

GLOBAL PROGRAM FOR SAFER SCHOOLS

Making schools and the communities they serve more resilient to natural hazards

What We Do

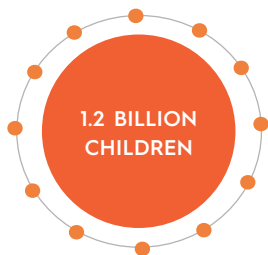
Work to make schools and the communities they serve more resilient to natural hazards. Resilient schools result in reduced physical impact on school infrastructure, minimized disruption to educational services, and lives saved in the event of a disaster.

Leverage support by linking activities directly to large school investment programs.

Bring together governments, the private sector, and civil society to enable countries to access the best experience and technical expertise.

Use technology and data analytics to quantify the level of risk and prioritize actions in order to guide risk-reduction investments.

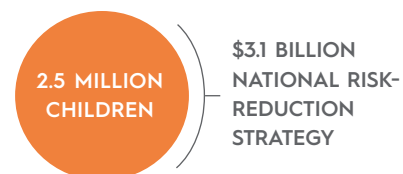
Despite an increasing global focus on the issue of school safety, with few exceptions, governments and development partners have not managed to address the problem at scale. By providing technical assistance in the context of planned and ongoing investments in school infrastructure, the Global Program for Safer Schools (GPSS) builds strong government ownership to address the issue of safety and enables countries to make schools resilient at marginal cost.



Close to 1.2 billion children are enrolled in primary and secondary education worldwide.



An estimated 875 million schoolchildren live in earthquake-prone regions of the world.



In Peru, GPSS launched a risk assessment that helped make an estimated 2.5 million children safer and paved the way for a \$3.1 billion national risk-reduction strategy.

APPROACH

TECHNICAL ASSISTANCE

GPSS supports technical assistance activities to create an enabling environment for risk reduction and to improve construction practices in the education sector. These activities are directly linked to ongoing and planned education infrastructure investment programs to ensure scale and long-term impact.

To date, GPSS has initiated activities in 11 countries across five regions, including Armenia, El Salvador, Indonesia, Jamaica, Mozambique, Nepal, Peru, Turkey, Samoa, Tonga, and Vanuatu.

MONITORING PROGRESS

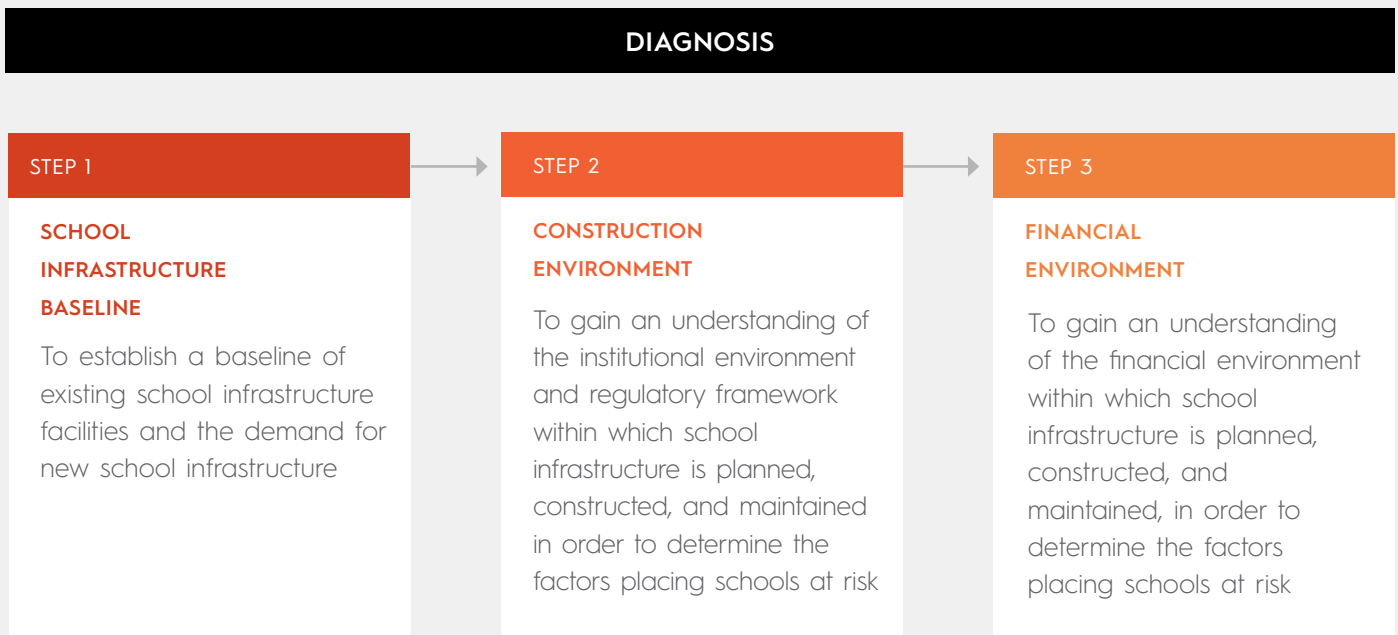
In order to monitor progress globally, GPSS developed a platform to establish a global baseline for school infrastructure. At this stage, more than 3 million

