles, responsibilities, resources, and authority among the actors are yet to be clarified and refined. The full cycle of transition might take a few years to be fully completed. This long period could be explained by the likely slow process of refining the governmental functions at the local level, which may involve:

- critical negotiations between local governments and the education sector;
- the management of significant changes in the staffing of local offices, with adequately trained head teachers and administrators;
- the incremental transition of the centralized bureaucratic culture to a culture based on local control and accountability;
- the gradual transformation of other central institutions that work in coordination with the education sector (i.e., health and social protection); and
- the process of capacity development to manage the transition (MoGA and UNDP, 2014).

7.2 Governance at the Federal and Local Levels

Before federalism, the education sector was largely centrally managed. Despite the passage of the Local Self-Governance Act in 1999 and the introduction of school management committees (SMCs) and village and municipal education committees in 2002, schools largely remained free of local oversight, particularly because of the absence of local

elections between 1997 and 2017, which created a power void at the local level (Neupane et al., 2018). With the transition to federalism, new actors have emerged who want to make their voices heard, with overlapping interests that can generate conflict.

Nepal's central government, as the provider of public goods, has the mandate to develop criteria and norms to administer the financial resources among provinces and local levels for improved access to education and learning equity for all children. Federalism is a work in progress, and how well the new federal structure manages the school education sector is still to be determined. The experience from other countries with federal systems, like Indonesia and Mexico (OECD and ADB, 2015; Arcia, 2015), indicates that it takes decades to be implemented in full, and implicit within this process is a system of monitoring and evaluation to improve educational performance, particularly access and learning equity, and overall student learning (Neupane et al., 2018).

While the new constitution and the subsequent Local Government Operation Act, 2017 give major responsibilities to the 753 local governments; in the absence of a Federal Education Act, the division of responsibilities between different levels of government is not clear. Typically, federal structures assign a major role to the central or federal government in allocating fiscal resources; designing, monitoring and enforcing educational standards; and ensuring the production of national public goods such as learning equity and protecting the minority and disadvantaged students' rights. Central governments at times work directly with local governments often bypassing the provincial governments. In Nepal, in the absence of the Federal Education Act roles of provincial and local governments are blurred in relation to school education. As already discussed in Chapter 1, and later in this section, there are productive and efficient roles for provincial governments in the federal system. Local governments are in charge of overseeing school education at the local level. Central government funding goes directly to local governments, who are responsible for distributing funds through the existing system of earmarked school grants.

The above transfer of powers seems simple enough; but in practice, its implementation calls for major changes in the organizational practices that have existed for a long time. For example, opening a new secondary school used to be a centralized function as it required sustained financial commitments for capital investment and maintenance; long-term financial commitments to hire new teachers (who require the recurrent payment of salaries and permanent contributions by the state to their retirement funds); and the permanent administration of one additional institution. Under the Local Government Operation Act, while permanent teachers are still selected by the federal government, the decision to open schools is now made by local governments. Obviously, such a decision needs

careful coordination with the federal government to ensure that federal contributions are adequate; but tension between local governments and the central education authorities that limit the financial envelope and the future funding requirements of new secondary schools could result in the suboptimal provision of good quality education services.

While the constitution largely assigns responsibility for education to local governments, there persists some degree of obscurity in matters of coordination and cooperation on shared responsibilities. However, the division of power between the three tiers of government is not always straightforward. An additional complication is that the centralized system persists as a ‘shadow structure’ because the central and local governments both still work under a centralized mentality that has dominated Nepalese governments for decades (Neupane, et al., 2020). Education Development and Coordination Units (EDCUs), which were created in response to the abolishment of the District Education Offices and have continued some of their functions, continue to operate, overseeing examinations and teacher management, even as the constitution had largely made districts obsolete. While EDCUs can improve coordination between different layers of government, local governments sometimes perceive them as encroaching on their powers (Ghimire, 2018). In the changing context, it is imperative to review the current functions of EDCUs and rethink whether this structure is needed.

Table 7.1: Responsibilities for education functions under federalism

Function	Responsible actor
Opening new schools	Local governments
Merging and closing schools	Local governments
Managing schools	Local governments and SMCs
Monitoring quality of education	Local governments
Curriculum	Curriculum Development Centre (central-level agency)
Student exams	Local governments for basic education, provincial governments for Grade 10, National Examination Board (central-level agency) for higher secondary education (Grade 12)
Licensing teachers	Teacher Service Commission (central-level agency)
Appointing teachers	SMCs and EDCUs
Transferring teachers	CEHRD/EDCU

Source: Adapted from Neupane et al. (2018)

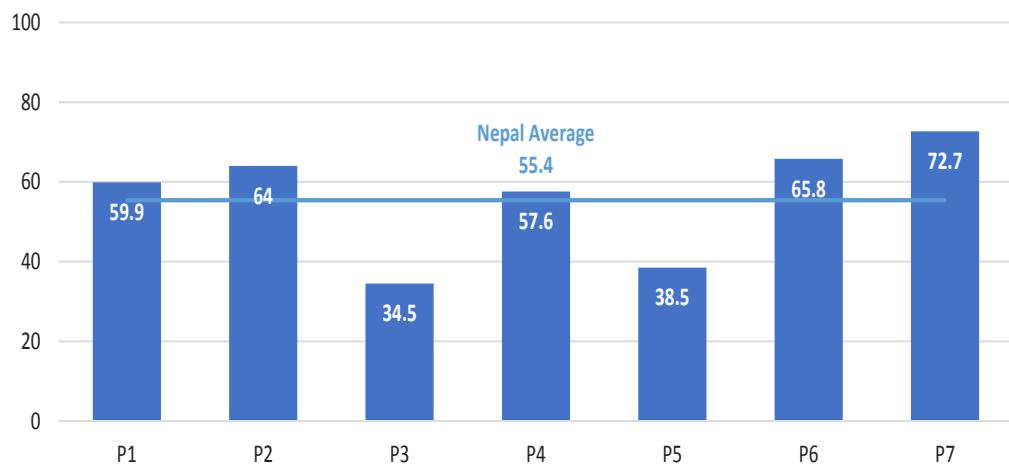
The institutional set up of local governments also presents opportunities in the sense that cross-sectoral management and the planning of programmes is supported at the local level

and with the different sectors being represented in the social development committees led by deputy mayors. As such, local governments can for example manage integrated ECED/PPE services across the education and health sector.

7.3 Issues in School Management and Governance

Following the takeover of school management by local governments, conflicts and/or tensions have been reported between and/or local governments, SMCs, teacher unions and parents. Local governments are often accused of imposing political interests in schools' affairs. Teacher unions often choose to report to central authorities rather than the local authorities, making it difficult for the latter to ensure teacher accountability. These overlapping interests often create a climate of mistrust. A major governance challenge is to clarify the roles and responsibilities of various local actors and mobilize various interests for school development.

The effectiveness and efficiency of school management is generally affected by the low levels of management capacity among local officials and in schools. Head teachers are responsible for a variety of administrative tasks, such as financial and teacher management. There is evidence that many of them struggle in at least some subjects. For example, the 2019 mid-term review of SSDP found that many head teachers did not follow central government guidelines for accounting and procurement (Bessières et al., 2019). The review also found that schools and SMCs struggled with analysing EMIS data and implementing school improvement plans. While 86% of schools had a school improvement plan in fiscal year 2018/19, local officials did not evaluate the quality of these plans. In addition, local governments may lack the managerial know-how to make informed decisions about running schools, because many of them do not have an education officer, especially in rural and remote areas (Neupane et al., 2018; British Council, 2020). There are wide disparities in managerial capacity between provinces (Figure 7.1), with, for example, only a third of local governments in Bagmati province not having an education officer compared to about three-quarters in Sudurpashchim province.

Figure 7.1: Percent of local governments without an education officer, by province

Adapted from British Council 2020. Note: P3 = Bagmati, P4 = Gandaki, P5 = Lumbini, P6 = Karnali, P7 = Sudurpashchim

Local governments could also have conflicting priorities when it comes to school management. A major concern among most local officials has been to minimize the flow of students to private schools, with the enrolment in private schools having considerably expanded in recent years (CEHRD, 2020b). This has prompted some local governments to push for English as the language of instruction in public schools, given that many parents prefer their children to learn English. Such a push may occur even when there is a lack of qualified teachers who can teach in English medium, to the detriment of education quality, adding further pressure on teachers without the necessary professional development support in bilingual instruction (Neupane et al., 2018; DRCN, 2020). There are also reports of local governments being mainly interested in installing closed circuit TV cameras, electronic attendance machines and other technology, under the assumption that this technology improves educational performance and enhances accountability. Similarly, the mid-term review of SSDP found that local governments were more concerned with 'hard components' of school administration, such as construction and ICT, and less with 'soft components,' such as pedagogy, which are absolutely critical to ensuring high-quality education and strengthened learner outcomes (Bessières et al., 2019). This suggests that local governments are yet to be prepared to manage schools properly.

In theory, SMCs and parent–teacher associations (PTAs) should hold local governments accountable for providing quality education services; but in practice, this does not always

happen. SMCs were conceived as locally representative organizations to oversee school operations.⁴⁴ In reality, the capacity of SMCs varies by school, with different levels of effectiveness (British Council, 2020). Moreover, the relationship between local governments and SMCs can be ambivalent. Some local officials and ward leaders' assumption of the leadership of SMCs negates the ability of SMCs to hold local governments accountable (Bessières et al., 2019; DRCN. 2020).⁴⁵ Further, some local governments have expressed the desire to have greater control over SMCs to make sure schools align with local priorities. Meanwhile, PTAs are often not formed or taken seriously by either teachers or parents, due to the more powerful role of SMCs, where parents are also represented (but not on the wider scale of traditional PTAs) (Neupane et al., 2018).

As noted earlier, student assessment results can help strengthen accountability; but issues with exam quality and implementation persist. At the basic level, schools employ the Continuous Assessment System that entails formative and summative assessments. Moreover, assessments (exams) are administered by different levels of government for the major landmark exams, which are held at the end of Grades 8, 10, and 12. The central government also administers the NASA at Grades 3, 5, and 8. Results from these assessments are used, to a certain extent, to hold schools, teachers, and local governments accountable for their provision of education services. Some schools, for example, display exam results on their publications and disseminate information to parents (Acharya and Vista, 2019). In addition, some local governments evaluate teachers' performance using exam results (DRCN, 2020). However, a variety of issues reduce the effectiveness of assessments (exams and continuous assessment) as an accountability tool. For the Continuous Assessment System, as mentioned earlier, certain teachers struggle to develop and administer tests that accurately measure student learning (Acharya and Vista, 2019; British Council, 2020).

The transition to federalism requires substantial cultural change given the many structural changes involved in moving from central governance to local responsibility. However, the success of this transition is highly dependent upon the managerial capacities of local governments, school head teachers, and SMCs, and the degree to which provincial oversight is in place and well received. The fact that neither the central government nor local governments are able to reduce disruptions in local governance indicates that the new Federal Education Act will have to make provisions for more objective oversight at

⁴⁴ According to the 1971 Education Act, each SMC should have four members including at least one women nominated by parents; one member nominated by the ward committee; three members including local intellectuals or educationists, founder of school and donor nominated by SMC; and one member nominated among teachers; plus the head teacher as the member secretary. One person among parents nominated by themselves as the chair.

⁴⁵ There are 6,743 wards in the country, which are the administrative units below local governments

intermediate levels. As mentioned before, successful experiences with education in other federal contexts make use of intermediate levels of government to implement oversight over local governments.

7.4 Towards a New Role for Provincial Governments

Provincial governments can play a major role implementing many important educational management functions. Provincial governments offer economies of scale in managerial and programmatic functions of education. At the same time, they are physically closer to their schools than the central government, enabling them to more quickly provide support services. And while local governments are responsible only for their own residents, provincial governments can take a wider view, helping to strengthen the overall performance of the education system. They are also more likely to be objective than schools in monitoring teachers' performance and school quality. Table 7.4 shows the potential roles provincial governments could perform more effectively than central and local governments. These roles are drawn from a review of evidence on federal education systems that have rapidly improved their performance in Ethiopia and Mexico (Wang et al., 2015).

Table 7.2: Potential strategic roles for provincial governments to implement educational priorities

Strategic component	Federal	Provincial	Local
Federalism and decentralization	Design and implementation	ND – Potential intermediary role	Passive partner in design
Quality and effective pedagogy	Sets standards	ND – Potential supervisory role	Implementation
Curriculum framework and learning materials	Main design	ND – Potential role school support	Implementation and partner in design
Assessment and examinations	Sets standards, manage grade 12 exam and conduct large-scale national assessment, analysis, feedback to policy	ND–Potentially manage grade 10 exam	Manage grade 8 exam and implement classroom based assessment
Teacher management and professional development	Sets standards	ND – Potential role in deployment management	Management and evaluation of performance
Language of Instruction	Set standards	ND	Decide and Implement language policy
Equity and inclusion	Sets policies and standards	ND – Potential role in facilitating and monitoring schools	Elaborate policies and Implementation
Enabling environment	Guidelines; monitoring	ND	Implementation, adaptation
Infrastructure development and school safety	Funding	Implementation support	Implementation and collaboration
Institutional and capacity development	Designing and funding	ND	Implementation

Source: Arcia et Al. (2020). ND = not defined yet

Within a federal system, provincial governments could take on a technical support function for the central government in the areas of school monitoring, data management, professional support to schools, because they are physically closer to their schools and could more quickly provide support services. With regards to the quality of schooling, provincial governments can be very effective in assisting the central government with school inspections, and provide schools with technical assistance in pedagogy through on-demand assistance by master teachers. As for teacher management, provincial governments are better positioned than the central government to evaluate the needs of schools in terms of deploying teachers with requisite language skills and local knowledge. Local governments can only see and act on what they are responsible for with respect to teachers. Their role is to look after the interest of their residents, and not the overall performance of other local governments, which is a function that would naturally fall on provincial governments. This would relieve the managerial burden of schools. Finally, in terms of the critical issues of equity and inclusion, provincial governments can be more objective than schools in monitoring teachers' performance and school quality, and more efficient than the central government due to their proximity to schools and better knowledge of local conditions.

7.5 Monitoring and Evaluation

The introduction of the web-based Integrated Education Management Information System (IEMIS) is one of the major accomplishments under the SSDP. Before 2017, schools collected EMIS data either electronically or by hand, and submitted it to Resource Centres, which were district-level agencies that served as data collection centres (Bessières et al., 2019). With the transition to federalism and the abolition of districts, a new web-based platform was established, with local governments responsible for monitoring the data collected by schools. MoEST processes the following data that schools submit data to the IEMIS website twice a year:

- The input data that schools collect at the beginning of each school year in April and May including on the number of students enrolled, number of teachers, and availability of textbooks.
- The output data that schools collect at the end of each year, in February and March, including on student retention, school performance data (including school improvement plans and financial and social audits), and learning assessment results (CEHRD, 2019a).

The data are comprehensive, covering ECED/PPE to Grade 12 in public, private, and religious schools; and are disaggregated by sex, caste and ethnic group, disability and geography.

CEHRD, the central-level agency that manages the implementation of SSDP, publishes the input data in its Flash 1 reports and output data in its Flash 2 reports.

IEMIS data are routinely used for decision making at the school, local, and central levels, particularly on issues related to equity. School data play a major role in monitoring SSDP activities, and local governments and SMCs use the data for making a range of decisions, such as allocating scholarships (Bessières et al., 2019; Magrath and Torrano, 2020). More than 90% of schools in the country reported data in the 2018/2019 Flash 1 report, with the remaining schools expected to report in the Flash 2 report (Bessières et al., 2019). To ease dissemination, the IEMIS platform allows users at all three tiers of government to access the data in their areas.⁴⁶ One of the most important uses of school data is to help construct the Equity Index. Since 2017, information has been gathered about gender, ethnicity, socioeconomic background, and other factors under this index to determine drivers of inequity across the country. CEHRD uses the index when developing SSDP annual school improvement plans and annual work plans and budgets to develop need-based interventions, such as providing school meals, scholarships and other supports.

Many local governments provide essential assistance with IEMIS to schools; but capacity issues can hinder these efforts. Local governments and EDCUs play an important role in ensuring that schools report their data. Many schools, even those with internet connections, struggle to use IEMIS with about 80% of basic and lower secondary schools and 20% of secondary schools lacking the capacity to use the platform (Bessières et al., 2019). The government has provided guidance to help schools; but the extent to which schools use this guidance is unknown (British Council, 2020). To address the issue, CEHRD has developed cluster systems, where high-capacity schools help other schools to use the platform. However, this can divert staff in high-capacity schools from other activities. Many schools still send data directly to local governments and EDCUs, either electronically or in hard copies. Yet local governments and EDCUs may themselves lack the resources to subsequently report the data to the central level, which results in delays in publishing the Flash reports (CEHRD, 2019a; Bessières et al., 2019). To aid both local governments and schools, MoEST has recommended to first train IEMIS officers at the provincial level to then train local government officers. The local officers can subsequently facilitate schools to submit data using the web-based platform.

Lack of a verification system raises concerns about data quality. All IEMIS data are self-reported by schools under the supervision of head teachers. The platform incorporates

⁴⁶ National-level users can view data from schools for all 753 local governments, provincial-level users can view data for schools in their areas, while local government users can view data from schools in their areas.

some validation checks to reduce errors and inconsistencies, and SMCs are ostensibly responsible for verifying school data. Most SMCs are trained on monitoring the quality of school data. In practice, however, the monitoring of data quality does not always occur, and there is evidence that the capacity of schools to do this is uneven, with some schools using less than robust data collection methods (Bessières et al., 2019; Magrath and Torrano, 2020). With local governments understaffed and without a district or provincial-level agency to regulate the information flowing in from the local level, it is difficult to assess the overall quality of the system and its data. The SSDP Mid-Term Review and Nepal's development partners have called for strengthening the quality of IEMIS data and clarifying the responsibilities of different levels of government following the abolition of district education offices (LEG, 2018; Magrath and Torrano, 2020).

