



Association pour
l'Education et la Culture
Indo-Himalayennes



Rainbow School Zanskar



rainbowschoolzkr

Rainbow School Nerok Zanskar Multi-Purposes Auditorium Hall Progress Report – June 2025

- ❖ Report on the construction project of the Rainbow School multi-purpose auditorium in partnership with APECIH and TCEF, the American foundation for the education of Tibetan children.



MOU With HIAL Ladakh, TCEF Montana and Rainbow School

Dated: 09/04/2025

We are pleased to announce that **Rainbow School has successfully signed a Memorandum of Understanding (MOU) with HIAL Ladakh** (<https://hial.edu.in>) on 09/04/2025. Under this collaboration, HAIL Ladakh will contribute their technical expertise in **Passive Solar Architecture**, including:

- 2D and 3D drawings
- Sectional building details
- Bills of Quantity (BoQ)
- Comprehensive architectural support and consultation

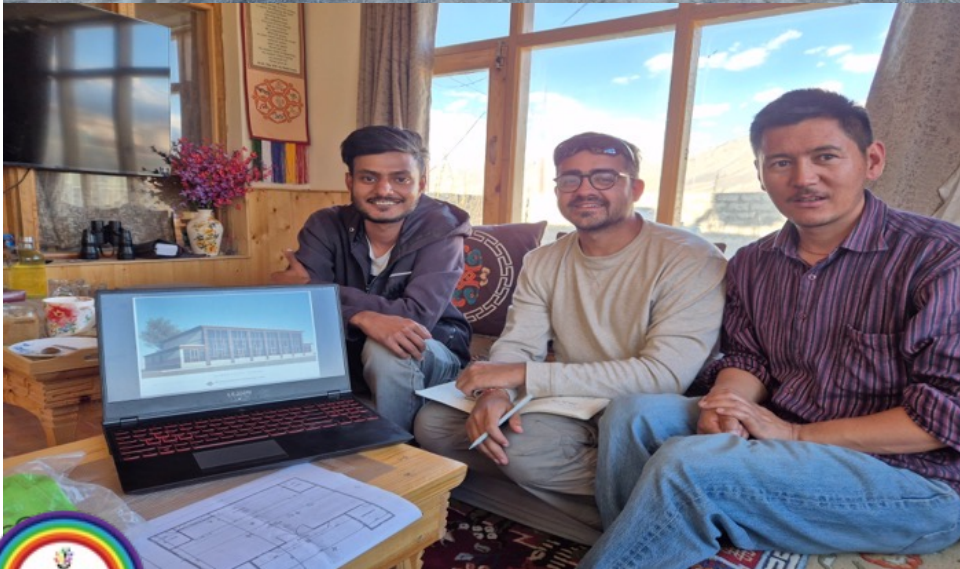
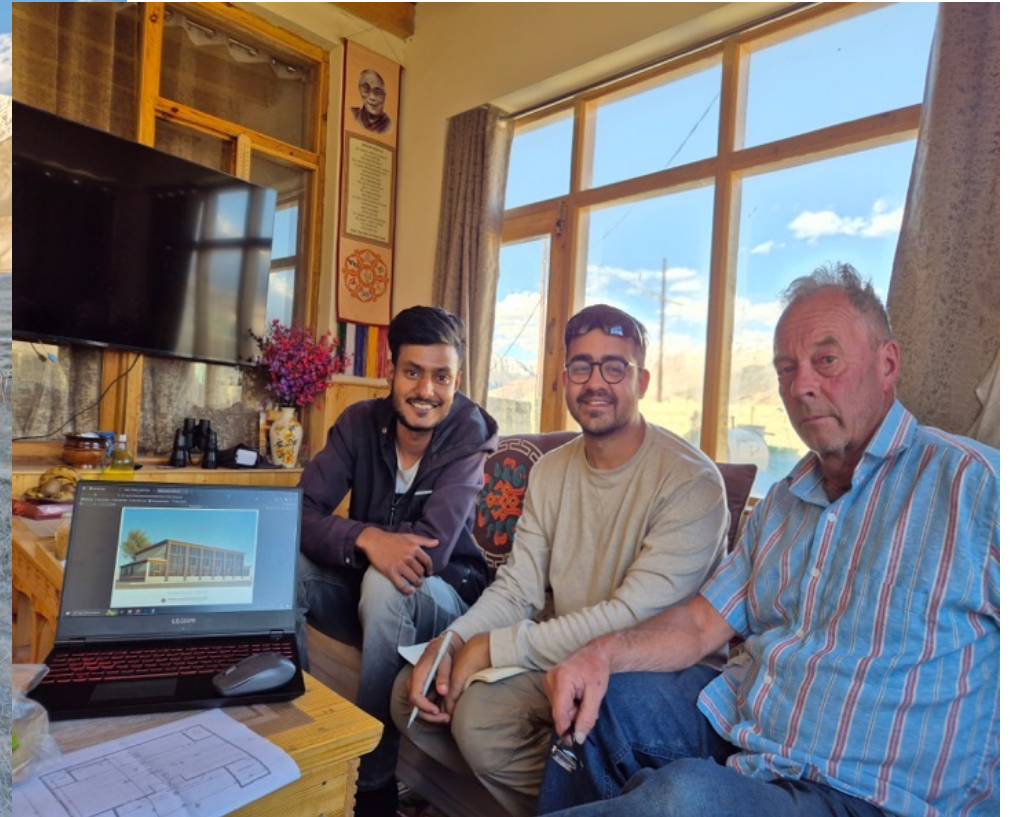
This MOU is a result of multiple rounds of discussions and meetings with the HAIL Ladakh Architecture Team and marks a significant step forward in our infrastructure development.

