

SUSTAINABLE URBAN SOCIAL HOUSING

The national urban housing shortage is **18.78** million units

15% of urban Indian population lives in slums that lack access to basic services of water, sanitation, etc.

The construction sector that fuels housing contributes about **24%** to the total national GHG emissions

Alternate technologies can reduce use of steel and cement by **25-30%**

With rapid urbanisation, Indian cities are going through an unprecedented transformation with a massive inflow of population. With land value inflating and dearth of infrastructure to accommodate the increasing population, low and marginal stakeholders bear majority of the repercussions. With the housing sector being one of the most resource intensive sectors, there is a lack of balance between scale and adaption in social and environmental aspects of affordable housing. The concept of sustainability is still lacking not only in the government policies and schemes, but also amongst the private developers. The case studies highlight the three scenarios that are primarily existent in the Indian housing market today



INDORE

The Shri Ram Kamal Residency was initiated by NAAD developers to cater to the housing need of Low Income Groups (LIG). The site has 700 dwelling units, with the 1BHKs targetted towards LIG customers. Cost effectiveness was ensured by using fly-ash bricks, however the necessity to keep costs low, compromised the technical element of construction. The aspect of green doesn't feature in the housing unit, primarily due to lack of awareness. This is a typical example of the private developer led affordable housing market today.

THIRUVANANTHAPURAM

Kannamoola Bund Colony is one the five settlement sets for redevelopment, targetting Economically Weaker Section (EWS). COSTFORD and Habitat Technology Group executed the project in 23 clusters of 5 units each. The project includes several features that enhance environmental sustainability and address social integration. Alternate techniques like rat trap bond, filler slabs, etc. have been adopted. However, cost-esclations and delay in construction have been a major bottleneck.



SANGLI

The Sangli-Miraj-Kupwad social housing scheme was selected for the Integrated Housing and Slum Development Programme. In partnership with Shelter Associates, 7 slums have been redeveloped into Swiss Cross-shaped blocks of flats. Environmental and social elements such as waste management, smokeless stoves, etc. have been incorporated in the housing units. Mechanisms and avenues have been set up to empower the beneficiaries to become the driving force of the project. However use of sustainable design and materials was not a key component in the scheme.

The initiative undertaken by Development Alternatives with the UNEP-Sustainable Social Housing Initiative (SUSHI) assesses the urban social housing in India with the integration of environmental sustainability. It attempts to identify relevant actors in this space and evaluate key stakeholders' awareness regarding sustainability.

Challenges Sustainable Urban Social Housing



There are various gaps and challenges that essentially hinder the implementation of the housing policies.

- The regulatory framework doesn't fully integrate sustainability and affordability agendas
- Low capacities at the implementation level results in poor project quality
- Stakeholders in affordable housing aren't familiar with environmentally sustainable design and technical elements
- The supply chain for green affordable materials isn't still very strong and consolidated

Triggers for Change

It is crucial to integrate the context of sustainability in India's growth path. The lack of supply of affordable houses indicates that there is an opportunity to incorporate a green dimension into the affordable housing space. There are several entry points, which need to be activated to mainstream 'green' in the affordable housing space.

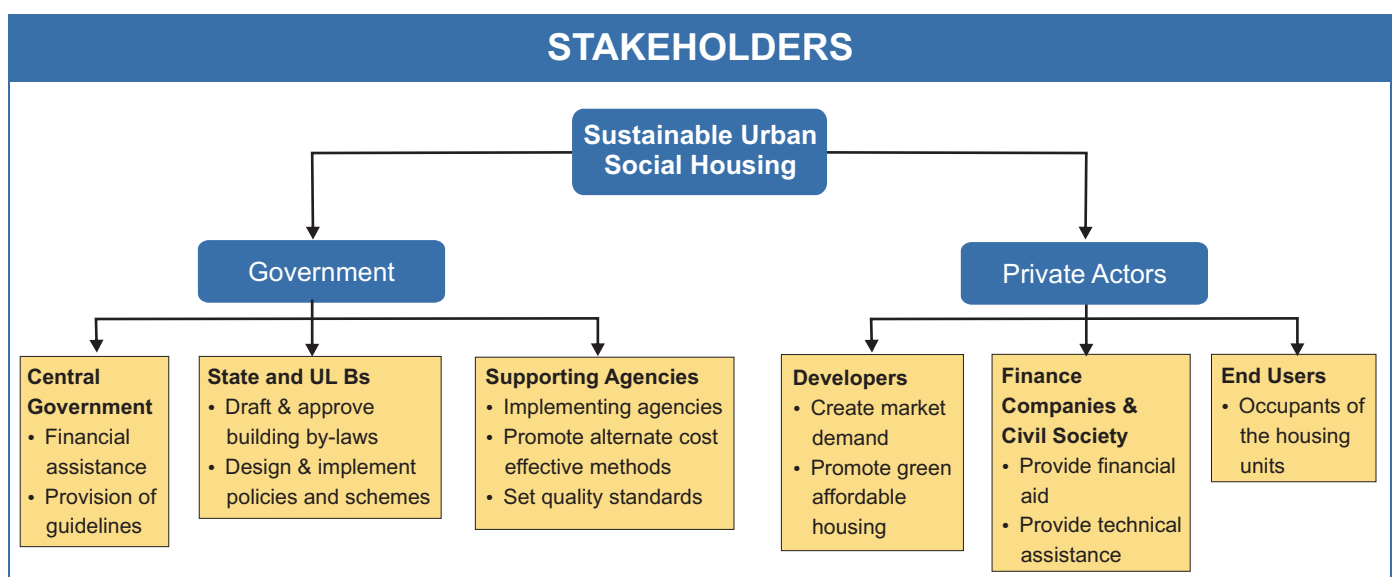
1. Strengthening the Regulatory Framework

- Central government needs to mainstream green solutions through policy channels while reinforcing monitoring mechanisms
- Adopting suitable green building codes and regulations at state level

- Developing standard design typologies and material guides for different regions
- Bridging the affordability gap with demand-side measures

2. Building Awareness and Developing Capacities

- Mainstreaming green building aspirations in the public sector
- Providing technical and training assistance to local level stakeholders
- Highlighting benefits for developers and end-users
- Stimulating supply chain through public demand



Key Stakeholders in Sustainable Urban Social Housing