7.6 Findings and Recommendations

Finding 7.1: Unclear roles in federalism – The inadequate clarity of roles under the new federal system of governance is a significant problem that will take time to resolve. Federalism will likely take several years to work as intended. The lack of clear roles creates a vacuum in decision-making that induces some actors to decide for others, resulting in confusion and mistrust.

- **Recommendation 7.1.1** – In terms of governance, the first step is to define clear roles for and within each level of government, and for different bodies, such as SMCs. Accordingly, the Federal Education Act should view provincial governments as potential honest negotiators which could reduce local conflicts in education governance. In addition, an organization and management survey (O&M) should be undertaken of all local governments to understand their capacity and roles.
- **Recommendation 7.1.2** – Specific recommendations to strengthen teacher management are as follows:
 - Set goals for improving the quality of new entrants to the teaching profession by developing a strategy through collaboration between MoEST, universities and the Ministry of Finance.
 - Measure and reward good school and teacher performance to create a climate of positive accountability, using non-monetary rewards and incentives to motivate teachers.

Finding 7.2: Insufficient administrative and managerial capacity in local governments

– Insufficient administrative and managerial capacity of some local governments to undertake their financial and operational responsibilities is a major governance concern. If the capacity issue is not addressed, there is a potential risk of implementation failure. As

a result, managerial tasks are often delayed or poorly performed. This is also caused by the fact that education unit of location government inadequately staff with technical staff.

- **Recommendation 7.2.1** – The capacity of local governments to perform key functions related to education should be assessed and monitored to classify local governments in terms of support likely required to act on their mandates. User friendly toolkits for planning programming and budgeting of education activities and development of required plans at local level should be made available and customized based on the afore-mentioned classifications.

Finding 7.3: Low financial management and accountability capacity – Although most of the governance and intergovernmental collaboration related issues will improve once the Federal Education Act is introduced to specify roles at the different levels of government, the main threat lies in the potential for financial mismanagement. High level budget management requires the constant monitoring of local governments' use of financial transfers to secure the proper use of funds, as well as publishing monitoring findings in the spirit of transparency and accountability to reduce moral hazard and misuse of funds (Fazekas, 2012; Arcia and Naslund-Hadley, 2018; OECD, 2017). To that end, there is a need to work with the education community to define what constitutes transparency in the allocation of funding.

- **Recommendation 7.3.1** – Clarify the roles for **planning and administering financial transfers** to anticipate and track the different types of grants disbursed to schools by making sure grant funds are used for their intended purpose and are properly accounted for in terms of their use. Also, transparency needs to be ensured to grant beneficiaries in the use of funds distributed to local governments and communities, because they are the ones who can give political legitimacy and support to schools and their managers.
- **Recommendation 7.3.2** – **Revisit the concept of social audits** to give voice to parents and teachers on the use of grant funds, because policies are only properly implemented when people involved in the final delivery of services are convinced it is in their best interests to comply with policy directives. This should be supported by including key indicators on financial data in school and local government profiles that can be accessed by the public.
- **Recommendation 7.3.3 – Allocate the centrally generated budget to priority areas.** Federal funds are very effective in fostering educational equity because they eliminate the natural tendency of local governments to capture as much funding as they can. Hence, central grant allocations need to be transparent in terms of measurable objectives and indicators, which are the main arguments the government can use to justify the allocation of funds among the 753 local governments.

- **Recommendation 7.3.4** – Plan and administer financial transfers in Nepal to anticipate and track the different types of grants to be disbursed to schools, and ensure grant funds are used for their intended purpose and are properly accounted for.
- **Recommendation 7.3.5** – The specific recommendations related to centrally generated budget allocations are as follows:
 - Make central grant allocations more transparent by applying measurable objectives and indicators. Such metrics would allow the federal government to objectively and reliably justify the allocation of funds among the 753 local governments.
 - Continuously monitor the use of financial transfers to local governments to ensure it is proper, and publish results in the spirit of transparency and accountability to reduce moral hazard and misuse of funds.
 - Work with local governments to define transparent funding formulas to guide the allocation of central and local grants to schools. Such formulas would need periodically revising based on independent evaluations of school and student performance as related to funding.

8. FINANCING AND COST OF EDUCATION

This chapter overviews the education financing in Nepal by describing macro-economic scenario of Nepal and estimating possible education financing with the analysis of trends. It also compares the public and private financing in school education and provides recommendations on financing for the next education plan.

8.1 Overview of the Financing of Education

Public education is funded by a mix of federal, provincial, and local funds. According to UIS data, public education funding in Nepal typically grows at a real rate (excluding inflation) of about 1% per year. However, education's share of the government's budget for the last 10 years shows some declining trends from 17.1% in 2010/2011 to 11.7% (2020/2021).

For fiscal year 2020/21, total education funding stands at NPR 171,712 million (\$1,468 million) (Table 8.1),⁴⁷ which represents about 11.7% of the government's budget.

Table 8.1: Total national and education sector budget allocation for FY 2020/21⁴⁸

	NPR million	\$ million
Total national budget	1,474,645	12,604
Total education sector budget	171,712	1,468
Percent share of education in the national budget	11.7%	11.7%
Total SSDP budget	121,250	1,036
Percent share of SSDP of the education budget	71%	71%

Source: MoEST (2020). \$1=NPR 117

Most of this education budget, amounting to NPR 110,744 million (\$947 million) or 64% of it, is transferred to local governments. NPR 55,869 million (\$478 million) or 33% of the total is allocated to the federal level, and NPR 5,099 million (\$44 million) or 3% to the provincial level. In terms of programme allocation, 71% of the budget is executed through the SSDP. A high share of the SSDP budget is allocated to recurrent costs, particularly teacher salaries. For 2020/21, 62% of the SSDP budget was allocated to teachers' salaries.

⁴⁷ The fiscal year begins in mid-July in Nepal.

⁴⁸ Budget figures for this section are extracted from the 2018/19 Status Report (CEHRD, 2019a).

Education funding is managed through a system of grants allocated by the central government and earmarked for different uses. The two main types of grants are conditional and equalization grants:

- Conditional grants are funds given directly to local governments that are earmarked for specific purposes and channelled through SSDP activities. These funds mainly go for paying for teacher salaries, ECED/PPE centres, textbooks, learning materials, scholarships for girl and Dalit students, and for developing school management capacity.
- Equalization grants are allocated on the basis of several factors, including poverty level, disadvantaged geographic areas, population, cost of service delivery, and co-financing by local governments.

Additionally, complementary and special grants are sporadic allocations to specific projects or programmes, such as school infrastructure and special projects.

The allocation of funds under the grants system is not transparent due to problems with budget tracking, and accountability for funds under the existing EMIS (Claussen et al, 2018). However, an in-depth analysis of the nature, efficiency, and effectiveness of this system of grants allocation is beyond the scope of this chapter; but the current system could be improved by the adoption of funding formulas.

In terms of distribution by budget component, in 2018/19, 87.6% of the SSDP budget went for basic and secondary education, and most of this was on teacher salaries (Table 8.2). Meanwhile, little was earmarked for governance, management, capacity development, monitoring and management in spite of them being critical needs, especially during the ongoing federal restructuring.

Table 8.2: Distribution of the SSDP budget by component, 2018/19

Component	Allocation (million NPR)	Percent
Basic education	57,927	62.0%
Secondary education	23,915	25.6%
Literacy and lifelong learning	442	0.5%
Teacher professional advancement	239	0.3%
Governance and management	553	0.6%
Institutional capacity development	581	0.6%
School facilities	5,756	6.2%
Monitoring and management	41	0.0%
Examination and accreditation	180	0.2%
Use of ICT in education	658	0.7%
Health and nutrition	3,074	3.3%
Others	86	0.1%
Total	93,453	100%

Source: CEHRD, 2018c

There are challenges with budget execution in education, which are expected to continue during the ongoing transition to federalism. An audit of the SSDP in 2017 revealed that certain funds allocated for infrastructure had not been used (MoEST, 2018b). Moreover, a survey of schools found that one-fifth of them had used only a half of their allocated budget or less although it did not explore why the budget was not used (NCE, 2017).

Nonetheless, recurrent spending, which forms the bulk of the government's education budget, is usually close to target, with about 95% of the total education budget executed on time. The exception was in FY 2017/18, when only 71% of the allocated budget for capital expenditures, such as infrastructure and durable goods, was spent (World Bank, 2018d). The subpar execution of the budget is due largely to ineffective project management, bureaucratic issues, and the premature allocation of funds before conditions for project execution are in place. There are also issues within local governments that impede timely and efficient budget execution, such as misuse of funds, political interference, and low implementation capacity (World Bank, 2017c) and insufficient information on spending and reporting requirements by grant lines (World Bank, 2017a).

Financial mechanisms: Major role for local governments

- Financial mechanisms - Up to 2017, conditional and unconditional grants were managed by the Department of Education (the entity that preceded CEHRD) and channelled to the public schools through district education offices which were the

local management offices of the Department of Education and the direct supervisors of schools. Since 2017, conditional grants are channelled from the federal budget to local governments who allocate resources to their schools. Provincial governments are involved in training educational staff. Local and provincial governments can complement the earmarked funding received from the federal level with their own resources from revenue sharing mechanisms, equalization and special grants, or their own local resources.

- Public schools receive financial resources from local governments for various purposes, including to pay teachers' salaries (approved, temporary, paid or rahat per capita funding mechanisms) and other staff. In addition, schools can receive financial support from NGOs and their communities. They can also charge exam fees and seek contributions from parents; however, these charges are never levied for below Grade 5 in fully aided schools.
- Scholarships are provided to schools for disbursing to targeted students. The common practice of schools is to make use of this funds for all children enrolled rather distribute this through need-based mechanism to targeted groups of students.
- Public (community) schools have to comply with audit requirements and audited accounts are submitted to local governments.
- **Technical and Vocational Education under** the Council for Technical and Vocational Education and Training (CTVET) there are Government, community and private TVET institutions, besides some public schools offer technical stream programmes in secondary schools.
- **Public TVET centres** receive resources from the federal government, contributions from families, and other contributions received by TVET centres. All revenue is reported in the school end of the year financial report. Audited accounts are communicated at central level to CTVET.
- **Public higher education** is organized around 11 public universities and 4 medical academies. Besides the public universities and (in 2017/18) their 137 constituent colleges, 508 community colleges and 780 private colleges operate with financial autonomy, although they are affiliated to universities for accreditation purpose.⁴⁹ The higher education system is supervised and monitored by the University Grants Commission (UGC), which distributes grants to universities and community colleges. Public universities and community campuses are funded through UGC grants and student fees. All resources are received in the institutions' accounts and are used for paying teaching and non-teaching staff salaries, administrative costs, services costs

⁴⁹ Number of campuses as in 2017/18, Education Management System, UGC, Report on Higher Education 2017/18

and investments. Audited accounts are communicated to the UGC. Medical academies are funded by the Ministry of Population and Health.

- **Private educational institutions** at all levels rely on student fees paid to finance their teaching and boarding activities. However, some religious and special education schools receive government subsidies.

The education system is financed by the following stakeholders:

- **The federal government** acts directly through MoEST's budget and the allocation of conditional grants earmarked for education to provincial and local governments. The federal budget also finances indirectly by allocating non-earmarked grants to the sub-national levels (equalization, special and complimentary grants). The federal government also reallocates part of tax and non-tax revenues to sub-national governments through a revenue sharing mechanism. Each transfer has its own allocation criteria based on the recommendations of the National Natural Resources and Fiscal Commission.
- **Provincial governments** have responsibilities for teacher professional development, education training centres, risk and disaster management and support to disabled students. They receive specific conditional grants from CEHRD and can add from their other resources. Provincial ministries of social development have education directorates or divisions.
- **Local governments** are responsible for providing school education. They receive conditional grants from the federal budget and can make use of non-earmarked funding to also pay for school education.
- **Local government education units** provide supervisory and technical support to local schools. The management of schools that was previously done by 75 district education offices is now spread over 753 local governments. Building an effective management capacity in all these local governments is a big challenge.
- **Development partners** contribute to the financing of education either for programmes managed through the financial system of the Government and recorded in MoEST's budget, or for programmes and projects financially managed outside the budget and recorded in the Technical Assistance book of the Ministry of Finance.
- **Parents** pay registration, tuition and other fees, including for boarding, to private and public schools, colleges and universities. The amount of fees is fixed by school management committees and vary by grade. Although public schools are funded by the government, parents still contribute some costs such as uniforms, school supplies, transport to and from school and private extra-tuition.
- **Non-governmental organisations** and International NGOs are funded from foreign or government sources and implement programmes directly or through local NGOs.

They contribute mainly to non-formal programmes, early childhood development and by supporting public schools. Their participation may be in the form of equipment support to schools and training teachers and staff. They also contribute to research and advocacy for the expansion and development of basic education for all.

- **Schools** also mobilise resources from their local communities and income generation activities.

Different sources of education funding

Nepal's national expenditure on education covers all public, private and external sources of funding for all levels of education from pre-primary to university, and all types of institutions, public and private. It includes the funding of activities within educational institutions, such as teaching activities, administration, school meals and boarding, and the expenditure required by school attendance, such as for uniforms, books and supplies, transport to school and private tuition (see Table 8.3 for the calculation). The overall national expenditure on education was estimated at NPR 344.2 billion in 2019/20, representing 9.1% of GDP and almost NPR 11,500 per inhabitant. This represents an update of the estimates made for the National Education Accounts in 2016 (MoEST and UNESCO, 2016) based on the same principles (Peano, 2020).

This calculation shows the following for 2019/20:

- Public sources funded 44.5% of education expenditure through federal ministries, provincial and local governments and development partners, compared to 43.8% in 2014/15. The share is higher for basic and non-formal education and less for higher secondary and higher education. The government mainly funds teacher salary costs.
- Parents are calculated to have contributed NPR 168 billion or a half (49%) of total funding. They are paying fees, mainly for private providers, buying related goods and services, paying exam fees while they receive NPR 3.1 billion worth of scholarships.
- The share of external funding sources is decreasing, with a low of only 3.4% of total expenditure in 2019/20 compared to 7.2% in 2014/15 and 12.7% in 2009/10. This has been partially compensated for by the increased share of government funding.

The Table 8.3 shows national educational expenditure for 2014/15 and 2019/20.

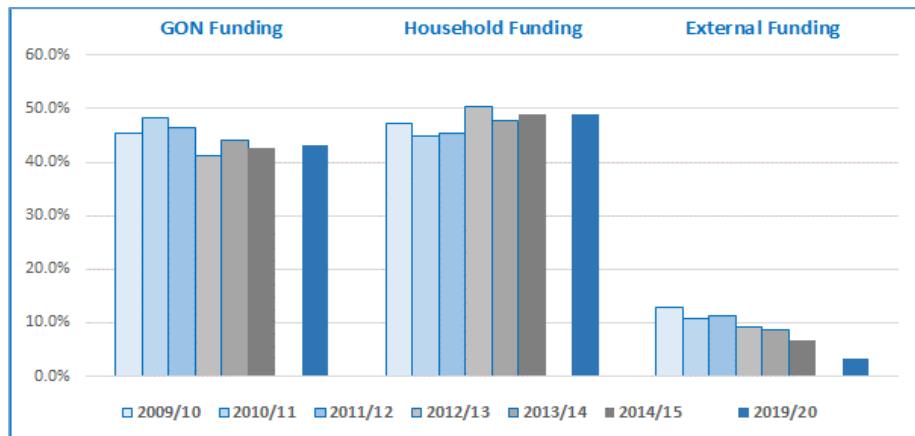
Table 8.3: Nepal's national expenditure on education, 2014/15 and 2019/20 (NPR million)

Million NPR	Initial financing	Transfers received	Funds managed	Transfers paid		Direct financing	Initial financing	
				Support to families	Other paid		2014/15	2019/20
A. MoEST and other ministries								
Ministry of Education	131,265	1,253	132,518	962	98,474	33,082	40.8%	38.1%
Incl. external loans	5,817	-	5,817	-	-	2,607	0.2%	1.7%
Incl. grants on budget	3,288	-	3,288	-	-	1,535	4.9%	1.0%
Other ministries	3,095	-	3,095	-	-	3,095	0.6%	0.9%
Total federal budget	134,360	1,253	135,613	962	98,474	36,176	41.5%	39.0%
B. Sub-national								
Provincial governments	6,520	4,253	10,773			10,773		1.9%
Local governments	8,114	94,221	102,335	1,925		100,409		2.4%
Total sub-national level	14,634	98,474	113,108	1,925	-	111,182	1.2%	4.3%
C. Other								
Technical assistance	4,020	-	4,020	-	-	4,020	0.7%	1.2%
International NGOs	3,624	-	3,624	-	2,899	725	1.0%	1.1%
Households & parents	168,216	3,147	171,363	-	1,253	170,110	48.8%	48.9%
Local NGOS	3,422	2,899	6,321	260	-	6,061	1.2%	1.0%
Internally generated	15,922	-	15,922	-	-	15,922	5.6%	4.6%
Total (A+B+C)	344,196	105,773		3,147	102,626	344,196	100.0%	100.0%
D. Summaries								
Public sources^a	153,013	1,253	154,266	2,887		151,379	43.8%	44.5%
Private sources^b	191,183	3,147	194,330	260	1,253	192,818	56.2%	55.5%
Government of Nepal^c	148,993	1,253	150,246	2,887		147,359	42.8%	43.3%
External funding^d	11,786	-	11,786	-	2,899	8,887	7.2%	3.4%

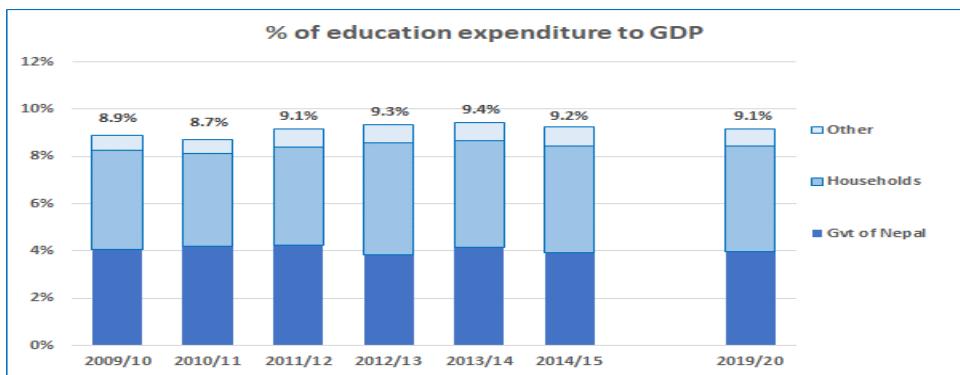
Source: Peano, 2020⁵⁰. 'Initial financing' refers to the initial source of funds as, e.g. MoEST passes much of its funding on to local governments to use.

