

PROJECT TITLE: CONSTRUCTION AND DEMOLITION WASTE

Client: People of India, Local Contractors, Industry and government.

Problem statement: In India, the dumping of C and D waste has been a huge problem for the government to manage and settle. There is only one recycling plant “Godrej Construction” in all over India which has been constructing compact bricks out of concrete of C&D waste.





South Asia



Co-funded by the
Erasmus+ Programme
of the European Union

Team:

**Prakash Nanthagopalan, Associate professor, Department of Civil Engineering,
Indian Institute of Technology Bombay (IITB), India,**

**Dakshina Shrestha, Associate Professor, Department of Electronics and Computer
Engineering,**

Sagarmatha Engineering College, TU , Nepal,

**Brajesh Mishra, Assistant Professor, Department of Electrical and Electronics
Engineering, Kathmandu University (KU), Nepal,**

**Narayan Prasad Acharya, Assistant Professor, Department of Electrical &
Electronics Engineering, Nepal Engineering College (NEC), Nepal,**

**Ajay Agrawal, M .Tech Student, Construction Technology and Management,
Department of Civil Engineering,**

Indian Institute of Technology Bombay (IITB), India,

**Evelina Lekesiute, Student of Civil Engineering, Kaunas University of Technology
(KTU), Lithuania.**

**Proposal(s): List what was proposed as a deliverable(s)! If the
deliverable(s) are online (hyperlink to them, for digital copies!)**

**Methods/Tools Used: (List all methods/tools (a word/ phrase for each
method/tool) used by the team**

Research of the field, experimenting – Meetings and Brainstorming with the mentors. Making material by the team, Going through the presentation done by PHD students of IIT,Bombay presentations discussion and Reflection. Identification of various requirements from different aspects of sustainability like social, environmental and economic., preparation of questionnaire , site visit, Analysis of the case based on design workbook, individual work and integrating all in a common platform. Prioritization of the requirements and solutions. Brainstorming session to find the best requirement and solution to the case given to us.

Learning Outcomes: (List at least 3 outcome statements)

- 1. A complete Report for Indian government on “Construction and Demolition waste” and the process of recycling C and D concrete waste to build different products**
- 2. Research analysis on the case in India and other countries on C and D waste recycling.**
- 3. Came up with the best requirement and solution to the case reference to the examples which already exists.**
- 4. Prototype of recycled material**
- 5. Deeper understanding of PBL process and Implementation**

Limitations faced: (List all the limitations: a word/ phrase for each limitation faced by the team)

- 1. Lack of knowledge in the beginning**
- 2. Site visit was only planned for recycling plan. Site visit of Dumping site and segregation site were not scheduled.**

"The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein."