





Bhenna Tola

CASE STUDIES OF COLLECTIVE HOUSING IN ASIAN CITIES SERIES • NOVEMBER 2022

Here is another small housing project in the provincial city of Jhenaidah, which shows how much even very poor, marginalized community people - and particularly women - can do to design and build solid, comfortable, low-cost houses for themselves, when they are supported by sensitive community architects and are allowed to control the money and the project themselves. This much-visited project - and it's sister project in Mohishakundu Shordarpara - are helping to show many in Bangladesh that peopledriven housing works and can do a great deal to help solve the country's very big housing problems.

- Project Bhennatola Community upgrading
- Location Jhenaidah, Bangladesh
- Size 62 households
- Finished 2017
- Type On-site upgrading of a very old inner-city community, on land the people own individually.

CONTEXT, PROCESS AND PARTNERS

The city:

Jhenaidah is a small district capital in the lush, rice-growing heartland of southwest Bangladesh. The town, which is built on the banks of the Naboganga River, is very old and is sprinkled with ancient mosques and temples. During the Mughal period, when Jhenaidah was part of the Narail princely state, the area was famous for the fine muslin that was woven there and the river oysters that were harvested and burned to make lime for plastering and masonry. Jhenaidah is just 150 kms north of Calcutta, which was the capital of British India from 1772 to 1911, and in 1793, the British East India Company set up a police station and jail there. This was important because as the empire expanded, it needed an ever-growing network of police posts to catch and lock up locals who didn't go along with the British laws it imposed to facilitate its various projects of commercial exploitation.

After Bangladesh won its independence in 1971, Jhenaidah was turned into a district in 1984. The city today is bustling and full of life. The municipal area has expanded from the old British colonial center to both sides of the Naboganga River, and the two sides are now connected by two old bridges and five new ones. The municipality is divided into nine wards, and has a population of 256,000. Because the city is small, by Bangladeshi standards, people in Jhenaidah tend to know each other.

A recent survey carried out by the community network identified 81 low-income communities within Jhenaidah's municipal area, where some 30,000 people (11% of the city's population) live. There are many NGOs working in these communities on issues of health, education and socio-economic development. There are also a lot of agencies offering microcredit to individual poor households, and as in many other Bangladeshi cities, the poor take many loans and find themselves in a perpetual cycle of indebtedness that harkens back to the dark days of generational indebtedness to the British indigo planters.

The community:

People began settling on this land, near the Naboganga River, in 1971, after the end of the Bangladesh's liberation war. In the beginning, there were about twenty families living in the community. Most of them were from the Hindu *Karmakar* caste and practiced their traditional caste-based trade of blacksmithing. Many also earned a little income by raising vegetables and other crops on open land around their houses, which was then still untended and forest-like. Later, many other families joined the small community by clearing pieces of land and building their houses, and the settlement grew. In that way, they created their own society. The community was named after the black castor oil plant, which is called *bhenna* in Bangla and was then growing all over the area.

Nowadays, most of the residents of Bhennatola have left their ancestral and caste-based trade, but a few families still do blacksmithing. Most men in the community now support their families by working as agricultural day laborers, carpenters or skilled workers in metal fabricating workshops around the city. Most of the community women take care of household work, cultivate kitchen gardens and raise animals (chickens, ducks, goats and cows) for food and selling.

When the housing upgrading project began in 2016, conditions in the run-down community were not good. More than half of the 62 houses were made of fragile and temporary materials like mud, bamboo and corrugated iron sheets. People wanted to build permanent houses made of bricks - not only for comfort and durability, but also for many social reasons. But with their limited and irregular earning, it was quite hard to think of building that kind of house. There were very few toilets in the community then, and the children often used gardens and open fields to answer nature's call. For women, the lack of toilets and privacy were especially serious problems. There is only one access road that went along the edge of the community, built by the municipality. Even though the Bhennatola community is within the municipal boundaries, all the municipal services like water supply, electricity and drainage had not reached inside.

Despite these problems, the Bhennatola community has an atmosphere that is more like a rural village than a congested inner-city slum, with roomy courtyards, lots of trees, livestock roaming around and an easy friendliness. Most community members have fairly large plots of about four decimals (162 square meters), which they share with relatives. The Bhennatola community has its own system of self-governance in which a respected community elder is tasked with looking after the well being of the community members and helping solve whatever small problems come up. The community members come together frequently for Hindu religious festivals and special rituals that go with their *Karmakar* caste.

