Nepal School Project

Designing for resilience

Architecture Competition

organized by

ARCHSTORMING

in partnership with

KARMAYOG FOUNDATION

Nepal Rising

ARCHSTORMING

Organizer

Archstorming

Archstorming is an international platform that aims to improve the well-being of people in need through innovative and sustainable architecture. Our mission is to **create positive change through architecture** and foster a new generation of socially conscious architects.

Our humanitarian architecture competitions showcase **real projects that address critical issues** such as disaster relief, poverty, conflicts and diseases, while serving the fundamental needs of shelter, warmth, access to clean water, education, and community building.

Sustainability is the core of our competitions, both in terms of design and construction, challenging our participants to find innovative construction methods, use locally sourced materials, and adopt collaborative easy-to-build techniques, among others, that can be understood and applied by local communities.

Map marking the location of Nepal

introduction

In 2024 Nepal faced one of the most destructive monsoon seasons in its history, followed by the Tibet earthquake in January 7th, 2025 that also affected the country. Floods and landslides destroyed homes, infrastructure, and over 150 schools across the country. Thousands of children were left without safe spaces to learn, disrupting education and impacting their mental and physical well-being.

This competition, organized by Archstorming in collaboration with Karmayog Foundation Nepal and Nepal Rising, aims to address this urgent crisis. **Participants have the opportunity to design a replicable, eco-friendly, and earthquake-resistant school prototype that can be implemented in multiple locations across Nepal.** These schools will not only provide a safe space for education but will also serve as community hubs and places of refuge during emergencies.

Rebuilding schools is about more than just physical structures. It's about giving children a chance to grow, learn, and feel safe again. It's about helping communities recover and creating spaces that are sustainable and resilient for the future.

This is an opportunity for architects and students worldwide to contribute their creativity to this transformative initiative, helping to reshape the future of education and community resilience in Nepal.

Collaborator

the NGOs: Karmayog Foundation and Rising Nepal

Archstorming has partnered with Karmayog Foundation, a local NGO, and Nepal Rising, its U.S.-based collaborator, that work improving life standars in Nepal, with a strong emphasis on education and disaster recovery.

Foundation volunteers helping communities.

Karmayog Foundation leads initiatives to uplift underprivileged and marginalized communities. In education, they work to establish modern learning facilities, equip schools with essential materials, and provide teacher training programs to improve the quality of education in rural areas. **Following the catastrophic monsoon floods of 2024, the Karmayog Foundation has made rebuilding schools a top priority,** aiming to create new safe and functional spaces where children can thrive.

Beyond education, Karmayog Foundation focuses on disaster preparedness and recovery, providing immediate relief, rebuilding essential infrastructure, and even addressing the needs of animals affected by natural disasters. Their efforts also include empowering women through skills training, organizing healthcare initiatives in remote areas, and promoting environmental sustainability through programs that reduce plastic waste and encourage eco-friendly practices

Nepal Rising, their partner in the United States, strengthens these efforts by raising funds, mobilizing volunteers, and fostering international partnerships.

We invite you to discover more about these organizations and their transformative work:

- Karmayog Foundation: Website | Instagram
- Nepal Rising: Website | Instagram

Nepal streets flooded.

the context: Nepal's most destructive monsoon in decades

During the summer of 2024, torrential rains triggered widespread floods and landslides, leaving hundreds of people dead, injured, or missing, and displacing thousands from their homes. Villages were submerged, roads were destroyed, and communities in hilly regions were devastated by landslides.

This already dire situation was made worse by the Tibet earthquake on January 7, 2025, which caused further destruction across Nepal. Buildings that had been weakened by the floods collapsed, and the recovery efforts faced even greater challenges.

Among the worst-hit areas was the education sector. **Over 150 schools were damaged or destroyed, leaving thousands of children without a safe place to learn.** In districts like Kavre, Sunsari, and Godawari, classrooms and playgrounds were washed away or buried under debris, while those in the Terai region were flooded.