schools have been located across the world. GPSS is developing standardized methods to identify the type of construction used in order to reach a better understanding of the current global level of risk related to school infrastructure. At the same time, other development partners, such as Save the Children, have also started to collect global data on non-infrastructure related aspects of schools safety that will be shared and visualized on this platform.

ENGAGEMENT WITH THE PRIVATE SECTOR, ACADEMIA, AND CIVIL SOCIETY

GPSS has established partnerships with the private sector, academic, and civil society, including Arup, Applied Technology Council, Save the Children, Universidad de los Andes, University College London, and the Swiss Federal Institute of Technology Zurich.

FIGURE 1: GPSS ROAD MAP FOR SAFER SCHOOLS

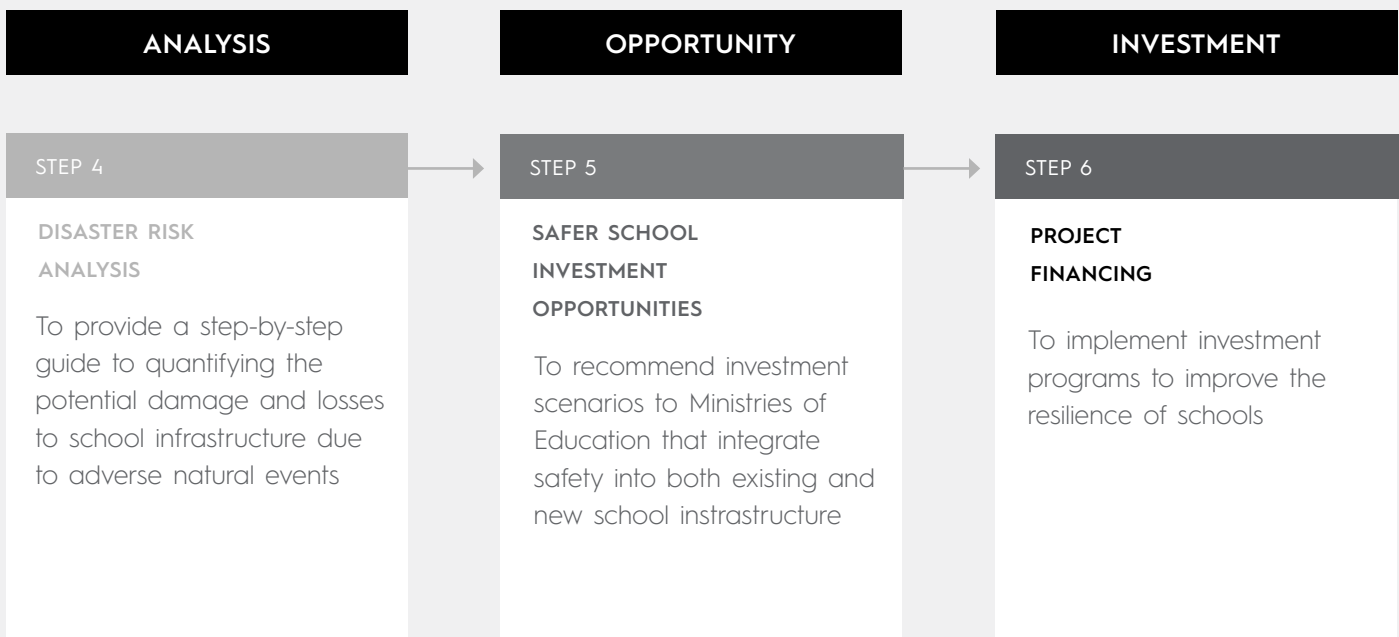


In addition, GPSS is involved in an informal engagement with the Global Alliance for Disaster Risk Reduction and Resilience in the Education Sector to coordinate the efforts of development partners to support the implementation of the World Wide Initiative for Safe Schools.