In addition, since the **Multi-Purpose Auditorium Hall** is a **jointly funded project between TCEF (Tibetan Children's Education Foundation, <https://www.tibetchild.org>) and APECIH**, we are delighted to confirm that we have also received a **signed MOU from TCEF**, which reaffirms their **commitment to financing 50% of the total project cost**.

These partnerships reflect our collective vision of building sustainable, functional, and community-driven educational spaces. We extend our sincere gratitude to both HAIL Ladakh and TCEF for their trust and collaboration.



First Site Visit of HIAL Architecture Team



After Several rounds of meetings, Both Physical and virtual, on 14 May 2025 HIAL, Ladakh Architecture team. Visit Rainbow School for a Land Survey and site identification.



Ground-breaking Ceremony/Installation Of Geomancy



2nd June 2025 As part of the spiritual and cultural tradition rooted in Tibetan Buddhism, the **Ground-breaking Ceremony (Bhumi Puja)** for the Multi-Purpose Auditorium Hall was performed with great reverence and care. Monks conducted the sacred rituals to bless the site and **seek permission from the elemental forces and land spirits (Nagas)**—a vital step before undertaking any construction activity in our tradition.

According to Tibetan belief, **the land is not inert but alive**, often inhabited by spirits or Nagas. It is customary and respectful to perform prayers and offerings to request their consent and blessings for any new structure. To ensure balance and harmony, **10 Sachu Pungpa (Tibetan Geomancy)** were also installed at the site.

Tibetan Geomancy is the traditional science of earth energy analysis, involving the alignment and interaction of natural elements such as water, air, space, light. Its purpose is to establish **harmony, health, prosperity, and well-being**—both within the environment and the individuals inhabiting it.

Notably, this year marks the **Wood-Snake Year** in the Tibetan calendar, which is traditionally **not considered auspicious for initiating new construction**. However, to counteract any negative influences, **special rituals and compensatory prayers** were performed, ensuring that the energy of the project is aligned with positive and auspicious forces.

This sacred and symbolic beginning sets the foundation not only for the physical structure but also for the spiritual integrity of this shared project. And it's also been suggested by Karma Tensum, Executive Director of TCEF, to offer the ceremonies.



