



# Partnership for Transforming Lives of the Urban Poor: Experiences of Unique Community-Led Housing Initiatives by Shelter Associates

Pratima Joshi and Geetanjali Deshmukh

## Abstract

Architects at the India-based non-profit collective Shelter Associates (SA) are creating a paradigm shift in slum development by following a city-wide multi-stakeholder approach to urban development by recognizing that slum communities are an inevitable part of our cities. SA gives slum-dwellers a voice by arming them with data about their community, empowering them to take decisions making them partners in the developmental process. This data is the ultimate evidence of critical gaps in the service delivery system bringing the Urban Local Bodies (ULB), communities, and the civil society on a level-playing field. Understanding lived experiences, cultural practices, and preferences of slum-dwellers has helped SA architects break the chains of their academic discipline. Involving communities and ULBs in the process of designing is leading to innovations both in design and processes setting precedents for a multi-stakeholder approach to slum rehabilitation. Using data

and technology, SA accurately targets the vulnerable communities and their needs leading to the efficient allocation of resources contributing to degrowth. As environmentalists, SA architects don't just consider land and other commons as resources but as life-sustaining forces and therefore nudge all stakeholders to jointly work towards the preservation of the commons. This article attempts to highlight the phenomenal success architects can achieve as facilitators and enablers owing to their technical abilities and the sensitivity and humane touch they bring to the process of social development. Their ability to take along diverse groups like ULBs, civil society, and slum communities for the transformation of the lives of the urban poor. Demonstrating the transformation that collectively designed built-in spaces bring about.

## Keywords

Social housing · Multi-stakeholder approach · City-wide perspective · Urban development · Quality built-in environment · Spatial data

P. Joshi (✉)  
Executive Director, Shelter Associates, Pune, India  
e-mail: [pratima@shelter-associates.org](mailto:pratima@shelter-associates.org)

G. Deshmukh  
Manager (Strategic Communications), Shelter Associates, Pune, India  
e-mail: [geetanjali@shelter-associates.org](mailto:geetanjali@shelter-associates.org)

## 5.1 Introduction

The non-profit organization Shelter Associates (SA) was founded by three architects in 1994 with a passion to ensure equitable rights and

access to essential services for the urban poor. Over time, professionals from diverse backgrounds including Engineers, Data Scientists, Geographical Information Systems (GIS) experts, and social workers joined SA to design and implement data-driven solutions in Sanitation and Housing.

SA is a pioneer in using spatial data for social impact in Maharashtra and its core sanitation project called the One Home One Toilet (OHOT) has facilitated individual toilets to 1.5 lakh individuals leading to vast improvements in their health and well-being.

SA has gained expertise in housing the poor through the implementation of three major resettlement projects in Pune and Sangli-Miraj, which are quite different from each other. These projects demonstrate a workable alternative to the typical slum rehabilitation projects that are prioritized by the government which fail to take cognizance of ground realities; do not view the issue of housing for the poor at a city-wide level; and are implemented in an intrusive and opaque manner.

The housing projects implemented by SA are: (1) based on accurate data which has been spatially organized; (2) generated from a city-wide approach that considers housing as an integral part of the city along with areas of employment, healthcare, education, and convenience; and (3) implemented in partnership with beneficiary communities.

Another path-breaking work SA undertook recently is the city-wide slum rehabilitation research project with ATE Chandra Foundation

and Pramiti Foundation that advocates creating city-wide spatial data to have a clear understanding of the on-ground situation to identify vulnerable slums within the city and also proposes innovative yet simple solutions to design a resilient social housing for the poor.

Learnings from the city-wide research have led to a unique slum rehabilitation project at Bondre Nagar in Kolhapur which is currently being implemented under the “Beneficiary Led Construction” model under the Government of India’s Pradhan Mantri Awas Yojana (PMAY) housing scheme.