Overall the trend from 2009/10 to 2019/20 has seen external financing decrease, household funding increase and government funding slightly decrease (Figures 8.1 and 8.2).

⁵⁰ a=Federal and sub-national budgets including external loans and grants + technical assistance, b=Households + INGOs + NGOs + internally generated resources, c=Federal and sub-national budgets including external loans and grants, d=External loans and grants on-budget + technical assistance + INGOs

Figure 8.1: Variations in the financing sources for education (2009/10 to 2019/20)

Source: Peano, 2020⁵¹

Figure 8.2: Education expenditure as a of GDP

Source: Peano, 2020⁵²

8.2 Government Expenditure For Education

This sub-section analyses in more detail the structure and trends in government expenditure for education. Government of Nepal expenditure is here used to refer to federal, provincial and local government funding including on-budget external funding, loans and grants.

⁵¹ MoEST and UNESCO (2016) and projected estimates in Peano, 2020

⁵² ibid

The federal budget

At the federal level, education is the responsibility of MoEST although other sectoral ministries fund specialised colleges. The 2020/21 federal budget for education comprises NPR 171.7 billion under MoEST and NPR 4.1 billion for medical academies and colleges under other ministries. Status of federal budget in education can be described as:

Changes introduced by the federal system – The responsibility for providing school education was transferred to local governments from the FY 2017/18 transition year. The funding previously managed by MoEST's Department of Education through districts education offices was transformed into a series of conditional grants with specific objectives, distributed to local and provincial governments. However, the initial financing remains with the federal budget as taxes are mostly collected at this level.

The NPR 171.7 billion for the education sector under MoEST includes NPR 110.7 billion as conditional grants to local governments to fund school and non-formal education, and NPR 5.1 billion as conditional grants to provincial governments, mainly to train education staff. NPR 55.5 billion is kept at federal level to finance technical education, higher education and MoEST administrative offices. Federal level expenditure is mainly recurrent expenditure and grants to universities and colleges.

Provisional budgets not fully implemented – In all four years from 2015/16 to 2018/19 actual recurrent and capital expenditure, including the financial repayment of government expenditure, have been less than the budgeted amounts. In 2016/17, under the central government system, the execution rate of education budget was 94%, which was better than the 80% for the overall government budget. In 2018/19, the execution rate of the education budget was 78%, similar to that of the overall budget. Grants transferred to sub-national levels are reported as utilized in the federal budget (Table 8.4), and thus do not reflect possible lower execution at the local level.

On-budget external support is partly directed to sub-national levels – External funding is representing a decreasing share of the education budget, with external grants of NPR 3.8 billion and external loan of NPR 10.3 billion for 2020/21. The proportion of loans from development banks has increased as in 2020/21 they represented the main component of external funding for education that is going through the federal budget. However, the external funds for school education are partly supporting activities implemented by local governments through the conditional grants. The comprehensive picture of external funding is provided in Section 8.5.

Table 8.4: Federal expenditure for education – provisional and actual, 2015/16–2022/23

In NPR million	2015/16		2016/17		2017/18		2018/19		2019/20		2020/21	2021/22	2022/23
	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Revised	Budget	MTEF	MTEF
Total GoN Budget													
Current + capital	693.1	493.3	929.1	727.4	1,138.7	967.6	1,159.4	958.0	1,365.1	941.1	1,301.9	1,496.4	1,734.3
Financing	126.3	107.7	119.8	109.9	140.3	119.6	155.7	152.5	167.9	132.2	172.8	201.2	220.7
Total, including financing	819.5	601.0	1,048.9	837.2	1,279.0	1,087.3	1,315.2	1,110.5	1,533.0	1,073.4	1,474.6	1,697.6	1,955.0
Federal	819.5	601.0	1,048.9	837.2	1,046.8	846.1	996.7	789.3	1,199.3	790.6	1,112.0	1,315.9	1,503.6
Provinces						241.2	318.5	321.2	333.7	282.7	362.6	381.7	451.4
Local govt					7.1	7.1	117.6	110.5	108.2	94.3	99.9	381.7	451.4
Education Budget (MoEST)													
Federal recurrent	98.5	90.5	116.1	109.1			46.2	36.2	64.7	33.8	55.5	60.7	63.9
Federal capital	0.2	0.2	0.2	0.3			0.3	0.3	0.6	0.3	0.4	2.1	2.8
Provinces							2.9		4.3		5.1		
Local govts							85.1		94.2		110.7		
Total in federal budget	98.6	90.7	116.4	109.4			134.5		163.8		171.7		
Implemented at Federal Level													
Funding	98.6		116.4		66.1		46.5		65.3		55.9		
GoN	83.5		106.0		55.2		40.8		57.3		41.8		
External grants	13.3		4.8		4.2		2.2		2.9		3.8		
External loans	1.9		5.6		6.8		3.6		5.0		10.3		
Other ministries													
Other ministries & colleges							3.1		3.1		4.1		

Source: Peano, 2020⁵³

⁵³ ibid

Local government expenditure

Local governments receive earmarked (conditional, special and complementary) grants from the federal budget, and non-earmarked funding from the revenue sharing and the equalization grants to provide school education in their areas. They can also mobilise local resources. The grants related to the payment of teachers' salaries at basic and secondary levels and implementing SSDP are the main financial transfers to local governments for FY 2020/21 and are provided as conditional grants (Table 8.5).

Table 8.5: Local government programme budgets through conditional grants for 2020/21

Programme	Budget NPR million
Teacher salaries --basic level	58,497.2
School Sector Development Programme	35,816.3
Teacher salaries – secondary level	16,282.6
Education scholarships for conflict victims	134.5
Education For All-Child Development Programme	13.8
Total	110,744.4

Source: Peano, 2020⁵⁴

The budget system identifies expenditure according to the source of funding. For FY 2019/20, the 730 local governments reported in the Sub-National Treasury Regulatory Application (SuTRA) system spent a total of NPR 302.3 billion (NPR 444.6 billion in the provisional budget) and spent NPR 97.6 billion for education amounting to 32.3% of all expenditure (see Table 8.6).

Table 8.6: Total and education expenditure of 730 local governments, FY 2019/20

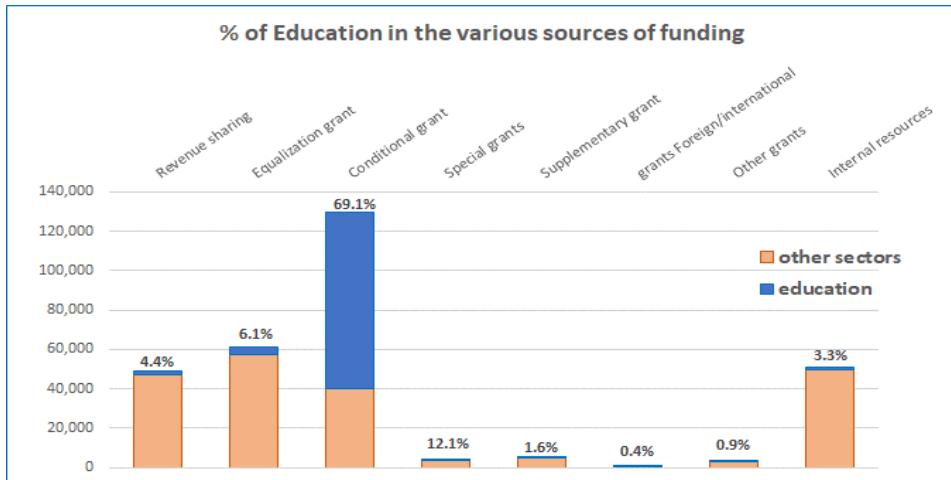
In NPR million	Total expenditure			Education expenditure			% of education in:	
	Budget	Actual	Execution rate %	Budget	Actual	Execution rate %	Budgets	Actual
Revenue sharing	77,390.5	48,996.3	63.3	3,069.8	2,144.9	69.9	4.0	4.4
Equalization grants	93,881.6	60,935.6	64.9	4,895.6	3,739.3	76.4	5.2	6.1
Conditional grants	158,565.4	129,355.4	81.6	99,505.5	89,443.0	89.9	62.8	69.1
Special grants	8,870.4	3,808.0	42.9	765.5	461.3	60.3	8.6	12.1
Complementary grants	13,908.2	4,886.8	35.1	129.3	78.2	60.5	0.9	1.6
Foreign/international grants	1,695.7	424.5	25.0	3.9	1.8	45.9	0.2	0.4
Other grants	6,487.0	2,882.1	44.4	95.9	25.8	26.9	1.5	0.9
Receipt of foreign loans	34.8	1.3	3.6	0.0	0.0		0.0	0.0
Internal resources	83,739.8	51,056.4	61.0	2,577.7	1,662.5	64.5	3.1	3.3
Total general	444,573.3	302,346.3	68.0	111,043.2	97,556.8	87.9	25.0	32.3

Source: Peano, 2020⁵⁵

The 2019/20 education activities were mainly funded from the NPR 89.4 billion of conditional grants transferred from the federal budget. As this funding is earmarked for teacher salaries, scholarships and school operating costs, it is better implemented and achieves a higher execution rate.

In 2019/20, these local governments allocated a total of NPR 97.6 billion for education, with an additional funding of NPR 8.1 billion from sundry grants on top of the earmarked NPR 89.4 billion (in Table 8.7, the 8.1 billion represents the difference between total spending and the amount of the conditional grant). Proportionally, this means that they are devoting 6.1% of the equalization grant, 4.4% of the revenue sharing and 3.3% of their internal resources to educational activities (Figure 8.3).

⁵⁵ Source: SuTRA database, district treasury offices & Financial Comptroller General Office

Figure 8.3: sources of funding of 730 local governments' education expenditure (2019)

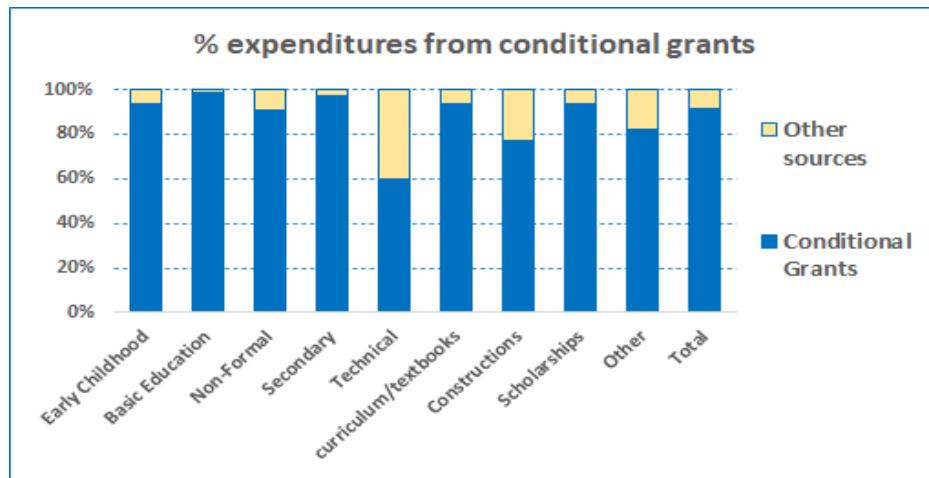
Source: Peano, 2020

In 2019/20, the 730 local governments added NPR 2.1 billion for school construction to the NPR 7.1 billion received as conditional grants for this purpose. They also added for technical education for which they receive little funding. The basic education component received the major part of the resources (43% excluding construction) (Figure 8.4). On average, The local governments spent an of NPR 13,000 per student at ECED/PPE level, NPR 16,000 NPR per student at basic education level and NPR 17,000 at secondary level (Figure 8.5).

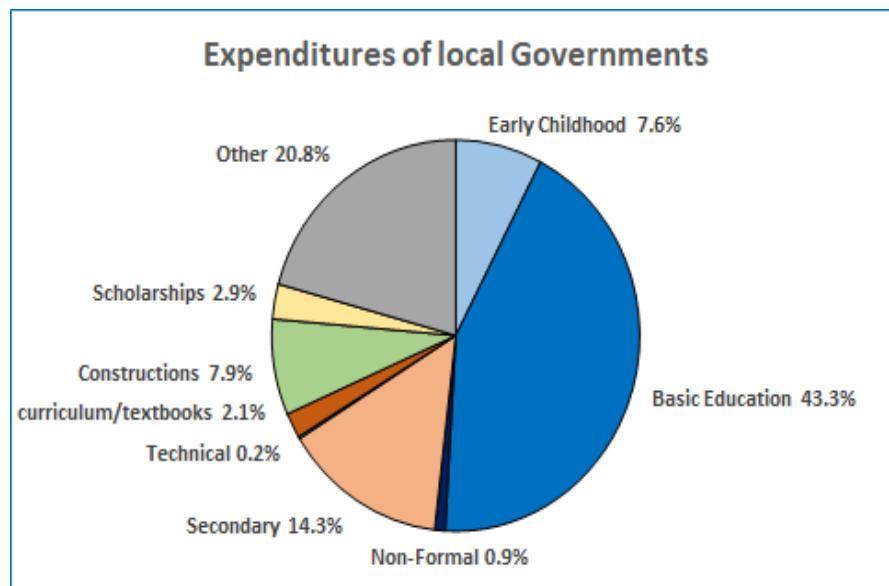
Table 8.7: Expenditure by the 730 local government by level of education and source of funding, 2019/20

In NPR million	Conditional grants	Other sources of funding					Total education expenditure	% conditional grants
		Revenue sharing	Equalization grants	Other grants	Internal resources	Sub-total		
ECED/PPE	6,822.0	160.4	203.7	9.2	99.6	472.9	7,294.9	93.5
Basic education	38,725.2	173.6	269.0	0.3	119.3	562.2	39,287.4	98.6
Non-formal	808.9	31.9	28.7	3.0	21.8	85.4	894.3	90.5
Secondary	12,819.4	157.0	194.0	3.6	50.1	404.6	13,224.0	96.9
Technical	161.1	24.1	52.2	11.5	20.3	108.0	269.2	59.9
Curriculum/textbooks	1,866.9	34.7	55.6	5.8	27.5	123.7	1,990.6	93.8
Construction	7,092.0	312.3	1,085.6	300.8	389.4	2,088.0	9,180.0	77.3
Scholarships	2,578.8	39.1	80.6	7.3	47.2	174.2	2,753.1	93.7
Other	18,568.7	1,211.9	1,769.9	225.6	887.4	4,094.8	22,663.5	81.9
Total	89,443.0	2,144.9	3,739.3	567.1	1,662.5	8,113.8	97,556.8	91.7

Source: Peano, 2020⁵⁶

Figure 8.4: Share of conditional grants and other sources in local government spending by level

Source: Peano 2020

Figure 8.5: Expenditure of local governments by category, 2019/20

Source: Peano, 2020

Provincial governments' budget

The funding mechanisms for provincial government are similar to those for local governments. Provincial governments receive earmarked grants, mainly conditional

grants from the federal budget, and non-earmarked funding from revenue sharing and the equalization grants. They also mobilise internal (local) resources. The seven provincial governments received NPR 5.1 billion of conditional grants for FY 2020/21, with most of it for technical education (Table 8.8).

Table 8.8: Programmes to be implemented at provincial level using conditional grants, 2020/21

Program	Budget (in million)
Council for Technical and Vocational Education and Training	4,056.3
School Sector Development Programme	596.0
National Examination Board	312.5
Community Library Grant	74.6
Manmohan Polytechnic	48.4
Education For All-Child Development Program	11.0
Total	5,098.8

Source: CEHRD, 2020e

For the purpose of this analysis, provincial budget reporting was unable to directly show the total expenditure for education in 2019/20, including those made from their non-earmarked resources. CEHRD subsequently made an estimate from information collected from six provincial offices from ASIP/AWPBs for 2018/19 and 2020/21. The amount allocated for education by these provincial governments represented the equivalent of 12.1% of the equalization grant received they received in 2018/19 and 11.48% in 2020/21. Provincial government expenditure for education can then be estimated at NPR 11.4 billion in FY2020/21 comprising NPR 5.1 billion received as conditional grants from the federal budget and NPR 6.3 billion from their non-earmarked resources.

Table 8.9: Provincial government education budgets, 2018/19 to 2020/21 (NPR billion)

	2018/19	2019/20	2020/21
	Budget	Budget	Budget
Equalization grants to provincial govt	50.3	55.3	55.2
<i>Education as % of equalization grant</i>	12.1	11.8	11.48
Education expenditure from own resources	6.1	6.5	6.3
Conditional grants	2.9	4.3	5.1
Total for education	8.9	10.8	11.4

Source: Calculated using budget data from CEHRD, 2018c, 2019b and 2020e

Consolidated expenditure of government

Altogether, the actual expenditure for education across the three tiers of government amounted to NPR 141.3 billion in 2018/19 and is planned to total NPR 190.3 billion in FY 2020/21 (Table 8.10). The two major components are the transfer to local governments through conditional grants and direct spending at the federal level, mainly for technical and higher education.

