Framework for Decision Support Tool (DST)

1. INPUT from designers, developers and consultants
2. DATA PROCESSING
   - Selection of appropriate materials and construction technologies
   - Scoring of materials and construction technologies
   - Processing data through social, economic and environmental parameters
3. OUTPUT Customised guidance and checklist to support decision-making

SUSTAINABILITY INDEX

MaS-SHIP
Mainstreaming Sustainable Social Housing in India Project
(2016 - 2018)
www.mainstreamingsustainablehousing.org

Project outputs

- Decision Support Tool (DST) for designers, developers and consultants, which lays down the fundamentals and methodology for planning, implementation and operation practices, necessary for achieving sustainability in housing projects and developments
- Policy/practice briefings for policy-makers and practitioners based on the key findings of the study with respect to mechanisms for mainstreaming sustainability (environmental, social and economic) aspects in affordable housing at national and sub-national levels
- Technical Reports based on synthesis of primary and secondary data and results from stakeholder consultations

Partners

- Oxford Brookes University
- Development Alternatives
- TERI
- UN-Habitat
Introduction to the project

The project seeks to promote sustainability in terms of environmental performance, affordability and social inclusion as an integrated part of social housing in India. The project will lead to the development of a decision support tool that will provide guidelines at the design (conceptual) stage to improve the performance of the project.

The applicability of the tool will be tested in two selected social housing projects to ensure that the environment, social and economic aspects in social housing are addressed and the proposed sustainable construction practices are implemented.

Background

In urban India, there currently exists a wide gap between the demand and supply of housing, in terms of quantity and quality. The Ministry of Housing and Urban Poverty Alleviation (MHUPA) has estimated an urban housing shortage of 18.78 million in the country at the end of the 12th Five-Year Plan, more than 95% of which pertains to houses for Economically Weaker Sections (EWS) and Lower-Income Groups (LIG). If this shortage continues to increase, it would mean that nearly 110 million houses need to be constructed with an investment of over USD 2 trillion by 2022.

Housing is primarily an energy and resource intensive sector. It contributes to about 24% of the total CO₂ emissions in India. Even though energy efficiency in buildings has been the focus of attention, it has been limited to commercial and high-end residential buildings. The proposed solutions are intended to be replicable in other developing countries.

Project aims

- To facilitate sustainability in social housing projects through the adoption of sustainable building materials and construction technologies by social housing providers (such as Government bodies, private developers, building material manufacturers and architects)
- To develop a policy framework for sustainable social housing with focus on operational energy use, judicious use of material and natural resources in construction, financial practices promoting sustainability and socio-economic considerations

Workstreams

- Background study on scenario of social housing Internationally and in India
- Evaluating parameters of sustainability in social housing
- Database building for developing Sustainability Index
- Stakeholder engagement (project developers/promoters)
- Testing, validation and refinement of the Sustainability Index and DST
- Policy briefs for mainstreaming sustainable social housing

Contact us

Oxford Brookes University
Professor Rajat Gupta (Project lead)
rgupta@brookes.ac.uk

Development Alternatives
Pratibha Ruth Caleb - pcaleb@devalt.org

TERI
Sonia IP Dhull - sonia.rani@teri.res.in

UN-Habitat
Hitesh Vaidya - Hitesh.Vaidya@unhabitat.org