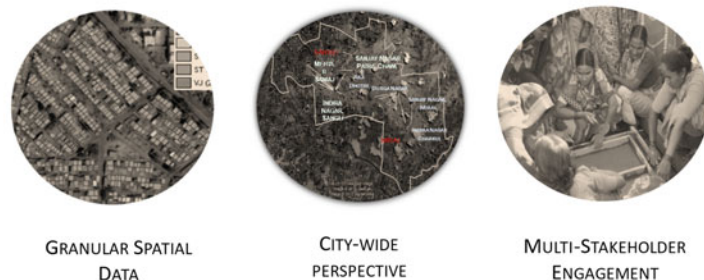
## 5.2 A Time-Tested Approach to Social Housing

Three decades back when SA started studying the urban slum space, it observed that many social housing projects fail because they are designed without considering the city that it is situated in, its surrounding, economic activity, and practices of the communities. Lack of accurate on-ground data meant many missing pieces of information, critical to the acceptance of the very people it is intended for. This led to the development of SA’s own approach to implementing housing solutions (Fig. 5.1).

- (a) Granular Spatial Data: The settlement level and socio-economic data collected provide an accurate description of the lifestyle of the residents, their on-ground condition, and the issues they face while living in dire

**Fig. 5.1** SA’s approach to social housing

### THE APPROACH BY SHELTER ASSOCIATES



conditions. The collected data is leveraged during multi-stakeholder interactions to ensure that extensive engagement with the community informs decisions in design development. It ensures (1) tenure security (2) well-designed internal spaces and (3) infrastructural amenities.

Furthermore, it also takes into consideration factors such as the location of (re)settlement, and the provision of amenities available to people within the neighbourhood. These factors are very important for holistic development but are often neglected during social housing.

The special aspect of our data-driven approach is the inclusion of community volunteers in creating data of their own slum. These volunteers, mostly young women are trained in conducting surveys, reading maps, and using digital survey tools. Data is the foundation of our work and co-creating data in this way leads to its acceptance by all involved.

The design developed with such an approach results in houses that are teeming with natural light and ventilation. They have unique areas such as (1) Spaces for keeping cattle, (2) Terraces to carry out traditional domestic chores such as making papads (thin crispy pancakes); exposing grain to the sunshine; cleaning beds. (3) Open spaces that are essential for forging community spirits and promote health and mental well-being.

- (b) City-wide Perspective: Mapping and analysing the slum location along with their level of vulnerability help in prioritizing and planning the housing projects. It helps the ULBs in creating better city development plans, resource allocation, and planning logistics well in advance. A city-wide perspective on social housing leads to optimal utilization of land as a resource instead of the ad-hoc, unplanned social housing projects.
- (c) Multi-stakeholder Engagement: SA advocates for involving both slum communities and ULBs in the planning, designing, and

financial decision-making of the projects. All of SA's housing projects have been successful due to the active involvement of communities who have even contributed financially, taking microloans while the ULBs have supported by validating the designs and building common infrastructure. By bringing together multiple stakeholders on a common platform, SA creates a level-playing field that empowers the communities.

---

### 5.3 Previously Completed Housing Projects

- (a) Dattawadi Housing project (1996–1998): Moving Mountains (Fig. 5.2)

Our first project was initiated in Pune, during the first rains of the monsoon, with the sudden demolition of an informal settlement known as Rajendra Nagar by the city administration. We worked with the community to ensure that 56 families were resettled into formal housing within a kilometre of the existing slum at Dattawadi with financial support from The Housing and Urban Development Corporation (HUDCO), a public sector undertaking under India's Ministry of Housing and Urban affairs.

This was a unique experiment in Pune city where the beneficiary families assisted with the design, monitoring, and construction of their own homes. Well-designed homes, customized sanitation facilities resulted in a healthier, hygienic lifestyle. The confidence they gained during their active involvement in the project led to a desire and concentrated efforts towards upgrading their lifestyle resulting in better education and employment options for the members.

