

## PROGRAM SOUNDNESS ASSESSMENT

### A. Program Description

1. The results-based lending (RBL) program of the Asian Development Bank (ADB)—Supporting School Sector Development Plan—will support the Government of Nepal's School Sector Development Plan (SSDP), which is the government's major education initiative for FY2017–FY2023. ADB and eight other joint financing partners (JFPs) will finance the program with the government during FY2017–FY2021 through a sector-wide approach.<sup>1</sup> The SSDP is a new flagship initiative of the government to improve access, equity, and quality of the entire school education system (pre-school to grade 12). The SSDP builds on the achievements and lessons from previous sector programs such as the School Sector Reform Plan (SSRP), FY2010–FY2016 and the Education for All Program, FY2004–FY2009. It focuses on enhancing equitable access to quality education at all levels of school education, and improving the governance and management of the education system.

2. ADB's RBL program will support the first 5 years of the SSDP, i.e., FY2017–FY2021. The program will reinforce the SSDP objectives by prioritizing and sequencing key outputs and targets in the first 5 years of the SSDP. The sector-wide approach in the SSDP enables the program to leverage the entire school sector budget for greater efficiency and effectiveness of public resources. The RBL program's impact will be a more qualified human resource base for equitable socioeconomic development. It focuses on enhancing equitable access to quality secondary education, and improving the governance and management of the education system. The program has four output areas: (i) access to basic and secondary schools improved, (ii) quality of school education improved, (iii) model school program pilot tested, and (iv) school system governance and management improved.

3. The SSDP is estimated to cost \$6,461 million during FY2017–FY2021. ADB's RBL will provide \$120 million to support the plan, and other joint financing partners (JFPs) are expected to provide an estimated \$436 million over the program period.<sup>2</sup> Table 1 outlines the scope.

**Table 1: Program Scope**

Item	Government Program (SSDP)	Results-Based Lending Program
<b>Outcome</b>	Equity, quality, efficiency, governance, and management of the education sector improved	Equitable access to quality secondary education enhanced <sup>a</sup>
<b>Key outputs</b>	Comprehensive program outputs for early childhood education development to grade 12 education to increase access, equity, and quality; better qualified and trained teachers; national curriculum revised; textbooks improved; assessments and examinations improved; and capacity for new federal structure developed	Same as in SSDP, but with particular focus on secondary education through the deployment of trained subject teachers, pro-poor scholarship scheme, improved examinations, pilot testing of the model school program, and improved school governance

<sup>1</sup> The eight other JFPs are Australia, the European Union, Finland, the Global Partnership for Education, Japan International Cooperation Agency, Norway, United Nations Children's Fund (UNICEF), and the World Bank.

<sup>2</sup> Development partners' financing is estimated based on commitments indicated so far. Expected contributions are: World Bank (\$150.00 million), European Union (\$63.10 million), Norway (\$39.46 million), Global Partnership for Education (\$26.60 million), Finland (\$22.34 million), Australia (\$9.00 million), Japan International Cooperation Agency (\$3.00 million), and United Nations Children's Fund (\$2.50 million). The government is expected to raise additional resources for the program, including possible additional financing from ADB and the World Bank after 3 years of implementation.

Item	Government Program (SSDP)	Results-Based Lending Program
<b>Activity types</b>	School infrastructure upgraded, teacher training revamped, curriculum renewed and textbooks developed, pro-poor scholarships and free textbooks provided, EMIS improved, school grant management system revised	Same as in SSDP, but focusing on interventions for grades 6–8 of basic education and grades 9–12 (secondary education)
<b>Program expenditure</b>	\$10.58 billion for FY2017–FY2023 (estimate)	\$6.46 billion for FY2017–FY2021 (estimate)
<b>Main financiers</b>	Government of Nepal, ADB, Australia, EU, FAO, Finland, GPE, JICA, Norway, UNESCO, UNICEF, USAID, World Bank, and national and international NGOs	Government of Nepal, ADB, Australia, EU, Finland, GPE, JICA, Norway, UNICEF and World Bank
<b>Geographic coverage</b>	Nationwide	Nationwide (selected schools to receive intensive focus to be model schools)
<b>Implementation period</b>	FY2017–FY2023	FY2017–FY2021

