



BUILD BEYOND TODAY

**From Roots to Revenue – Securing
Finance and Climate Solutions
Through Agroforestry: The Case of
Bamboo**
April 11, 2025

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HILTI FOUNDATION FOCUS AREAS

HILTI The
Found
ation.



**MUSIC FOR SOCIAL
CHANGE**



**ECONOMIC
EMPOWERMENT**



**AFFORDABLE HOUSING
AND TECHNOLOGY**

FOCUS AREA

AFFORDABLE HOUSING

AND TECHNOLOGY

**Supporting deprived families
through housing to build a better
future for themselves**

**We know having a safe place to
call home is essential for social
and economic development.**





ABOUT **BASE**

Provides alternative building technologies to enable a network of partners that provide comfortable, affordable, resilient, eco-friendly houses with social impact.



BASE
INNOVATES



BASE
ENABLES



BASE
BUILDS



BASE BUILDS

BASE has built over **2,300 homes** in the Philippines, Nepal, India, and Nicaragua. BASE has established **8 bamboo supply facilities** and **an additional 1 partner facility** in the Philippines.



Jaro



Lanit



Quezon City



Tacloban



Basey



Cabug



E. Samar



Sorsogon



Silay



Sicozon



Davao



San Carlos



40,000+
tCO2 savings



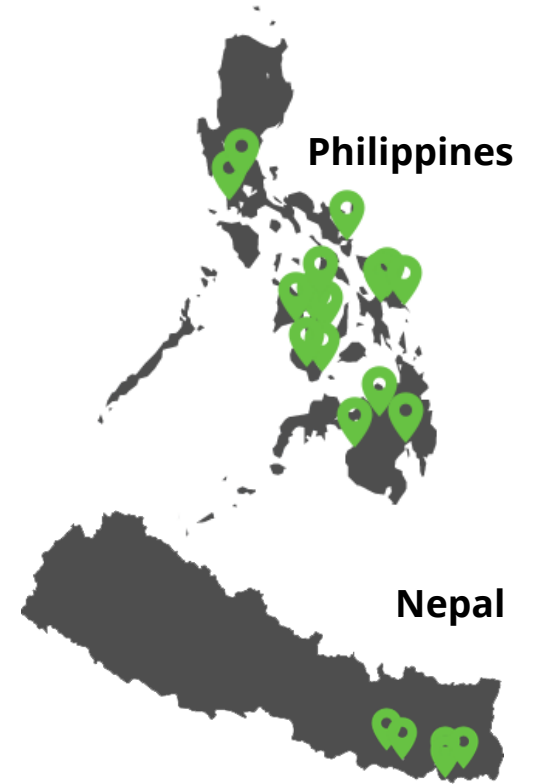
2,300
CBFT Houses



10,500+
sheltered



1,000+
trained



India



BASE BUILDS



Farmers Model House
Bukidnon



Torogan House (Maranao)
Bukidnon



Single Detached
Tacloban



BARMM Walay House
Cotabato



Two-storey, Single Detached
Davao



Middle Class Houses
Negros Oriental

BASE BUILDS

NON-RESIDENTIAL PROJECTS



Community Center



Office



Weaving Center



Ampitheatre



Food Processing Center



School Building

BASE BUILDS

NON-RESIDENTIAL PROJECTS



BASE BUILDS

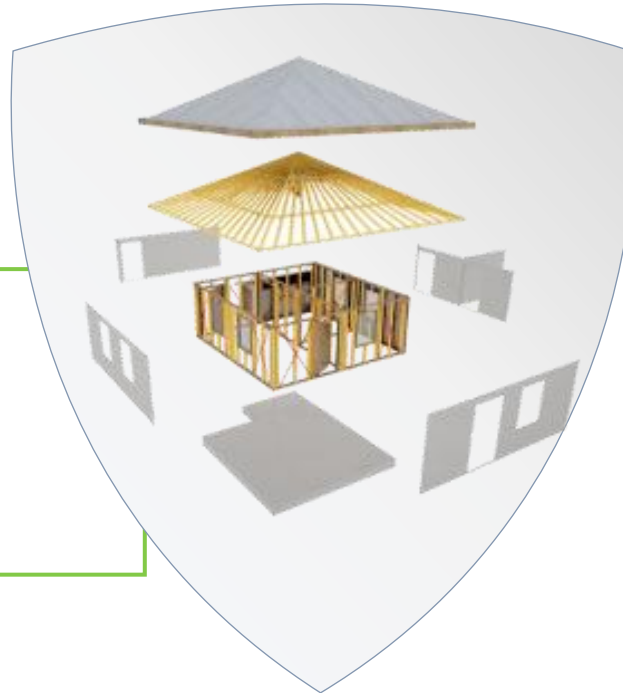
NON-RESIDENTIAL PROJECTS



CEMENT-BAMBOO FRAME TECHNOLOGY

Bahareque Technology,
Colombian Engineering
Filipino Craftsmanship

Accreditation of Innovative
Technologies for Housing
(AITECH)



Typhoon Resistant



Earthquake Resistant



Fire Resistant



Insect Resistant



BASE INNOVATES

At BASE, innovation is at the forefront, with continuous research and development through the Base Innovation Center to optimize technology and explore new applications beyond standard housing models.