- (b) Kamgarputala Housing project (2003–2005): Disaster averted (Fig. 5.3)

In 1997, Pune faced one of its worst floods and the city administration invited us to carry out



**Fig. 5.2** Community involved in constructing their own houses at Dattawadi



**Fig. 5.3** Kamgarputala housing project still stands

detailed surveys of 6 informal communities along the river which flows through the city, the river Mutha. Kamgar Putala, one of the oldest informal settlements in Pune, was the worst affected by the floods due to its location at the confluence of the Mula and the Mutha Rivers. We worked with the 176 flood-affected families of Kamgar Putala to help them secure formal housing away from the flood-prone banks of the river.

The community accumulated the capital for contributing to the construction of new homes by

forming micro-credit groups and building savings. Since flooding along the river Mutha was an annual occurrence and the community of Kamgar Putala was determined to find long-lasting solutions for the safety and future of their children.

Thus well-structured, liveable, and safe housing was designed. The floor area of each unit is 200 ft<sup>2</sup> divided into two bays. Each unit includes a toilet, a bathing area, a kitchen area, and a multipurpose living–dining–sleeping area



in the front bay. The unique aspect was that the traditional way of living of the community was respected and accommodated. The community did not want a high-rise building, which was accepted. The community was used to cooking while sitting on the floor so low-raised cooking platforms were built. In spite of the small space, separate toilets and bathrooms were built to respect the community's wishes.

- (c) IHSDP/City-Wide slum housing project, Sangli-Miraj-Kupwad (2009–2013): Multi-stakeholder success (Fig. 5.4)

SA was appointed as consultant for the Integrated Housing and Slum Development Programme (IHSDP) in Sangli-Miraj-Kupwad, a peri-urban area about 400 km south of Mumbai on the banks of the river Krishna, with a population close to 550,000. Our city-wide design proposal, informed by our poverty mapping and use of Geographic Information System (GIS) technology, optimized the use of the limited land available to meet the rehabilitation and relocation needs of the families living in 29 slums across the city.

The IHSDP had been introduced by the Government of India (GOI) for the improvement

of slums in cities and towns under the Jawaharlal Nehru Urban Renewal Mission (JNNURM). The critical objective of the IHSDP was holistic slum development with a healthy, and enabling urban environment, by providing adequate shelter with security of tenure and basic infrastructure facilities.

The housing stock created would be sufficient to provide formal housing, with security of tenure and improved sanitation, to the families in 29 slums, almost half of the slum population of the peri-urban area.

A critical aspect of our approach was that it did not involve moving the beneficiary families to faraway sites on the edge of the peri-urban areas which lack services (transport, water, and drainage) and drives them deeper into poverty. Hence, relocation would not impact their access to places of employment, and amenities such as schools, health centres, emergency services, and markets.

The GOI approved this project for its innovative, holistic and inclusive approach, which could be emulated in other cities. This approach later became part of the government policy framed under Rajiv Awas Yojana (RAY), which requires cities to map its poor using GIS and remote sensing technologies.



**Fig. 5.4** IHSDP Housing project—view of the society

### 5.4 City-wide Research Project

SA envisages an India where every citizen has access to basic infrastructure, secure tenure, and recognition of equal rights. To achieve this vision, SA undertakes slum rehabilitation projects using a process sensitive to the needs of all stakeholders, especially the community. Shelter Associates in collaboration with the Pramiti Foundation and funded by ATE CF had undertaken a research project to provide a framework for implementing social housing projects across 44 slums on government land in Kolhapur.

Through data collection, mapping, socio-economic surveys and discussions with the concerned stakeholders the research project provides a detailed on-ground scenario for affordable housing in the city of Kolhapur.

Stage 01 | Gathering Data based on –  
 (1)| Rapid Infrastructure Mapping (2)| Study of Planning rules (3)| Rapid Household Surveys  
 This highlighted loss of judicious use of land, issues due to lack of holistic development and lack of inclusive planning.