ADB = Asian Development Bank, EMIS = education management information system, EU = European Union, FAO = Food and Agriculture Organization of the United Nations, FY = fiscal year, GPE = Global Partnership for Education, JICA = Japan International Cooperation Agency, NGO = nongovernment organization, SSDP = School Sector Development Plan, UNESCO = United Nations Educational, Scientific and Cultural Organization, UNICEF = United Nations Children’s Fund, USAID = United States Agency for International Development.

<sup>a</sup> As per ADB’s classification, post-primary grades 6–12 are treated as secondary education. ADB. *The Project Classification System, Toward Strategy 2020: A User Guide*. Manila.

Source: Asian Development Bank.

## B. Program Soundness

### 1. Relevance and Justification

4. The Constitution of Nepal (2015) sees education as a fundamental human right and includes provision of free and compulsory basic education and free secondary education. Education is seen as a major pillar for poverty reduction and as the means to develop the qualified and competent human resource base required for graduation from the status of least developed country by 2022. The public school system is the predominant provider of school education, catering to 83.9% of total students at the basic level and 77.2% at secondary level. School education receives the bulk of public funds allocated to education, accounting for more than 80.0% of the total annual education budget. However, public schools are often perceived as being inferior to private schools because of the continued poor performance of the public school system. Therefore, improvement in public schools is essential to raise the overall quality of education and to produce the much-needed qualified human resource base for the country’s equitable socioeconomic development. The program will support the government in improving the functioning of basic and secondary schools and the quality of education they offer. More specifically, the program will focus on the following:

- (i) **Strengthen secondary education.** Improving the quality of education by focusing on secondary education will enable secondary education graduates to move on to tertiary education, which will increase labor market opportunities and wage returns. The main focus of the program is to generate a pool of qualified and skilled human resources in the country. The focus emerges from (i) the demand for secondary education, which increased substantially because of the growth in basic education, while government investments in this subsector cannot meet the current demand; (ii) the pressure to ensure that the larger pool of students, mainly from rural and remote areas of Nepal, will meet the entry

requirements of tertiary education; and (iii) increased awareness among the people and growing acceptance among policymakers that investment in secondary education is necessary to achieve greater returns in the long run. While strengthening investment in secondary education, the program also ensures strong emphasis on improving the quality of basic education, particularly in grades 6–8, so that students have the skills to study in secondary grades.

- (ii) **Strengthen teaching and learning of math, science, and English.** The program will support strengthening of teaching and learning in general and in three subjects in particular—math, science, and English—in which the majority of students perform poorly but which are fundamental to Nepal's human resource development. To enhance student learning in these subjects, investments will be made in subject teachers, information and communication technology (ICT), e-resources, activity-based resource materials, science laboratories, equipment, and teachers' professional development. The program will support the provision of trained subject teachers, and development and distribution of supplementary materials and kits for math, science, and English for grades 6–12.
- (iii) **Address equity and disparity issues.** Although the Government of Nepal provides a large number of scholarships, they have tended to be distributed without sufficiently targeting the most needy students. A revised scholarship scheme, with better targeting and pro-poor focus, will be developed to increase the participation of students, especially girls, from poor households in secondary education. A comprehensive equity strategy will be developed to mitigate multiple dimensions of disadvantage, and financial allocations and technical support will be ensured based on the equity index. The program will pilot the use of voucher schemes in urban areas to foster partnership with private schools and increase access to secondary education for poor and marginalized students. Very few government secondary schools currently offer science subjects in grades 11 and 12. The program aims to increase the number of schools offering science across the country. The implementation of 200 model schools aims to increase whole-school development with comprehensive quality inputs and to provide opportunities to poor students (including through residential facilities) to access high-quality education. The model schools will be equitably distributed across the country to allow better access to science subjects in grades 11–12.

