



Sanjay Nagar

CASE STUDIES OF COLLECTIVE HOUSING IN ASIAN CITIES SERIES • JANUARY 2021

India has some enormous housing programs for the millions living in slums. But those subsidies mostly go to developers, who build dystopian housing complexes that are badly designed, poorly built, far from everything and unaffordable to those they are supposed to benefit. This project is using government subsidies in a very different way, to show how when communities form cooperatives and are assisted to collectively design and rebuild their housing in-situ, the results can be fine-tuned to people's real needs and more likely to enhance the social support systems within communities than to destroy them.

- Project Sanjaynagar
- Location Ahmednagar, Maharashtra, India
- Size 298 households
- Finished Still underway in 2021
- Type On-site reconstruction of a long established slum, with the new housing organized in eight interlinked courtyard buildings, each managed by its own housing cooperative.

CONTEXT, PROCESS AND PARTNERS

The city:

Ahmednagar is in the agricultural heartland of Maharashtra State and is a city with a lot of history. During colonial times, the British used the city's 15th century fort as a prison to lock up leaders of the independence struggle, including Jawaharlal Nehru, India's first prime minister, who wrote his famous book, *Discovery of India*, while imprisoned there in 1944. Later, the town's cooperatively-run sugar factories were instrumental in inspiring independent India's cooperative movement. Cooperatives were seen by India's leaders like Nehru and Gandhi as a crucial part of the country's development and upliftment. Ahmednagar is now a low-key district capital peppered with ancient monuments, with a population of about 400,000 people.

Like all cities in India, Ahmednagar has long been a magnet for poor migrants from surrounding rural areas, who come into the city looking for work and better lives. But what they don't find is any kind of affordable housing. About 15% of Ahmednagar's citizens live in varying degrees of squalor and insecurity in the city's 22 slums. 17 of these slums are "notified" and five are "un-notified". The distinction is important because according to India's 1956 Slum Act, being "notified" or "recognized" by the government protects people living in a slum against eviction and clears the way for the government to bring in basic services like drains, water supply, common toilets and paved walkways, to improve living conditions. Notification also makes a slum eligible for upgrading or redevelopment under various government schemes. The 17 "notified" slums in Ahmednagar are home to nearly 46,500 people, but they occupy an area of just 0.18 square kilometers, which means people in those settlements are living in an extremely dense density of about 200,000 people per square kilometer.

The community:

Sanjaynagar is one of those 17 notified slums, with 298 households and a population of 873 people, crowded into 209 houses. The community occupies a 0.85 hectare (2.09 acres) piece of municipal government land, about two kilometers from the city center, in the Morchud Nagar area. This vibrant community is mix of people of different faiths who come from a range of poor and vulnerable backgrounds (especially Dalits and Adivasis), for which the Indian bureaucracy has a variety of unlovely but very specific official classifications: *scheduled castes*, *scheduled tribes*, *denotified tribes*, *special backward classes* and *other backward castes*. Half the families fall below India's official poverty line and carry "*Below Poverty Line*" cards to prove it. And just in case you didn't get the message, all of them are part of the *Economically Weaker Section (EWS)*. This last one is an especially useful classification, because accessing housing subsidies for the project this report describes is contingent on being officially *EWS*.

Sanjaynagar began its long life as a marshy, mosquito-infested leper colony outside the city limits. In the 1970s, a group of leprosy patients negotiated with the municipal authorities to be given them a safe place to live, where they wouldn't feel shunned by Ahmednagar's citizens. Later, they were joined by more poor families evicted from informal settlements around the Wadia Park stadium. In subsequent decades, more people moved into the slum and it grew to its present size. Bit by bit, the residents made an inhospitable place habitable, planting shade tree, improving their tin sheet and mud-plastered houses and lobbying for municipal water, electricity connections and an access road. By 2018, most of Sanjaynagar's residents had access to basic services, but housing conditions were still poor. Almost everyone in the community works. The men are produce vendors, factory workers and construction laborers, and some have jobs in steel fabricating and repair shops or do piece-work packing spices and candies. The women work as house maids, street vendors and tailors or have small businesses selling cutlery and jewelry or making handicrafts and blankets.

The project:

The Sanjaynagar community is now in the process of completely transforming itself into a safe and healthy housing colony, with subsidies from a national slum housing program (PMAY-Urban) and support from three organizations that are working with the people to make Sanjaynagar's reconstruction a community-driven, sustainable and collaborative model for redeveloping other slums in Ahmednagar - and other cities.

- The project is demonstrating a community-led alternative to the conventional top-down and developer-driven housing delivery model that most government housing programs have promoted.
- The project's participatory design and collective decision-making is attempting to revive the true spirit of India's cooperative housing movement, and bring it into the context of a slum redevelopment.
- The project is showing that community-driven housing development can be faster, cheaper, better, more sensitively designed and better looked after in the future than standard government housing.
- The community-driven model can address India's staggering housing problems at scale because the demand-side - which has that scale - takes over from the supply side.

- The community-driven model also preserves and strengthens existing social infrastructure and leads naturally to other holistic developments, other collaborations, other improvements in the lives and economic well-being of the residents, who are no longer illegal squatters but legitimate citizens of their city.