Ground-breaking Ceremony/Installation Of Geomancy



Second Visit of HIAL Ladakh Team – Site Finalization and Artisan Consultation



On **4th June 2025**, the **HIAL Ladakh Architecture Team** made their second official visit to Rainbow School for the **finalization of the site layout, orientation, and marking for the foundation** of the Multi-Purpose Auditorium Hall.

During this visit, the architecture team engaged in a detailed field session with various local **artisans**—including **walling experts, carpenters, and welders**. The purpose of the interaction was to **introduce and explain the principles and structural concepts of Passive Solar Building Design**, which is a core component of the project.

Importantly, this session was not a one-way technical briefing. The HAIL team **actively listened to feedback from the artisans**, incorporating their **local knowledge, traditional techniques, and practical insights** into the ongoing design and construction process. This collaborative and inclusive approach ensures the structure will be both **culturally rooted and environmentally responsive**.

This marks another significant milestone in the joint project, furthering our commitment to sustainable, community-centered infrastructure development.



Commencement of Foundation Digging and Wall Construction



Starting from 6th June 2025

The **digging of the foundation** began on **6th June 2025**, marking a significant step forward in the physical execution of the Multi-Purpose Auditorium Hall project. Immediately after excavation, the construction of the **foundation wall using stone masonry** was initiated.

Key technical specifications of the foundation include:

Depth: 3 feet (approximately 91 cm) below ground level

Width: 43 inches (approximately 109 cm)

DPC (Damp Proof Course) Height: 30 inches (approximately 76 cm) above ground level

Given that **Zanskar experiences heavy snowfall**, the DPC level was **strategically raised to 30 inches to protect the structure from snow accumulation and moisture-related issues**, ensuring durability and thermal efficiency in extreme winter conditions.

This phase reflects the community's combined effort in ensuring that the foundation is both structurally sound and environmentally adaptive.



Commencement of Foundation Digging and Wall Construction



Installation of First Steel-Reinforced Pillar – 13th June 2025



We are pleased to share that the first steel-reinforced pillar for the Multi-Purpose Auditorium Hall Project was successfully installed on 13th June 2025. This marks a significant milestone in our ongoing construction efforts.

A dedicated team of **16 members** has been mobilized for this season to carry forward the execution of the project. Their commitment and hard work have resulted in progress that has exceeded our expectations.

We look forward to continued momentum and teamwork as we move ahead with the next phases of construction.



Comparison



A week before



22/06/2025



Excavation and Ground Preparation Update



We have engaged a *shovel* (excavator) for the following works:

Digging of the septic tank

Excavation of the water reserve room

Filling and leveling of the ground up to the DPC (Damp Proof Course) level

These activities are part of the ongoing foundational and utility infrastructure work for the project site. The efforts will ensure proper sanitation and water storage facilities while preparing the structure for the next stage of construction.



Preparation for RCC Work



Wall Construction and Sustainable Heating Approach



Following the completion of ground levelling and DPC (Damp Proof Course), we have successfully **compacted and laid both mud and cement bricks** for the upcoming wall construction.

Wall Composition:

70% of the walls above the DPC level will be constructed using **mud bricks**, supporting traditional, breathable architecture.

The **south façade** will feature a **Trombe Wall** system built with **cement bricks** combined with **mineral water plastic bottles filled with normal water and 250 grams of salt**.

This **passive solar heating technique**—tried and tested at HIAL Ladakh—uses the water bottles as **thermal batteries**. During the day, the bottles absorb heat from the sun; at night, they slowly release the stored heat, helping to maintain a stable indoor temperature.

Community Involvement & Environmental Action:

To collect the required number of water bottles:

Students were encouraged to bring empty plastic water bottles from home. Every 15 days, the school **rewards them with ₹2 per bottle**, which is tracked and recorded.

We also **collect bottles from local hotels**, promoting reuse and reducing plastic waste in the community.

This initiative not only supports sustainable building but also raises environmental awareness among students, creating a hands-on learning experience in climate-resilient architecture.



Cement and Mud Bricks



Bricks are exposed to sunlight for complete drying before being laid on the wall. To ensure better bonding and structural strength.
Thank you all for your support
Report Prepared By Tantar Lundup