Table 8.10: Consolidated Government's expenditures for education (NPR billion)

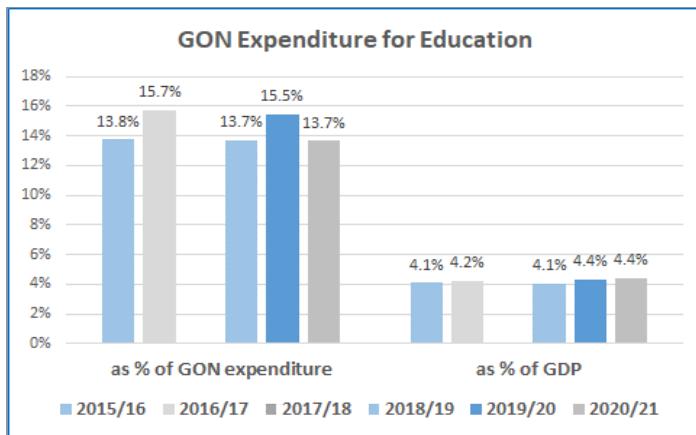
	2018/19	2019/20	2020/21
	Actual	Revised	Budget
Expenditure for Education	141.3	164.3	190.3
Federal (MoEST)	36.5	34.1	55.9
Other federal ministries	3.1	3.1	4.1
Conditional grants to provinces	2.9	4.3	5.1
Provinces' own resources	6.1	6.5	6.3
Conditional grants to local govts	85.1	94.2	110.7
Local own resources	7.7	8.1	8.1

Source: Calculated using budget data and ASIP/AWPB documents (CEHRD, 2018c, 2019b and 2020e)

Taking into account all levels of government, education represented 13.7% of total government budget in 2020/21, which is rather low compared to the 20% considered an international benchmark.

In relation to GDP, the public expenditure stood at 4.1% in 2018/19, the last year when actual expenditures were reported and is likely to stand at 4.4% with the budget planned for 2020/21 (Table 8.11). Figure 8.6 displays government expenditure for education against GDP in different years.

Figure 8.6: Education as a proportion of government budget and GDP



Source: Peano, 2020

Table 8.11: Trend in GoN expenditure for education compared to GDP and total budget (NPR billion)

	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2018/19	2019/20	2020/21
GDP	1,192.8	1,367.0	1,527.3	1,695.0	1,964.5	2,130.1	2,253.2	2,674.5	3,458.8	3,767.0	4,312.9
Total GoN expenditure	259.7	295.4	339.2	358.6	435.1	522.7	671.7	717.3	1,031.6	1,062.3	1,392.2
GoN Expenditure for Education	48.35	57.51	64.96	65.32	81.53	83.91	92.4	112.8	141.3	164.3	190.3
% growth rate at constant prices		7.30	5.90	-5.60	14.80	-2.80					
as % of GoN expenditure	18.6	19.5	19.2	18.2	18.7	16.1	13.8	15.7	13.7	15.5	13.7
as % of GDP	4.1	4.2	4.3	3.9	4.1	3.9	4.1	4.2	4.1	4.4	4.4

Source: MoEST and UNESCO, 2016; Peano, 2020⁵⁷

Expenditures by levels of education (Federal MoEST and conditional grants)

Half of the 2020/21 federal education budget (NPR 85 billion) has been allocated to basic education (which enrolled 3.8 million students in public schools) (Table 8.12). The second highest amount is the NPR 33.1 billion (19%) for secondary education, to serve the 1.3 million students enrolled at this level. Education management, higher education and technical vocational education are receiving significant shares, while literacy and non-

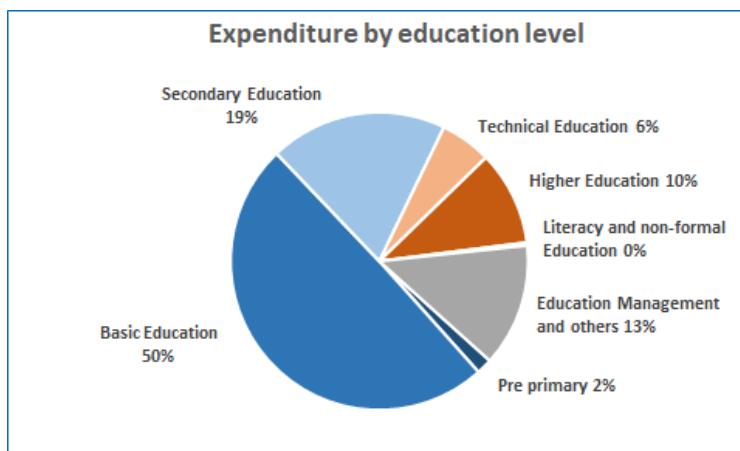
formal programmes are receiving relatively smaller shares. Note that the allocation to ECED/PPE is probably underestimated here as some of it has been included under basic education. Figure 8.7 displays the distribution of 2020/21 budget.

Table 8.12: Expenditure on federal budget by education level (NPR million)

Sub-sector	2019/20	2020/21
Early childhood education (ECED/PPE)	2,733.2	2,938.0
Basic education	68,072.8	84,974.3
Secondary education	28,348.4	33,134.1
Technical education	4,077.2	9,558.9
Higher education	17,638.4	17,624.4
Literacy and non-formal education	1,345.2	584.7
Education management and other	41,540.7	22,897.8
Total	163,755.9	171,712.2

Source: CEHRD, 2019b and 2020e

Figure 8.7: Distribution of 2020/21 education budget



Source: Peano, 2020⁵⁸

The average expenditure per student in FY 2019/20 ranged from NPR 177,270 per technical education student to NPR 756 per non-formal education student (Table 8.13) for which enrolment statistics are available. The government spent an average of NPR 18,000 per basic and NPR 23,000 per secondary student.

⁵⁸ Source: SuTRA database, district treasury offices & Financial Comptroller General Office

Table 8.13: Expenditure per student in 2019/20 (as reported by local governments)

Sub-sector	Students enrolled in public institutions	Expenditure NPR million	Per student NPR
Pre-primary (ECED/PPE)	555,075	2,733.2	4,924
Basic education	3,806,639	68,072.8	17,883
Secondary education	1,221,444	28,348.4	23,209
Technical education	23,000	4,077.2	177,270
Higher education	275,000	17,638.4	64,140
Literacy and non-formal education	1,780,000	1,345.2	756
Education management and other	–	41,540.7	–
Total		163,755.9	

Source: Peano, 2020⁵⁹

8.3 Household Expenditure on Education

Households, i.e. student's families, are the main funders of education activities in Nepal, as they bear 49% of the initial funding. They pay contributions, tuition fees and user fees to public and private educational institutions and pay for uniforms, textbooks and supplies, transport to and from school and private tuition. According to the 2016/17 household survey (CBS, 2019), education represented 4.1% of average household expenditure after food (52%) and rent (12.7%) with average per capita expenditure of NPR 4,134 on education services and products, which nationwide amounted to NPR 119 billion.

Urban families spent a relatively larger proportion on education than rural households (5.5% vs 3.3%) (Table 8.14). The proportion of education expenditure increased in relation to families' incomes with the 20% of households with higher income devoting 5.8% of their consumption for education and spending 20 times the average spending of the 20% with the lowest income. Wealthier families tend to be more urban, send their children to private educational institutions and their children study for longer.

Table 8.14: Household education expenditure, 2016/17

	Education expenditure	
	% of household consumption	NPR per capita
All households	4.1	4,134
Urban	5.1	6,443
Rural	3.3	2,471
Poorest Quintile	2.3	654
Second Quintile	3.0	1,326
Third Quintile	3.5	2,055
Fourth Quintile	4.8	4,338
Richest Quintile	5.8	12,305

Source: CBS, 2019 (*National Household Survey, 2016/17*)

Another estimate of expenditure on education can be made using the National Education Accounts (NEA) estimates per student for 2014/15 and updating these estimates using changes in enrolment figures and the national price index to account for the inflation in the cost of education goods and services. This calculation leads to estimated household expenditure of NPR 113 billion in FY 2016/17. This source is based on the results of the 2010/11 Nepal Living Standards Survey (CBS, 2011). The two sources give close estimates of NPR 119 and 113 billion. The second approach has been used to develop the detailed analysis in this section as it provides the possibility to update for 2019/20 by category of school and level of education.

Total household expenditure on education

In 2019/20, households spent NPR 171.4 billion on education comprising NPR 112.9 billion of payments to educational institutions and NPR 58.5 billion buying uniforms, supplies, transport, snacks and other goods and services. Fees paid to private educational institutions account for more than one half of all expenditures of households. Payments and contributions to public schools at pre-primary, basic level and secondary level (Grades 9–12) amount to 5.2 billion NPR. At upper levels, families are paying NPR 16.4 billion as fees to public institutions. The main expenditures for goods and services related to the school attendance are for textbooks and school supplies (NPR 20.8 billion) and for snacks (NPR 16.4 billion) (Table 8.15).

Table 8.15: Education expenditure of households by type of expenditure, 2014/15 to 2019/20 (Million NPR)

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Fees to public institutions	10,545	11,184	12,574	15,174	17,471	16,331
Tuition fees to private institutions	47,188	44,932	52,365	59,235	71,014	87,380
Fees for ancillary services	4,338	4,582	5,281	5,860	7,286	9,164
Uniforms	6,780	7,423	8,268	8,961	9,824	10,652
Textbooks and supplies	12,772	13,712	15,381	16,975	19,033	20,797
Transport	2,195	2,196	2,517	2,903	3,352	4,049
Other (snacks, tea, etc.)	9,699	10,324	11,659	12,931	14,748	16,366
Private tuition	3,858	4,232	4,781	5,312	6,039	6,624
Total in NPR million	97,374	98,586	112,826	127,350	148,766	171,363

Source: Peano, 2020⁶⁰

Unit cost per students

In 2019/20, education financing ranged from 137,000 NPR per student in private higher education and NPR 135,000 per student in private technical education to NPR 2,025 per student in public ECED/PPE and NPR 2,719 per student in public lower basic (Table 8.16). Private education is much more costly than attending a public institution. Families choose private education because of the language of instruction (mostly English), the generally better quality education and the higher social recognition attached to sending their children to a private institution. Public basic education entails costs for families even as education is free and compulsory. This amounts to NPR 2,700 per year at lower basic level, of which NPR 500 is a compulsory direct contribution to the school. The cost per student increases with the education level, with higher payments to schools and higher related expenses. Most parents of private secondary students spend large amounts on private tuition.

Table 8.16: Household expenditure per student by type and level of education, 2019/20 (NPR)

	Payments to educational institutions	Expenses outside educational institutions					Totals
		Uniforms	Textbooks & supplies	Transport	Other (snacks, etc.)	Private tuition	
Public schools							
ECED/PPE	513	489	451	18	496	58	2,025
Lower basic	478	698	774	14	582	172	2,719
Upper-basic	1,135	1,105	1,553	15	960	308	5,076
Lower secondary	2,749	1,363	2,882	58	2,083	1,794	10,928
Higher secondary	14,474	1,406	3,120	471	2,781	1,305	23,557
Technical colleges	20,115	1,409	3,121	466	2,785	1,301	29,197
University constituent colleges	16,903	916	5,443	2,107	3,170	1,220	29,758
University community colleges	15,310	794	4,356	2,370	1,897	1,454	26,181
Private schools							
ECED	14,207	1,083	1,269	241	1,423	195	18,418
Lower basic	26,948	1,894	3,473	760	3,013	742	36,829
Upper basic	26,818	2,285	4,725	1,231	4,168	1,537	40,763
Lower secondary	42,526	2,288	5,192	2,041	5,076	4,759	61,882
Higher secondary	50,590	2,370	4,778	2,421	4,737	1,636	66,532
Technical colleges	119,225	1,904	3,823	2,155	7,325	130	134,563
Private higher education	120,088	1,716	5,427	2,475	6,503	1,107	137,316

Source: Peano, 2020⁶¹

8.4 External Funding

Amounts and terms of external support vary widely

External funding for education comes mainly from international organizations including development banks and foreign government cooperation agencies and private funding mobilised by INGOs. It is mainly channelled through either the government's budget, managed directly by the funding entity, or transferred to another entity for implementation. External funding has increased from NPR 13.5 billion in 2009/10 to 31.3 billion in 2020/21 (Table 8.17 and Figure 8.8). Funding includes grants or concessionary loans, sometimes attached to specific achievements measured by indicators. External funding is expected

⁶¹ ibid

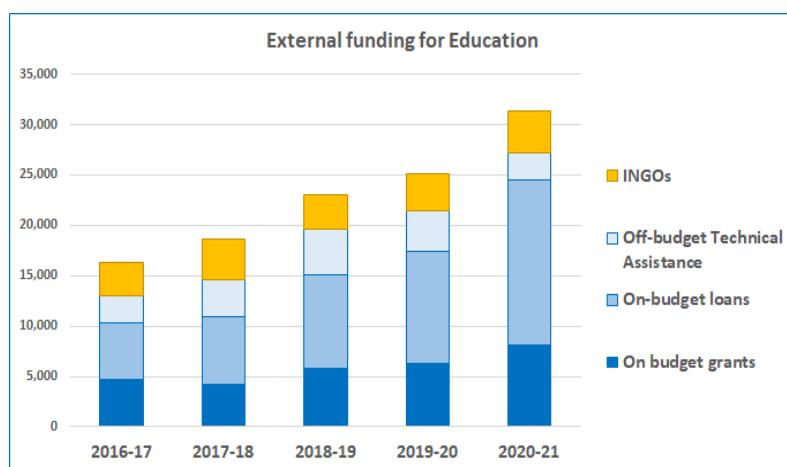
to come to NPR 31.3 billion in FY 2020/21, with a half being loans. The amounts and the terms of support vary widely, depending on the agreements on programmes with the government. In recent years, on-budget loans have become the major component of the external financing for education with this amount increasing five-fold in the last 12 years. The distribution of foreign grants and loans received by the three tiers of government are shown in Table 8.18.

Table 8.17: External funding for education by source of financing (NPR million)

	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018-19	2019-20	2020-21
On budget grants	7,943	10,457	12,214	11,523	12,854	9,551	13,285	4,729	4,175	5,845	6,304	8,107
On-budget loans	3,641	432	652	0	297	464	1,903	5,576	6,783	9,228	11,155	16,407
Technical assistance	464	533	1,309	1,212	1,190	1,382	2,490	2,694	3,701	4,487	4,020	2,705
INGOs	1,494	1,530	1,629	1,729	1,829	1,929	3,099	3,265	3,967	3,495	3,624	4,068
Total	13,541	12,952	15,804	14,464	16,171	13,325	20,777	16,265	18,626	23,055	25,103	31,287

Source: Peano, 2020⁶²

Figure 8.8: Variation in external funding for education



Source: Peano, 2020⁶³

⁶² Calculation by Peano (2020) using NEA data to 2015/16 (MoEST and UNESCO, 2016), calculations by the authors using budget speeches (MoF, 2019), source books, AIN mapping (AIN, 2020)

⁶³ Ibid

Table 8.18: Distribution of on-budget support by level of government

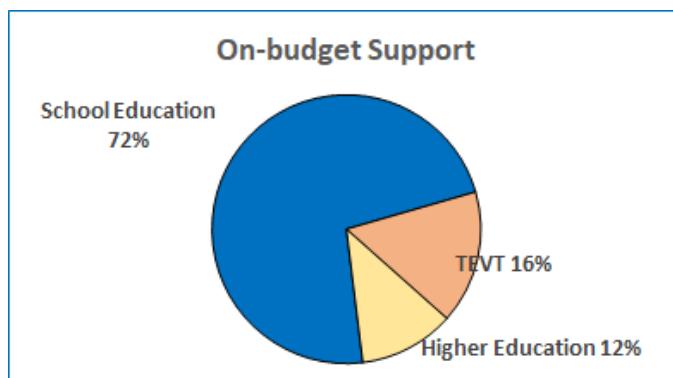
	Foreign grants	Foreign loans
Federal	3,770.8	10,305.2
Province	81.5	99.9
Local	4,254.6	6,002.0
Total on-budget	8,106.9	16,407.1

Source: Peano, 2020⁶⁴

Budget directed to school education

On-budget support: Joint fund for supporting SSDP and programmes for TVET and higher education

The major part of external funding for education is channelled through the government budget. It includes major programmes implemented using Asian Development Bank and World Bank loans, and pooled funding to support the School Sector Development Plan, with a group of development partners amalgamating their funding with the government to finance SSDP.⁶⁵ The school education sub-sector is receiving the major share of external support in 2020/21 with the rest going for TEVT and higher education (Figure 8.9 and Table 8.19).

Figure 8.9: On-budget support to education, by level, 2020/21

⁶⁴ Budget speeches (MoF, 2019) and red book.

⁶⁵ The Asian Development Bank, European Union, Finland, GPE, JICA, Norway, UNICEF, USAID and World Bank have communicated their 2020/21 disbursement plans for the joint financing partner fund (ASIP, 2020/21)

Table 8.19: Expenditure for education through on-budget external support to GoN

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
	Budget	Budget	Budget	Actual	Budget	Budget
Total	15,187.3	10,305.3	10,957.8	9,908.8	17459	14,076
Grants	13,284.5	4,728.9	4,174.8	3,735.7	6304	3,770.8
Loans	1,902.8	5,576.4	6,783.0	6,173.1	11155	10,305.2
School Education	12,722.5	8,326.4	8,556.4			7,356.8
TEVT	1,462.0	1,033.2	1,404.0			3,917.8
Higher Education	1,002.8	945.7	997.4			2,801.4

Source: Calculation by Peano (2020) based on technical assistance books, Ministry of Finance

Technical assistance off-budget is more oriented to school education and system support

Technical assistance off-budget support is provided by international organisations and bilateral cooperation agencies financed outside the government financial system and not reported in government budget accounting (Table 8.20). Between 2015 and 2020, this assistance is mainly directed to school education (75%), with a substantial amount of support for system level activities (16.1%).

