

ABOUT US

THE ENTERPRISE.

Mud Beaver Sikkim is a socio-sustainable construction enterprise focussing on specialisation in research, development, promotion and transfer of earth based building technologies.

We construct timeless, unique traditional, vernacular, cost effective, low carbon embodied, climate responsive, energy efficient dwellings alongside designing and implementing green products & practices to sustainably contribute as a part of the project but development as a whole.

MISSION

To build earthen dwellings of timeless, natural beauty, contributing to quality sustainable homes that will continue to be a pleasure to live for generations to come with an absolute positive future impact.

VISION

We believe in "building future", a "green future" of natural beauty, resilient and green regenerative structure designed & built to live, endure and honour many generation to come.

We believe in bringing positive and proper changes within the building industry in context of constructional practises being carried.

We look forward in creating physical expression of our love for the planet and our future along with green practices to accept/embrace.

OUR VALUES

INNOVATION

"Genuine curiosity to learn and improve."

4 years of research and development has taught us one thing, that the pursuit of excellence never ends, but greatness can happen along the way.

DURABILITY

"We build things that last."

We build to withstand extreme weather, fire and earthquakes, uniquely capable of enduring the test of time, with very least maintenance.

BEAUTY

"A big chunk of layers of pretty surface"

We believe in building things that are strong from the inside and has that quirky eye appealing surface from the outside.

SUSTAINABLE TO THE CORE

"We strive to achieve green building in the truest sense of the term"

We believe that currently, most greenbuilding is just not that. In the current dominant building model, one or two environmental benefits are typically advertised with a lot of greenwashing. all the sustainable approaches only comes handy when we use the resources that are mostly locally found around us, doing that we can help ourselves economically, socially & can sustain our lives for more future to come but with responsibility.

PROPER METHODOLOGY

"Getting things done the right way"

At every stage of execution we don't compromise on the code of practise that is to be followed, from the moment we think of doing a certain project everything will be done how it should be done, period!

LOCAL/STUDENT EMPOWERMENT

"An opportunity will go a way"

We don't believe in hiring but making someone a part of what we do, where in we sharecamaderie to learn, improve and grow together by providing opportunities specially to the student's and the local's.

WHY CHOOSE US?

CARBON FOOTPRINT ISSUES CAN BE TACKLED:

Our project provides an alternative to conventional (concrete) construction. Since concrete is used to build most roads, bridges, dams, and other structures worldwide, it emits a significant quantity of CO₂. Aside from water, it is the most consumed product on the planet. This industry will continue to harm the environment with over 4 billion tonnes of carbon dioxide annually until global emissions are reduced.

G20 and sustainable goals can be attained.

TO BE INTRODUCED TO AND BECOME A PART OF OUR PERMACULTURE PROJECT:

With this project we want to help design and set up small-scale or large-scale fields for the purpose of self-sustaining irrigation. This will help provide food for oneself and their families. This will be achieved through application of various features and techniques namely, aquaponics, drip irrigation and mixed cropping to name a few.

OUR PROJECT AIMS TO INTRODUCE WASTE MANAGEMENT TECHNIQUES:

When we talk about waste management, we cannot do so without talking about segregation of wastes, however segregation can be done properly only if it starts from the home where the wastes are produced. We will introduce a well-designed flow chart or a system that will have segregation of wastes as its core.

FREE WATER VIA RAIN WATER HARVESTING :

With rain water harvesting, we aim to help in the ever increasing demand for water and reduce the need for imported water. This will help in both water and energy conservation, as well as help in reducing the water bill.

INTRODUCTION TO AQUAPONICS:

With our aquaponic services we aim to provide all-natural fertilizer from waste produced by fishes. Without any reliance on mined or manufactured fertilizers, efficient, sustainable and highly productive irrigation can be done. The waste water from the fishes excretion can be used as nutrient rich water for plants. This water which is technically filtered can then again be cycled into the tank containing fishes. This cycle goes on thereby proving to be a great self-sustaining process.

FIGHT CLIMATE CHANGE:

All of the projects various techniques and features are provided with the aim of sustainable construction and the future in mind. This basically boils down to the fact that our project helps to bring about a positive change in the ecosystem. This, in turn helps in fighting the glaring problem we face as a species, that is the climate change.

(Being self responsible for the planet)

WORKSHOPS/AWARENESS CAMPS FOR SUSTAINABLE LIFESTYLE.

After we build a sustainable infrastructure around us, if we don't realise & accept a sustainable lifestyle the effort put may only be a mere percentage, therefore a proper change in mentality, lifestyle is needed so after we finish building green systems, we'll be hosting and giving workshops on how we can attain a total sustainability by accepting a new dimension of habits and living.

SOLAR HARNESSING AS PART OF THE PROJECT.