By rebuilding schools, we will provide children with a safe place to learn, restoring hope among students and parents and encouraging them to return to education. These schools will address the mental and physical well-being of children affected by disasters, helping them regain stability and confidence. Additionally, the project ensures the long-term resilience of educational facilities in disaster-prone regions, safeguarding students for generations to come.

after the monsoon:
examples of devastated schools

the competition

the challenge: designing a replicable school model

This competition invites architects and students worldwide to **design a prototype for a school that can be replicated across multiple rural locations in Nepal.** The goal is to create a modern, eco-friendly, and earthquake-resilient building that provides a safe and welcoming environment for children in disaster-affected areas.

Given Nepal's vulnerability to natural disasters, **safety and durability are critical features for this design.** These schools must not only withstand future natural disasters but also serve as community hubs in emergencies, offering a secure space for children and families.

Collaboration with local authorities, communities, and the government is central to this project. The land will be provided by government schools themselves, which typically have large unused spaces. Once the schools are built, the local government will oversee operational aspects, such as assigning teachers and managing resources, ensuring these facilities become integral parts of their communities.

▲ Schools in Nepal

the competiton

the site

Since this competition focuses on creating a replicable school prototype, there is no specific site provided. Instead, **participants will work with a standard average plot,** similar to those that could be provided by government schools. This ensures all designs are comparable and evaluated under the same criteria.

- The proposed plot covers an area of **1,800 m²** **(approximately 19,375 square feet).**
- It is a **rectangular plot** measuring **30 × 60 m.**
- The land is **flat** and suitable for construction.
- **Access** is via an unpaved dirt road adjacent to the plot.
- The site is located on the **outskirts of the community.**
- Public water and electricity supplies will be available.

▼ Proposed land

the competition

school program

The school will accommodate **200 students aged 3 to 14.**

The design must be **modular, allowing for construction in phases** as funding becomes available or needs arise, while maintaining functionality and coherence.

core facilities

first phase of construction

These spaces are essential for the school's initial operation:

- **Classrooms:** Five classrooms (35 m² each / ~377 ft²), easily divided into two smaller spaces, creating a total of ten learning areas. Each classroom must include at least one teacher's desk and a blackboard.
- **Multipurpose Hall:** A communal space that serves as a library, meeting area, and venue for cultural activities (40 m² / ~430 ft²).
- **Outdoor Areas:**
  - A covered **veranda** to provide shelter from the sun and rain (30 m² / ~215 ft²).
  - An **orchard** to grow vegetables and other edible plants for use in meals or as an income-generation activity (50 m² / ~538 ft²).
  - A **playground** for group activities and play. Participants will determine the size of this space, keeping within the limits of the plot.
- **Restrooms:** Separate facilities for boys and girls, each with four stalls and a shared area with at least four sinks located at the restroom entrance (20 m² / ~215 ft² total).

additional facilities

second phase of construction

These spaces can be added as the school grows and more funding becomes available:

- **Office:** A small office for the director, which can also be used by teachers during breaks or meetings (15 m² / ~160 ft²).
- **Canteen:**
  - **Kitchen:** designed for basic meal preparation, such as toasting bread or heating milk, using wood or charcoal for cost efficiency (15 m² / ~160 ft²).
  - **Dining Room:** accommodating around 40 students (one full class) to be used on a rotational basis by the students (30 m² / ~540 ft²).
- **Storage Room:** A space for storing school supplies, food, cleaning materials, and other essentials (10 m² / ~108 ft²).

future expasion

The design must be modular to allow for additional classrooms or other facilities to be added as required. **Participants may also propose additional spaces** they believe would add value to the school, which could be considered for future construction phases.