Table 8.20: Expenditure from technical assistance off-budget programmes (NPR million)

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
School education	2,000.3	2,300.6	2,967.9	3,174.4	2,764.9	1,771.7
TEVT	336.6	97.7	95.1	86.6	24.4	10.8
Higher education	20.5	43.0	20.9	0.0	0.0	0.0
Non-Formal education	28.4	29.7	21.2	32.3	32.2	23.1
System	42.3	204.2	577.1	917.3	928.0	611.7
Other	62.1	19.3	18.8	276.1	270.3	288.0
Total	2,490.2	2,694.5	3,701.0	4,486.8	4,019.8	2,705.3

Source: AIN, 2020

International NGOs provide more direct support to basic level schooling

INGOs mobilize funding from external private sources. Most INGOs intervene across a range of sectors while a few work exclusively on education. The Association of International NGOs (AIN) reports that 40 INGOs supported Nepal's education sector between 2018 and 2020 (AIN, 2020). Activities through local NGOs are mainly directed towards public schools at

basic education level and include school infrastructure, support to school feeding, learning materials, support to families. They also support school communities for the remuneration of additional staff.

8.5 Non-State Actors

Non-state actors in the education sector include households, INGOs and NGOs. This section also considers funding mobilised by schools from communities and schools' income-generation activities.

Private financing for education

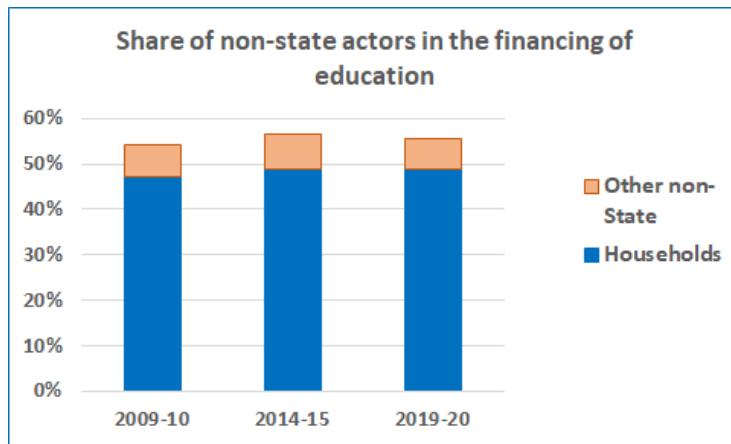
Households pay registration, tuition and user fees, including for boarding, to private and public education institutions. Households also pay for uniforms, textbooks and school supplies, snacks and tea, transport to and from school, and extra private tuition. INGOs mobilize external private sources and can implement directly and often sub-contract local NGOs. They mainly contribute to financing non-formal programmes, ECED/PPE and by supporting public schools. They provide equipment support to schools and train teachers and other school staff. They also support the carrying out of research and advocate for the expansion and development of basic education for all. Non-state entities funded 55.5% of total education expenditure in 2019/20 (Table 8.21 and Figure 8.10) with households accounting for most of this (48.9% of total), with the proportion of funding provided by the different non-state actors being similar over the past decade.

Table 8.21: The share of non-state entities in the initial financing of education expenditure

	2009/10		2014/15		2019/20	
	NPR million	Education expenditure (%)	NPR million	Education expenditure (%)	NPR million	Education expenditure (%)
Households	50,230.9	47.3	96,034.9	48.8	168,215.7	48.9
Funding generated by schools	4,727.3	4.4	11,056.7	5.6	15,921.6	4.6
INGOs	1,494.0	1.4	1,928.9	1.0	3,624.0	1.1
NGOs	990.9	0.9	2,376.4	1.2	3,422.0	1.0
Non-state actors	57,443.1	54.1	111,396.9	56.6	191,183.4	55.5

Source: Calculations by Peano, 2020⁶⁶

⁶⁶ using NEA (MoEST and UNESCO, 2016), CBS/CPI Data set, EMIS Dataset (granted by CEHRD) and AIN (2020) mapping

Figure 8.10: The share of non-state actors in the financing

Source: The share of non-state actors in the financing (Peano, 2020⁶⁷)

Private provision

The delivery of education services is dominated by public providers as they enrol the majority of students; and receive the major part of the resources. Public providers are funded through a mix of public resources (88.6%) and private sources of funding (11.4%), the share private provisions being higher in public universities and community colleges which charge fees and for literacy and non-formal programmes with high levels of support from NGOs.

Private providers at all levels mobilised funding of NPR 95.6 billion in 2019/20, not including the related goods and services purchased by the families of students. The private providers represent 38% of the expenditure on the provision of education services. They comprise a larger proportion of technical and vocational education (58%) and higher education level (46%) expenditure than at the basic education level (35%).

8.6 Findings and Recommendations

Finding 8.1: Education funding – Nepal is gradually increasing domestic funding for education as the share of external funding has gradually declined. As the country moves towards a federal system, it is imperative to find appropriate ways of allocating funds.

Local financial mechanisms and their role in per-student funding need to be clarified at provincial and local government levels, and school-level allocation formulas need to be worked out. And budget execution needs to be aligned with planning efforts.

- **Recommendation 8.1.1** – Establish a system that allows to track government budget allocation and expenditure tracking across all government tiers and budgets, including the equalization grants from the local governments, to monitor and report on overall domestic financing for education and track compliance with international commitments. Continue advocacy to increase the overall education budget in line with international commitments.

Finding 8.2: The COVID-19 crisis challenges private funding and provision – The level of household spending shows that many families choose fee-paying education despite significant additional costs. This raises questions of equity in access to quality education. In addition, the expense of attending public schools can cause economic hardships for poor families. Many households' education spending relies on remittances that are likely to significantly decrease due to the COVID-19 pandemic related constraints for labour migration and demand of labour. Although it is expected to be severe, it is unclear what impact the pandemic has had on the running of private schools.

- **Recommendation 8.2.1** – Explore models that are based on affordable education so as to support low-income families.

Finding 8.3: Economic and public finance risks – The pandemic has created shocks and repercussions on demand, supply and external features. It is impacting schooling and reducing the capacity of households, I/NGOs and private sectors to finance private education. The federal government is facing challenges in mobilizing revenue and in public expenditure management. There is less customs revenue, VAT, income tax and non-tax revenues to pay for the government's recurrent expenditure. As a result, the government is challenged to manage the provisional budget transfers to provinces and local governments. Some development programmes may forego funding. This will all have a negative impact on the functioning of provinces and local governments. Also, the pandemic's impact on development partners' GDPs may well reduce external funding for Nepal from foreign grants.

- **Recommendation 8.3.1** – Education funding – To improve budgetary execution, MoEST should prioritise its programmes, reinforce the use of EMIS to link the budget with policy priorities, and expand the role of provincial governments to alleviate the managerial burden of local governments. The federal structure has made the link between the central government and local governments more direct in terms of funding allocation, performance and accountability. This is a good move towards

making sector financing more efficient. However, the role of provincial governments in budget allocation, monitoring, and management should be recognized and enhanced to improve overall efficiency. The development of clear, measurable, and monitorable funding formulas, which include a role for provincial governments, should be explored. There is an opportunity to use the Federal Education Act to address these issues.

- **Recommendation 8.3.2 – Household financing:** Households are the main funders of education expenditure in Nepal, mainly by paying fees for students in private institutions, although there are also significant costs for students enrolled in public institutions. As more poor families enrol their children in public schools, reducing the burden of household financing from pre-primary to lower secondary levels would help encourage all children to attend the full cycle of basic education.
- **Recommendation 8.3.3 – Many families' budgets depend on financial transfers from workers abroad.** This source of funding could be constrained by the impact of the pandemic. In this context, the government should consider reducing the cost of basic education as part of broader policies to support families.
- **Recommendation 8.3.4 – On public and private provision:** Household spending shows a strong demand for education, but a certain disaffection with public schools as many families choose private schooling despite its high cost. The next education plan should give priority to and devise strategies to ensure better learning outcomes and a higher quality of teaching in public schools.

Finding 8.4: Less government spending on education could undermine economic development: Many Nepalese still live just above the poverty line and are prone to socio-economic vulnerabilities. The economic and social ambition of the country requires a strong investment in human capital to provide the necessary skills required for sustained development.

- **Recommendation 8.4.1 –** The government should ensure a sufficient level of investment in education. At the moment, it spends a relatively small proportion of its budget (13.7% excluding debt servicing) on education compared to international benchmarks, even when accounting for spending by all three tiers of government. In the context of economic inequalities in the population, public expenditure is fundamental to improve educational achievement to benefit the whole economy.

Finding 8.5: Government financing – Policies encouraging economic growth should enlarge the fiscal basis and increasing government revenues in turn benefitting public financing for education.

- **Recommendation 8.5.1 –** The government should view investing in human capital as a precondition for long-term economic development. The next education sector

plan should be based on this vision. This supposes dedicating a larger share of the government's budget for education aiming for a target of 20% of the government (federal, provincial and local) budget.

Finding 8.6: Financing mechanisms are complex and lead to territorial inequalities – The federal system has made local governments responsible for funding and managing public schools. The centralisation of the majority of tax revenues at the central level requires a redistribution of revenues to sub-national levels to enable local governments to implement their responsibilities. This is clearly the case for teacher remuneration, which is the major part of education costs. Owing to budget constraints, the number of positions of permanent, temporary, and rahat teachers has been kept unchanged in the central budget and MoEST is expecting local governments or schools to compensate for funding shortcomings from their own resources. However, the deployment of permanent positions is unequal across Nepal and not all local governments can compensate.

- **Recommendation 8.6.1** – Develop a teacher rationalization and redeployment plan with annual targets on teachers being (re)deployed to reduce the inequitable distribution of teachers across local governments.

Finding 8.7: Funding mechanisms – The analysis of territorial disparities indicates the need for an evolution of the current funding mechanisms. Special attention has to be given to the remuneration and deployment of teachers. Keeping earmarked funding for teacher remuneration could contribute to geographical equity, with the condition that this funding covers all teachers, and as long as it is distributed based on objective criteria. By contrast, schools' infrastructure, maintenance and day-to-day recurrent expenses could be the responsibility of local governments funded from non-earmarked sources.

- **Recommendation 8.7.1** – Many types of funding mechanisms are possible, from full decentralisation leaving the responsibility to local governments with totally non-earmarked funding, to keeping earmarked funding for specific activities. The diversity in the size and capacity of local governments suggests that a system where the federal level ensures a territorial balance in the conditions of schooling would be the most favourable solution. However, the equitable distribution of resources is mainly a management issue, and reformed financing mechanisms would not solve all the difficulties.
- **Recommendation 8.7.2** – Territorial equity in education could be based on conditional grants to local governments that cover the remuneration of all teachers based on pedagogical norms being reflected in the number of teachers and the ratio of teachers to students. This would need clear management of the network of public schools. The federal level could also consider keeping the control of some activities such as

scholarships for disadvantaged groups, while current and equipment expenditures could be covered from non-earmarked resources.

Finding 8.8: Federalism accentuates the difficulties reporting information – The information system is important for the efficient and effective management of the education system, with a network of schools covering the entire territory. The complex decentralisation system has led to the reporting flow on implementation becoming more complicated. Local governments have to report the district treasuries whose financial operations are controlled by the Financial Comptroller General Office (FCGO). Budget and expenditures are processed under the SuTRA system. Electronic transmission has still to be expanded to all local governments. CEHRD is exploring the possibility of collecting financial information directly from schools as the SuTRA system cannot properly cross-reference resources and school conditions and achievements, limiting potential analyses. The monitoring of the system requires that MoEST is able to collect and analyse a large quantity of information of varying degrees of scope and complexity. This is important also for the management of external financing as several development partners link their disbursements to the attainment of indicators. The improper flow of information threatens the timely assessment of disbursement linked indicators (DLIs) and could hinder the timely release of external resources.

- **Recommendations 8.8.1** – Financial reporting systems are being developed and their functioning needs improving to smooth the flow of information to and from local governments in order to enhance their accountability and decision-making capacity.
- **Recommendations 8.8.2** – There are many stakeholders involved in education financing and many of the reporting systems are tied specifically to each financing entity, often with their own discrete financial systems. Achieving a comprehensive picture of all expenditure therefore requires the mobilisation and processing of many sources. An initial coordination exercise was implemented with the National Education Accounts between 2009 and 2015, and this present assessment has tried to update this picture. It is advisable that MoEST undertake similar work, ideally, every year so that regular information on costs and expenditure could complement the regular production of data on schools, students and teachers. Specifically, MoEST should use the forthcoming data from the 2020/21 Nepal Living Standard Survey to update information on household expenditure on education.
- **Recommendation 8.8.3** – Information is also important for the management of external financing, as several development partners link their disbursements to the attainment of indicators. Development partners should consider the potential difficulties and risks in maintaining the flow of performance data when designing results frameworks.

Finding 8.9: The need to develop management capacity in local governments – Developing the management capacity of the staff in charge of education in local governments is another challenge for the smooth monitoring of the system. The 753 local governments have most responsibilities for providing school education. Even with the redeployment of education officers to local governments, it has not been possible to provide all local governments with adequate management capacity. The issue also has an impact on the federal level MoEST, as solving financial irregularities in local governments has become difficult due to their lack of technical staff and expertise.

- **Recommendation 8.9.1** - It is an urgent necessity to provide local governments with sufficient and qualified staffing in planning and management practices. Federal administration and well-performing provincial and local governments should be mobilised to support the technical and managerial difficulties in other local governments, to spread service delivery practices, promote the quality of services and improve the expenditure assignments. This is a precondition for the efficient use of public resources.

9. VULNERABILITY AND RISKS

This chapter describes the Nepal's risk profile in global risk and vulnerability index, identifies different type of risks that Nepal faces, and discusses the possible risk emerge from the federal transition. It then discusses possible effects of such risks and vulnerability on education and suggest some ways to develop resilient education system. This chapter is developed by reviewing relevant global, regional and local studies and literature.

9.1 Nepal's Risk Profile

Nepal is the thirty-fourth riskiest country worldwide in terms of risks from natural hazards and conflict, on par with countries like Congo, Palestine and Sierra Leone (INFORM, 2020). The INFORM risk index is a global, open-source risk assessment for humanitarian crises and disasters. It produces a composite risk indicator for 191 countries, on the basis of close to 50 indicators relating to three dimensions: hazards and exposure, vulnerability and lack of coping capacities. An overall score between 0 (low risk) and 10 (high risk) is given to each of these three components and an average is computed to determine the country's risk index. Nepal's index score of 5.7 puts it higher than the Southern Asia regional average of 5.1 and in the high-risk category of countries (Table 9.1). Nepal's high risk level is due to its exposure to hazards, its weak coping capacity at the institutional level and socioeconomic vulnerability with the major factor being natural hazards. Nepal is considered as the third most exposed country to earthquakes and is also substantially exposed to floods and epidemics. It also has a high level of exposure to conflict risks.

Historical trends in the index show a recent increase in this component overall. The coping capacity component's sub-index suggests that capacities have remained stable in recent years, although at a level that contributes to the global risk level the country faces. The two most salient drivers of low capacity are governance, with an index of 6.7/10 and access to health care, with an index of 5.8/10. In terms of vulnerability on the other hand, the index has shown an improving trend since 2016, to attain a level that today is classed as medium. It is notable that the country scores comparatively well in all indicators that compose the vulnerable groups component, resulting in an index for this of just 3.0/10, that places Nepal 102nd, thus favourably below the international mean of the total 191 countries (INFORM, 2020).

Table 9.1: Risk and vulnerability index

Component	Index (/10)	Rank (/191)	Sub-component	Index (/10)
HAZARD & EXPOSURE	5.7	33		
Natural			Earthquake	9.9
	5.8	35	Flood	6.7
			Tsunami	0.0
			Tropical Cyclone	0.2
			Drought	3.2
			Epidemic	6.6
Human	5.5	41	Projected Conflict Risk	7.8
			Current Highly Violent Conflict Intensity	0.0
VULNERABILITY	4.5	62		
Vulnerable Groups			Uprooted people	3.6
	3.0	102	Health Conditions	2.1
			Children U5	4.3
			Recent Shocks	0.2
			Food Security	2.0
			Other Vulnerable Groups	2.3
Socio-Economic Vulnerability	5.8	42	Development & Deprivation	7.3
			Inequality	4.1
			Economic Dependency	4.3
LACK OF COPING CAPACITY	5.6	53		
Institutional	6.1	47	Disaster Risk Reduction (DRR)	5.4
			Governance	6.7
Infrastructure	5.0	55	Communication	4.1
			Physical infrastructure	5.0
			Access to health care	5.8
INFORM RISK	5.2	34	RISK CLASS	High

Source: INFORM, 2020

9.2 Types of Risks

Nepal experienced 5,734 natural disasters, 10,284 manmade disasters, 4,061 conflict events and 208 epidemics between 2015 and 2020 (Table 9.2). The annual number of occurrences increased three-fold between 2015 and 2019 with natural and human-induced disasters accounting for most of the increase. The annual number of conflicts has fluctuated around an average of 730 events while there was a large rise in the impacts of epidemics in 2020 because of COVID-19.

The most frequent risk or hazard has been fire with almost 11,000 incidents in the period mostly in rural households built from inflammable materials. Natural disasters are the second most commonly occurring hazard with over 5,700 events in the period. Landslides are becoming more prevalent with their number increasing almost tenfold over the period with 550 in 2019 alone. Nepal's topography and fragile geology are compounded by climatic events, deforestation and unplanned settlements. Floods are also widespread as

the country's many rivers and rivulets break their banks during many monsoon seasons. Half of all natural disasters are small scale climatic events of cold waves, snow, hail and wind storms; thunderbolts and heavy rainfall.

The main types of conflict Nepal faces have historically been peaceful protests and to a lesser degree riots, together accounting for 88% of conflict events. Although the number of incidents of violence against civilians represents only 3% of all conflict events their incidence increased from 31 occurrences in 2019 to almost as many in the first seven months of 2020. Epidemics were not a systemic risk in Nepal in the recent past, although local outbreaks appeared, but the COVID-19 pandemic outbreak in 2020 has created an exponential increase in the occurrence of epidemic risk.