Most of the present day resources of energy are limited and irreplaceable. The next generation will face acute energy crisis if alternate resources of energy are not developed concurrently. Increasing cost and import of conventional resources have bad effect on the economy of a country, and the only cheaper solution is "unlimited power" from the sun.

PRESERVING TRADITIONAL/VERNACULAR DESIGNS.

The construction techniques and materials we seek to incorporate into our structures will reintroduce feasible traditional features. This not only rekindles one's love for traditional structures, it will help in spreading cultural importance that has been gradually fading over time.

IMPROPER CONSTRUCTION PRACTISES.

It is no secret that the construction process of a common man's home in Sikkim has long been in need of an overhaul. The construction usually is not done with proper survey and technical tests, thumb rules are followed for construction in completely different conditions of sites. These are only but a few problems being highlighted. These improper practises can prove fatal in the long run. We aim to raise awareness against it and introduce proper procedures to be followed.

POCKET FRIENDLY.

The construction materials that we will be using in our techniques mainly revolves around mud and this can be locally sourced or even be available free of cost. This means lesser cost of transportation, faster construction and increase in efficiency.

This all contributes to the fact that the net cost of construction decreases substantially.

PROMOTE LOCAL TOURISM.

The structures we aim to erect are going to look the part as well as carry the tag of a green building. This, due to its rarity and uniqueness can generate interest from locals and tourists alike. This will in turn help in increasing the local tourism of the state.

ATTAIN SUSTAINABLE DEVELOPMENTS GOALS.

The state we work out of, that is Sikkim is known as the first organic state of India.

This being the case, there are various goals and objectives set by the state for further improvement in this field. Our project will contribute heavily into attaining the said goals.

MAKE PEOPLE FEEL PROUD & RESPONSIBLE THROUGH GREEN CERTIFICATIONS.

The construction of structures we are going to be responsible for, will warrant a green certificate that certifies the ownership of green buildings. This serves to invoke pride and responsibility of the owner for owning a green building.

AWARENESS& AVAIL SCHEME'S RELATED TO CONSTRUCTING GREEN BUILDINGS.

Since sustainability is need of an hour to tackle all the climate priorities, the government have provided with various schemes in relation to the construction of green buildings. This will help in the availing of various subsidies that will help alleviate/reduce the cost of construction of the said green building.

RECYCLING OF DEBRIS FROM THE EVENTUAL DEMISE OF BUILDINGS NEARING THE END OF THEIR LIFE SPAN.

Various old structures all over the state are nearing the end of their life span. The resultant waste products from their eventual demise can be recycled through us at MudBeaver greatly reducing the burden to the ecosystem in the state.

THE EXCESS OF SOIL FROM LANDSLIDES CAN BE REUSED BY US AT MUDBEAVER.

Landslides being a common occurrence and problem in our state, we offer some semblance of silver lining in the fact that we can put the soil from such landslides to better use through sustainable construction.

OUR SERVICES

SUSTAINABLE CONSULTANT.

We not only put on a lot of labour on building a den for our client but foremost we are here to give suggestion's & advise for individuals who are interested in diving in to this world of sustainability, from advice's dealing with just building a green home to the selection of materials/products, technology used, etc and to actually practicing and living a sustainable lifestyle, we are here to thoroughly help you on your journey.

TRADITIONAL/VERNACULAR SUSTAINABLE DESIGNS.

Providing design which are inspired from rich & aesthetically looking traditional buildings, preserving the local culture and heritage with a zest of passive design principles which helps the dwellings designed to be structural and climate responsive.

GREEN DESIGN OPTIMISATION.

Apart form building fresh mud structure and systems, we also indulge our selves on re-designing and renovating existing conventional structures with various passive & sustainable principle's & practices that makes a dwelling more climate responsive, green, resulting it to be energy efficient, self sufficient& much more.

GREEN BUILDING CERTIFICATIONS:

Since these services we provide helps a great deal in attaining sustainability, which also tick's off a lot of criteria and norms for a building to be certified as green, therefore we are also here to get you certified for building & living the green way to show how responsible & caring you're towards our planet EARTH..

SOLAR ENERGY HARVESTING:

We provide services on capturing and storing solar energy emitted by the sun is known as solar energy harvesting. Subsequently, the thermal and light energy is transformed into electrical energy by an appropriate technique providing you with on-grid as well as off grid electric system for a free energy to run your dwelling.

RAIN WATER HARVESTING :

One of many fields our project touches is the application of rain water harvesting. The practice of gathering rainfall runoff from a catchment (the region where water falls into bodies) in order to store it in above-ground ponds or aquifers for later use or to utilise immediately for household purposes, irrigation water level regeneration and much more. To put it simply, harvesting water involves directly collecting rainfall.