Through the research project, SA has observed that the lack of comprehensive data available with the ULB makes it difficult to take a holistic view of the entire urban area. This can lead to piecemeal slum rehabilitation projects which represent a suboptimal use of the limited resources, such as tenable land and fail to leverage an economy of scale. It can also lead to hesitancy by the ULB in undertaking slum redevelopment projects due to complexities and conflicts that may arise during planning.

SA strongly advocated that the research follows the core principles of (1) a data-driven approach, (2) a holistic city-wide perspective to identify vulnerable settlements, and (3) including diverse multi-stakeholders in planning. It follows a process of federating the data collected on a unifying base map leading to a city-wide dataset that can be leveraged to make informed decisions in the planning and preparation of slum rehabilitation projects across the urban area (Fig. 5.5).

This ensures that an accurate profile of the surveyed area, whether a city, a neighbourhood, or an individual slum, is generated (Fig. 5.6).

SA advocates that a city-wide approach and identification of the most vulnerable slums in the

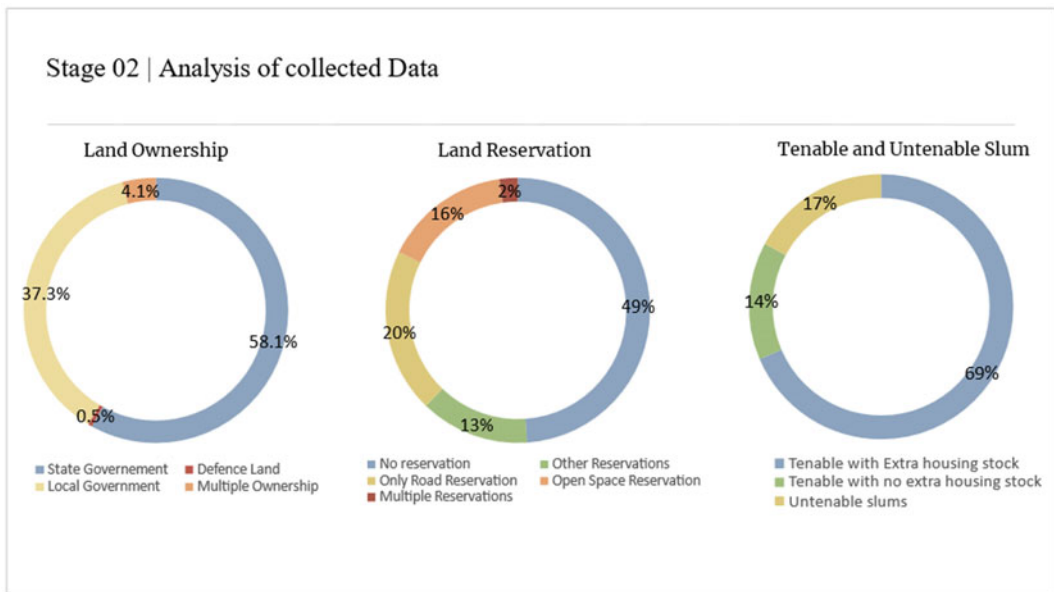
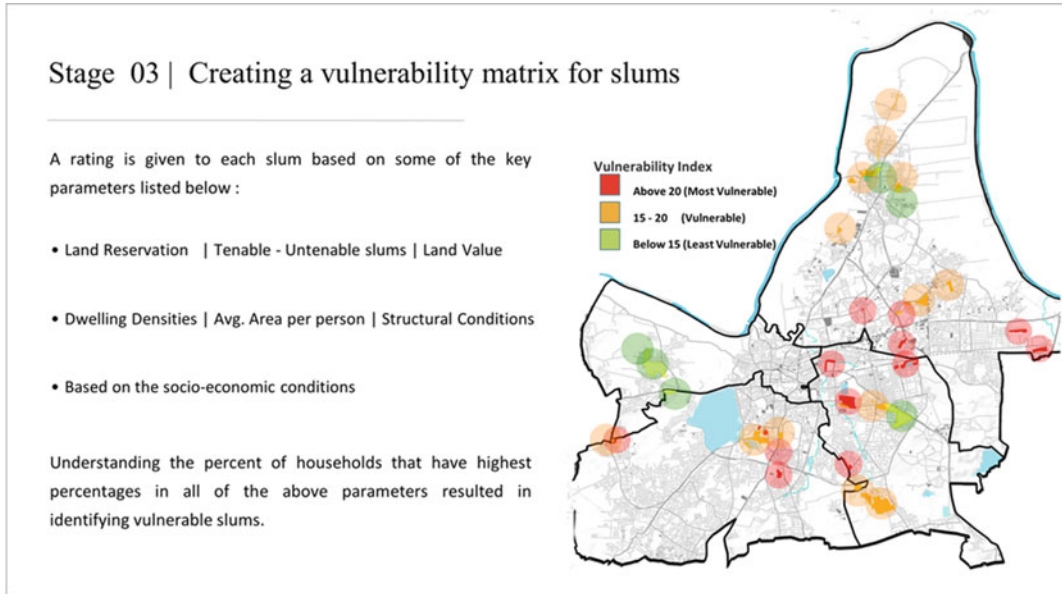