Table 9.2: Number of hazards and conflict events by risk type & province 2015-20

	P1	P2	P3	P4	P5	P6	P7	Total
Natural disasters	1,363	749	1,001	723	857	462	579	5,734
Climatic events	580	467	408	297	444	250	369	2,815
Earthquake	14	8	13	11	10	10	9	75
Floods	280	201	140	75	141	43	53	933
Landslide	408	1	394	313	194	144	123	1,577
Other natural disasters	81	72	46	27	68	15	25	334
Human-induced disasters	2,891	2,585	1,966	750	1,833	317	482	10,824
Fire	2,716	2,443	1,868	690	1,754	292	426	10,189
Other man-made disasters	175	142	98	60	79	25	56	635
Conflict	527	958	1,154	329	510	265	318	4,061
Battles	9	11	5	2	1		1	29
Explosions/Remote violence	37	23	26	17	25	11	13	152
Protests	309	530	822	209	307	155	208	2,540
Riots	124	359	224	59	122	73	68	1,029
Violence against civilians	20	24	18	6	26	17	8	119
Other conflict events	28	11	59	36	29	9	20	192
Epidemics	34	32	31	22	31	38	20	208
COVID-19	32	30	30	22	26	20	19	179
Other epidemics	2	2	1		5	18	1	29
Grand Total	4,815	4,324	4,152	1,824	3,231	1,082	1,399	20,827

Source: ADPC NGI & CECI (2013). Note: P3 = Bagmati, P4 = Gandaki, P5 = Lumbini, P6 = Karnali, P7 = Sudurpashchim

Provinces 1 and 2 and Bagmati province have been more exposed to all risk types in the past six years with more than 4,000 events each. Lumbini province has been moderately exposed while Gandaki, Karnali and Sudurpashchim had between 1,000 and 2,000 occurrences each (Table 9.2). The following paragraphs explain each province's level of risk in 2013 according to ADPC NGI and CECI (2013)

Province 1 in eastern Nepal is the most risk-prone province with the greatest number of natural and human-induced disasters of all seven provinces. It has also experienced the most climatic events accounting for 30% of floods and 27% of fires (especially in Jhapa, Morang, Sunsari and Udayapur districts); and 25% of landslides (mainly in Taplejung, Sankhuwasabha, Solukhumbu, Okhaldhunga, Khotang, Bhojpur, Dhankuta, Terhathum, Panchthar and Ilam). On the other hand, it is less conflict-prone considering that it is the third most populous province.

Province 2's risk exposure is mainly to human induced disasters and conflict, ranking second among the seven provinces for both. While all areas are affected by fire and protests and riots Saptari and Parsa are most highly affected. Province 2 ranks second for climatic risk events and had 22% of all floods.

Bagmati is the province with the most conflict events probably related to it being the most populous province and home to the capital city. Two thirds of the protests and half the riots occurred in Kathmandu. The capital also has the most human-induced disasters based on data of the previous years, with over a third of the provinces' fires occurring there, almost four times as many as the next most fire-prone district. Bagmati is also frequently beset by climatic events, although these are five times more frequent in Makwanpur than in other districts; by landslides, that account for 25% of national disasters; and floods, that mostly occur in Kathmandu, Sindhuli, Makwanpur, Sindhupalchok and Chitwan.

Gandaki province is among the three least risk-prone provinces, Gandaki has experienced the most events. A half of all events occurred in the four districts of Kaski, Lamjung, Syangja and Baglung. Gandaki is the third most prone province to landslides, having experienced 313 in the period 2015-20, with only Manang and Nawalpur almost untouched. Most protests and riots have been in Kaski, accounting for 48% and 33% of all such events in the province, respectively.

Lumbini province has had an average exposure to natural and manmade disasters, conflict and epidemics. The main drivers of its risk exposure have been climatic events, floods, landslides, fires, protests and riots.

Karnali is Nepal's least risk-prone province, with the fewest natural disasters, floods, conflict events and the fewest events overall over the period. It stands out however as being the province most exposed to epidemics, which can, in part, be attributed to the cholera outbreak in the summer of 2012.

Sudurpashchim is one of Nepal's least risk-prone provinces with least exposure to epidemics. It has been prone to climatic events, landslides and protests. Three of its nine districts (Achham, Kailali and Kanchanpur) account for 60% of all events.

9.3 Risks Emerging from the Federal Transition

Nepal's transition to a federal governance structure has made significant headway, with the election of provincial and local governments that are now functioning and key legislations enacted, and central institutions established. Significant progress has been made in terms of democratic representation with historically under-represented groups, such as, women and Dalits now having a voice through their presence in the assembly, with 38% and 21% of seats respectively (World Bank and UNDP, 2019).

However, the transition to federalism has increased the need for capacity-building for elected officials and civil servants at all levels, at great cost, for which a comprehensive strategy is still lacking. There have been delays in enacting some laws for implementing federalism. There are structural weaknesses in the inter-ministerial coordination mechanisms for the development of policy and the administration at the subnational level. Most provincial governments are in the process of building their administrative infrastructure and connectivity, with 47% of local governments building offices. Finally, sector ministries are under-capacitated with respect to their federal mandate (policy-setting and monitoring and evaluation) and over-capacitated with respect to implementation functions for which they are no longer responsible (World Bank and UNDP, 2019).

COVID-19 has brought these shortcomings starkly to light and is likely to extend the period needed for the transition to a fully functioning federal system in terms of responsibilities, accountability and capacities. The combination, therefore, of the transition to federalism and the constraints imposed by the pandemic are an unfavourable context in which to organize, and implement, disaster risk reduction institutions, policies and tools.

9.4 Vulnerability

that make them susceptible to the damaging effects of a hazard or conflict, such as health and nutrition; morbidity and mortality levels; the availability, quality and location of shelter; the lack of diversification of family revenue; or subsistence economies (IIEP, 2020). A number of physical, social, economic or environmental factors give rise to vulnerability. The capacity of a society, community or organization depends on the strengths, attributes, resources, mechanisms or strategies that it has at its disposal to cope with hazards and conflict, and prepare for and respond to risks and disasters. The key drivers of vulnerability are as follows in Nepal:

- Demographic pressure as Nepal has one of the fastest growing urban populations in South Asia which is straining its limited natural and economic resources (UN DoESA, 2019).
- Development and deprivation, with multidimensional poverty still affecting 28.6% of the population, despite having halved this level in the 2006–2014 period (NPC, 2018) and the human development index ranking Nepal 147 out of 189 countries despite a 1.18% improvement in the index since 2010 (UNDP, 2019).
- Refugees and internally displaced persons in relation to the significant number of families that are forcibly displaced as a consequence of disasters, when their homes are destroyed on the one hand, and the presence on the territory of 20,000 refugees living in five Bhutanese and twelve Tibetan refugee camps (UNHCR, 2020).
- Economic reliance on remittances, which have contributed greatly to reduce the trade deficit.
- Food security, which despite Nepal enjoying favourable indicators in terms of average nutritional quality, is subject to great uncertainty due to climate change, and other socioeconomic factors. Several areas in Nepal continue to be classified as food deficient areas and rely on supplementary feeding schemes.

9.5 Effect of Risks on Education

This section quantifies and describes the extent to which risks impact education focussing on the risks that have the greatest impact on school education including the 2015 earthquakes, floods and landslides, COVID-19, and riots, protests and conflict. This section also provides facts and figures relating to school-based violence, including gender-based violence.

The Ministry of Home Affairs reported that in 2017/18, 6,381 disaster events claimed 968 lives, injured 3,639 people, and affected 27,255 families. It also damaged 20,741 houses and caused economic losses equivalent to NPR 6,838 million (Gautam, 2020). A survey of students from 17 districts found that 94% of them said they had come across disasters, and

most said that earthquakes, fire and landslide disasters were the most prominent disasters they had experienced (Tuladhar et al., 2014). Major disasters like the 2015 earthquakes, 2017 floods, 2018 hurricanes and windstorms and 2020 COVID-19 have impacted Nepal's education sector badly.

The response to natural and human-induced disasters involves initiatives by the government, non-government and private sectors. For the education system, temporary learning centres are erected and health, WASH, nutrition and protection related services provided to students and school communities. Safe spaces are also created for children. Based on the nature of school damage, repair, maintenance, retrofitting or new school construction is needed. Government and non-government actors invest resources to manage teaching materials and build the capacities of education sector stakeholders.

Damage to school buildings is one of the main causes of learning losses. This is likely to be a recurrent problem. Following the 2015 earthquakes, the assessment of school structures has only been carried out in the 14 most affected districts. In the meantime, as enrolment increases, in several places, communities continue to expand schools including on steep slopes, close to river-banks and in the lap of hills, and without following building standards, or carrying out proper environmental impact assessments. This situation often creates new vulnerabilities to disasters.

Hazards and conflict impact the very nature of learning environments, the former undermining facilities and learning materials, and the latter creating tense, politicised and occasionally violent climates in schools. In addition to the closure of schools, the COVID-19 pandemic caused exams to be suspended. Most disasters place children and teachers under stress, be it psychological or social stress. All the above factors erode the basis for quality learning, and are detrimental to learning outcomes.

Risks particularly threaten the more vulnerable communities and their livelihoods, exacerbating poverty. This, in addition to the prevalence of school-related violence, not least corporal punishment by teachers, undermines demand for education, leading to increased rates of dropout and out-of-school children.

9.6 Impact of the COVID-19 pandemic on Nepal's Education System

Nepal's progress against key education performance indicators and achievements in human and social development and inclusiveness over the past ten years has experienced a severe shock with the COVID-19 pandemic reaching Nepal in early 2020. Overall outcomes

related to the reduction of people living in extreme poverty, as well as education specific net enrolment rates in basic and secondary education, gender parity in enrolment, basic education survival and completion rates and the literacy rate among 15-24-year-olds were among the indicators that were celebrated for their progress pre-2020. Progress is at risk of stagnating or even reversing due to the spread of COVID-19 and the measures undertaken (including a nine month school closure across the country) to prevent further transmission.

The high degree of autonomy to plan and implement functions relating to management of school level education at the municipal level provided an opportunity for localised response to mitigate the impact of the pandemic on the ability to continue education and facilitate learning. However, it also meant recently established local government structures needed to respond to an unprecedented challenge, while the federal structure roll out still requires roles to be clarified; management mechanisms to be set up; and intergovernmental coordination mechanisms to be put in place to provide an adequate response to the crisis.

The first case of the virus was identified in Nepal in January 2020. Following the identification of the second case in March, the country entered a strict lockdown with borders and all, but essential, Government services closed.

At the national level, federal government have provided the following guidelines and protocols to respond to the COVID-19 crisis, with the intention that local governments have responsibility for supporting, planning, and implementing their local response.

- COVID-19 Education Cluster Contingency Plan 2020 (approved 7 May 2020)
- Alternative Learning Facilitation Guidelines (approved on 31 May 2020)⁶⁸
- Emergency Action Plan for School Education (approved 22 September 2020)
- School Reopening Framework (approved on 5 November 2020)
- Closed User Group (CUG) Service Implementation guidelines (in process of being approved).

The current scenario of the contingency plan projects 2.2 million additional children will not be able to complete their education unless they are provided with additional support (NEC, 2020). As learning outcome levels, particularly amongst the children of vulnerable groups, were a concern previous to the pandemic, the disruption caused by the school closures will require intensive response over the next years to correct this. The pandemic

⁶⁸ This document was revised as student learning facilitation guideline, which was (re)approved on 4 September 2020

will also increase pre-existing disparities in access, participation and learning outcomes, with children from vulnerable groups falling even further behind their age appropriate levels because of the lack of regular, continuous face to face contact and protected space for learning that school provides. This also includes those children without access to technology that are potentially at a greater disadvantage while learning remotely.

Moving beyond the immediate effects of the pandemic on the education sector in Nepal, ensuring schools are able to safeguard the health of students and teachers will require large investments with EMIS data confirming, for example, that as of 2020, only 55% of the more than 35,000 schools have girls' toilets with running water. Although the 2019 MICS confirmed that 80.7% of the population has access to hand wash facilities with soap, there are large geographical disparities within this, with this percentage only reaching 55.2% in the Karnali province for example (CBS, 2020).

With schools closed and lockdown imposed throughout the country, it is predicted that there will be many negative effects on children's short and long term health and well-being because of the reduction in basic services and a likely increase in levels of anxiety which has negative effects on families. Girls and the youngest children in society have been disproportionately affected, as access to basic healthcare and mechanisms for child protection are vastly reduced at the same time as family pressures increase.

The health focus during this period has shifted to combatting COVID-19. The budget in the health sector for 2020/21 has significantly increased compared to the previous year to combat the COVID-19 situation but many vaccination programs, other health campaigns and the treatment of other diseases have been adversely affected by the shift in priorities (NPC, 2020). This has left many children without the basic healthcare needed to support their healthy growth. At the same time there are concerns about children's nutrition as there is no access to the daily school meals that were provided and the UNICEF family tracker indicated that 1 in 5 households are struggling to meet key dietary requirements, which could have a detrimental health on children's long term development.

Safeguarding incidents have also increased. Reported cases of domestic violence increased by more than 100% in the first three months of the lockdown and cases of rape or attempted rape also showed a substantial increase in this period (UNICEF, 2020). In some areas, child marriage was said to have increased during the lockdown which might be affecting on the dropout of the students (LEG, 2020). Since mid-March 2020, 1,350 persons, including 319 children and 876 women have been reported to have died by suicide. Suicide among adolescent girls have increased by almost 40 per cent during the

four months of lockdown compared to the same duration the previous year, with some increase among boys, according to the Nepal Police (UNICEF, 2020).

COVID-19 related disruptions in livelihoods and the contraction in households' consumption are expected to have affected the poor and vulnerable, including households engaged in informal activities, disproportionately. The pandemic has caused migration patterns to change. Poor daily wage labourers depend on regular work to be able to afford urban living costs. Without work, their savings disappear quickly, and they have no choice but to leave, mostly to their home village. This has an impact on school enrolment: when those workers leave with their families, their children will therefore need to be accommodated in village schools once they have returned. At the same time the return of migrant workers mostly from India and the Gulf States, has put a further strain on village and household resources.

Nepal is highly dependent on remittances from migrant labour abroad, which are worth over a quarter of its GDP. This dependency on money earned outside the country means livelihoods are particularly vulnerable to the border closures associated with COVID-19. After a sharp dip, overseas remittances to Nepal started rising again between July and September, suggesting an initial sign of economic recovery. However, there will be much uncertainty in the future as slower economic growth globally will have an impact on employment opportunities in the destination countries, with remittances to Nepal predicted to decline by 12 percent in 2020 (World Bank, 2020).

The MoEST attempted to keep learning loss to a minimum through a multi-pronged approach with different modalities being developed for different groups of children, depending on their access to electricity and connectivity. As access to internet and TV is low, the Government has had to find a range of alternative solutions with the potential to reach all children, including the most disadvantaged. Most teachers will not have been prepared for the switch in learning modalities. As well as this many were dealing with increased family pressures and anxiety about face to face contact. With roles and responsibilities for providing alternative methods of learning and school reopening shared between the Federal, Provincial and Local governments, through SMCs and Head teachers, co-ordination mechanisms, timing and capacity to implement needed will be robust enough for managing the resources.

Recognizing the efforts in initiating the various approaches to supporting continuity of learning, there is yet little data available about the extent to which these have met the needs, Such as how many children have learned through alternative modalities. This

emphasizes the need for systematic monitoring of learning levels to understand which children will require accelerated programs or support to get back at an appropriate learning level. Collection and analysis of this information should then help learn lessons for building for the future and make learning continuity resilient to any further shocks.

From November 2020, MoEST devolved the decisions to open schools to local governments, and municipalities initiated the operationalisation of the national standards and guidelines based on local risk assessments. The final framework for reopening schools was approved on 5th November 2020. These guidelines gave decision-making powers and management responsibilities to the local governments, in collaboration with the District COVID response management centre, around issues of reopening dates, phased and staggered reopening, and ensuring schools that had been used for quarantining were disinfected. Local governments are implementing the new directive at different speeds. As of January 2021, an estimated 85% of schools have reopened by local governments (NEC, 2020).

There is a concern that variation in local oversight and resources could lead to lack of control of safety standards in underserviced municipalities. To address this, disinfection and public health safety protocols are incorporated in the School Reopening Framework.

Throughout the response there has been a wide range of initiatives to support the health and well-being of children with provision of mental health and psychosocial support (MHPSS) mainly addressed through civil society and INGOs. The importance of partnerships with CSOs and non-government agencies during the response was reiterated in the Joint Sector Review (November, 2020), with the AIN (Association of International NGOs), for example, having a combined presence of its 40 member organizations supporting education in more than 500 of the 753 local governments, collectively covering nearly half of Nepal's more than 35,000 public schools. Furthermore, the support provided through the CSO networks in the Nepal Local Education Group to the response to the COVID-19 pandemic through the Nepal Education Cluster (covering 270 local governments) has been a critical support mechanism for the government in the response.

Finance for the education response to the situation came from different resources and is allocated through different Government mechanisms. The Government applied for USD 10.85 million from GPE funding to support the response. A significant amount of this (USD 4.66 million) was allocated to specifically support 100 local Governments, selected according to need and COVID-19 prevalence. Additional support was committed by World Bank (For Higher education), GPE, Finland and USAID. Some funds from SSDP were redirected (around USD 30 million) for the purpose including funding for the COVID

response, both in the last trimester of the 2019/20 fiscal year, and as part of the 2020/21 fiscal year annual work plan and budget, in August 2020. It is yet to be verified to what extent LGs used their equalisation grant budget and revenues towards the response in the education sector.

Federal relief programmes have been launched in response to COVID-19, such as cash/food for workers; loan offers to businesses; extension on tax payments; and rebates on utility bills (HCT, 2020). The Ministry of Finance (MoF) committed to expand the Universal Child Grant (UCG) to 11 new districts. This expansion will benefit an estimated 415,000 children and their families, many living in COVID-19 hotspots where economic activity is curtailed.

At a time when the decentralisation process still needed to be fully operationalised, and within the context of existing capacity constraints, the COVID-19 pandemic created unprecedented challenges for each layer of Government. Each LG had its own contextual challenges and different levels of capacity to manage the response comprehensively as it immediately changed priorities and created an urgent need for action to respond to the pandemic.

The FDM, NIPRE report (2020) commented that despite the limitations of local governments they were able to find localised solutions and mobilise resources to provide a rapid, response to the crisis. This is borne out in education by the way in which local governments used local knowledge and understanding to adapt resources for alternative learning modalities to reach as many learners as possible.