PERMACULTURE USING AQUAPONICS.

The creation of an ecologically sound way of life in our homes, gardens, communities, and enterprises is the core of permaculture. With this project we want to help design and set up small-scale or large-scale fields for the purpose of self-sustaining irrigation. This will help provide food for oneself and their families

Aquaponics is the cultivation of plants without soil in a recirculating environment that combines hydroponics (growing plants without soil) and aquaculture (raising fish and other aquatic creatures). In aquaponics, the waste produced by the fish is transformed into nutrients for the plants by nitrifying bacteria. To flourish, plant roots take up these nutrients. For the fish to survive, the plant roots purify and filter the water.

NET WASTE MANAGEMENT:

One of the many problems being faced as of now might be the issues with the proper disposal of waste through lack of segregation etc. We will introduce a well-designed flow chart or a system that will have segregation of wastes as its core. Self-help groups will be introduced to act in the field and take the initiative to fulfil the introduced system's objectives.

SUSTAINABLE LANDSCAPING:

We also plan and design spaces around with a critical consideration of preserving soils, land use, topography, etc. that heightens water management and thoughtful local flora/vegetation choices.

SUSTAINABLE INTERIOR DESIGNING:

The structure that we build are of course a work of an art due a lot of enriching factors but what really matters at the end of the day is how ambient and cool it is from the inside, therefore we use locally produced product(sometimes recycled) that we design to fill in those spaces inside that will narrate the story of their own.

OUR TECHNIQUES

BUILDING WITH EARTH

- Rammed earth
- Wattle and daub
- Stacked earth (cob)
- Earth filled in

BUILDING WITH BAMBOO

- Post-and-Beam structures
- Hyperbolic paraboloids
- Hyperbolic (twisted) towers
- Spatial gridshells

BUILDING WITH STONE

- Ashlar masonry
- Rubble masonry
- Dry stone masonry
- Rustication
- Polygonal masonry
- Cyclopean masonry

OUR TEAM

PRAJWAL TAMANG - CEO & Founder.
Diploma, B.Tech in Civil Engineering.
Earth & Bamboo specialised, trained from
Auroville Earth Institute & Bamboo Centre
Auroville, Tamil Nadu.

AASHA TAMANG - President.
Former Community facilitator under North East Rural Livelihood Project.
Block resource person under Sikkim Rural Livelihood Mission.

LHAKDEN LEPCHA - Managing Director/ Landscape Designer.
Diploma, B.Tech in Civil Engineering.

PRAKASH TAMANG - Finance manager/Permaculture executive.
Bachelor's in Commerce,
20 years of administrative experience at finance section.

SALINA RAI - Creative Director / Product designer/HR
Diploma, B.Tech in Civil Engineering.
Certification on Graphic designing

BHOOMIKA CHAUDHARI - Architect
'Bachelor's in Architecture (A.O.A, Mumbai)
Specialises in Sustainable Architecture
Worked as intern at Dus Studio, Auroville.

SANSKAAR RAI - Structural designer (Earth)
Diploma, B.Tech in Civil Engineering.
M.Tech in Structural Engineering (S.M.I.T, Majitar)

NEDUP ZANGPO LEPCHA - Structural designer (Bamboo).
Diploma, B.Tech in Civil Engineering.
M.Tech in Structural Engineering (S.M.I.T, Majitar)

PRATAP TAMANG - Project manager, Sikkim Region.
15 years of experience in civil works.
Specialised in Traditional/Vernacular civil construction.

INDRA KR TAMANG - Project Manager , West Bengal Region.
15 years of experience in civil works.
Specialised in traditional/vernacular carpentry, bamboo works.

KAJI MAN TAMANG - Project Manager, Nepal.
15 years of experience in civil works.
Conventional civil works.

NANIA NGUTE TAMIN - Project manager, Arunachal Pradesh/Assam region.
Diploma, B.Tech in Civil Engineering.

ASHUTOSH TIWARI - Aquaponics guru
Bachelor's in Fisheries.
Specialised with ornamental (aquarium) fishes aquaculture.

AMIT RAI - zero waste management guru
Diploma, B.Tech in Civil Engineering.
Certification on Waste management.

ACHONG LEPCHA - Solar energy solution guru.
Diploma, B.Tech in Civil Engineering.

PRAVESH PRADHAN - Rainwater harvesting solution guru.
Diploma, B.Tech in Civil Engineering.
Worked as technician for RWH project's.

NANDESHWAR RABHA - Head Technician
15 year's of masonry experience.
Trained with earthen building techniques.

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www.mudbeaversikkim.in

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Mud Beaver Sikkim

BUILDING FUTURE

THE ULTIMATE GUIDE TO THE ENTERPRISE