PMAY-Urban Housing Scheme:

The housing project in Sanjaynagar is being implemented with assistance from a major government housing scheme called PMAY-Urban. The Pradhan Mantri Awas Yojna (PMAY) scheme was launched by the Government of India in 2015 to subsidize the construction of decent housing for low-income and "EWS" families in urban areas, and set a target of providing 10 million houses by 2022, when India will celebrate 75 years of independence. In the state of Maharashtra, PMAY provides a per-unit subsidy of Rs. 150,000 (US\$ 2,000) from the central government, which is topped up with another Rs. 100,000 (US\$ 1,333) subsidy from the state government, bringing the total per-unit subsidy to Rs. 250,000 (US\$ 3,333).

Most of the housing built under the PMAY-Urban scheme - and under most government housing schemes for the urban poor - is built by contractors and developers, who take the subsidies, construct the houses and allot them to families individually. Poor communities are just passive recipients of housing they have no control over and often can't afford. Progress with PMAY has been very slow. By July 2020, just 3.5 million of the target 10 million units had been built, and problems with shoddy design and construction were rife. The government was looking for other options to speed things up.

The PMAY-Urban scheme does include a provision which allows interested communities to work together to collectively design and develop their own housing, under scheme's "Affordable housing in partnership" option, though there have been few takers. Sanjaynagar is one of those cases and is the first PMAY-supported project in the state in which the slum dwellers formed housing cooperatives and managed the house design and construction themselves, collectively, in collaboration with support organizations. So this is a very important breakthrough project.

Snehalaya Foundation, a local NGO that works with poor children and marginalized women in Ahmednagar, has been working in Sanjaynagar for 15 years, running a *bal bhavan* (children's school), and other programs. Through this work, Snehalaya has built a strong and trusting relationship with the community people. In 2018, Snehalaya joined forces with two other organizations - the Hunnarshala Foundation and the Curry Stone Design Collaborative - to explore the possibility of using the government's PMAY-Urban housing scheme as an opportunity to redevelop Sanjaynagar, as a test case for redeveloping other slums in Ahmednagar.

The three organizations formed a consortium, in which Snehalaya would mobilize the residents of Sanjaynagar, Hunnarshala would provide participatory design and technical support, and the Curry Stone Design Collaborative would provide funding support, manage and document the project. They began organizing regular meetings in the community to talk with residents, explain how the PMAY scheme worked and what it offered and begin collecting the people's ideas about how they would like to upgrade their houses and living conditions. It didn't take long to build consensus among the residents to take up the opportunities of the PMAY housing scheme to redevelop Sanjaynagar.

The first step was to carry out a detailed physical and demographic survey, to better understand the composition of the settlement. The survey was done by enthusiastic community members, with support from Snehalaya. They were careful to gather all the household and social information they would need later for the PMAY project proposal, including photographic records from each person and each household. Next, a slum committee was set up to facilitate the housing project and ensure the equal participation of women, with representatives from all different social, ethnic and religious groups living in the community. The committee's first task was to work with the consortium partners to review and finalize the list of homeowners, from the survey.

Sanjaynagar is the first ever community-led slum redevelopment project to be carried out in Ahmednagar, and so far, the journey hasn't been easy. There weren't any similar projects to see and learn from, and nobody had any idea what such housing might look like - neither the community people nor the local government officials who would be important partners in the project. But since Sanjaynagar was to be a model for the redevelopment of the other 21 slums in the city, it was important that the project be done well - *and be beautiful*.

To deepen the residents' understanding of community-led development and to build trust in the project, a trip to the city of Bhuj was organized. The entire committee got on a train and made the long, dusty, 24-hour trip to the city of Bhuj, in the neighboring state of Gujarat, to visit some community-driven housing projects that were being supported by Hunnarshala. In Bhuj, they met the *slum sabhas* (community-based organizations) that had participated in government housing schemes and met slum dwellers who had rebuilt their own houses. One of the projects the team visited was in Ramdevnagar, which was later selected by the Ministry of Housing and Urban Poverty Alleviation as one of the "best practices in habitat planning and design for the urban poor." The

consortium also hosted key officials from the Ahmednagar Municipal Corporation to visit Bhuj, to show them these and other successful housing initiatives supported by Hunnarshala, as part of their campaign to help officials, who are more accustomed to *top-down* processes, to understand how *bottom-up*, community-led housing can work. In these ways, everyone learned, and for both community people and government officials, *seeing was believing*.

Back in Ahmednagar, the work of planning the new project and designing the new houses began in earnest, in a series of participatory community design workshops that were facilitated by architects and engineers from Curry Stone Design Collaborative and Hunnarshala. Cost estimates for the project were then prepared, according to the PMAY guidelines. People also agreed to contribute their own funds towards the cost of building their new houses. The outcome of these workshops was a full redevelopment plan for Sanjaynagar. The housing design and the layout plans were then reviewed by the Slum Committee and submitted to the municipal government for approval, under the PMAY-Urban scheme.