This phased approach ensures that the project remains feasible while addressing both immediate needs and long-term growth opportunities. The NGO does not have a fixed budget for construction, as it depends on donor contributions and other collaborations.

the competition

materials

The construction materials commonly used in Nepal combine local availability, cost-efficiency, and resilience against natural disasters:

- **Reinforced Cement Concrete (RCC):** Widely used for structures, including pillars, beams, and ceilings, to ensure durability across different soil types.
- **Metal (iron/steel):** Used for structural elements such as beams, railings, exterior pillars, and entire structures. Metal sheets are also used as an affordable roofing option, for example, for porches or sheds. Metal provides durability, ease of maintenance, and flexibility in construction, particularly for lightweight and earthquake-resistant designs.
- **Granite stone:** Durable and abundant, primarily used for foundations.
- **Concrete blocks:** Economical and durable, these are often made on-site and plastered after installation, requiring minimal specialized labor.
- **Fired clay bricks:** Traditionally used for walls and pavements, they offer a uniform aesthetic to urban and rural spaces but have a higher environmental impact due to emissions during production.
- **Compressed Stabilized Earth Blocks (CSEB):** A sustainable alternative to traditional bricks, made from local materials such as soil, sand, and a small amount of cement, without requiring firing.
- **Wood:** Used in carpentry and structural elements, although high maintenance, termites, and humidity limit its application.
- **Bamboo:** A fast-growing, sustainable material ideal for lightweight and flexible structures, used in both traditional and modern construction projects.
- **Clay tiles:** Commonly used for roofing, clay tiles help regulate indoor temperatures and are a cost-effective, locally available option.

Participants are encouraged to conduct their own research on locally available construction materials and suggest alternatives that differ from those listed here.

construction techniques

The design must prioritize safety, durability, and child-friendly features while incorporating cost-effective and sustainable materials. Essential considerations include:

Earthquake-resistant design: The greatest challenge lies in ensuring that the structure is resilient to earthquakes, given Nepal's high seismic activity. This must be achieved while remaining cost-efficient and sustainable.

Sustainability: it should be a core consideration in the selection of materials and the integration of renewable energy solutions, such as solar panels and rainwater harvesting systems for gardening and cleaning tasks. These features help reduce environmental impact while enhancing the school's long-term viability and self-sufficiency.

Raised basements: To prevent flooding and reduce the risk of wildlife, such as snakes and scorpions, entering the building.

Passive design strategies: Features such as natural ventilation and ample daylight should be incorporated to enhance sustainability and reduce energy needs.

Modular construction: Allowing additional elements to be integrated as funding becomes available, ensuring flexibility and scalability.

Construction will rely mainly on local workers. While innovative approaches are encouraged, they must remain practical, maintainable, and easy to implement.

volunteer trip

The Karmayog Foundation offers the opportunity to **participate in the construction of the winning project** for those participants who are interested.

The volunteer program will last approximately 14 days to ensure a meaningful impact. Volunteers will stay in homestays, offering an authentic experience of Nepalese culture and traditions. This immersive setting allows participants to engage with community members, learn about rural life, and gain a deeper understanding of local challenges and strengths.

In addition to project work, volunteers will have the opportunity to explore Nepal's rich heritage and natural beauty, visiting iconic sites in Kathmandu and trekking through impressive mountain landscapes.

This trip offers volunteers the chance to make a meaningful contribution to Nepal's recovery while embarking on a transformative personal journey.

the competiton
awards:

We are offering a total of 10,000€ in cash prizes, distributed as follows:

1st PRIZE
6,000 € + Construction

2nd PRIZE
2,000 €

3rd PRIZE
1,000 €

SPECIAL HONORABLE MENTIONS
2 × 500 €

10 HONORABLE MENTIONS

50 FINALISTS

All winning projects and finalists will be published in various architecture magazines, blogs, social networks, and our website. All participants will receive a digital certificate of participation.

Calendar

Registering will give you access to both the course and the competition to you and your team (from 1 to 4 members). The registration periods, submission deadline and winners announcement are as follows:

Early Bird Registration
February 6th - March 5th

Standard Registration
March 6th - April 2nd

Extended Registration
April 3rd - April 30th

Final Call Registration
May 1st - May 28th

Submission deadline
May 28th

Winners announcement
June 11th

Registration

To register for the competition, visit our official website and complete the registration form. Upon completion of the form, you will be redirected to the payment page where you need to complete the payment to finalize the registration process.