The COVID-19 pandemic has put local governments to the test in terms of being able to act on this mandate in responding to the challenges emerging from the pandemic and the federal and provincial governments in supporting them to do so.

9.7 Findings and Recommendations

Finding 9.1: Nepal is very vulnerable to natural disasters and is classified as high risk in terms of its exposure to a wide range of hazards and conflicts; and weak, although stable, institutional coping capacity. The exposure to these risks is increasing driven in part by population growth, haphazard infrastructure development and the effects of climate change.

- **Recommendation 9.1.1** - Create a comprehensive database and information system that integrates EMIS and the Disaster Management Information System (DIMS) – There

is a great need for a comprehensive database of schools, their condition, facilities, the risks they face and the tools they have developed to mitigate these. The Structural Integrity Damage Assessment (SIDA) is a starting point, that should be expanded to cover all schools, and linked to the EMIS. Information on risks and vulnerability, and school-level activities to address these in school improvement plans can be included in school report cards.

Finding 9.2: The low capacity of local governments has increased vulnerability to risk in the short-term. The transition to a federal structure is affecting education service delivery in general, and risk mitigation in particular. Education has yet to become a high priority for many provincial and local governments, where resources are often stretched and capacity underdeveloped and the roles of the three tiers of government are yet to be fully defined. The pandemic has placed further constraints on individual freedoms and institutional scope for action, further undermining capacities to respond to more common hazards.

- **Recommendation 9.2.1- Improve systematic education sector contingency planning –** Building on recent education cluster contingency planning exercises, the education sector needs to undertake a comprehensive exercise, on a multi-hazard basis. For contingency plans to yield best results, they must be developed in advance, and be dynamic, both entailing prevention and preparedness activities and measures, and be regularly updated. This should be completed in a capacity-building approach with broad stakeholder participation. Given the federal structure, support must then be provided to harmonize federal, provincial and local provisions and plans. Annual update exercises will offer the opportunity to take stock of progress in terms of implementing the preparation dimensions, and maintain momentum.

Finding 9.3: Education losses to natural disasters are wide-ranging and challenge the continuity of learning. Many schools have been damaged by earthquakes, landslides and flooding in recent years. Up to 60% of school buildings are highly vulnerable. Other impacts include the damage to teaching and learning materials coupled with psychological stress among pupils and teachers. Schools are often used as temporary shelters for affected families when disasters strike. These factors often result in extended school closure, the erosion of quality learning, interruptions to learning continuity, and the increased risk of dropout, particularly for girls.

- **Recommendation 9.3.1 - Improve education sector resilience, focusing on learning continuity –** The structural integrity of school buildings is an essential condition, but additional key considerations are necessary to ensure learning continuity, as the current COVID-19 crisis has further highlighted. CSS can provide the overarching

framework to ensure that schools are safe, the learning environment is protective and conducive, to both maintain classes during emergencies and minimize the risk of dropout. There is no one size fits all approach, and a tailored combination of remote learning approaches, with parents and teachers actively engaging the child in learning processes is required to best reach all children and youth, which incorporates and combines for example mobile and social messaging apps for continued teacher support and interaction, TV, printed learning packages, online platforms, as well as teacher training and monitoring at different levels (UNICEF, 2020b; 2020d; 2021).

Finding 9.4: Persisting disparities – Education reforms have created the foundations for peacebuilding and social cohesion. Efforts to improve minority group participation in education are yielding results; curricular reform to include peace, human rights and civic education has been initiated; and the language of instruction policy has laid the foundations for mother tongue and multilingual education. However, disparities in access remain significant; teaching and learning materials are yet to be updated and translated; and teacher training modernized to include practices that reflect the concepts shared; as for example, corporal punishment remains widespread. These factors, in addition to the growing share of private education provision, contribute to a widening gap, in terms of opportunity and learning, between the poorer majority and elite (boys especially), tending to reinforce social inequalities, and constitute a source of ongoing grievance and tension, potentially fuelling conflict within society.

- **Recommendation 9.4.1: Tackle absenteeism.** In the process of schools opening up, the traditional school-based administration to record attendance will have to be revisited in terms of being able to track children while they transition from formal to alternative education and back to normal. Many children will require targeted support to return to and remain in school after the reopening. This will include, reviewing and adapting the procedures and mechanisms on how to deal with absenteeism, and capacity should be built at Municipality and school level to use these effectively.
- **Recommendation 9.4.2: Prioritize strategies to close the implementation gap of existing policies and initiatives** – Nepal has signed up to many international agreements related to DRR. The translation of these into national policy should be a priority. Promising initiatives like Schools as Zones of Peace and Comprehensive School Safety deserve to be mainstreamed and implemented at scale, to achieve substantive change in resilience levels. Comprehensive, systematic and regular monitoring systems should enable the identification of priorities, provide the transparent basis for the allocation of scarce resources, and constitute incentives for local governments to build their own, and their communities' capacities and know-how.

Finding 9.5: Building the resilience of school education – Education and the education sector are key pillars of national resilience building. Efforts to mainstream disaster risk reduction in the curriculum began in the 1990s; children have been increasingly involved in environment clubs, disaster awareness activities and drills; and DRR programmes implemented such as the Child-Centred Disaster Risk Reduction Programme. More significantly, safe school initiatives have broadened their scope from structural integrity to include disaster and climate change education, and preparedness and response planning, with the recent Comprehensive School Safety initiative being adopted as an overarching framework by MoEST, to be implemented by all schools by 2022 to institutionalize DRR.

- **Recommendation 9.5.1: Seize the opportunity of the federal transition** – While the transition, and the clarification of roles and responsibilities and resulting capacity building is taking time, taken together, they represent an opportunity to change attitudes and develop a greater focus upon prevention and preparedness. As teams are formed, and capacities gradually built, there is scope to underline the importance of mainstreaming DRR in all activities, including broad development plans and education service delivery. Conversely, education priorities should be mainstreamed in DRR policies and plans at the local level. The National DRR Strategic Plan of Action (2018-2030) and the Fifteenth Periodic Plan (2019-2023) provide a conducive environment for this to happen.

Finding 9.6: Disaster risk reduction – The DRR policy and institutional landscape is comprehensive but the local expression of policy intent is highly variable and often weak. At the federal level, 24 key education policies accommodate DRR and school safety. Not least, the SSDP has a broad focus, not only on strengthening equity, quality, efficiency and governance in the education sector, but also on resilience. In 2017 MoEST developed a master plan for comprehensive school safety, adding implementation guidelines and a communication and dissemination strategy in 2019. Specific provisions for DRR include the 2015 DRRM Act and Nepal's Disaster Risk Reduction National Strategic Plan of Action (2018-30). DRR management institutions have been created at the federal (the National Disaster Risk Reduction & Management Authority, the National Reconstruction Authority, and NEOCs), provincial and local governments. However, only a minority of local governments have created disaster management committees (11%), formulated local acts and policies (5.9%), and produced DRR strategic action plans (2.5%); coordination mechanisms among the different tiers are yet to be clarified, and early warning systems implemented.

- **Recommendation 9.6.1 - Complete the updating of the national curriculum framework to reflect peacebuilding and disaster risk reduction** – Nepal's risk profile is such that reducing the impact of disasters and emergencies will hinge greatly on the inter-generational building of awareness and appropriate behaviour at the individual, community and social levels, to strengthen coping capacities and reduce vulnerability.

It is therefore a priority to complete the revision of curricula, textbooks and learning materials, teaching guides and teacher training programmes to embed the features of peacebuilding and DRR. These materials must be comprehensive and accessible through all learning media and locations: online, at schools, and in classrooms.

Finding 9.7. Preparedness and prevention – Addressing the damage caused by recent natural disasters has left much unfinished DRR business as resources are directed to addressing emergency response, at the expense of systemic prevention and preparedness. As a result, many initiatives designed in response to a given situation, but of much broader and long-term value, have been deprioritized, including the Schools as Zones of Peace initiative, the structural integrity of schools, comprehensive school safety, and monsoon floods contingency planning. COVID-19, is the latest crisis to deter attention away from prevention and preparedness. Along the way, efforts to update the school curriculum to reflect peacebuilding and DRR have yet to be extended to all levels and grades, matched with appropriate teaching and learning materials, and supported by teachers trained on the concepts, knowledge and required pedagogical approaches.

- **Recommendation 9.7:1 - Involve a broad range of local stakeholders in DRR for education resilience** – Teachers, communities, PTAs, SMCs, child clubs and networks should systematically be involved in elaborating DRR tools, with oversight from provincial authorities. This should take place at the local government (disaster contingency, preparedness and management plans) and school levels (incorporating risk and vulnerability analysis and emergency procedures in school improvement plans). This will enhance understanding, ownership and ultimately the effective and timely activation of disaster response mechanisms, when necessary, to mitigate the effect of hazards.

Finding 9.8. Impact of COVID-19 – The pandemic is posing a new set of challenges. The ongoing closure of Nepal's schools poses an extreme threat to the right to education where the majority of students have no access to distance learning and books at home. This situation compounds the health risk posed through increasing poverty, which is leading to less immunization and more vulnerability to water-borne and vector-borne diseases. The pandemic may also have a deep effect on out-of-school learners and children. Lockdowns have imposed difficult financial trade-offs on families, and may affect demand for education, even when schools reopen.

- **Recommendation 9.8.1 - Test students on competency and learning loss and provide tools for teachers to put learning back on track.** When children come back to school, their level will be even more varied than before COVID-19. Their competency and learning should be assessed with priority given to foundational learning in literacy and numeracy. Existing standardised diagnostic tests should be adapted to allow

monitoring of the reduction in disparities in learning levels that have been caused by the COVID-19 crisis.

- **Recommendation 9.8.2 - Re-open schools and ensure a safe and healthy school environment for teachers and students.** It is important for government to ensure real-time monitoring on the number of schools that have opened up and the compliance with measures undertaken to provide a safe learning and development environment for children while doing so. It would be highly disadvantageous for children to be out of school much longer, particularly those from vulnerable communities.

Finding 9.9 - System strengthening. For COVID-19 recovery, there are specific needs for data collection, analysis and use to ensure that the above priorities are being realised. The ongoing efforts to strengthen Education Management Information System (EMIS) that recently transitioned in a web-based system, through training and modification, provide a timely opportunity for this in terms of capturing the progress towards objectives in COVID-19 recovery. In addition, there is a need for strengthening the mechanisms to use the EMIS in local level response and recovery in terms of ‘real time’ data and feedback mechanisms being available at local government level to allow dynamic decision making and ability to adapt to emerging needs and challenges.

- **Recommendation 9.9.1** Continue the work initiated both at the national level on development of human development-based formulas to determine equalization grants and in the education sector specifically, the equity-based allocations of pro-poor and targeted scholarships and the additional grants for local level Equity Strategy Implementation Plans (ESIPs). The ESIP provides an opportunity in terms of further embedding evidence-based and need-based planning and budgeting in the design of the new education sector plan that can be applied to address disparities and needs emerged from the impact of the COVID-19 pandemic on the education sector in Nepal.

The COVID-19 crisis was a severe blow to the fragile progress that had been made on a new delivery system. When schools had to close, local governments, to some extent guided by the Central Government that provided disaster relief funds and developed many initiatives to reach children and continue learning. Distribution of textbooks and home learning materials to homes happened on quite a large scale, although not everywhere. Teachers have been enabled to visit homes, and in some cases teach in smaller groups. Other remote teaching modalities using radio and internet have been developed and rolled out, but the success was limited due to limitations in access and other constraints in implementation. There is now a need to fast-track education service delivery that is tailored to effective COVID-19 response as well as accelerating the progress towards longer term goals.

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ANNEXES

Annex 1: TOR for Education Sector Analysis (ESA)

A credible education sector plan needs to be based on evidence, needs and priorities, and be compatible with the context it will be implemented in and matched with available resources. The undertaking of such an analysis should therefore provide the foundation of the planning of the new plan. The carrying out of the education sector analysis will be guided by the *Education Sector Analysis Methodological Guidelines*⁶⁹ and the *Guidelines for Education Sector Plan preparation*⁷⁰, and other diagnostic tools (for example RISE or SABER) as proposed by the experts mobilized to undertake the education sector analysis.

The 2020 analysis will be a joint effort by the government and education sector development partners, with technical expertise mobilized for specific components presented in this section (see boxes). The various analyses will contribute to the sub-sector and cross-cutting theme chapters of the Nepal 2020 education sector analysis as summarized in Table 1:

Table 1: Outline of the Nepal 2020 education sector analysis

Chapters	Thematic approach papers	Sub-sections in the ToR
Chapter 1: Context of Nepal's education sector	All	5.2.1, 5.2.1.1, 5.2.1.4
Chapter 2: Equity and inclusion	5.1.5b, 5.1.5c, 5.1.5f	5.2.3.1, 5.2.3.2
Chapter 3: Quality, relevance and learning outcomes	5.1.5a, 5.1.5d, 5.1.5e, 5.1.5g, 5.1.5i, 5.1.5k	5.2.1.2
Chapter 4: Efficiency and institutional capacity		5.2.1.3
Chapter 5: Governance, management and accountability	5.1.5h	5.2.1, 5.2.3
Chapter 6: Financing and cost of education	5.1.5j	5.2.2
Chapter 7: Education sub sector analysis	All	5.2.1.1, 5.2.1.4
Chapter 8: Vulnerability and risks		5.2.4
Chapter 9: Summary and policy recommendations across the overarching thematic areas.	All	5.1.7

⁶⁹ Volumes 1 and 2, UNESCO IIEP, World Bank, UNICEF, Global Partnership for Education, 2014

⁷⁰ UNESCO IIEP and GPE, 2015

Supervision and coordination: Once support for technical expertise is confirmed, ToRs for the required expertise will be developed bilaterally by the ESP Technical Committee and the respective development partners. The ToRs will then be shared with the ESP Working Group for input and comments before being finalized by the ESP Technical Committee. The ESP Secretariat will maintain and update a joint work plan to reflect all agreed timelines and deliverables, and provide a monthly progress report on this for the ESP Technical Committee to review and provide guidance in terms of accelerating the mobilized technical assistance, or to explore additional support if needed. The ESP Secretariat will coordinate with the mobilized technical expertise on required inputs (data, consultations, etc.) and with the leads and co-leads of the relevant ESP thematic working groups ahead of their meetings and where additional support or inputs from the TWGs are needed.

Technical expertise to be mobilized: The education sector planning specialist (6.4.2a) will support the mobilization of the technical assistance through the ESPDG, with, if needed, assistance from writers, translators and editors to consolidate the different analyses of the education sector analysis.

Institutional analysis of the education sector (March-July 2020)

An institutional education sector analysis is a review of the context, access, equity, effectiveness, funding, quality and management of the sector and the institutional arrangements, structures and frameworks within this. It aims to understand the strengths and weaknesses of the sector and support the selection of education policy reform options. The analysis of the institutional context establishes a picture of the environment within which an education sector plan will be implemented.

The institutional analysis of Nepal's education sector will take stock of the 2015/16 education sector analysis, the 2019 SSDP mid-term review, the 2019 institutional capacity assessment and subsequent major analyses and reviews to articulate the following:

- The key education planning and management functions that the education administration performs by analysing the norms, rules, and regulations that govern its functioning, the institutional set up for this and enforcement and enactment.
- The projected current total and school-aged populations to identify constraints placed by demographics on the education system, including a review of key demographic and social indicators to assess what factors drive or impede performance and potential reasons for any performance gaps.

An issue-driven desk review will be undertaken based on the documentation of processes relating to the achievement of envisioned results, bottlenecks and issues relating to the expected performance of institutions at all levels and the wider implications of the transition to a federal structure. This will include an analysis of the current policy, planning and practices in the education sector, highlighting gaps and proposing mechanisms to streamline these processes across the three tiers of government based on observed good practices.

Technical expertise to be mobilized: The education sector planning specialist (6.4.2a) will support the mobilization of the technical assistance for the sector analysis mobilized through the ESPDG with, if needed, assistance from writers, translators and editors to consolidate the different analyses of the education sector analysis.

Analysis of the institutional context of the education sector (March-May 2020)

An analysis of the context of Nepal's education sector will be carried out to look into the extent to which the federal structure has created increased local accountability and efficiency to increase access to quality public services. This analysis will review assessments and reviews of the preliminary impact of the new system on the provision of education to understand the environment in which the ESP 2030 will be implemented and potential constraints, opportunities and enabling factors. The analysis will also develop case studies of local governments to triangulate the assumptions and findings of the sector analysis.

The institutional context analysis will cover the following education sub sectors:

An analysis of the context of Nepal's education sector will be carried out to look into the extent to which the federal structure has created increased efficiency and accountability to local people that has improved access to quality public services. This analysis will review assessments and reviews of the preliminary impact of the new system on the provision of education to understand the environment in which the ESP 2030 will be implemented and potential constraints, opportunities and enabling factors. The analysis will also develop case studies of local governments to triangulate the assumptions and findings of the sector analysis.

The institutional context analysis will analyse the following issues:

- i. ***The federal governance structure*** analysis will reflect on the federal governance structure and administrative roles and functions of MoEST and its central level agencies.