5. **Program beneficiaries.** The primary beneficiaries will be about 6.3 million students enrolled in school education. They will be better prepared for further education and skills development or employment. More effective training and professional development will be provided to 152,000 teachers working in approved positions. The emphasis on math, science, and English will raise the quality of education, enabling students from rural areas to choose science and technical subjects and derive the ensuing benefits. Employers and tertiary education institutions will benefit from this program by finding more young people who are well educated and well prepared for work or postsecondary education and training. More than 3 million students are likely to benefit from an improved scholarship program. A targeted pro-poor scholarship program will support the participation of girls in science subjects in grades 11 and 12 in public or community schools. About 40,000 students and 3,000 teachers will benefit from access to modern ICT tools and e-learning resources in schools and classrooms. Various central and district line agencies of the Ministry of Education (MOE) will benefit from ICT and equipment, training and capacity building, and infrastructure upgrades. As better-prepared and skilled students enter higher education institutions and are able to cope with

tertiary education, the quality of human resources available in the country will increase. In the longer run, the program will contribute to making Nepal's school education system more competitive internationally and ensuring that qualified and skilled Nepalese workers enter the global labor market.

6. **Stakeholder support.** The government has prepared the SSDP with diverse technical inputs and extensive stakeholder consultations. Since 2015, when the preparations for the SSDP were initiated, extensive consultations have been held with MOE agencies, Ministry of Finance, National Planning Commission, other line ministries, various civil society organization, and the JFPs. Regional and district consultations were held with teachers, students, school management committee members, teacher unions, and other stakeholders to understand and include their suggestions and recommendations in the plan.

7. **Poverty reduction.** Economic growth in the country has averaged 4.0% annually since 2006, and the proportion of people living below the national poverty line has declined from 31.0% in 2006 to 23.8% in 2015. Although it is well accepted that education is central to achieving inclusive growth, the school education system in Nepal continues to face various challenges. It is characterized by significant disparities and inequities in educational outcomes among a diverse population of different castes and geographical or ethnic backgrounds. These disparities are particularly pronounced in the higher grades up to 10, where they begin to taper off. A growing share of enrollments in private schools; continuous low performance of rural community schools; inequitable distribution of qualified and experienced teachers, particularly in the remotest regions; parents' inability to meet different forms of fees, including for private tuition; and high associated opportunity costs for children from poor families, particularly for boys, are some of the strong signals of the persistently inequitable education system in Nepal. The program therefore developed important initiatives to help overcome poverty and inequality.

8. The program is expected to have positive distributional effects because (i) it will bring more children (especially girls) from poor households into the education system after the introduction of programs in line with the constitutional provision of free basic and secondary education; (ii) adequate provision of subject teachers to support free higher secondary education in rural schools will motivate grade 10 graduates to enroll in grade 11 and complete the full school cycle; and (iii) the various scholarships schemes will be revised to incorporate a stronger pro-poor focus than in the past, and to reflect the real cost of schooling, which will enable students from poorest families to enroll in secondary schools. In addition, the effect of education on poverty reduction can also be traced to migration and remittances. Since Nepal is a major labor-exporting country, better-quality education will increase the likelihood of better employment opportunities internationally and of higher remittances.

9. **Gender impact.** In general, girls outperform boys in many indicators related to access and equity. However, several districts in the Central Terai and the Far Western regions have significant gender disparities in enrollments. Even though gender parity in enrollments has been achieved at both basic and secondary levels, the performance of girls in the annual grade 10 examinations has been lower than that of boys. The program includes gender targets in the disbursement-linked indicators (DLIs). The program action plan also contains gender actions.