Support groups and partners in the project:

- **Ahmednagar Municipal Corporation** (*government partner*) is the local government in Ahmednagar, and is the official implementing body for the PMAY-Urban scheme, so all project funds goes through the municipality. The municipality is also supporting the project with land, permissions and infrastructure.
- **Snehalaya Foundation** (*social partner*) is an NGO based in Ahmednagar, founded in 1989, which supports women, children and LGBT communities on issues of HIV, sexual violence and poverty. Snehalaya has worked with the Sanjaynagar community for many years and assisted with the social aspects of the housing project: the community survey, forming social groups and registering as cooperatives and helping access government funds and bank loans.
- **Hunnarshala Foundation** (*technical partner*) is an NGO based in the city of Bhuj that has worked since 2001 to mainstream the ecological building practices of India's traditional societies, by studying the prevalent practices with master artisans, testing and improving technical practices, recommending the practices to state actors for adoption, organizing traditional building artisans and linking them with emerging markets. For several years, Hunnarshala has been supporting governments and NGOs to design and implement housing programs for the underserved populations in rural and urban areas through community-led development. In Sanjaynagar, Hunnarshala worked with community members to develop design options, prepare the formal project proposal, monitor the construction and assist the local team.
- **Curry Stone Design Collaborative** (*project management and funding partner*) is a Mumbai-based collective of social design practitioners, architects and civic planners who work with poor and marginalized communities and use participatory design to help improve their built environments. The studio was set up in 2016 and is financially supported by the **Curry Stone Foundation**, which is based in Bend, Oregon, in USA. This initiative in India was launched with the intent to participate in creating equitable spaces to live, work and play, with a philosophy that is strongly grounded in a bottom-up, community-driven approach. Besides providing funding support for the housing construction in Sanjaynagar, as well as grants to the consortium partners for their participation in the project, Curry Stone Design Collaborative is providing technical, managerial, training and documentation assistance throughout the course of the project.

LEGAL FRAMEWORK OF THE PROJECT

Legal background and status:

Most of the families in Sanjaynagar had been evicted from the city center years ago and were given rights to use this peripheral land. The 0.85 hectare (2.09 acres) land belongs to the Ahmednagar municipal government and is marked in the City Development Plan as a "notified slum settlement", which gives the residents some rights and protections from eviction and also makes them eligible for taking part in government slum housing schemes, like PMAY-Urban.

As part of the redevelopment of Sanjaynagar, the 298 resident families have divided themselves into eight groups, and each group is registering itself as a separate cooperative housing society, with the state-level Registrar of Cooperative Societies. As of January 2021, two of the eight cooperatives had been registered and the other six were in process. Each cooperative is responsible for planning its own building, managing the finances, dealing with the contractor, managing the construction and taking care of future building maintenance.

The original idea was for these eight cooperatives to be the legal lease-holders of the public land their building occupies, as has been the practice in many earlier government low-income housing schemes on public land (especially in nearby Mumbai). That would have been ideal, because the collective lease-hold to the land

would have given the cooperatives the legal "group power" to control who moves in and out, look after members when they have troubles, and keep market forces out of the building. But under changes made to the housing policy in August 2020, by India's market-oriented current government, the land will not be transferred or leased to the project beneficiaries or cooperatives at all, but will remain under municipal government ownership, along with the entire basic infrastructure. The housing units will be transferred individually to the families, as registered beneficiaries of the project on a notified slum. After occupying their units for 15 years, the residents will get individual freehold title to their housing units and will then be entitled to sell their units on the open market if they wish. So in the future, the role of the eight cooperatives in Sanjaynagar will likely be diminished to only social support and management of building maintenance and repairs.

Government support:

The Sanjaynagar project has been approved and is being financially supported by the state-level and central government through direct subsidies to the project for partially supporting the cost of construction. The land for the project is also being provided free by the local government, although land ownership will remain with the Ahmednagar Municipal Corporation. Part of the infrastructure is being provided and is expected to be maintained by the municipal government.

PROJECT COSTS AND FINANCING

Project costs and who paid for what

1. Land: The land for the project was provided free by the Ahmednagar Municipal government.

2. Houses: Each 30 square meter housing unit costs Rs 528,000 (US\$ 7,040) x 298 units = Rs. 157.3 million (US\$ 2.1 million). The housing units were financed as follows:

- Rs. 150,000 (US\$ 2,000) PMAY subsidy from central government x 298 units = Rs. 44.7 million (US\$ 596,000)
- Rs. 100,000 (US\$ 1,333) PMAY subsidy from state government x 298 units = Rs. 29.8 million (US\$ 397,333)
- Rs. 135,000 (US\$ 1,800) grant from Curry Stone x 298 units = Rs. 40.2 million (US\$ 536,400)
- Rs. 100,000 (US\$ 1,333) contribution from the family (from savings or individual bank loans) x 298 units = Rs. 29.8 million (US\$ 397,333)
- Rs. 43,000 (US\$ 573) grant funds to be raised from philanthropic sources x 298 units = Rs. 12.8 million (US\$ 170,853)

3. Infrastructure: The Ahmednagar Municipal Government will cover part of the common infrastructure, sustainability features and site development costs detailed below. All these costs are estimated to come to Rs. 19.9 million (US\$ 264,595), which works out to Rs. 66,593 (US\$ 888) per unit.

- Paved roads and courtyards: Rs. 2,006,550 (US\$ 26,754)
- Water supply: Rs. 2,006,550 (US\$ 26,754)
- Sewers: Rs. 1,379,962 (US\$ 18,399)
- Electricity mains and solar street lights: Rs. 1,186,800 (US\$ 15,824)
- Boundary wall and two gates: Rs. 2,347,200 (US\$ 31,296)
- Terrace gardens: Rs. 812,727 (US\$ 10,836)
- Rooftop rainwater harvesting system: Rs. 4,334,545 (US\$ 57,794)
- Solar panels for common area lighting: Rs. 5,770,364 (US\$ 76,938)

4. Support costs: The cost of providing technical and social support to the Sanjaynagar community to mobilize the community, develop the project, design the houses and facilitate the construction will come to an estimated Rs. 18 million (US\$ 240). These costs were borne partly by the three groups in the consortium (Snehalaya, Curry Stone Design Collaborative and Hunnarshala), partly by the Curry Stone Foundation, with a small portion being covered by the Ahmednagar Municipal Government.