- Arup, a private firm of designers, planners, and engineers, provides technical support to GPSS. Most recently, ARUP supported GPSS's development of a *Roadmap for Safer Schools* (Figure 1), an operational tool offering guidance to project managers interested in advancing the safer school agenda. Currently, ARUP is developing a toolkit and case studies to complement the Roadmap.

- Save the Children and GPSS are collaborating on the development of *Comprehensive Guidelines on Community-based School Construction* and associated training videos. A network of NGOs, including Plan International and World Vision, have actively provided input to these materials.

GPSS also supports country-to-country learning and knowledge exchanges between technical experts and policy makers.



ACTIVE ENGAGEMENTS

A world map with a light gray background. Four orange circular markers are placed on the map, each with a label: EL SALVADOR (Central America), JAMAICA (Caribbean), PERU (South America), and TURKEY (Europe/Asia). Two large orange callout boxes with white text are overlaid on the map. One callout box points to the Caribbean region, and the other points to the South American region.

GPSS is now active on the ground in 11 countries: Armenia, El Salvador, Indonesia, Jamaica, Mozambique, Nepal, Peru, Samoa, Tonga, Turkey, and Vanuatu.

EL SALVADOR

JAMAICA

PERU

TURKEY

GPSS has conducted comprehensive technical reviews of school safety in eight countries: Afghanistan, Armenia, Indonesia, Mongolia, Mozambique, Samoa, Tonga, and Vanuatu.



Next Steps

GPSS aims to engage in 20 additional countries in the next five years in order to reach its goal of making 500,000 classrooms safe from natural disasters and to benefit 15 million students.

ARUP is supporting GPSS to develop the Recovery and Reconstruction Roadmap, an operational tool that will guide project managers involved in post-disaster recovery and reconstruction efforts.

University College London is supporting GPSS to develop a global baseline of risk information that will inform school infrastructure projects in countries that lack information and capacity to make risk-informed decisions.

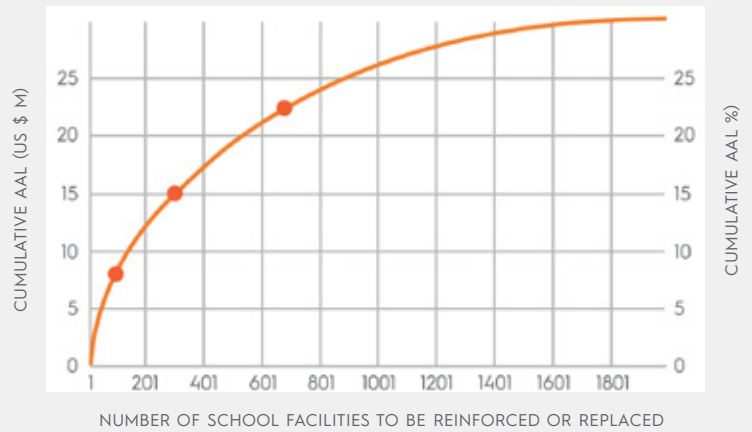
Peru

In Peru, a GFDRR-supported risk assessment in Callao and Lima indicated that the Ministry of Education can reduce about 70% of the seismic risk by improving the physical safety of 600 schools – 30% of all schools (Figure 2). GPSS extended the risk assessment nationwide and is supporting the implementation of Peru’s first National Plan for School Infrastructure and a Seismic Retrofitting Program for School Infrastructure.

To date, the government has started the implementation of a first phase of Plan Lima, which includes making 373 of the most vulnerable schools resilient – a step that will benefit 278,000 students in the short-term. At least 12,000 schools will be made resilient in the medium- to long-term. In total, an estimated 2.5 million children will have access to safe school buildings.

In order to enhance and accelerate the implementation of these programs, an innovative solution based on incremental retrofitting is being implemented for the first time in Peru. In line with this approach, GPSS has also convened the best universities in the country to devise, test, and validate retrofitting solutions for one of the most common and vulnerable types of schools.