BASE INNOVATION CENTER



RESEARCH & DEVELOPMENT

Committed to continuous improvement and optimization of construction processes and procedures.



TRAINING & LEARNING

Conducting a series of training on CBFT and other housing solutions with an emphasis on quality and resiliency.



TECHNOLOGY TRANSFER

Providing and sharing the expertise on CBFT with partners.

PARTNER ORGANIZATIONS

Hilti Group



Local Universities



International Universities



Other Institutions



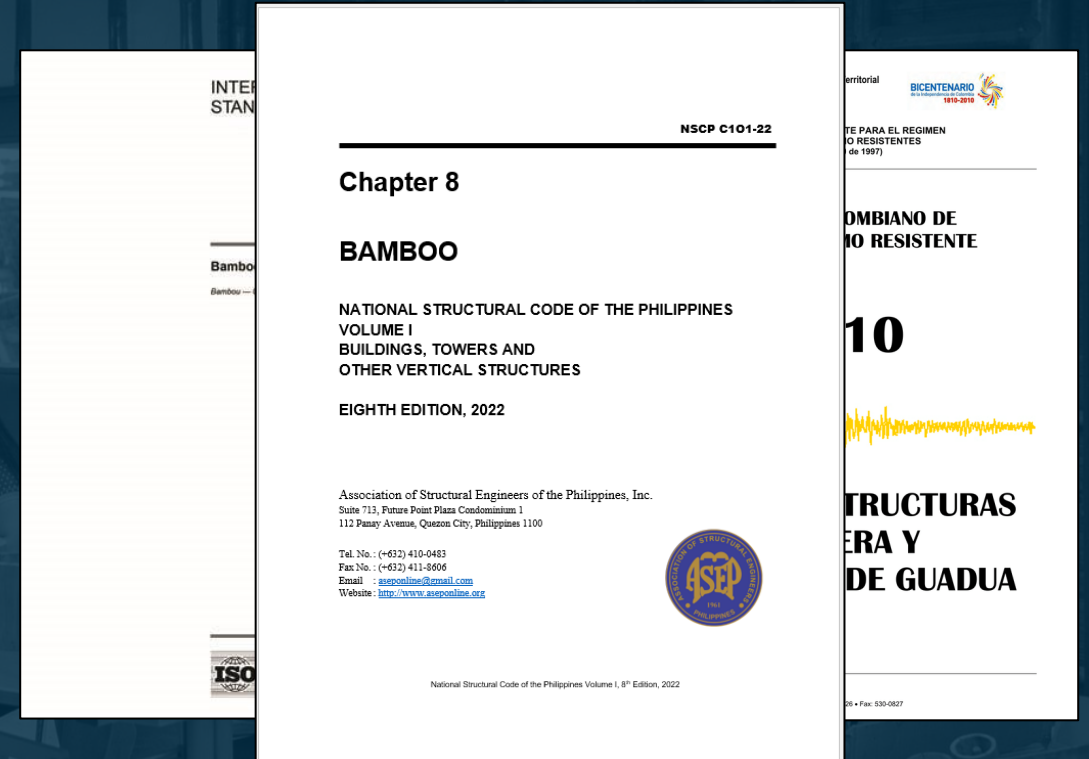
BASE INNOVATION CENTER



INCLUSION OF BAMBOO IN NSCP

Recommended Bamboo Structural Standards

1. Content
2. Visual grading
3. Allowable stresses and modulus of elasticity
4. Coefficient of modification, C_D , C_t , C_r , etc.
5. Design of Elements with axial load
6. Design of elements with Bending
7. Design elements with Shear parallel
8. Connections design
9. Maintenance





HOUSING ECOSYSTEM



NEGROS OCCIDENTAL IMPACT (NOI25)

**Base provided technical input and
knowledge transfer**

1. Programmed for 10,000 disaster-resilient homes by year 2025
2. 612 houses constructed to date
3. Shift in national policy for house funding affected target



CHALLENGES

Demand creation and investment support for suppliers in the value chain

1. Support the value chain for housing to scale

Potential of 23,000 poles/month or 150 houses/month

Negros Occidental
Murcia
2,500/month



Dumaguete
Kawayan Collective
3,500/month



Maguindanao
FLP
2,000/month



Polomolok
Mahintana
2,500/month



Isabela
Quezon LGU
2,500/month



Central Luzon
Kawayan Holdings
3,000/month



Batangas
Kanya
Kawayan
1,500/month



Bukidnon
Hineleban
2,500/month



Davao
AOFF
3,000/month

CHALLENGES

Policy change sees national housing budget oriented towards vertical housing only

2. Support to Codes and Regulation

- NSCP – National Structural Code of the Philippines,
- Green Building Code

3. Technology and Know-how transfers

4. Support to local government funding

- Solution for cities/municipalities shelter program
- On-going study:
 - Housing Finance in the Philippines
 - Developmental Loan Financing
 - Housing Loan Programs for End-Users
 - Development/Green Incentives





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DEEP DIVE DISCUSSIONS

1. **Success Factors:** Identifying effective strategies and best practices.
2. **Key Enablers:** Understanding the drivers of progress.
3. **Challenges & Barriers:** Addressing obstacles to implementation.
4. **Scaling & Replication:** Exploring opportunities for broader adoption.