

Terms of reference (ToR)

Video production of 3D construction animation and timelapse of a CBFT house

(Short-term consultancy services)

Project: IMPACT 2026 – Phase III

Duration: 8 weeks

Date of publication: 24 July 2026

Deadline: 2 August 2026

Nature of assignment	Video production of 3D construction animation and timelapse of a cement bamboo frame technology (CBFT) house
Duration	8 weeks
Location	Kathmandu, Nepal
Published Date	24 July 2026
End date of application submission	2 August 2026

1. About Habitat for Humanity Nepal

Habitat for Humanity Nepal is an international non-governmental organization that is driven by the vision that everyone deserves a decent place to live. Our partnership with communities, governments, private sector including entrepreneurs and financial institutions, youth networks, and academia, allows us to serve low-income families by improving habitability, tenure security, access to basic services and affordability of housing solutions. Our integrated programming serves to benefit 2.7 million people over the next three years, through direct and incremental construction, affordable housing finance, affordable construction technologies and services, and evidence-based policy advocacy for housing adequacy as a fundamental right. Responding to the root causes of inequity in the housing ecosystem, Habitat Nepal leads with a systems-strengthening approach, facilitating development of inclusive housing markets, removing key policy barriers and empowering communities through people-centered approaches, for a stronger and more equitable housing ecosystem.

2. Background

Since 2019, Habitat Nepal has been implementing the "IMPACT 2026" project which is driven by a commitment to scale safe, durable, and affordable bamboo housing solutions. Building on the achievements of Phases I and II, the current phase (Phase III – July 2025 to December 2027) emphasizes innovation, sustainability, and local ownership to meet housing demands while fostering resilient and eco-friendly construction practices.

Through this assignment, Habitat Nepal aims to support individual/ companies/private sector to produce physical 3D construction animation & timelapse video of a CBFT house to promote bamboo housing and aid in the positive perception of this locally-available, nature based solution, that can be used as a climate-resilient material in affordable house construction. This terms of reference or TOR defines the work to be carried out by individual/private sector. It provides a brief outline of the project and specifies the scope of work.

3. Objective

The objective of this project is to produce a high-quality, step-by-step architectural timelapse and educational video documenting the complete construction of a small bamboo house from groundbreaking to completion. The primary goal is clarity, and the final video must allow viewers architects, engineers, local builders, and community stakeholders to easily understand the distinct chronological phases, structural components, and sequential flow of the construction of a house using prefabricated CBFT.

4. Scope of work

The successful candidate will be responsible for modelling the 3D models and creating a phased, sequential construction animation using prefabricated CBFT:

1. Modelling and storyboarding

- Create SketchUp 3D models of the CBFT house to ensure layers, components, and groups (e.g., foundation, CBFT panels, truss, rafter, purlins, flattened bamboo insulation, plaster layers) are isolated properly for sequential animation.
- Create a scene-by-scene storyboard detailing the order in which building elements will appear as per actual construction practice.

2. Animation and rendering

The consultant must animate the phased construction growth or sequential placement of the building elements in the exact following chronological order:

- Foundation
- Flooring
- Wall panel installation (including the diagonal bracing, chicken wire mesh etc)
- Roof structure (Rafter, purlin, bracing etc)
- Wall plastering
- Architectural finishes
- Rain water harvesting in the house.
- Surrounding context

3. Narration and audio

- Scripting and narration in clear, viewer-friendly language.

4. Post-production and editing

- Editing the rendered clips into a smooth, logical "virtual timelapse" flow.
- Integrating clear, on-screen text, arrows, or step numbers to guide the viewers through the technical process.
- Add suitable background music.

5. Methodology

The consultancy will adopt a structured approach to produce clear and detailed 3D animation and timelapse video of the construction of a CBFT house. It will start by modelling the SketchUp model which will be used to render the phased animation of the construction process with guidance from Habitat Nepal regarding the correct flow of construction activities.

6. Key deliverables

The key deliverables for the consultancy are:

- 3D SketchUp model used for the animation with proper layers, components, and groups of the construction elements.

- A low-resolution preview of the full animation sequence to verify technical accuracy and timing.
- There must be material accuracy, and texture must look highly realistic.
- English and Nepali subtitles for each video.
- Final high-resolution video of the full-length 3D explanatory video rendered in full HD.
- Camera movements should be smooth, slow, and stable. The focus must remain on engineering clarity of the technology rather than dramatic cinematic transitions.
- Final video with background music, graphics, labels, and organization and donor branding.
- Editable/source files.