## 2. Adequacy

10. **Effectiveness.** The sector assessment reveals that although Nepal has made steady progress in enhancing equitable access to primary and basic education, many students do not take up secondary education because they have no access to it or cannot afford it. Significant

geographic and socioeconomic disparities persist in secondary enrollments, because Dalits, girls from specific regions, and children from poor households have limited access. The quality of secondary education is an issue. The overall pass rate at grade 10 in SY2015 was 47.4%, and was only 33.0% for students from public or community schools. Results from the grade 10 examinations and the National Assessment of Student Achievement show that students perform poorly in three subjects—math, science, and English—that are fundamental to Nepal's human resource development. Moreover, only about 3.5% of the total students enrolled in grades 11–12 take up science subjects. A combination of factors has hampered overall quality improvement, e.g., lack of comprehensive quality inputs in schools; scarcity of qualified and trained subject teachers and head teachers; inadequate learning resources beyond textbooks; ineffective in-school support mechanisms; and inadequate capacity of local communities for effectively managing the decentralized education system.

11. The proposed program makes use of the RBL modality, which links financing to achievement of key results. The program design incorporates four distinct result chains that together link inputs, outputs, outcomes, and impact. The result areas chosen and performance targets set in the design are adequate to achieve the overall sector goals, and the RBL modality fits well with the government's shift to results-based planning and budgeting.

12. **Efficiency and economy.** School sector planning and budgeting faces the problems of suboptimal allocation and utilization of funds, especially at school level. This is mainly the result of weak planning and budget preparation; delays in the release and effective utilization of the budget; and a largely norms-based school grant system. Despite efforts to strengthen bottom-up planning processes (district plans to be prepared based on school improvement plans) in the past, district education plans are mostly based on norms and budget ceilings provided by the Department of Education (DOE) and do not reflect the contextual needs of districts. Although most of the allocated funds (about 90.0%) are spent, revealing efficiency, their use is not effective because of (i) delays in budget release to schools (more than 47.0% of the budget is released in the third trimester); (ii) unrealistic unit costs for classroom construction combined with the requirement of matching financial community contribution, which may be lacking; (iii) provision of per-capita funding-based grants to schools based on an education management information system (EMIS) that has some shortcomings in accuracy of student and teacher data; and (iv) a weak grant compliance monitoring mechanism. These shortcomings can affect the timely (efficiency) and cost-effective (economy) achievement of program results.

13. The program will tackle the above shortcomings through various initiatives. It is expected that the overall annual planning and budgeting process will be improved with a link to expected results, given that the JFPs and MOE have agreed to results-based financing. The program will (i) strengthen the financial management system for timely release of funds, (ii) boost district capacity for supervision and monitoring of civil works completion, (iii) enhance the accuracy of EMIS data through third-party verification, and (iv) strengthen district and school management capacity for supervision and monitoring of programs to achieve results. It will also improve the existing school grant mechanism, with emphasis on needs-based allocation of resources to schools linked to results and effective grant utilization strategies that would enhance program economy. Use of government systems under the RBL modality will enable MOE to achieve greater efficiency by reducing transaction costs. The implementation of model schools with comprehensive quality inputs and a wide range of infrastructure and facility improvements will bolster the environment for schooling and demand for enrollment in those schools. Implementation of the teacher rationalization plan will be a critical reform dimension in school education, expected to save scarce resources to provide the basis for quality-boosting activities.

14. **Sustainability.** Sustainability of the program is addressed because it is embedded in the country's medium to long-term vision, which is supported by the Eighth Amendment to the Education Act (2016). Furthermore, the sustainability of the SSDP in the medium term will be enhanced by the RBL modality, which links the disbursements to results through the DLI targets. The program will also strengthen MOE's ability to secure necessary budgetary support for the implementation of the program. In addition, reforms in nationwide fiduciary and safeguard mechanisms will help, in the medium term, to strengthen systems for financial management, procurement, anticorruption efforts, and environmental and social safeguards. This will strengthen the link between government spending and its intended outcome.