The community process:

Before the ACCA Program intervention in Jhenaidah began in December 2014, there was no network which brought together the city's poor communities. The communities had links with the municipality, but they had no system of linking with and supporting each other. Communal savings activities were rare, but some communities took part in saving schemes that were linked with microcredit projects run by NGOs. With modest support from the ACCA program, the community architects and organizers began initiating discussions in the city's poor communities about the importance of building a citywide community network. Initially, five communities joined the process and started their own savings groups - run mostly by women. Bhennatola was one of those five pioneering communities in the new network.

The first pilot community housing project, in the Mohishakundu Shordarpara community, began in 2015, with support from the ACCA Program. While that project was taking off, the Bhennatola community started preparing themselves by setting up a savings group and mapping their settlement, with support from the local architects. In 2017, a grant from the Selavip Foundation allowed a similar housing upgrading project to be planned and implemented in the Bhennatola community, which became the city's second community-driven housing project. The support from Selavip gave a big boost to the citywide and community-driven process in the city, and more communities started to join the network. While in the first community housing project in Mohishakundu Shordarpara was testing a new methodology, the innovations in the second project in Bhennatola were tried out boldly and successfully. At this time, the community architects started to work full time in the city, and that had a big impact on the project and subsequent work in Jhenaidah. Bhennatola, as the second community in the network added a newer dimension to the process in Jhenaidah city.

Initiating the project:

That first project in Mohishakundu Shordarpara demonstrated a more collective, more collaborative and more people-driven strategy for addressing housing problems. The project gave lot of inspiration to other communities in the Jhenaidah network and built trust in the community-driven development process - both in community network and in the larger city and municipal government. With this inspiration, the community network began to prepare the next community in pipeline for housing upgrading. The network had chosen Bhennatola since it had secure land, was well unified and had a serious need for housing improvement. All the communities in the network were deserving, but Bhennatola was little ahead of others in their collective action and savings. The community's willingness to work together led the network to decide that Bhennatola would be the second community for collective housing in the network. When the network got the opportunity of Selavip Foundation funding, the project started right away.

Support groups and partners in the project:

- Jhenaidah Citywide Community Network helped to mobilize communities in the city, selected the community for the pilot housing project, negotiated the housing loan agreement and worked to involve the local authorities in every stage of the process.
- Women's savings group in Bhennatola led the process in the community, including mapping, savings, planning and design, searching for good masons, procuring construction materials in bulk, managing the labor and supervising the construction process.
- Jhenaidah Municipality supported the project by approving the house designs and waiving the building permit fees, encouraging the community-led process, and also helped source better building materials in lower cost.
- **Co.Creation.Architects**, a local group of community architects, provided technical support for community mapping and affordable housing design, including innovative cost cutting building technologies and community-led construction management.
- **ALIVE**, a Jhenaidah-based NGO, helped with community mobilization and manage the fund in the project. At the end of 2018, the NGO stepped back from their involvement in the process.
- **Platform of Community Action and Architecture (POCAA)** is a group of volunteer architecture students and young professionals in Bangladesh who learn from communities, design housing and community improvements with them, and help in horizontal sharing and connecting with communities in other cities.
- ACHR's Citywide Housing Program was another regional program of the Asian Coalition for Housing Rights (with funding from the Selavip Foundation), which enabled a number of community networks in cities across Asia to expand on and consolidate the citywide and community-driven housing process that had begun under ACCA, with modest funding for big project for housing and decent poor fund.
- **Community Architects Network (CAN)** has been a good friend to the process in Jhenaidah, joining in some of the early community visits in 2014, providing guidance when challenges came up and boosting the city's energy to take steps towards housing, especially with the saving activities.
- Local volunteers and civil society organizations provided a lot of spontaneous and informal help to the communities with setting up workable financial mechanisms and dealing with formal procedures.

Civil engineers from Jhenaidah Polytechnic Institute volunteered for structural design, training of local masons and construction supervision when needed.