DESIGN AND CONSTRUCTION

House and layout design process:

Because the land was limited and the families were big, the only way to make more room for extended families and for future growth was to expand upwards. At first, the people in Sanjaynagar were skeptical about moving from ground floor houses into multi-story buildings. But through the participatory design process and in the course of many workshops, they came to understand the challenges of space shortage and eventually agreed

to work with the architects to design their new housing in three-story buildings, with members of each cooperative given full freedom to design their own building.

The design process was quite interesting. The architects in Hunnarshala and Curry Stone began by working with the community people to design a basic housing unit, which everyone was happy with. The basic unit has 30 square meters of space and includes a living room, a bedroom, a cooking area, a washroom, a toilet and a small balcony. Care was taken to make sure that basic unit met all the requirements set out in the PMAY guidelines. The idea was that by adding a stairway, an extra door or making small adjustments, those basic units could be stacked up or laid side-by-side or combined in different ways to create larger houses to accommodate the many big joint families in the community, according to their needs, creativity and affordability. So some families will have houses which combine two, three or even four of the basic units. But even if they connect internally and work as one big house, each unit counts as a separate member of the cooperative, for financing and membership purposes. The basic unit was designed in such a way as when stacked up, a small internal courtyard ("*chowk*") is created, to bring light, air and ventilation into the house, borrowing from a long tradition of small internal courtyards in houses in western India.

(Drawings of two houses in Building 6 are shown in the photos at the end, to give an idea how families combine the basic housing units together to make larger joint-family houses.)

Each cooperative then took the basic unit as their building block and worked together to create their own building, preserving the delicate web of the existing social fabric as much as possible. The buildings will all be different, with varying numbers of units, but all are three-stories tall and all are organized around shared courtyards. The buildings are connected by ground-floor corridors and first-floor walkways, and fit together in such a way as creates shady common spaces and preserves all the mature trees that are already on the site - which is essential in this hot, dry climate. In the first building that was designed, the people decided to allot the ground floor units to elderly and disabled community members who may have difficulties with stairs.

The Sanjaynagar site is fairly flat and is surrounded by farmland on two sides, a burial ground on a third side and a 15-meter access road on the fourth. In the final layout plan the community people developed with the architects, the eight buildings are tightly organized around their courtyards, with a big central open area for all residents, a community center, a preschool and shelters for keeping the livestock many community members raise. Where they don't already have mature trees, the courtyards will be planted with native trees that will be easy to maintain. These shared open spaces will also provide space for some of the innovative infrastructure plans, like rainwater harvesting and wastewater treatment.

Innovations in infrastructure and services:

Sanjaynagar's redevelopment plans include all the basic services, but with some interesting "green" innovations in how those services work:

- **Water supply:** Ahmednagar is in a drought-prone part of Maharashtra, and so in addition to metered municipal water connections for each house, rainwater harvesting systems, recharge bore wells and localized water treatment are being incorporated into the design, to save and manage water resources.
- **Drainage:** Wastewater from the houses will be separated with the use of dual plumbing. Grey water from bathing and cleaning will be treated at household level and will be used for irrigating green areas in the settlement. Only black water from toilets will go into the decentralized waste-water treatment plants planned within the courtyards.
- **Solid waste management:** Household waste will be segregated, with the organic wet waste going to cattle owners within or near the settlement and the dry waste being collected, processed and recycled through a local recycling business.
- **Lighting:** In addition to metered municipal electricity connections for each house, street lights powered by their own solar panels will keep the common spaces well-lit at night.

Innovations in construction techniques:

The Sanjaynagar housing project also includes some environmentally-friendly design innovations, using locally available construction materials and technologies:

- **Load bearing structure:** The three-story buildings were designed as load bearing structures (on 9-inch walls), with some seismic reinforcing, to cut costs and reduce the use of steel reinforced concrete.
- **Fly ash bricks:** The load-bearing technology required consistent strength in the blocks, so instead of conventional fired clay bricks, fly ash bricks from a local producer were used. Fly ash is an environmentally friendly building material made from a polluting byproduct of thermal nuclear power stations. Blocks made of fly ash are lighter and stronger than ordinary fired clay bricks, use less energy to produce, require less cement and can be left unplastered (saving money and materials).
- **Debris wall construction:** Debris walls, which use leftover construction waste materials, were also used in some places, to further cut costs and reduce wastage. Unlike block masonry, debris walls can be built by amateur or inexperienced construction workers.

- **Shallow domes:** Another strategy to reduce cement and steel was using shallow domes instead of reinforced floor slabs. The initial plan was to use shallow domes over all the rooms, but the project's structural expert suggested using them only in rooms on the top floor of the buildings.

