

SECTOR ASSESSMENT (SUMMARY): EDUCATION

1. Sector Performance, Problems, and Opportunities

1. **Disaster risks and impacts.** Nepal is highly vulnerable to disasters triggered by natural hazards, including earthquakes, floods, landslides, glacial lake outburst floods, and droughts. In 2015, earthquakes in April and May caused damage and losses estimated at \$7 billion—equivalent to 35.7% of the country's 2014 gross domestic product (GDP)—with 8,790 casualties, 22,300 injuries, and more than 8 million people affected (almost 29% of the population).¹ GDP growth slowed to 0.0% in FY2016 from 5.7% in FY2014 and 3.0% in FY2015.² In August 2017, widespread floods affected 35 of the country's 77 districts, inundating about 80% of the land in the Terai region. Recovery costs from the floods are estimated at \$705.1 million. Nepal loses on average about \$173 million per year (equivalent to 0.88% of 2014 GDP) as a consequence of natural hazards, according to probabilistic analyses. The 100-year probable maximum loss is estimated at \$1.4 billion for an earthquake.³

2. The recovery financing requirements for the 2015 earthquake were assessed at \$8.4 billion. The Government of Nepal established the National Reconstruction Authority (NRA) in December 2015 to plan and coordinate reconstruction and rehabilitation programs. Despite these efforts, annual economic growth slowed significantly, reflecting the loss of income and productive capacity because of the earthquakes, unrest in the Terai region, and unfavorable monsoons. While the Asian Development Bank (ADB) projects 7.4% economic growth for Nepal in FY2017, this is expected to fall in FY2018 to 5.9%.⁴ Heavy rains from mid-August 2017 triggered landslides and floods, resulting in the loss of lives and livelihoods. The Terai region was hardest hit and agricultural production was hampered.

3. **Education sector performance and disaster impacts.** Development of human capital is critical for Nepal's vision to become an inclusive and prosperous middle-income country by 2030.⁵ Nepal has made steady progress in increasing access to basic education (grades 1–8), as well as improving internal efficiency and gender parity. However, progression to secondary education (grades 9–12) and enrollment of girls from disadvantaged backgrounds (Dalits, a historically excluded social group) and in science remain low. Girls and children from Dalits and other disadvantaged groups in rural schools find it particularly difficult to get access to quality education.

4. The 2015 earthquakes forced the closure of schools for a month in the severely affected districts, driving more than 2 million students out of the education system. This significantly disrupted their learning, motivation, and confidence. It also increased their fear and anxiety as some lost families and homes. These factors undermine learning outcomes, such as national assessment of student achievement. Some students continue to attend school in temporary learning centers, while others are sent to less or unaffected neighboring schools. This has disrupted quality learning, especially for students with disabilities or significant injuries. Nepal's

¹ Government of Nepal, National Planning Commission. 2015. *Nepal Earthquake 2015: Preliminary Damage and Needs Assessment*. Kathmandu; and Government of Nepal, National Reconstruction Authority. 2016. *Post Disaster Recovery Framework (2016–2020)*. Kathmandu.

² ADB. 2016. *Asian Development Outlook 2016: Asia's Potential Growth*. Manila.

³ United Nations Office for Disaster Risk Reduction. 2015. *Making Development Sustainable: The Future of Disaster Risk Management*. Global Assessment Report on Disaster Risk Reduction. Geneva.

⁴ ADB. 2017. *Macroeconomic Update Nepal*. Volume 5, No.2. Kathmandu

⁵ Government of Nepal, National Planning Commission. 2015. *Sustainable Development Goals, 2016–2013: National (Preliminary) Report*. Kathmandu.

hard-earned educational achievements are jeopardized by recurring disasters and their impact on students, teachers, schools, and communities.

5. A 2016 structural integrity and damage assessment estimated that 2,234 schools are heavily damaged and not in use in 14 districts severely affected by the 2015 earthquakes.⁶ These schools lack adequate facilities for learning, such as laboratories, libraries, and information and communication technology. They also possess limited basic facilities such as water supply, sanitation, and electricity. An additional 3,569 partially damaged schools with identified retrofitting or repair needs remain in use. The structural integrity and damage assessment found that all these schools are vulnerable to seismic hazards, 30%–50% are vulnerable to landslides triggered by precipitation and earthquakes, and 5% are susceptible to flooding. In addition to resilient school infrastructure, Nepal needs other disaster risk management (DRM) actions and stronger institutional capacity to safeguard communities and investments. Tools and data need to be developed for risk-informed site planning and design.