The registration fees are tiered based on the date of registration as follows:

- Early Bird Registration: €70 + VAT
- Standard Registration: €90 + VAT
- Extended Registration: €110 + VAT
- Final Call Registration: €130 + VAT

* VAT charged 21%.

We accept Visa, Mastercard, Discover, and American Express credit or debit cards. Payments can also be made through PayPal. Please note that we will not have access to your credit card details. Once the registration and payment process is completed, no refunds will be issued.

Immediately after registration and payment, you will receive a confirmation email to the address provided during payment. This email will include your unique registration number. When submitting your proposals, you will be required to provide this registration number for identification purposes, and it should be clearly displayed on your competition board, preferably in the lower right corner.

FAQs & eligibility

- **For common queries, refer to the FAQ section on our website.** During the competition, individual responses will be provided to questions sent via email.

- The competition is open to all, including architecture students, professional architects, and individuals from other disciplines such as engineering, philosophy, sociology, photography, etc. All nationalities are welcome, we appreciate as diverse participation as possible.

- Teams can consist of one to four members, all of whom must be at least 18 years old. The registration fee is per team, irrespective of team size.

- If a team or participant wishes to submit more than one proposal, they must register and pay the fee for each submission.

- Jurors, the organization, or anyone directly related to the jury are not allowed to participate in this competition.

Submission

For this competition, participants are required to submit **two digital files**: **“one A1 Board” and a “Project Description**”. Submissions should be made through the ‘**Submit’ section on our website**.

1x A1 Board: Participants are required to present their project on one A1 format board (594×841 mm or 23.4×33.1 inches), which can be either landscape or portrait oriented.

A1 Board Content: The board should contain a variety of visual aids that contribute to a clearer understanding of the project. The **Order Number included in the payment confirmation email** must be clearly visible in the lower right corner of the board.

A1 Board File Details: The board must be delivered in **JPEG or JPG** format with a maximum size of **10 MB. The file name must be the Order Number provided in the payment confirmation email (e.g., 123456789.jpg).**

Project Description: A project description, of no more than 400 words, must be submitted along with the A1 Board.

Project Description File Details: The description must be submitted in **PDF format**. **The file name must be the Order Number provided in the payment confirmation email (e.g., 123456789.pdf).**

Language: All texts, both on the A1 Board and in the Description, must be written in **English**.

Anonymity: The materials cannot contain any name or reference to participants or teams. Only the registration number should be included in the files’ names to ensure anonymity.

Rules & Conditions

Intellectual Property: Participants maintain the rights over the intellectual property of their submissions. However, by participating, they grant our platform a global, free, and non-exclusive license to reproduce, publish, and distribute the project in any format and through any dissemination medium. Our platform will make sure to give proper attribution to the project authors. The authors of the project selected to be constructed will give our partner NGO the right to build it and modify it if necessary in order to adapt it to their actual needs.

Use of Copyright-Free Images: Participants are responsible for ensuring that any images or materials used in their submissions are copyright-free. Our platform is not responsible for any copyright infringements made by participants.

Changes to Competition Rules: Our platform reserves the right to change the competition rules at any time, in compliance with current legislation. Any modifications will be published on the website and will be binding for participants.

Right to Cancel the Competition: Our platform reserves the right to cancel the competition due to lack of enrollment or other justified reasons. In such cases, participants will be notified individually and the registration fees will be refunded within 15 days from the notification of the cancellation.

Adherence to Terms and Conditions: Participants are required to adhere to the terms and conditions of the competition as stated on our website. Failure to comply may result in disqualification.

No Responsibility for Third-Party Use: Our platform is not responsible for the use of participants’ submissions by third parties, including content that has been shared by third parties or indexed by search engines.

Please note that these rules are a summary and participants should refer to the full terms and conditions on our website for complete information.

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