COMMUNITY AND PROJECT MANAGEMENT

Community members have divided themselves into eight registered cooperative housing societies, each with between 27 and 51 families. Each cooperative will manage its own housing project, and all the project funds will go through the cooperatives, not through individual families. Normally, housing projects are taxed at 18% in Maharashtra, but if the budget goes through a registered housing cooperative like this, then people don't have to pay this tax - which amounts to a big saving for the people.

The Ahmednagar Municipal Corporation is responsible for the implementation of all housing projects under the PMAY-Urban scheme and has worked with the Sanjaynagar community and with the Consortium to finalize all the project contracts, provide permissions, coordinate with state and central government, disburse the funds for construction and provide the infrastructure. In the early part of the project, the Sanjaynagar Slum Committee supported the processes of preparing the PMAY project proposal, finalizing the beneficiary list, forming committees for each of the 8 buildings and resolving problems. The Slum Committee continues to support the construction process in various ways. Each of the eight housing cooperatives has a committee which is in charge of managing the construction of their building, coordinating with the contractor, overseeing the work and communicating with members. Hunnarshala and Curry Stone provide technical design and construction supervision support, while Snehalaya supports the social and organizational parts of the project.

Construction:

The funds for the housing construction are disbursed in stages, according to progress of the construction, from the municipal government to the Consortium, and then to the joint accounts set up by each of the eight housing cooperatives, which manage the funds and construction together. The construction of the buildings is managed jointly by the cooperative committees, Snehalaya and overseen by the Curry Stone Design Collaborative technical staff. Hunnarshala staff was present on the site and helped to manage it until the Covid pandemic hit in March 2020, when everyone had to go home. There is only one contractor working on the first building. The contractor provides his own workers, and many are skilled masons and helpers who live in the Sanjaynagar community. The plan is to get more contractors involved in the future, when the Covid crisis is over.

Because of black-cotton soil conditions on the site, the pile foundations had to go down five meters, which added a lot to the cost and difficulty of laying the foundations for the buildings at Sanjaynagar. The first piles were finished in April 2019, and construction of the first building began in July 2019. The initial plan was to go phase-by-phase, so that not everyone would have to move out of their old houses immediately. This was partly because there have been difficulties finding nearby transit accommodation for so many families at the same time. The Covid-19 pandemic lockdown has been another major factor in stalling the project, as the other buildings were to start by April 2020. But by October 2020, only one of the buildings (Building 6) had been about 40% completed. Construction of the other seven buildings hadn't started yet. The rest of the site was still occupied by the Sanjaynagar residents.

Challenges:

Sanjaynagar is the first ever community-led slum redevelopment project to be carried out in Ahmednagar, and even in these early stages, the project has faced some big challenges:

- **Delay in disbursement of government funds:** The Sanjaynagar project was officially sanctioned by both the central and the state governments in 2018, but as of January 2021, not a single rupee had been released for the project. The construction of the first building has begun, but only because of the availability of bridge funding from the Curry Stone Foundation, which will not be enough to complete the entire project.
- **Covid-19 pandemic:** The construction of the first building had reached the first floor when the pandemic hit and India went into one of the harshest lockdowns in the world. Besides stopping the construction temporarily, the pandemic has led to a shortage of skilled and unskilled construction workers. Meanwhile, construction materials prices have gone up by 20%, further impacting construction costs.
- **Lack of support from the local government:** The Sanjaynagar project is being implemented in collaboration with the Ahmednagar Municipal Corporation, which is responsible for accessing the project funds from state and central government as well as providing funds for services like electricity, drainage and water supply. However, the local government is dealing with an unusual project like this (both a people-driven project and a PMAY-Urban project) for the first time, and their lack of expertise and the experience to support the project is proving to be a major hurdle. But everyone is learning as the project progresses.

FOR MORE INFORMATION ABOUT THE PROJECT

This case study was written in October 2020 by Gaurav Dinodia and Mahavir Acharaya at the Hunnarshala Foundation, with support from Bhawna Jaimini of Curry Stone Design Collaborative.

Please follow these links to see two short films about Sanjaynagar:

<https://www.youtube.com/watch?v=qUnRe2bhslQ>

<https://www.youtube.com/watch?v=KqntKHDgnT0>

For more information about the Sanjaynagar project, please contact:

Mr. Mahavir Acharaya

Hunnarshala Foundation

8-16, Mahadev Nagar-1, Behind Valdas Nagar, Near Mirzapar Highway, Bhuj 370001, Gujarat, India

- Tel (landline) +91 9978 654 014
- Tel (cell) +91 98795 10299
- E-mail: mahaviracharya@gmail.com
- Website: www.hunnarshala.org

Ms. Bhawna Jaimini

Curry Stone Design Collaborative

4, First Floor, Girishant, Plot 3, Linking Road, Khar, Mumbai 400052, India

- Tel (cell) +91 85878 61361
- E-mail: bhawna@currystonedesign.com
- Website: www.currystonefoundation.org

Mr. Hanif Shaikh

Snehalaya Foundation

239 F Block, MIDC, Ahmednagar 414111, Maharashtra, India

- Tel. (cell) +91 90110 20177
- E-mail (1): hanif@snehalaya.org
- E-mail (2): info@snehalaya.org
- Website: www.snehalaya.org

PHOTOS



Sanjaynagar began its long life as a leper colony outside the city in the 1970s, and some elderly community members who moved here in those dark times are still around.

That's the map of the Sanjaynagar slum before the redevelopment began, with 298 poor families squeezed into 209 mud and tin-sheet shacks.