- ii. ***The early childhood education and development (ECED) for school readiness*** analysis will examine the political and institutional ECED environment and the different approaches and how they are being applied in Nepal. It will also review the level of public and private financing of ECED and cost-sharing mechanisms and the main actors, including an overview of services and activities and the level to which they meet the government's minimum standards for ECED.⁷¹ It will quantify disparities in access to ECED services and identify the reasons for them to help identify corrective measures. Finally, it will analyse the quality of ECED and evaluate its impact on children's development and their readiness for school education.
- iii. ***The mobility between formal and non-formal education*** analysis will look at the institutional setup (including the role of community learning centres) and the composition of non-formal programmes and their actual and potential beneficiaries, along with their links with the formal education sector. This analysis will also assess the management, quality and relevance of the training offered in terms of enabling age-appropriate (re)enrolment in formal education and life-long learning.
- iv. ***The cross-sectoral linkages*** analysis will look at school-based health, sanitation, protection and nutrition schemes (such as the provision of midday meals) and identify the impact that these inputs have on access, participation and learning. It will further analyse the institutional arrangements and cross sectoral mechanisms (both horizontal across ministries and vertical across federal, provincial and local levels) to enable cross sectoral planning and implementation by the government.
- v. ***The links to technical education*** vocational training analysis will identify the institutional setups of the technical and vocational education and training (TVET) providers and their financing, as well as who accesses and benefits from their programmes. It will also analyse the extent to which the TVET system responds to the needs of the labour market, and whether the TVET management and delivery structures and labour market services facilitate a demand-driven skills development system. This sub chapter of the context analysis will inform the broader analysis of the external efficiency of the education sector (5.2.1.3).
- vi. ***The links to higher education*** analysis will articulate the configuration of the higher education institutional set up in Nepal and examine its financing, teaching issues, the quality of infrastructure, specific governance structures, internal efficiency and gender and social equity issues. It will also calculate the average cost of producing a graduate by institution and by subject area to extend and deepen understanding of internal efficiency and equity. It will finally, evaluate the performance of the ***sub-sector by***

⁷¹ The ECED minimum enabling conditions are (i) child-friendly seating arrangements, (ii) availability of qualified and trained ECED teachers, (iii) application of the six learning areas (maths, science, language, creativity, construction, self-reliant skills) model, and (iv) access to child friendly drinking water and toilets.

institution and subject area, in terms of the number of graduates produced, and to assess the economic relevance of higher education courses.

Technical expertise to be mobilized: The analysis will be supported by experts mobilized through the ESPDG (6.4.1) with support from the education sector planning specialist (6.4.2a).

***Analysis of the quality of school education and learning outcomes
(March-May 2020)***

This analysis will identify what institutional requirements can provide quality education that translate into required learning outcomes and the acquisition of useful skills. It will examine why some students do not learn and will identify the institutional constraints and barriers that cause many students to perform inadequately. The analysis will focus on the following three dimensions:

- i. ***The teaching-learning processes and pedagogy*** analysis will look at what promotes quality teaching-learning processes in terms of institutional arrangements for teacher competencies and motivation and pedagogical processes. It will also look at assessments of the quality of teacher training (including the supervision and training modalities and institutional arrangements and what is needed to establish a holistic teacher support mechanism) and projected recruitment and training needs against the system's capacity to meet them. Finally, it will reflect on teachers' job satisfaction and the social context of the teaching profession.
- ii. ***The management of education*** analysis will examine the distribution of resources and personnel between schools, the pedagogical management of schools, the transformation of resources into results and learning achievements for students, and the mechanisms for providing quality services. It will also evaluate the system's capacity to identify efficient and inefficient schools and to use monitoring tools and incentive frameworks for results-based management.
- iii. ***The learning assessments*** analysis will examine the learning assessment system and the progress of students' learning achievements, including against those achieved in comparable countries. It will analyse the Grade 8, 10 and 12 national exams, the National Assessment of Students Achievements (NASA) for Grades 5 and 8, Early Grade Reading Assessment (EGRA) results for Grade 3 and Grade 8, 10 and 12 school exams, and project support for skill development in the education sector, such as the Technical Assistance for Soft Skills (TASS).

Technical expertise to be mobilized: The analysis will be supported by experts mobilized through the ESPDG with support from the education sector planning specialist (6.4.2a).

Analysis of the external efficiency of the education sector (March-May 2020)

The analysis of the external efficiency of the education sector will examine the relationship between level of education, employment and earning. The analysis will recognize the high level commitment in Nepal to strengthening (the linkages to) technical education and vocational training (TEVT), along with the countries window of opportunity in terms of its demographic dividend.⁷² It will take stock of current linkages between school education and TEVT, which will be part of the analysis of the education sector institutional context (5.2.1.1). The analysis will assess the extent to which the current production of human capital in Nepal (the distribution in quantity and quality of trainings of young people) corresponds to the demands of the national economy. Concerning employment, the analysis will look at data on the trend of labour productivity in the main sectors, and the flow of jobs created in recent years in relation to the training profiles of those leaving the education system. The analysis will further examine the relationship between the employment situation and training in the labour force, and the individual and social profitability of human capital. The analysis will take:

- a macro-economic perspective of the extent to which the education system is aligned in terms of quantity and quality with the requirements of the domestic labour market and international demand for specific skills; and
- a micro-economic perspective to review the employment status of school and higher education leavers in the workplace.

The analysis will determine how skills and competencies are valued in the national/global workplace and the relationship between remuneration and the level of education attained, as well as to evaluate the returns on investments in education and training at individual and collective levels. Finally, the evaluation will look at the impact and contribution of different levels of education on living standards, health-related behaviour and outcomes, and social and civic behaviour.

⁷² Based on the declining trend in the average population growth rate, projection models indicate that Nepal, like other South Asian countries, will continue to enjoy increasing demographic surplus characterized by a shrinking dependency rate (higher proportion of working age population, fewer children to feed, and fewer elderly to look after), that is projected to reach its peak in 2025. This is also known as a 'demographic dividend'.

System Approach for Better Education Results exercise on school health and nutrition

The system Approach for better Education Results (SABER) is a diagnostic tool used to collect, analyse and disseminate comparative data and knowledge on education policies in order to systematically evaluate and strengthen the education system. The SABER exercise on school health and nutrition will use an adapted SABER version to assess the policy framework and institutional capacity of the education system to identify the gaps and plan appropriate capacity development efforts and/or road maps in coordination with various stakeholders and sectors. The SABER exercise will build on the 2015 SABER school feeding exercise that was undertaken in Nepal and review the progress against the five-year (2015 to 2019) road map that was developed based on this and the effects/impacts on children's educational and nutrition status

Looking forward, the SABER 2020 review will help on understanding and addressing emerging challenges in school feeding governance and informing how to seize new opportunities for the improvement of school feeding program to achieve both expected education and nutrition outcome. The 2020 SABER exercise is to guide the school feeding institutional set-up adjusted to the current federal administration improving the operation for optimum utilization of human resources. Last but not the least, the exercise will look at how the school-based health and nutrition programs can support the GoN in its aims to graduate from low-income country to developing country by 2023, and to middle-income country by 2030, and related to this, identify capacity and programmatic gaps.

Technical expertise to be mobilized: The SABER exercise will be supported by WFP.

Economic and public finance analysis and projection (March-July 2020)

Macro-economic public finance analyses evaluate current and projected levels of resources available for public expenditure and education in particular. They include benefit-incidence analysis to help understand to what extent the allocation of and access to resources are need-based in the education sector. This analysis will use data on the current status of the education sector consolidated through the education sector institutional analysis (5.2.1) to review the current and projected levels of resources available for public education. This will be used to determine the scenarios of resource availability and fiscal space for ESP 2030 by analysing the trends of past gross domestic product (GDP) and domestic and external resources and projecting future GDP, tax income and public resources.

Macro-economic analysis

At the macro level, the analysis will articulate the trend of public resources allocated for education and their distribution by level of education and nature of spending, as well as across provinces. It will also estimate the contributions of provincial and local governments, households and other non-state actors to education. The Nepal Education Accounts (UNESCO 2015) exercise will serve as a reference. This analysis will provide the ESP 2030 Steering Committee (6.1.1) with a financially sustainable reference scenario for the 10-year timeframe of ESP 2030 and the Medium Term Expenditure Framework (MTEF).

Public expenditure analysis

This analysis will identify the levels of expenditure on education at the provincial and local government levels by looking at provincial and local government annual budget allocations and expenditure in the education sector. The analysis will also identify the contributions of non-state actors (including private education providers and households) based on available data.

Education sector cost-benefit analysis

A cost-benefit analysis will be carried out to:

- assess the allocation of resources in the school education sector from an equity perspective;
- estimate the return on quality ECED in terms of efficiency gains in access and completion rates;
- assess the impact of the engagement of non-state and private sector actors in the education sector;
- assess the extent to which the financial and physical resources allocated to schools are related to the number of enrolled students;
- assess the geographical equity of resource allocation across provinces, local governments and schools; and
- assess the overarching financial legislation, and education policies and management that guide policy choices on public resource (re)distribution, and education cost sharing between the government and households.

Technical expertise to be mobilized: To be confirmed by development partners

Socio-economic impact analysis (March-July 2020)

Socio-economic impact analyses look at the extent to which education and the human capital it produces contribute to a country's economy and social structures. This type of analysis carries out i) benefit-incidence analyses of social disparities in access to and the appropriation of education resources and ii) analysis on the conversion of resources into quality and learning outcome results by schools.

A socio-economic impact analysis will be carried out to improve understanding on how Nepal's education sector contributes to the country's development. It will identify correlations between the provision of education and the levels of skill, knowledge, employability and productivity of school and higher education leavers. The social dimension of this analysis will cover health outcomes, civic attitudes, environmental awareness and other aspects. The reviews undertaken by the ESP TWGs (5.1.5) will identify issues and determining factors that improve understanding of the sector's internal and external efficiency. This includes an analysis of the inclusion and exclusion of children in the education sector, as well as the drivers (gender, disability, caste and ethnicity, socio-economic status, etc.) of exclusion. It will also include an analysis of the effects of cross cutting themes, such as climate change, and the socio-economic impacts this may have on the education sector in terms of reducing educational achievements and the performance of the education system.

Technical expertise to be mobilized: The analysis will be informed by projections within these analyses with support from the education sector trend analysis specialist (6.4.1d). Also, thematic reviews will be carried out by the ESP thematic working groups (6.1.5) with support from the education sector planning specialist (6.4.2a) to map knowledge gaps in their thematic areas.

Education sector gender and social inclusion analysis (May-June 2020)

The policies, plans and strategies under which ESP 2030 will be developed will be reviewed through a gender equality and social inclusion (GESI) lens to ensure that it includes targets, strategies and mechanisms to support Nepal to meet its SDG targets on equality and inclusion, and that it is gender responsive. The theoretical framework and analysis undertaken as part of the development of the Consolidated Equity Strategy for the Nepal School Education Sector (DoE 2014) will serve as a conceptual framework to guide this analysis. This analysis will explain how far gender, socio-economic status, ability, caste, ethnicity, language and geographical location drive disparate education outcomes. The

analysis will be informed by an evaluation of the Equity Strategy, as well as by taking stock of the related major initiatives the government has undertaken including the scaling up of midday meals. The analysis will also review the Equity Strategy to recommend updates relating to the changed context and the development and implementation of the Equity Index since 2014.

Regarding the gender review, a detailed methodology will be developed in consultation with expert organizations and networks, such as the education gender network, the Gender Equality and Social Inclusion (IDPG-GESI) Working Group of the International Development Partners Group, the UN Girls Education Initiative (UNGEI) and UN WOMEN. The 2015 education gender gap analysis (Stenback 2015) will serve as a key reference, while initiatives such as the gender focal point network and the introduction of comprehensive sexuality education (CSE) will be analysed in terms of their impact and scalability.

Technical expertise to be mobilized: The review will be supported by the education sector planning specialist (6.4.2a) with additional technical expertise mobilized through UNICEF to:

- lead the review;
- hold consultations with relevant line ministries; and
- review the institutional arrangements and provisions in place in the education sector against those stated in the Right to Education Act (2018), the Federal Education Policy (2019) and elsewhere.

The European Union has been requested to support the gender review part of the analysis.

Analysis of the education sector through a disability-inclusive education perspective (March-May 2020)

Nepal's policy framework for disability inclusion supports inclusive education for persons with disabilities in the Constitution, the Disability Rights Act (2017) and the Inclusive Education Policy (2017). Using this policy framework and the disability-inclusive education approach paper (5.1.5), this analysis will take stock from relevant studies and strategies. It will help understand the status of inclusive education, and analyse concerned legislation, regulations, policies and frameworks at federal, provincial and local levels to include children living with disabilities in education. It will cover the specific measures required to mainstream disability-inclusive education and the wider legislative and policy environment needed to support it.

The analysis will also do the following:

- It will focus on the cultural, geographical and socio-economic diversity in the country and their implications for the ability of the education sector to provide access to quality school education for children living with disabilities across the groups and areas.
- Review institutional arrangements and facilities to establish a baseline for children living with disabilities and to identify good practices and capacity constraints at local government and community levels, including a focus on the cross sectoral linkages of services. Assess the current spread, coverage, and functioning of resource classrooms and assessment centres to provide a baseline of existing services and identifying best practices and areas that need targeted interventions for improvement.

The inclusive education analysis will be supported by the Inclusive Education Initiative (IEI) World Bank trust fund, and the Inclusive Education sub-TWG co-lead (UNICEF) and members. Thematic qualitative research will be undertaken to investigate the assumptions, beliefs and practices towards the special, integrated and inclusive education models for the inclusion of children with disabilities and measures relating to institutionalization, protection, agency and participation.

Technical expertise to be mobilized: The analysis will be supported through the World Bank's Inclusive Education Initiative (IEI) trust fund and through technical assistance from Norway through UNICEF. Additionally, UNICEF and UNESCO are exploring additional support in terms of supporting government officials to participate in the International Institute for Educational Planning (IIEP) training on including disability-inclusive education in education sector planning.

Risk and vulnerability analysis (June 2020)

Education sector risk and vulnerability analysis is undertaken to analyse the impact of hazards and conflict on education, the potential for education to exacerbate conflict or have a positive role in promoting social cohesion and disaster resilience, and the capacities of the education system to mitigate and manage risks.

A risk and vulnerability analysis will be carried out informed by the other education sector analyses to identify the main potential and actual hazards, shocks and stresses that could affect the education system in the ESP 2030 period. This will provide an overview of the overall humanitarian impact of existing hazards in the country and present the root causes of and contributing factors to existing hazards, including those related to

climate and environment, conflict and violence. The analysis will also assess to what extent hazards affect the education system and what parts of the system may have an impact on vulnerability to risks. It will analyse the capacities of the education system to withstand shocks, respond to the effects of crises, and mitigate their effects, as well as to contribute to conflict transformation, social cohesion, resilience building at the individual, school, community and system levels. It will also include a climate-change risk analysis of education sector performance and the adaptation deficit to current climate variability and change, which can make communities vulnerable to climate risk, driving migration.

In the context of the COVID-19 pandemic, the risk and vulnerability analysis will also include an analysis of the impact of the pandemic and the preventive and response measures on the education sector for the medium (5 years) and long term (10 years) and project the damage and recovery costs.

Technical expertise to be mobilized: The European Union Delegation to Nepal has been requested to provide financial support for mobilizing a team of experts to undertake the risk and vulnerability analysis, including a climate-change risk analysis. The education sector planning specialist (6.4.2a) will support the ESP Secretariat (6.1.3) in facilitating this team to collaborate with the environment and LEDPG climate change experts.

Annex 2: List of Contributors

1. ESP Technical Advisory Committee provided inputs to ESA and the nine study reports

Professor Dr. Min Bahadur Bista (ESP TAC Leader)
 Professor Dr. Lekha Nath Sharma,
 Mr. Janardan Nepal, Former Secretary
 Professor Dr. Bal Mukund Bhandari
 Professor Dr. Mahesh Nath Parajuli
 Professor Dr. Binay Kushiyat,
 Professor Dr. Bal Chandra Luitel
 Dr. Nirmal Bishwokarma
 Dr. Meenakshi Dahal
 Dr. Meena Gurung

2. Experts mobilized for ESA and related studies

Experts	Task	Agency managing and funding
Dr. Frances Hitchen	Overall coordination, review of nine studies and drafting of ESA	UNICEF, Funded by GPE
Dr. Gustavo Arcia	Institutional and Context Analysis	USAID
Michael Lightfoot, Serge Peano and Barnaby Rooke	Macro-economic and public financing analysis	EU
Erlend Sigvaldsen and Susy Ndaruhtuse	Analysis of the external efficiency of the education sector	NORAD
Astrid Korin	Analysis of the social impact of education	NORAD
Ruth Naylor and Amy West	Gender Equality and Social Inclusion analysis of the Education Sector in Nepal	NORAD
Dr. Niraj Poudyal and Dr. Natasha Graham	Disability inclusive education analysis in Nepal	UNICEF
Dr. Matt Brossard, Renaud Comba and Matej Damborsky	Data Must Speak (DMS) about Positive Deviant Approaches to Learning in Nepal	UNICEF
Dhruba Gautam and Barnaby Rooke	Vulnerability and risk assessment of the Nepal education	EU
Dr. Lekha Nath Poudel and Peter Haag	System Approach for Better Education Results – School Feeding (SABER-SF) 2020, Nepal (Including Health and Nutrition Analysis)	WFP

3. Experts contributed to finalize ESA

Experts	Task performed
Dr. Min Bista and Dr. Lekha Nath Poudel	Reviewed draft of ESA, provide editorial inputs and finalized sector analysis document

4. Overall coordination and management of ESA

Name	Task performed
Dr. Tulasi Prasad Thapaliya (Joint secretary, MOEST)	Overall coordination of GON, DP, experts and stockholders;
Dr. Bhoj Raj Kafle (Under-secretary, DACS, MOEST)	Managing the overall tasks

5. Contributors

Baikuntha Aryal	DG, CEHRD	
Dr Kamal Pokhrel	Joint Secretary, MOEST	
Krishna Prasad Kapri	Joint Secretary, MOEST	
Ima Narayan Shrestha	Joint Secretary, MOEST	
Keshav Prasad Dahal	GD. CDC/DDG, CEHRD	
Deepak Sharma	Joint Secretary, MOEST	
Ana Prasad Neupane	DDG, CEHRD/DG, CDC	
Shankar Bahadur Thapa	Director, CEHRD	
Ghanashyam Aryal	Director, CEHRD	
Jaya Prasad Acharya	Under secretary, MOEST	
Jimi Oostrum	Unicef	
Sambeden Koirala	SSDP TA Team	
James Russell	MOEST	
Yadav Prasad Acharya	Education officer, MOEST	
Lav Dev Bhatta	Education officer, ERO	
Pharsuram Tiwari	Education officer, ERO	
Shyam Acharya	Education officer, ERO	