### 3. Financial and Economic Analysis

15. The program aims to provide quality basic and secondary education to all students and better prepare them for higher education and employment. Education increases the employability and future income of individuals by enhancing their productive capacities. According to the Nepal Living Standards Survey (2010/2011), the average annual wage income of wage earners with higher education is higher than those of lower education levels (Table 2). The average incomes of basic, secondary and higher secondary educated people are NRs24,528, NRs44,220, and NRs67,481, respectively.<sup>3</sup> Compared to 2003, average annual wages of employees has increased in 2011 at all levels except for the individual with tertiary education.

**Table 2: Average Annual Real Wage for All Employed Workers**  
(2003 NRs)

Education Completed	2010/2011	2003
No education	12,839	8,520
Primary level completed	24,528	17,651
Lower secondary completed	44,220	33,681
Secondary completed	67,841	58,981
Tertiary (bachelors and higher) completed	99,695	172,436
Average for Nepal	29,282	24,776

Source: Government of Nepal, Central Bureau of Statistics, National Planning Commission. 2011.

16. The internal rate of return (IRR) has been calculated using elaborated method to measure the benefit and effectiveness of the SSDP program and its viability. This method derives the rate of return after calculating the discount rate that equates the net present value of the benefit stream arising from additional investment in schooling with the net present value of the cost stream. The cost-benefit analysis for the SSDP presents an assessment of benefits and costs associated with the program using a "counterfactual" identification approach whereby SSDP "investment" is the estimated additional cost over and above the current spending.

17. **SSDP benefits.** The benefits are taken to be those changes in the quantity, quality and reduction in internal inefficiency of education produced over the program period as a result of SSDP. Benefits come from three sources: (i) increased number of basic education completers who earn higher wages (relative to non-completers); (ii) increased quality of education resulting in higher wage-premium for all basic education completers; and, (iii) decreased wastage of public and private resources as a result of reduced dropouts and repetitions. The SSDP will enhance internal efficiency that will result in low "wastage" i.e., fewer school dropouts and repeaters, and lower unit costs. Recently, internal efficiency has been improved by lowering repetition rates and improving

<sup>3</sup> Government of Nepal, National Planning Commission, Central Bureau of Statistics. 2011. *Nepal Living Standards Survey 2010/11 (NLSS III)*. Kathmandu.

survival and completion rates, and SSDP interventions are expected to further contribute to improving internal efficiency.

18. **SSDP costs.** SSDP costs include additional program costs (from the government and JFP sources) and private costs that comprise of direct household outlays as well as the opportunity costs. Additional program investment is derived from the difference between the ongoing program spending and the proposed SSDP estimates.

19. **Internal rate of return.** Based on a discount rate of 12% for the benefit and cost streams described above, the present discounted value of benefits for the base-case scenario is estimated to be \$2,830 million while the present discounted value of costs is estimated to be \$2,447 million, and therefore the net present value of program benefits is \$383 (Table 3). Both costs and benefit are calculated in 2015/2016 constant prices. The economic analysis resulted in a sound internal economic rate of return of 16.0% for the program (12.6% for basic education and 23.9% for secondary education).

**Table 3: Internal Rate of Return Estimates**

	Annual wage increment (NRs) <sup>a</sup>	Quality premium <sup>b</sup>	Basic education	Secondary education	SSDP	NPV (\$ million)
Basic Education	69,893	5.5%				
Secondary Education	36,888	5.5%	12.6%	23.9%	15.8%	383

NPV = net present value, SSDP = School Sector Development Plan.

<sup>a</sup> Both agricultural and non-agricultural wages based on NLSS III data are used (including in-kind, wage received on daily, long term and contract/piece but excluding incomes from enterprises). The estimates are in 2015/2016 price.