Over the years, people have done what they can to improve their housing, but infrastructure and environmental conditions remained bad.



Some forward-thinking early residents planted trees, which now provide generous shade. All are being preserved in the redevelopment.



Here is an aerial photo that shows Sanjaynagar (shaded yellow in the red line at left) a little outside the city of Ahmednagar, on the right.



This is one of the internal lanes in Sanjaynagar. Without paving, drains or sewers, the lanes are mucky and dirty for most of the year.



This Sanjaynagar resident sits in front of his house every day packing masalas (spices), which he sells outside in the market.



With so many people living in such small houses, a lot of the chapatti-making and other cooking takes place in the lane out in front.



The conditions are shabby, but this is a thriving community where life goes on and people find ways to help each other and "do the needful."



And of course there are lots of children in Sanjaynagar, of different faiths and ethnicities, always on the lookout for a bit of mischief.



When the possibility of using the government's PMAY housing scheme to completely redevelop the community, the three support organizations (Snehalaya, Curry Stone Design Collaborative and Hunnarshala) held lots of community meetings - both large and small - to get the community people on board.

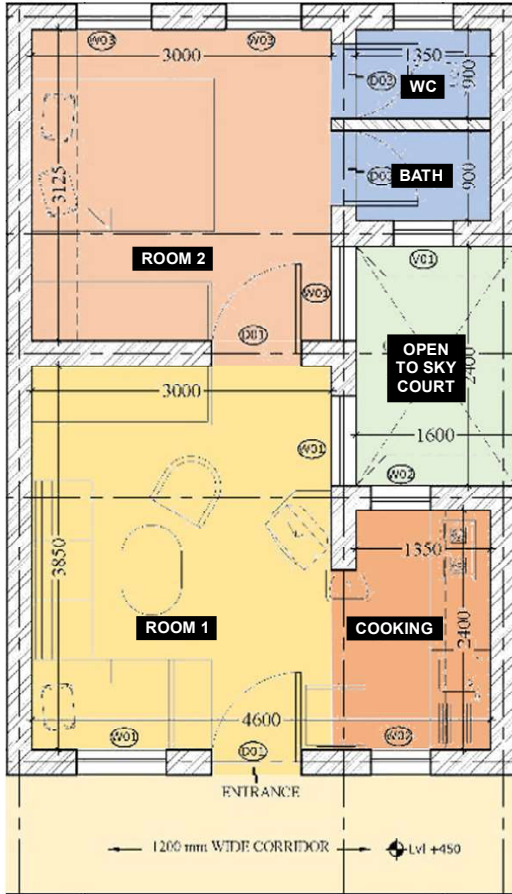


Most PMAY housing projects are designed and built by developers, with no community participation at all, and look like this one in Nagpur, where problems of bad construction and long distances from the city center are rife.

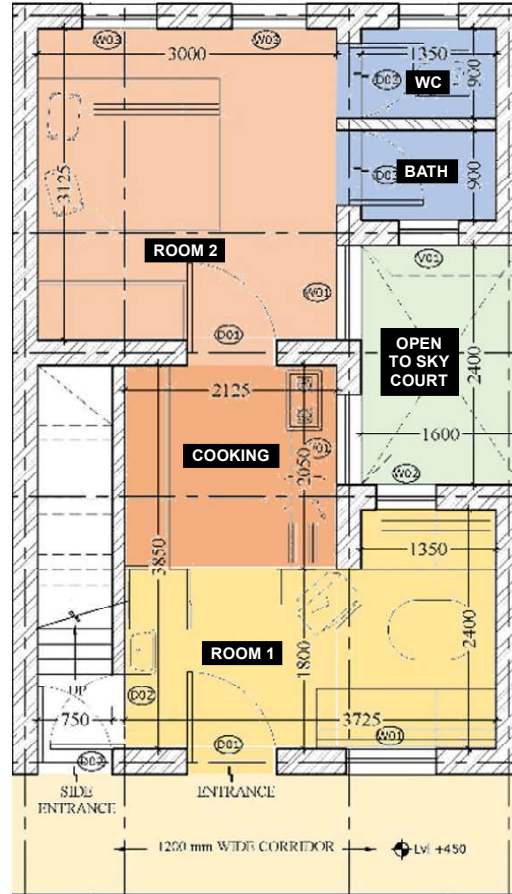
So if communities design and build their own housing, instead of big developers, what could it look like? To get some ideas, Hunnarshala invited Sanjaynagar residents to Bhuj to visit some community-driven housing projects there.



Besides showing the community residents some ideas and inspiring them, the exposure visits to Bhuj also included some local government officials from Ahmednagar, who would become key supporters and partners in the Sanjaynagar project.



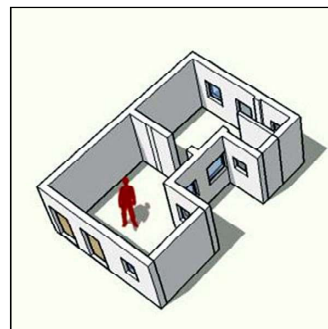
THE BASIC UNIT (without stair)



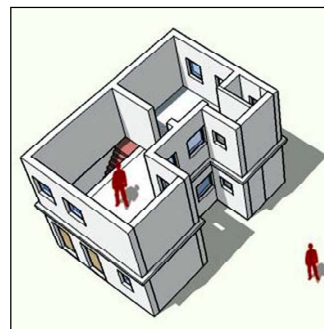
THE BASIC UNIT (with stair)

The first step in the design process was collectively designing a basic housing unit of about 30 square meters, which everyone was happy with. That unit became the building block of the eight buildings the eight cooperatives designed in the project, all of which are different.