7. Workplan and indicative timeline

SN	Activities	Date
1	Announcement	24 July 2026
2	Application submission deadline	2 August 2026
3	Selection and contracting	17 August 2026
4	Kick off meeting with the production team	20 August 2026
6	Draft detail model plan submission	31 August 2026
7	Review and changes	28 September 2026
8	Final delivery	15 October 2026

8. Qualifications, skills, and experience

The consultant or firm will have the following qualifications:

- The firm/consultant must have at least three years of experience in production of video of 3D modelmaking, with at least one prior similar model making experience for INGOs, government, and development organizations, or related work of a similar nature.
- Ability to execute the tasks on time.
- Communication, coordination, and research independently on the given task.

9. Evaluation criteria

- **Relevant experience (30%)** Demonstrated experience in producing video of 3D models, particularly in the development sector, bamboo modeling experience is an added bonus.
- **Technical approach and understanding (25%)** Clear understanding of the assignment, target audience, and ability to propose an effective methodology for delivering simple, accurate and high-quality model.
- **Quality of previous work (20%)** Portfolio showcasing creativity, model making experience and experience with similar projects.
- **Team composition and capacity (10%)** Qualifications and experience of key team members, including architects, modelers, draftsmen, etc.
- **Cost effectiveness (15%)** Financial proposal that provides good value for money while meeting the required quality standards.

10. Coordination and supervision

The consultant/firm will work in close coordination with the technical team based in Lalitpur district throughout the assignment. The project lead will provide overall guidance, share relevant materials, and facilitate coordination as needed.

11. Support from Habitat Nepal

Habitat Nepal will provide necessary technical and coordination support to facilitate the successful implementation of the assignment. This will include sharing relevant designs in 2D architectural drawings (PDF/CAD), technology specific documents, exact technical step-by-step sequence list, and photo references to guide model production.

A designated focal person will support the consultant/firm in coordinating with the project team and relevant stakeholders, and will provide timely feedback. Habitat Nepal will also ensure that all technical details are accurate, contextually appropriate, and aligned with project objectives.

12. Mode of payment

Payment will be made to the consultant/firm only upon full completion of the deliverable after reviewed, verified, and approved by the Habitat Nepal Communication and Technical team.

13. Ethical standards

In accordance with its foundational mission principles, Habitat Nepal is committed to the highest ethical standards and opposes all forms of discrimination, exploitation, and abuse. We intend to create and maintain a work and living environment that is safe, productive, and respectful for our colleagues and for all we serve. We require that all staff and representatives (consultants, contractors, vendors/suppliers, interns, volunteers, agents, and implementing partner organizations) take seriously their ethical responsibilities to Safeguarding (Child Protection, Prevention of Sexual Exploitation, Harassment, and Abuse) our intended beneficiaries, their communities (especially children), and all those with whom we work. Abiding with the organization, the consultancy service has responsibilities to maintain an environment that prevents harassment, sexual exploitation, and abuse, safeguards the rights.

14. Copyright

Copyright for the documents will remain with Habitat Nepal national office and includes the right to use and distribute the material or parts of it to the local government and other partners in Nepal and abroad.

15. Application requirements

- A Technical Proposal detailing the interpretation of the TOR and work schedule. The technical proposal should, at a minimum, include the following information in your interpretation of the TOR:
 - Detailed work plan and methodology
 - Key deliverables
 - A capability statement demonstrating how applicants meet the required qualifications and competencies, along with at least one sample from previous work similar to this assignment
 - Two reference details from former clients

- A copy of organization/institution/consultant registration certificate.
- A copy of the latest tax clearance certificate.
- PAN/VAT registration document and the number.
- Copies of curriculum vitae, or CV, of the key team members (as an annex).
- A Financial Proposal detailing the proposed costs including all applicable taxes.
- The entire proposal should be a maximum of seven (7) pages including the financial proposal. Proposals not meeting this requirement will not be considered.
- Confidentiality of Information: All documents and data collected will be treated as confidential and used solely to facilitate analysis.

16. Instructions to submit the proposal

Interested national reputed and qualified consultants/firms should submit their technical and financial proposal including testimonials/certificates.

Please write “**TOR_3D Video**” in the subject line of the email and submit the proposal no later than 02 August 2026 at procurement@habitatnepal.org

For any queries contact the following email address np.info@habitatnepal.org

Application deadline: Sunday, 2 August 2026



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