



This project, and indeed the company that has grown out of it, began as the dream of one family to have a beautiful, environmentally conscious and eco-friendly house. After years of planning, the current inhabitants are very happy with the results!

This project, and everything Rammed Earth Solutions constructs, is built on the basis as being as respectful to the environment as possible – the earth for building this house was taken from the site, removing the need for soil displacement elsewhere, and transport costs. The earth is rammed by hand, removing the need for pollution generating machinery. Bamboo is used as it is recognised as a very sustainable (and strong, and beautiful!) material, due to the speed it grows.

This home includes many features which are in keeping with the ethos of being environmentally friendly: Solar panels and biogas generate alternative, sustainable energy. Water collection and purification systems allow for the most efficient use of water. The design (and the intrinsic nature of rammed earth walls) of the house means that it is warm in winter and cool in the summer, reducing energy costs for heating or cooling. This home also incorporates features to reduce the damage from earthquakes.

This project provided employment for many people from an impoverished area of Nepal, and in a number of cases these employees have continued working, offering them & their families a brighter future.



Caption (above): Aerial shot of the realized project – an environmentally conscious house constructed primarily of rammed earth and bamboo. This home takes a holistic approach to being environmentally conscious and includes solar energy, biogas and a natural ‘grey-water’ purification system.

(Left): A view of one of the balconies. Please note the overhang, an important feature of rammed earth constructions, and the recycled bottles used as an attractive feature in this house.

PROJECT NAME: Rammed Earth Solutions – Environmentally conscious home

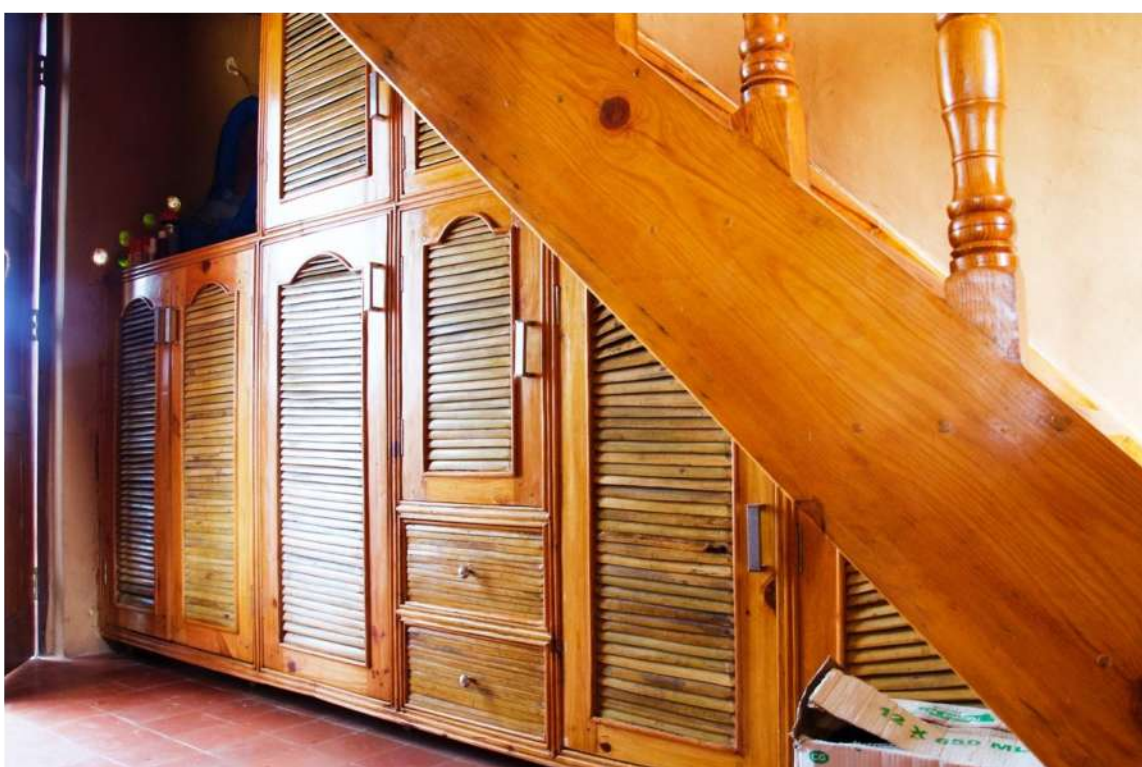
DESIGNER NAME: Narayan Acharya



Caption (left): Completed bamboo roof in one room of the house.

(Below centre): This picture is of the completed living and kitchen area of this house. You can see the large windows letting in a lot of light, the amazing amount of space, and the complementary furniture.

(Bottom): This picture shows the stairs and some custom made bamboo furniture.



Points of the Hasselt Charter addressed by this project:

1. The building method is sustainable, and is accessible to disadvantaged communities due to the low costs and relative ease of construction. It is an existing technique in this country, though it has become mostly unused, unrecognized and unappreciated; but now has been improved and reinvigorated. This project provided employment for dozens of people for whom meaningful employment is difficult to obtain, and the arising company continues this ethos. Many of these employees came from a remote and rural community. We feel that these factors follow the principles of human solidarity and non-discrimination by providing employment, regardless of caste or existing economic status, and thus empowering not only these individuals, but also their communities. The skills they have learnt are theirs for life, and will allow them a greater chance at being self-sufficient. Through bringing back techniques that have been used in this country, we are inherently collaborating with the culture, in a sustainable and beneficial way.

5. This project was innovative at the time, not only in the techniques used in construction but in the mindset. With regards to labour, jobs were created for dozens of people who might not have had access to employment, and the skills imparted to these employees are seen as valuable in a cultural context. This project to the view that the most appropriate technology in any given situation is the most environmentally-friendly option. As such, where possible manual labour was used over machinery, e.g. the ramming of the earth was done by hand. This allows for more employment, a wider skill set to be learnt, and for less pollution. The materials for this project came from, where possible, either recycled (the timber) or sustainable (the bamboo). The earth used to construct the walls was taken from the site, completely removing the need for (and costs and pollution of) transporting earth to the site, and so not damaging an environment. We hope that by showing and discussing these benefits, these ideals and the techniques employed in achieving them will become widespread.

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Points of the Hasselt Charter addressed by this project:

9. Since this project has been completed, there have been countless phone calls and enquiries, hundreds of visitors, multiple new projects, and some national and international press coverage. The project designer has given a number of talks and demonstrations. One of the main reasons this project was undertaken was to show the country and the world that it is possible to have a beautiful home, whilst respecting the values of sustainable building alongside being environmentally responsible. We feel this project is part of the 'social production of habitat' because, by removing the use of technology, we are empowering people to work together and share their skills in the production of a home. This was not a project completed by one person, it required a large team. However all of these people now have some of the skills required to create a rammed earth building. Their social collaboration on future projects, either their own or others, is part of the ethos involved in this building – sharing skills, working together, and relying on each other. Everyone involved in this project feels a sense of pride.



Caption (above): Realized project a few months after completion, now with permaculture garden in bloom.

(Right): A closer look at the rammed earth walls of the completed project.

(Below): A photo showing the beautiful bathroom, complete with a decorative feature made from recycled bottles.



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