<sup>b</sup> We assume part of wage premium can be attributed to improved quality of education. The quality premium measures the contribution of improvement in education quality to the increase in wage rates among the people with the same level (but different quality) of education. We assume that controlling for student's individual and household characteristics, the premium for having attended urban public school in comparison with rural public school, provides us with a measure of quality premium. The co-efficient in the regression was 34% for secondary and 44% for basic education. But 5.5% (around 14.0% of the premium) can be attributed to increased quality when all else is held constant. This scale of quality premium is comparable with that used in the World Bank (2009) economic analysis for Nepal's School Sector Reform Program, in which 5.0% of the average annual earnings of those with basic education was taken to be a measure of the "education quality premium".

Source: Government of Nepal, National Planning Commission, Central Bureau of Statistics. 2011. *Nepal Living Standard Survey 2010/11 (NLSS III)*. Kathmandu. ADB estimates.

20. **Sensitivity analysis.** The key source for school sector education benefits was earnings from improved education quality (59% for basic and 48% for secondary education). A sensitivity analysis revealed that on the benefit side, except for the wage level effect, wage premium resulting from quality of education affects the return on investment more than other variables, implying that elevating the overall education quality of the workforce would bring a higher return on investment. The results, including the sensitivity analysis for progress in internal efficiency and external efficiency gains, suggest that the program is expected to be a sound "investment" in various scenarios. In fact these are conservative, lower-bound estimates, given that externality benefits arising from healthier, more educated citizens and more equitable/inclusive society are not included.

21. **Fiscal affordability and sustainability.** The program expenditure falls within the estimated school sector resource envelope or fiscal space (\$6.498 billion), indicating the feasibility of the government allocating the necessary budget (internal and external sources combined) to meet the estimated program cost (\$6.461 billion) during FY2017–FY2021 (Table

1). This analysis assumes that the economy grows at an average annual rate of 4.1% until FY2021 at constant prices and Ministry of Finance provides the stipulated amount (about 5.2% of the gross domestic product on average). Since the government is committed to implement the constitutional provision (free and compulsory basic education and free secondary education) and reform initiatives envisaged in Eight Amendment of Education Act, the education sector is expected to receive the resources during FY2017–FY2021 to meet the required cost of the program.

22. The long term sustainability considerations are built in SSDP design through: (i) using country systems for budgeting, accounting, reporting, and auditing; (ii) strengthening institutions involved in school sector education which will sustain improvements in the sector; (iii) use of DLIs to trigger results; and (iv) strengthening governance and management.

#### **4. Implementation Arrangements**

23. **Program implementation.** The program will be implemented at a time when Nepal is moving toward a federal system, which will require major organizational changes. However, it is expected that this restructuring will require a transition period of at least 3 years during which the existing institutional arrangements continue. The program will strengthen existing structures for better program management, technical oversight, and coordination. MOE is the executing agency and DOE is the implementing agency. An interministerial SSDP steering committee, chaired by the secretary of MOE, will be established with participation of key officials from MOE, DOE, central line agencies, Ministry of Finance, Financial Comptroller General's Office, and the National Planning Commission. The Foreign Coordination Section of the Planning Division of MOE will function as the program coordination secretariat and will monitor and report on DLIs. A technical working committee will be set up in DOE to ensure timely implementation support and close follow-up. These arrangements will be common to all JFPs supporting the proposed program.

24. The RBL will use program systems for financial management, procurement, and anticorruption measures. The program fiduciary system assessment undertaken at country, MOE, and DOE levels showed the overall fiduciary risk to be substantial. Weaknesses affect internal control and oversight mechanisms, reconciliation of accounts between the payments made by the Financial Comptroller General Office and the expenditure recorded by the district education offices is problematic, action on audit observations is often delayed, and capacity gaps in districts and schools persist. These risks will be mitigated through a continuous program of system improvement outlined in a Financial Management Action Plan agreed between JFPs and the government. The computerized government accounting system will be rolled out countrywide in the education sector for timely and accurate financial management reporting. An annual fiduciary review will diagnose bottlenecks and provide support to remove them.