6. About 25% of the 2,234 heavily damaged schools are to be reconstructed under planned and ongoing projects supported by Nepal's development partners.⁷ The government is also trying to finance the reconstruction of additional schools. However, a significant funding gap remains. Knowledge and skills also need to be developed for resilient construction and communities, as well as community-driven retrofitting that may be replicated under local government funding.

7. Given the scope and size of the reconstruction efforts, the Ministry of Education, Science and Technology set up a central-level project implementation unit (CLPIU) for education, which receives the NRA's authorization of reconstruction projects and disbursement. The CLPIU and district-level implementation units administer large school projects through competitively selected contractors. Small school buildings are reconstructed by local participation with local resources.⁸

2. Government's Sector Strategy

8. **Disaster Reduction Policy and Action Plan.** In recent years, the government has ramped up efforts to develop policies and regulations to integrate disaster risk reduction and mitigation into development programs. The Natural Calamity (Relief) Act was put in place in 1982, and the Building Act (1998) was amended in 2007 to require all municipalities to follow the National Building Code. The 2015 Constitution identifies disaster risk reduction (DRR) as a priority and gives responsibility for reducing risk and advancing DRM to all levels of government. The Fourteenth Plan 2016/17–2018/19 focuses on (i) risk reduction from water-induced disasters, as well as environmental and climate changes; and (ii) post-earthquake reconstruction and rehabilitation.⁹ The 2015 earthquake highlighted Nepal's need to enhance DRM. The government approved the Nepal Earthquake Post Disaster Recovery Framework, 2016–2020 in 2016.¹⁰ In

⁶ Government of Nepal, Department of Education; and World Bank. 2016. *Structural Integrity and Damage Assessment*. Kathmandu.

⁷ ADB funded Emergency Earthquake Assistance Project and Japan Fund for Poverty Reduction funded Disaster Risk Reduction and Livelihood Restoration for Earthquake Affected Areas (\$78 million) to reconstruct 160 schools; Japan International Cooperation Agency provided \$112 million to reconstruct and retrofit 282 schools; and India extended \$50 million to reconstruct 75 schools. Other contributions from the government, United States Agency for International Development, and the Department for International Development (DfID) in the United Kingdom represent less than 25% of the identified needs.

⁸ Schools with less structural damage and fewer than 8 classrooms are often referred to as small-scale school buildings, while other schools with more classrooms are referred to as large school projects.

⁹ Government of Nepal, National Planning Commission. 2016. *Fourteenth Plan 2016/17–2018/19*. Kathmandu.

¹⁰ Government of Nepal, NRA. 2016. *Nepal Earthquake 2015 Post Disaster Recovery Framework, 2016–2020*. Kathmandu.

2017, the Disaster Risk Reduction and Management Act was passed,¹¹ and the National Disaster Risk Reduction Policy and Strategic Action Plan, 2017–2030 was finalized.¹² Nepal also signed the Sendai Framework for Disaster Risk Reduction, 2015–2030.¹³ However, the institutional arrangements to implement the national disaster risk reduction policy are inadequate.

9. **Post Disaster Recovery Framework, 2016–2020.** This framework prepared by the NRA and the Reconstruction and Rehabilitation Policy 2072 (2016) provided the policy instrument for steering reconstruction and rehabilitation in response to the 2015 earthquakes. Comprehensive school safety guidelines were adopted to provide (i) safe learning facilities, (ii) school disaster risk management, and (iii) risk reduction and resilience education. The development partners in Nepal support these guidelines.¹⁴

10. Implementation and enforcement of these policies and regulations face challenges. For instance, enforcement of National Building Code is weak because of limited (i) governance capacity, (ii) awareness by the population, (iii) technical and financial resources, and (iv) skilled workers. The buildings that complied with this code were not damaged even in severely affected districts, and development of manuals, tools, and human resources in construction business needs to be strengthened to have broader understandings of the National Building Code. While policies and action plans have laid the foundation for DRM activities, such as multi-hazard risk assessment and disaster information management system, they have not been fully translated into actions because of limited national and local capacities.

11. Under the Reconstruction and Rehabilitation Policy 2072 (2016), the government will seek to ensure that infrastructure—particularly social infrastructure such as schools and health centers—is reconstructed to disaster-resilient and gender-sensitive standards. The new school infrastructure aims to provide safe learning spaces for students, including safe site selection, compliance with building codes, disaster-resilient designs, retrofitting, construction supervision, and quality control. The policy also focuses on strengthening the preparedness and risk-reduction capacity of the education system—from the national level to school level—through multi-hazard risk assessment, mapping for disaster management, reducing risks in schools by incorporating school safety into improvement plans.