LEGAL FRAMEWORK OF THE PROJECT

Land tenure:

The Bhennatola community occupies 4.98 acres (about 2 hectares) of land. All 62 families in the community are individual owners of their small parcels of land, and all have individual land title papers. Often each family owns the land collectively with their relatives, such as brothers and uncles. To accommodate these extended families, many residents have divided their family plots into sections, with shared courtyards and common facilities like toilets, tube wells and worship spaces (*puja ghar*).

Government support:

In the beginning of the housing process in the Bhennatola community, the Municipality was actively involved. They had already seen the positive outcome in first housing project in the Mohishakundu community, and were supportive of the second project in Bhennatola. To build a house legally in Jhenaidah, people are required to apply for building permits from the municipality, which cost 5,000 taka (US\$ 60) each. When the Mayor inaugurated the housing project in Bhennatola, he waived the building permit fees for the 17 families whose houses were rebuilt. The mayor also became an important ally in the community process, and helped to extend the community-driven housing process to other communities within Jhenaidah and to other cities too. He also travelled with mixed teams from Jhenaidah to other cities in Bangladesh and to other countries to share the story of the community-city partnership in Jhenaidah. This time the municipality hosted and embraced visitors from outside with more interest and long-term commitment.

PROJECT FINANCING

Project costs and who paid for what?

Land:

The community members own their ancestral land plots individually, so there were no land costs in the project. In this community there were not much of disputes in land demarcation. Whatever they had they could solve it by themselves.

Houses:

The cost of constructing the basic structure of the 17 new houses (both single-story and two-story models) came to about 100,000 taka (US\$ 1,200) per house. That amount was financed by a 100,000 taka (US\$ 1,200) loan from the Selavip fund, as managed by the network. The loans were to be repaid in five years, in weekly installments of 500 taka (US\$ 5.83), to the community network's city-level loan fund, where the funds would revolve to finance house construction in other communities. The loans came in the form of building materials, not cash. Each family invested another 20,000 taka (US\$ 240) to add doors, windows and a toilet to their new houses. The women's saving group required that each family build the toilet first, to get the housing loan.

Infrastructure:

Despite of being within the municipal area, only municipal electricity service has so far reached the community. So there was no extra cost associated with this. The community use water from tube wells within the settlement and are content with the water quality. In 2020, with the help of a local NGO and the Municipality, the community network built a few paved pathways and drains in the community.

Loan repayment troubles:

When the ACCA project began in Jhenaidah in 2014, the intention was that the US\$ 41,000 ACCA funds would be used by the new community network to seed its own city-level fund, with the first loan from the fund going to the Mohishakundu Shordarpara community (the first housing project) to finance the upgrading of the first 20 houses. As the housing loans to Shordarpara were repaid, the funds would then revolve to finance housing projects in other communities that were part of the network. Although the city-level fund has not yet been officially set up, the \$24,000 loan for the 20 houses in Shordarpara was disbursed, and all 20 families signed a stamped agreement to collectively repay the loan to the citywide network.

The same financing arrangement was adopted for the Bhennatola project, and the US\$ 20,400 grant from Selavip, which financed the 17 houses, was to be repaid as a loan to the network's citywide fund. There

have been serious loan repayment problems in both communities however, and the repayment problems have prevented the community-driven housing process in Jhenaidah from growing and helping other communities to start upgrading their housing.

Since the process of establishing a new community-managed finance system was new to Jhenaidah, many things were done to help build everyone's capacity to understand and manage this new kind of finance system - including the NGO, the community architects, and the communities in the network. Initially, the families in Mohishakundu Shordarpara and Bhennatola made their weekly housing loan repayments. Later, there were troubles of political interference and dishonesty, and the loan repayments in both communities stopped in 2017. The community network, the NGO and the municipality all worked to help the communities resolve these problems, and the repayments resumed in 2019 in both communities. But after the Covid-19 pandemic hit and people lost jobs and earning opportunities, the loan repayments stopped again. However the citywide community network has become stronger and more organized, in terms of community actions, savings and negotiation with Municipality and other NGOs, and the hope is that the repayment problems will eventually be resolved.