Fig. 5.5 Stage 02—analysis of collected data



**Fig. 5.6** Stage 03—creating a vulnerability matrix for slums

city will ensure optimum utilization of government land and an inclusive planning approach that will be beneficial for all concerned stakeholders (Fig. 5.7).

Solutions based on the vulnerability matrix (Fig. 5.8).

The finding, analysis, and solutions of the research project have been captured in detail in a toolkit. The proposed solutions in the toolkit can be easily accessed by like-minded organizations and government agencies as the solutions have the potential to be replicated in similar 2-tier and 3-tier cities willing to implement social housing programmes.

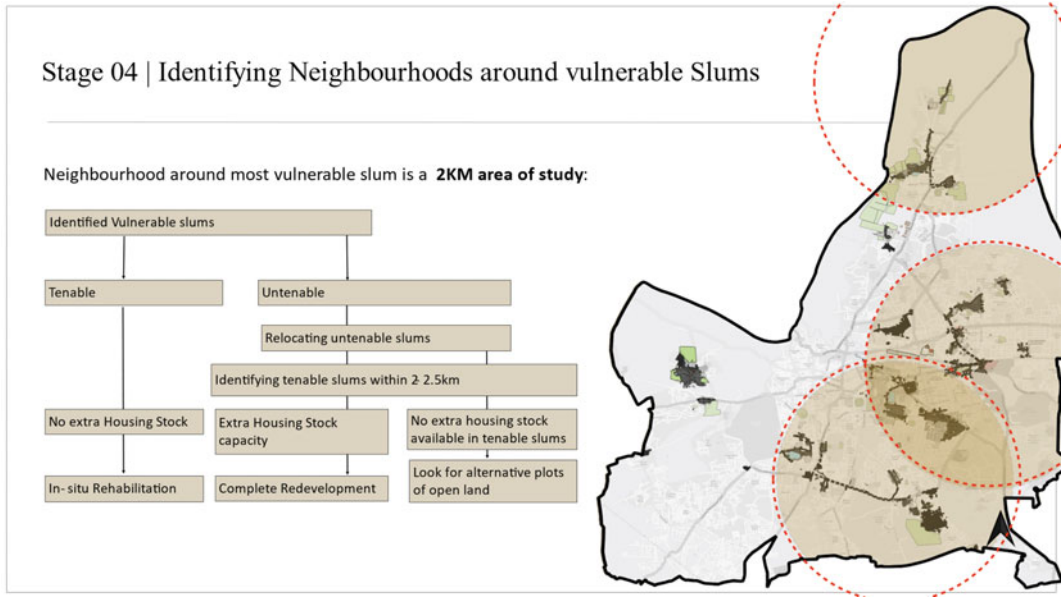
## 5.5 Live Project: Slum Rehabilitation at Bondre Nagar, Kolhapur