12. **Education sector policy and disasters.** The Ministry of Education, Science and Technology’s most recent and comprehensive School Sector Development Plan, 2016–2023 (SSDP) identifies school safety as an explicit objective.¹⁵ School safety objectives are to (i) ensure all children can access safe enabling learning environments, and (ii) mainstream comprehensive school safety and DRR in the education sector by strengthening school-level disaster management and resilience. The SSDP supports the “building back better” approach. The focus of DRR is safe reconstruction, repair, and retro-maintenance of schools in earthquake-affected areas, and safe reconstruction and retrofitting of schools in unaffected areas. SSDP also stresses the three pillars of the Comprehensive School Safety Framework: (i) safe infrastructure, (ii) strengthened DRM and (iii) strengthened resilience in communities and among stakeholders. The government’s Post Disaster Recovery Framework also prioritizes school reconstruction.

¹¹ Government of Nepal. 2017. *Disaster Risk Reduction and Management Act 2017*. Kathmandu.

¹² Government of Nepal, Ministry of Home Affairs. 2017. *National Strategic Action Plan for Disaster Risk Reduction 2017–2030*. Kathmandu.

¹³ United Nations. 2015. *Sendai Framework for Disaster Risk Reduction, 2015–2030*. Sendai, Japan.

¹⁴ United Nations Office for Disaster Risk Reduction. 2017. *Comprehensive School Safety Framework*. Kathmandu.

¹⁵ Ministry of Education. 2016. *School Sector Development Plan*. Kathmandu.

3. ADB Sector Experience and Assistance Program

13. ADB has been a major development partner supporting Nepal's education sector reforms. Since 2006, ADB has used a sector-wide approach to support the government's Education for All Program, School Sector Reform Plan, and SSDP. Through these initiatives, ADB and other development partners (i) helped to improve educational infrastructure and enabled conditions for enhanced learning; (ii) provided free textbooks, scholarships, and incentives for marginalized groups; (iii) mainstreamed actions to address out-of-school children; (iv) teacher management and professional development; (v) improved school safety; and (vi) reduced fiduciary risk in the education sector.¹⁶ ADB financing under SSDP will add value through key initiatives, such as the model school program, examination reform, provision of subject teachers, and improved school grant management system.

14. Even before the 2015 earthquakes in April and May, ADB led a DRR initiative to create a safer environment for student learning under the School Sector Reform Plan.¹⁷ As a first attempt in Nepal, ADB took a leading role in the Nepal Risk Reduction Consortium established in 2009. The disaster risk reduction plan included retrofitting of 260 school buildings in Kathmandu Valley; 165 of them had been completed and were used as emergency shelters after the earthquakes. The capacity development of 184 Department of Education and District Education Office engineers and sub-engineers were completed, and more than 5,000 teachers and 50,000 students were trained in school safety. The lessons learned in these pilot actions were used in a comprehensive strategy for schools in 2014, which included nine stand-alone and six linked actions to reduce the disaster risk in schools.¹⁸

15. Shortly after the earthquakes, ADB supported the Emergency Earthquake Assistance Project,¹⁹ and the Japan Fund for Poverty Reduction (JFPR) financed Disaster Risk Reduction and Livelihood Restoration for Earthquake-Affected Areas.²⁰ Through the ongoing Emergency Earthquake Assistance Project, at least 160 schools were rebuilt to disaster-resilient standards. The JFPR-funded project is supporting at least eight model schools equipped with ICT equipment; science laboratories; and improved learning space, furniture, and amenities. The proposed project builds on lessons learned from the design and implementation earlier projects.

16. The project is consistent with the SSDP and complements another recent ADB-funded education program with results-based lending (RBL). The RBL program focuses on improving the quality of school education; access to education; and professional teacher development, particularly in the secondary education system. While investment lending is justified for the proposed project because most of the activities are civil works, the learning outcome is strengthened by the sector-specific system support through RBL. The progress and lessons learned will be shared with other development partners through a sector-wide approach.

¹⁶ In addition to ADB, the SSDP has eight joint financing partners: (i) Australia, (ii) European Union, (iii) Global Partnership for Education, (iv) Japan International Cooperation Agency, (v) Finland, (vi) Norway, (vii) United Nations Children's Fund (UNICEF), and (viii) World Bank.