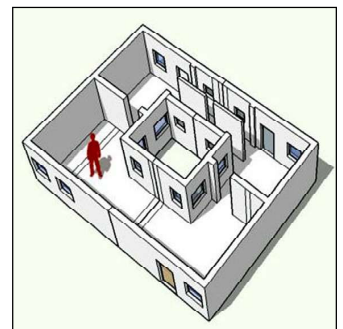
By adding an internal stairway, or making other small adjustments, the basic housing unit could be assembled in different ways, to create houses that accommodate big joint families.



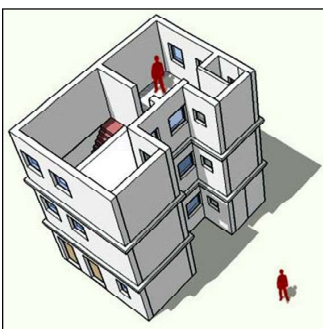
One unit alone



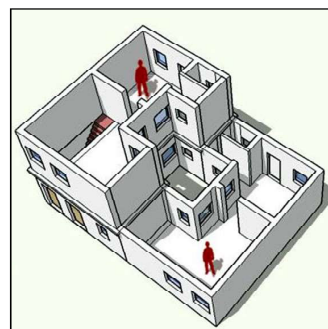
2 units stacked up



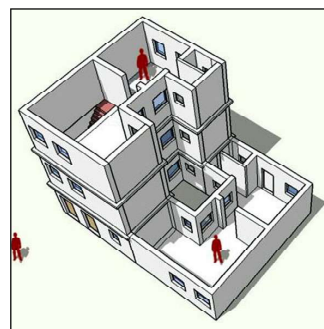
2 units side by side



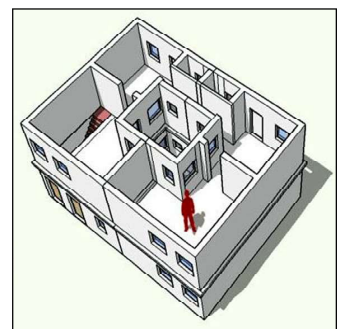
3 units stacked up



3 units stacked and beside



4 units stacked and beside



4 units stacked and beside



Once the community members had divided themselves into eight groups of families who wanted to live together and formed their own housing cooperatives, the complex, people-driven design process in Sanjaynagar really began.

EXAMPLE: PATHARE FAMILY

- Family name: Pathare
- Swapnapurti Housing Cooperative (Building 6, with 33 units)
- Number of households in family: 2

The 2 housing units occupied by the Pathare family have their own entrances, but are connected internally by a stairway.

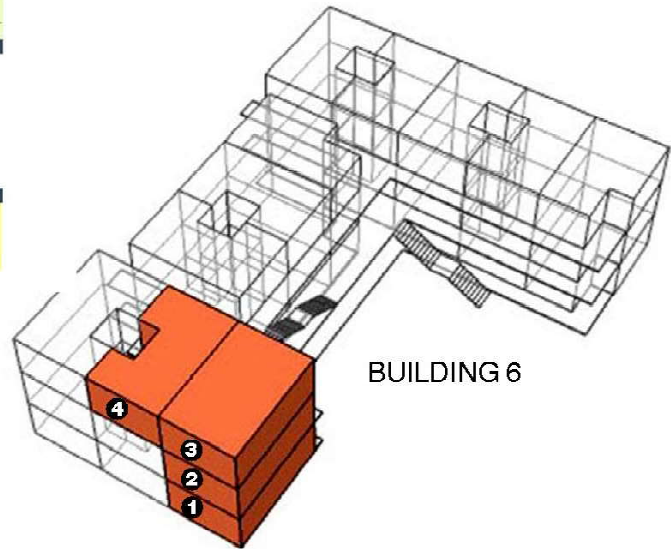
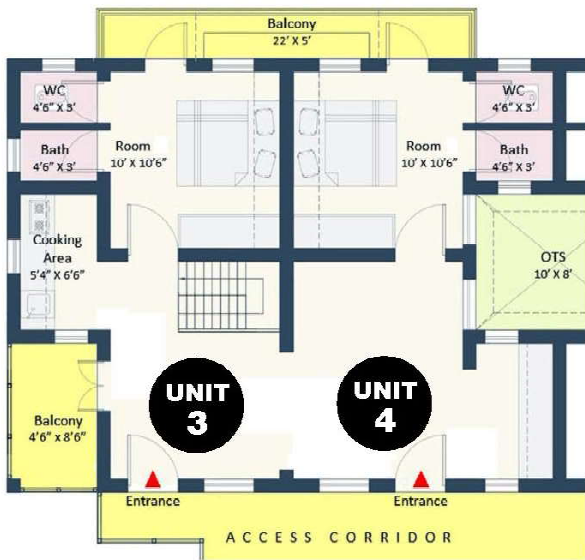
UNIT
1

Pramila Dattatrey Pathare (45), a widow, will occupy the ground floor apartment. Pramila and her daughter-in-law will cook together in the ground floor kitchen.