A few years back, the Urban Local Body (ULB) of Kolhapur City had proposed a slum rehabilitation scheme for the Bondre Nagar, a slum located at the edge of the city. The scheme proposed the generation of extra housing stock to become the saleable component in the design. This approach was questioned as there was no

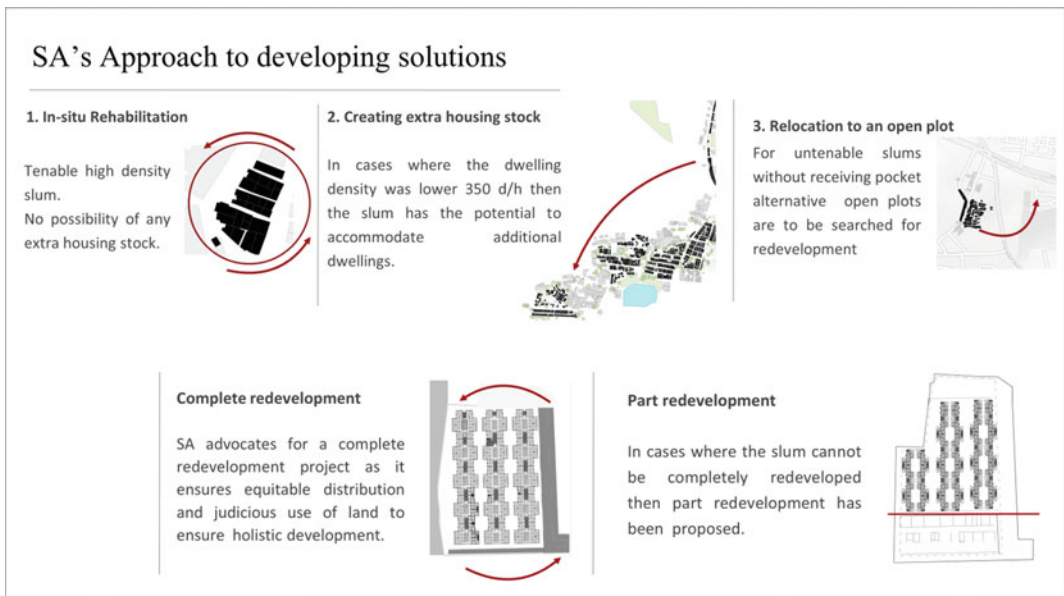
demand for extra housing in the area. Furthermore, the residents opposed the development of a multi-storeyed structure. Being farm labourers with lifestyles that were incompatible with a high-rise construction, the solution proposed by the PMAY department was unsustainable as it followed a top-down approach.

Voices from the community (Fig. 5.9).

Ram Dhere is one of the oldest residents of Bondre Nagar, and he used to work as a mason for almost 40 years, following which he quit his work in order to look after his ailing wife. “Every monsoon the gutter behind our house would overflow and flood all the houses in our area. This led to poor health and added on expenditure for us every year” says Rama Dhere. Meanwhile, his unmarried daughter Lakshmi used to earn income for the entire family through the ten cows they used to own. The family faced a series of unfortunate events, including the demise of Ramachandra’s wife and Lakshmi’s deteriorating health condition. “Not a single day passes by when I don’t feel responsible for the hardships my family has been through. I wish I was capable enough of providing them a healthy and safe home”, he adds (Fig. 5.10).



**Fig. 5.7** Stage 04—identifying neighbourhoods around vulnerable slums



**Fig. 5.8** Stage 05—SA’s approach to developing solutions

There was a need for a holistic solution that had the approval of all concerned stakeholders with the interests of the community at the centre. SA at the behest of the community intervened with its multi-stakeholder approach and designed

housing solutions based on the findings of the city-wide research project.