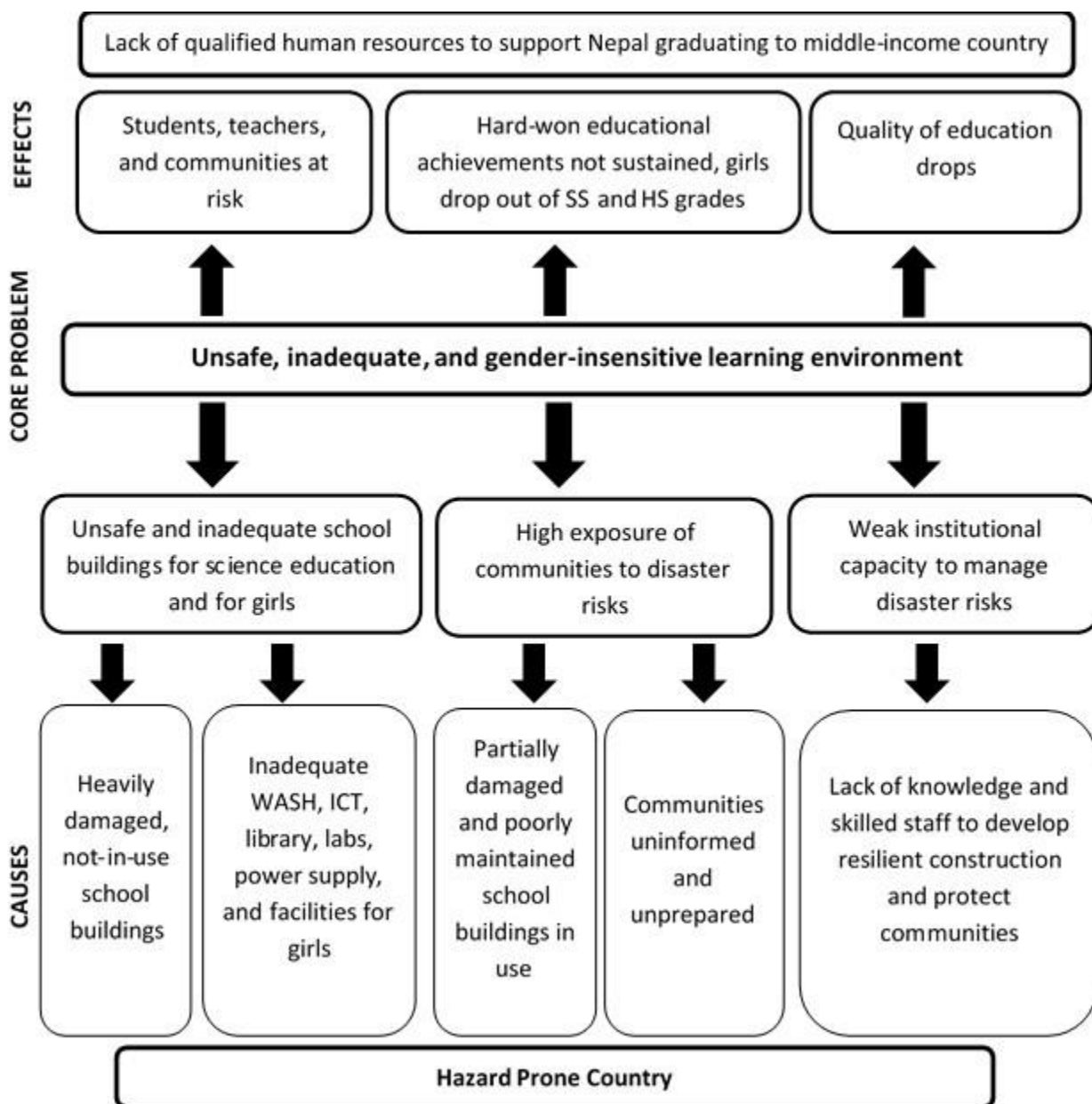
¹⁷ ADB. 2011. *Report and Recommendation of the President to the Board of Directors: Proposed Policy-Based Grant and Technical Assistance Grant to Nepal for the School Sector Program*. Manila.

¹⁸ ADB. 2016. *Completion Report. School Sector Program in Nepal*. Manila.

¹⁹ ADB. 2015. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grant to Nepal for the Earthquake Emergency Assistance Project*. Manila.

²⁰ ADB. 2015. *Report and Recommendation of the President to the Board of Directors: Proposed Administration of Grant to Nepal for the Disaster Risk Reduction and Livelihood Restoration for Earthquake-Affected Communities project*. Manila.

Problem Tree for Education (Disaster Risk Management)



HS = higher secondary; ICT = information and communication technology; SS = secondary school; WASH = water supply, sanitation, and hygiene.