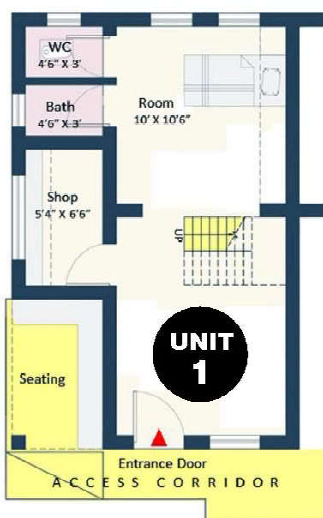
UNIT
2

Pramila's son Kamlesh Tattatrey Pathare (22) will live in the second-floor unit with his wife Sunita (21) and their two children, Aryan (3) and Aruni (1).

Here is an example of how one family in Building number 6 designed their 2-unit house, and figured out with their neighbors how to fit it into the building they designed together.



BUILDING 6



EXAMPLE: GAWALI FAMILY

- Family name: Gawali
- Swapnapurti Housing Cooperative (Building 6, with 33 units)
- Number of households in family: 4

The 4 housing units occupied by the Gawali family all have their own entrances, but are connected internally by stairs.



Chandrakala Ram Gawali (50), a widow, will continue to run her provisions shop from the kitchen space in her ground floor unit. She won't need the kitchen because her daughters-in-law upstairs will cook for her.



Chandrakala's youngest son Pradeep Ram Gawali (22) is still a bachelor and will stay in this unit with his 70-year old paternal grandmother Manjulabai.



Chandrakala's eldest son Ishwar Ram Gawali (28) will stay in this unit with his wife Puja (24) and two daughters Purvi (6) and Shruti (4).



Chandrakala's middle son Vikas Ram Gawali (25) will stay in this unit with his wife Rajashree (22) and daughter Swarali (1), but the families of the two brothers will live and cook together.

And here is an example of how a much larger joint family in the same building designed their 4-unit house and worked with their fellow cooperative members to fit it into the puzzle of their new building.



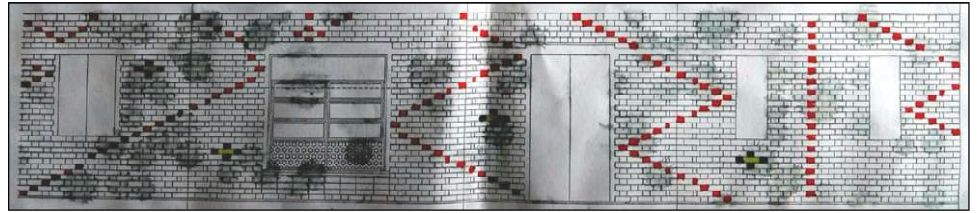
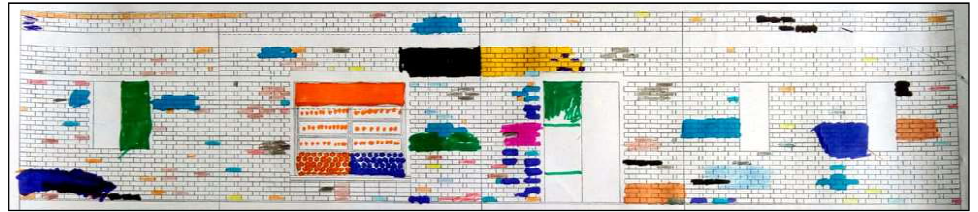
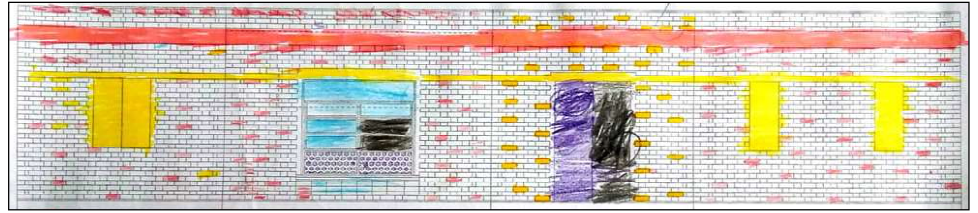
▲ Here is the final layout plan for the redevelopment of Sanjaygar, with each of the eight buildings arranged around its own courtyard - carefully designed to preserve all the mature trees.



▲ And here is a computer-generated picture of how the project will look, from a crow's perspective, with the courtyards, trees and small "chowks" which bring air and light into the buildings.



The load-bearing walls in the project are made of strong and environmentally-friendly fly ash blocks, with a few burnt clay bricks thrown in for pattern. To help the community people take part in deciding on the patterns, the architects developed these templates and set out the magic markers - with these colorful results.



Here are some photos from the construction site taken in October 2020, when the work on Building number 6 was about half finished. When the pale gray fly ash bricks (which come from a local producer) are combined with the red clay fired are quite lovely. These walls will not have to be plastered, and that helps keep the building costs low.





More photos from the construction of Building number 6, taken in September and October 2020. The black-cotton soil conditions on the site meant that the pile foundations had to go down five meters, so the foundations accounted for nearly 30% of the construction costs.



Here the arched walkways that will connect all the buildings are being constructed by the local contractor's masons on the site.



To save on steel and cement, the 3rd-floor rooms are all spanned with these beautiful shallow domes, which support the roof terraces.