50-year-old Madhukar Gosavi lives alone in a shady house in Bondre Nagar, Kolhapur. During his youth, he contracted Chikungunya after





**Fig. 5.9** Laxmi and Ram Dhere

which he lost the control over his limbs and thus his ability to walk on his own. But this was only the beginning of Madhukar's struggles. "Since I could not walk, my employer removed me from my job, and life came to a standstill. I had to be dependent on others for my survival. Earlier I had no toilet in my house. I had to make my way from the muddy road to the community toilet which was exactly at the other end of my house. Neighbours' glares and remarks only added to my discomfort and embarrassment. Shelter Associates intervened in our slum with a housing project with basic infrastructure and amenities and is supporting people like me to lead a life of

**Fig. 5.10** Madhukar Gosavi



respect and dignity. Without their support, I would have continued to curse my fate and live in dependency with a poor quality of life” smiles Madhukar.

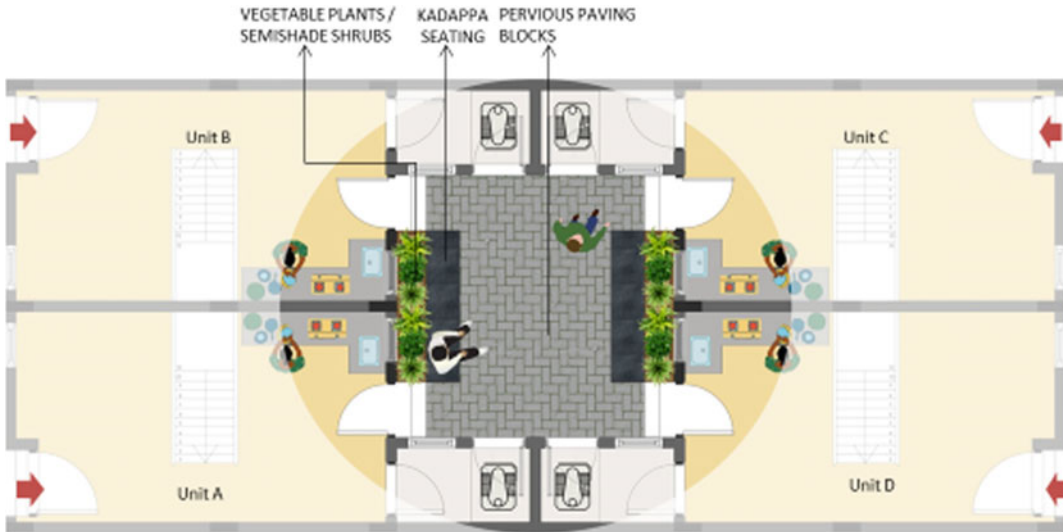
**A well-designed redevelopment:** For the rehabilitation of Bondre Nagar SA engaged the community in an inclusive process of designing. From taking door-to-door discussions to engaging the residents in a to-scale mock-up plan, SA has given a clear understanding of the space and its functionality. The developed design is a low-rise, high-density development consisting of G+1 tenements planned such that the adjacent tenements share a common wall and a rear open space that doubles up to form a courtyard. The tenements are designed to have adequate light and ventilation and the developed design has the approval of all concerned stakeholders. The

open-to-sky spaces play a vital role in the Bondre Nagar redevelopment plan as it makes a decisive difference between liveable habitat and claustrophobia as a design upgrade for the community. Spillover spaces like courtyards and backyards not only cater to informal activities but also increase the indoor quality of living. Repetitive units make a cluster and such clusters create spatial richness by minimalistic means leading to a safer, healthier, and affordable living environment (Fig. 5.11).

Each house opens to an internal road leading to better accessibility. The arrangement of houses in a grid pattern ensures spatial requirements of the community. SA has followed all design by-laws, and the construction will be in RCC to provide permanent homes to the families. The settlement is well-organized such that road

**Fig. 5.11** Bondre Nagar redevelopment design for healthy living





**Fig. 5.12** Cluster plan showing open courtyards for informal activities

congestion will be avoided at all times enhancing firefighting capabilities (Fig. 5.12).