25. The RBL will follow program procurement systems and exclude high-value contracts, in accordance with ADB's RBL policy. The country and sector procurement assessment rated the overall procurement risk as substantial. These risks will be mitigated by ensuring adequate and trained staff in all district education offices; revising manuals and guidelines to strengthen technical capacity, particularly for construction; improving supervision by schools and promoting an e-government procurement system.

26. **Safeguard systems.** The program safeguard system assessment carried out for potential social and environmental impacts proposed categories B for environment, C for involuntary resettlement, and B for indigenous people. The major risks are uneven compliance

with safeguard regulations and lack of adequate capacity to integrate safeguard concerns in program implementation, and poorly documented transfers of land titles from communities to schools in voluntary land donations. Safeguard compliance will be strengthened with the establishment of a safeguard desk with appropriate monitoring tools. The safeguard program actions are included in the program action plan.

27. **Monitoring and evaluation system.** Assessment of the monitoring and evaluation system shows that MOE has a functional mechanism in place that is guided by the national framework. The EMIS is the main database system capturing information against the key performance indicators for the school sector. Information on program performance and financial performance is generated through the annual status reports and financial management reports. In addition, periodic national learning assessments and performance audits of the MOE system will be conducted by the Education Review Office. These monitoring and evaluation mechanisms will undergo further strengthening and will be used for the reporting and verification of achievement of the DLIs. EMIS will be subject to two rounds of independent, third-party verification to improve reliability of data. EMIS data will also be used to generate school profile cards for social audits and for overall sector performance reports.

28. **Reviews.** ADB, together with the other JFPs, will monitor the implementation of the program through regular technical and financial review missions and by commissioning periodic third-party reviews, as agreed with the government. Reviews to be conducted in March and November of every year will assess and verify the achievement of DLIs, which will be the basis for fund disbursements. A midterm review will be jointly conducted in the third year of the program, which will review and revise the DLIs based on implementation experience and performance up to that time.

### **C. Managing Risks and Improving Capacity**

29. The soundness assessment shows that the program is well justified by (i) its expected impact on the education sector, poverty reduction, and overall economic development; (ii) its adequacy, as measured by effectiveness, efficiency, and economy; and (iii) sustainability of the results in the medium term.

30. The overall risk of the RBL is rated substantial. However, the overall benefits and impact are expected to outweigh the risks and the costs associated with mitigating them. A key risk associated with the program results has to do with the difficulty in providing sufficient qualified and trained subject teachers and related comprehensive quality inputs for improving the teaching and learning of math, science, and English in upper basic (6–8) and secondary grades (9–12). To mitigate this risk, MOE will prepare a teacher rationalization and deployment plan that will aim to train excess primary-level teachers as subject teachers for upper grades, and also gradually create new positions for secondary grades. New subject-wise training modules will be developed and provided to all existing and new subject teachers. Subject teacher provision will also be closely integrated with the provision of activity-based teaching–learning kits to ensure that the selected schools receive the comprehensive quality-related inputs. The second risk has to do with inadequate budget allocation as per SSDP expenditure framework, weak links between policy targets and budget allocations, and continuation of budgeting based on norms rather than needs. To mitigate this risk, the program will strengthen the preparation process for the annual strategic implementation plan and the annual work plan and budget, thereby establishing a result chain of inputs and outputs.

31. Weak public finance management and reporting capacity of the MOE system, which is characterized by poor internal control and oversight mechanisms, represents the third major risk to the program. To mitigate this risk, the program includes a rolling annual fiduciary review of the system and the implementation of a jointly agreed fiduciary management action plan. MOE will implement the computerized government accounting system in all 75 district education offices to ensure timely and accurate reporting of program expenditures and to reduce audit observations. The fourth risk relates to the overall operating environment of the RBL, in which the anticipated transition to the federal structure will require additional decentralized capacity, the lack of which may impede sustained efforts in the education sector. A transition period of at least 3 years is expected for new structures to be in place, during which the existing arrangements for technical and management support will continue, so they will be strengthened for effective implementation.