FIGURE 2: CONCENTRATION OF RISK BY SCHOOL FACILITY IN LIMA AND CALLAO



“The government of Peru, through the Ministry of Education, is committed to the improvement and rehabilitation of school infrastructure throughout the country. The Program for School Infrastructure has made advancements in adjusting its institutional structure, implementing an ambitious short-term intervention plan in Lima and designing the National School Infrastructure Plan. The World Bank and GFDRR have been strategic partners in this process by providing timely technical assistance.”



– Gustavo Canales
Director of the Program for School Infrastructure, Ministry of Education

Nepal

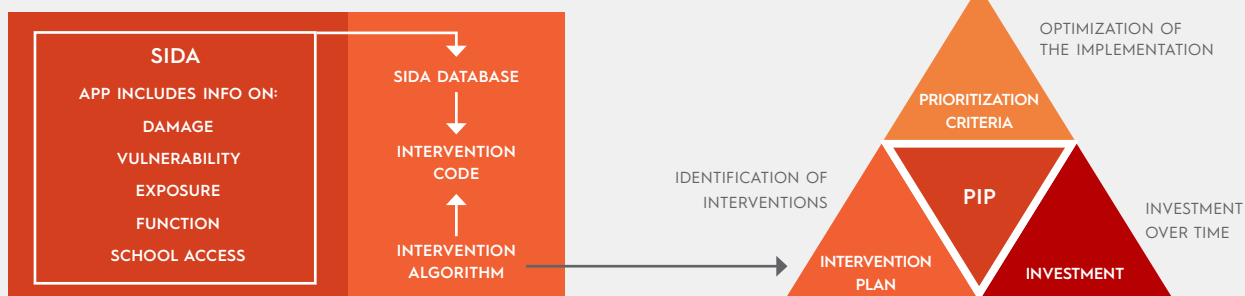
The 7.8 Mw earthquake that struck Nepal on April 25, 2015, affected more than half of the country's 75 districts. Under GPSS, the World Bank and Global Facility for Disaster Reduction and Recovery (GFDRR) have provided technical advice and support to the Department of Education on the planning for reconstruction and recovery of the education sector. GPSS has trained 150 Nepali engineers to conduct a detailed structural integrity and damage assessment (SIDA) of 18,000 public school buildings — an effort enabled by innovations in data collection and analysis.

The results of the SIDA served as essential inputs for the Department of Education, other development partners, and NGOs involved in planning the reconstruction and

prioritizing the implementation. The results also provided the vulnerability information needed to plan long-term risk reduction programs in the education sector.

An innovative tool has been developed that automatically analyzes the SIDA results and prepares a prioritized investment plan (PIP) for use in reconstruction and retrofitting of school infrastructure (figure 2). The tool makes it possible to quantify the investment needed in the short and medium terms to recover from the disaster, the investment needed in the long term to improve the resilience of school infrastructure, and the changes in the investment over time. This tool and the results of the SIDA have been integrated into a web-based platform, providing long-term support to risk-informed decision making in the

FIGURE 3: SIDA DATABASE AND PIP



Armenia

Armenia has a large school building stock that is highly vulnerable to seismic hazards. Of its nearly 1,440 registered schools, 90% were built prior to the adoption of the first Seismic Code in 1994.

GPSS, in collaboration with the World Bank and Arup, conducted a technical review of school safety in the country to identify priority areas for additional support to the national Safe School Improvement Program (SSIP). Estimated to cost \$620 million, SSIP seeks to improve the safety of 25% of all Armenian schools. The government has already committed to provide \$110 million. In addition, the Asian Development Bank is contributing \$88.5 million; World Bank is providing \$22 million; and the European Investment Bank will potentially allocate \$88.5 million for this effort.

With support from GPSS, Armenia has formally committed to initiating regulatory reform to ensure the safety of all schools targeted under the SSIP.

As part of an agreement with the Asian Development Bank, the government has committed to using the school construction and retrofitting guidelines developed by GPSS to revisit its existing Building Code.

With these efforts underway, Armenia is better positioned to ensure that investments in strengthening infrastructure will help protect students and reduce potential damages and loss in school facilities located in high and medium seismic hazard zones. As a result of repairing affected school facilities, the country has also reduced potential education service disruption in the case of an earthquake.



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GFDRR THEMATIC INITIATIVE: SAFER SCHOOLS

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