The Detailed Project Proposal for Bondre Nagar was submitted to the government under the Pradhan Mantri Awas Yojana's—Beneficiary Led Construction category and has received subsequent approvals. The land has been transferred in the name of the beneficiaries, thus providing tenure security. All approvals of various agencies include the town planning department. The residents have also formed a cooperative society and are applying for micro-loans. The Kolhapur Municipal Corporation is also actively involved in planning the common infrastructure. The site has been cleared, and the beneficiaries are now living in a transit camp nearby. We move towards the construction phase with great enthusiasm and hope for a dignified future.

Alongside Bondre Nagar, in the years 2022–24, SA would like to explore the translation of the research project into actionable on-ground impact for social housing projects that will have a city-wide impact. As SA strongly advocates the approach of focusing solutions for the most vulnerable slums within the city, planning future projects for them is of utmost importance. Projects that are planned around the vulnerable

slums will ensure the optimum utilization of prime government land. Alongside monitoring the Bondre Nagar Project, SA would like to develop solutions for the vulnerable slums that are conducive to on-ground scenarios and in accordance with inclusive, multi-stakeholder involvement. SA would like to ensure that these settlements are undertaken for rehabilitation that benefits all concerned stakeholders.

## 5.6 Conclusion: Learnings from Diverse Experiences

In this almost three-decade journey, SA architects have faced many challenges like apathetic bureaucracy, unwanted political influence, and sometimes reluctance of the slum communities fearing change. We routinely face and shatter gender bias since most of our senior management and 60% of our field staff and community volunteers are women who have to face both the ULBs and the community.

We overcome these challenges with determination and passion to provide a secure tenure to the many urban poor in India so that our future generations can live and thrive in safe environments. "Shelter Associates strongly believes that

everyone deserves to live in homes with adequate amenities, regardless of their backgrounds. Why do we frequently overlook the slums when it comes to growth despite the fact that they are an integral component of the city? We strive to provide healthy and dignified lives to slum-dwellers. Our social housing projects incorporate the culture, traditions as well as preferences of all the residents”, expresses Ar. Pratima Joshi, Executive Director of Shelter Associates.

SA’s holistic approach and involvement of the communities and ULBs have resulted in a robust housing for thousands of urban poor. Residents now have a dwelling that is structurally stable and well-designed. The sense of ownership and responsibility further ensure the maintenance, cleanliness, and hygiene of the space. Their lifestyle transforms into one that is in stark contrast to the vulnerable living conditions in the slums. It is also observed that they strive to maintain this transformed lifestyle by promoting the economic betterment of the family. They also have a sense of financial responsibility as a new lifestyle also comes with awareness of savings for repaying loans, maintenance of their apartments, etc. This results in upward economic

mobility and the future generations greatly benefit from it.

Changing the built environment changes the perceptions of the society towards the marginalized communities. It leads to their acceptance and gradual assimilation into the mainstream. They can now forever leave behind the stigma of being slum-dwellers.

---

## References

- A case story on Kamgar putala. Retrieved on 25th Feb 2023 from D:\Tom Data July 2018\New Proje (shelter-associates.org)
- City-wide Social Housing Research project in Kolhapur. Retrieved on 25th Feb 2023 from Research Project— Final Report .docx (shelter-associates.org)
- Moving Mountains: A community’s journey from a slum to a society. Retrieved on 25th Feb 2023 from Dattawadi\_41.pdf (shelter-associates.org)
- Relocation of Sanjay nagar slum to a transition camp. Retrieved on 25th Feb 2023 from Relocation of Sanjay Nagar slum to a transition camp (shelter-associates.org)
- Shelter Associates website. Retrieved on 25th Feb 2023 from Shelter (shelter-associates.org)