

AFFORDABLE HOUSING

Problem Based Learning (PBL)
Student Case Study



"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."

Title

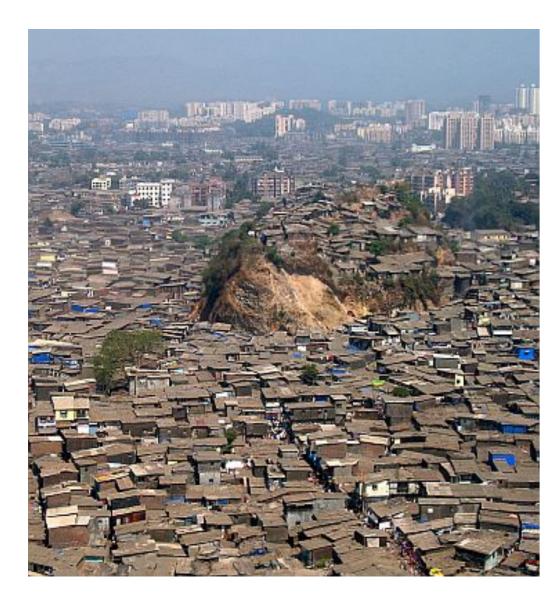
Affordable Housing

Client

Larsen and Toubro Realty Limited

Problem statement

Rehabilitated slum residents have adaptation issues in the new vertical living environment





Proposal

Ideas for sustainable improvement in future slum rehabilitation projects for affordability and comfortability

Mobile app for community development, communication, quality assurance, continuous improvement, and awareness of maintenance expenditures for transparency

Methods/Tools Used

Roleplay simulation of the negotiation between stakeholders

Stakeholder mapping

Mind mapping

Ideation

Solution clustering

Feedback and Iteration

Meeting & interview with L&T

Site visit and short interaction with residents

Collection of secondary data through research papers, news and articles

Online Collaboration tools: Google Docs, Google Drive

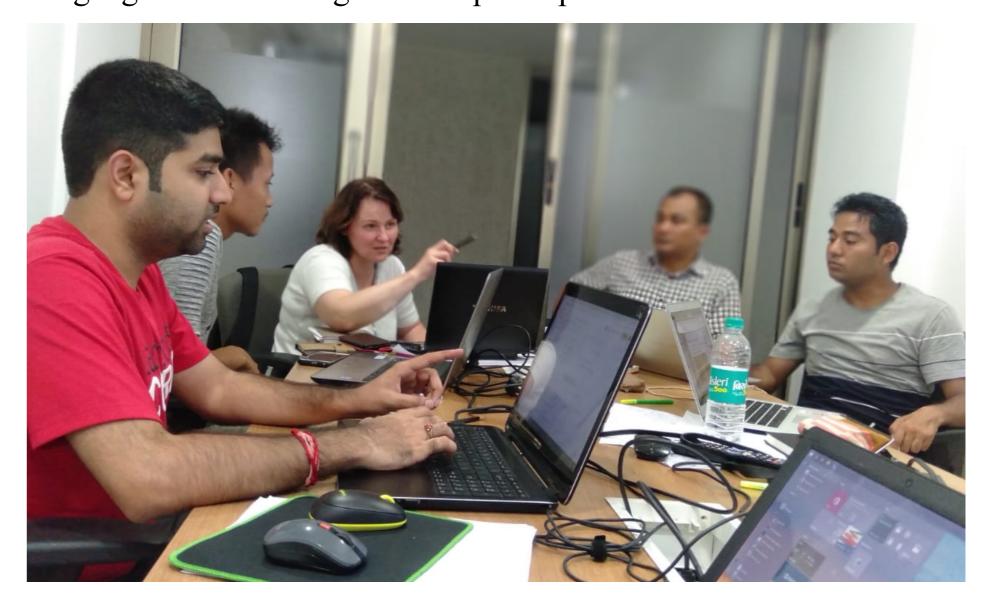
Skype

Learning Outcomes

- 1. PBL mindset & application of selected methodologies
- 2. Understanding of slum rehabilitation scheme, policies and Pragati project in Mumbai
- 3. Capability to work with different cultures and fields
- 4. Implementation of PBL case studies in other countries

Limitations faced

- 1. Limited case study time frame
- 2. No communication or interviews with slum residents
- 3. No communication with important stakeholders (OMKAR & SRA)
- 4. Lack of extensive background research & local context understanding
- 5. Lack of PBL experience
- 6. Lack of extensive site observation and exploration
- 7. Language barrier among the case participants



Team Members

Rasa Apanaviciene

Assoc. Professor, Faculty of Civil Engineering and Architecture, Kaunas University of Technology, Lithuania

Dinesh Dangol

M. Sc. Information and Communication Engineering, B.E. Computer Engineering, Nepal Engineering College, Nepal

Himanshu Patel Tuniki

Ph.D Student, Faculty of Civil Engineering and Architecture, Kaunas University of Technology, Lithuania

Olga Mäkinen

M. Sc. Creative Sustainability, Aalto University, Finland

Choten Tshering

B.E Civil Engineering, Jigme Namgyel Engineering College, Bhutan

Ramesh K. Shrestha

Faculty and Principal, Sagarmatha Engineering College, Nepal

Lena Sthapit Faculty and Dy. Head of Civil Engineering Department, AITM, Nepal

Abhishek Singh

Ph.D student, Indian Institute of Technology, Mumbai, India

References

- 1. Hindman e al. 2015, Dow Sustainability Fellowship 2015: Addressing Slum Redevelopment Issues in India
- 2. Sheth et al., 2009, Slum rehabilitation in the context of urban sustainability: a case study of Mumbai, India,