DESIGN AND CONSTRUCTION

Design process:

Bhennatola was the second community in Jhenaidah to design and build collective housing. Community leaders from the first project at Mohishakundu Shordarpara taught residents in Bhennatola how to do community mapping. Community architects and mobilizers took a back seat, and watched the beautiful process of women helping each other to plan and build better houses. The first community took the lead and helped the Bhennatola community women to measure and map their houses and settlement. Since Bhennatola didn't have any drainage system or proper road while doing mapping, they did the future community planning as well. A few of those plans were later implemented, with assistance from the municipality and another NGO.

The Bhennatola community members have quite large land plots that are shared among relatives, so "homestead planning" was even more important. How all the houses in one homestead would face the shared courtyard, where the livestock would stay, and in which direction the houses could be expanded - these were all important design aspects for this community and became key challenges in the design process. The houses that were adjacent to the main road planned for future shops for earning. Spaces for community-gardening spaces were carefully designed also. Every tiny bit of space was designed together.

Community architects and house owners had long dialogues while planning together. Women were meticulous to place the house, kitchen and toilets in relation to the courtyard. A few mothers got involved in designing safer spaces where their children can play and they can keep an eye on them from the house. It was bit challenging to bring the women in design decision-making, as they had not often talked with strangers before. But with friendship, trust and involvement of other community women, it became easier. A few of the women excelled at handling the process and later became mentors for other women in the network.

We had few dream-house workshops to understand their aspirations. In the design workshops, each household reflected on their aspirations by making models and drawings of their "dream houses." The basic elements of the new layout plan and the houses that were built came out of this workshop. Due to the budget constraints of the 100,000 taka (US\$ 1,200) housing loan, each family then had to work out a balance between financial limitations and their housing aspirations.

To stretch that limited budget and build as much house as possible, the community architects and engineers worked with local masons to incorporate several low-cost construction techniques (like compromising with the ground floor height, brick walls without plaster, pre-cast concrete slabs for stairs, door and windows without lintels, frameless pivoted doors and windows and concrete-reducing "filler floor slabs" with earthen pots), without forgetting the aesthetic part of the design. The people chose fired brick as the main building material for their houses, due to the material's availability, durability and low maintenance. Most importantly, a brick house is perceived by everyone as providing a higher social status.

A team of community leaders from Dinajpur - a city in the northern part of Bangladesh - visited while the construction was going on, to share their knowledge about building low-cost hygienic toilets. It was a wonderful three-day workshop, where every woman took part and did hands-on work in building actual

toilets in their family compounds. Women and children were specially quite happy to build new toilets. This horizontal sharing workshop helped the community to boost their desire to have proper toilets.

The whole design process was facilitated in such a way as to build trust and friendship between the community and the support professionals - a process that was much helped by the numerous meals everyone shared together during the design and construction process, prepared by the community women.

House design and layout plans:

There aren't many strict rules in Jhenaidah which govern the design and construction of houses, except that a certain space be left on all sides of the plot. Most people in the city hire local masons to design and build their houses for them. They invest a lot of money in their houses, but because they work alone, and without any planning or design assistance, they often end up with poorly-designed houses that don't meet their real needs very well. This kind of individualized housing development also tends to isolate people and erodes the sense of community.

All these factors were taken into consideration in planning the more collective and more participatory housing process in Bhennatola. During the course of the design workshops, two house types emerged as the most practical options for meeting people's family needs and fitting on the different-sized plots - both of which were designed to be flexible, so people could add rooms and expand their houses in the future. Scale models were made of these two houses and construction costs were estimated. Then, two actual demonstration houses were constructed with the two most vulnerable families. Community leaders and local builders built the houses under the supervision of community architects and community organizers. These houses gave everyone a powerful means of imagining and experiencing houses that were little bit different than the ones they had been living in. Through this process, the whole team learned and understood about the construction costs, design features and new techniques that helped lower the cost of the houses. Later, the community took responsibility for building the rest of the houses, with assistance from the community architects.

- House type 1: Single storied brick house with corrugated iron sheet roofing, with two rooms and a generous verandah. The house has an area of 360 square feet (33.45 square meters). Each room is 12 x 10 feet (3.7 x 3 meters) with a verandah of 5 x 21 feet (2 x 6.4 meters). This basic house costs 100,000 taka (US\$ 1,200), and each family would add another 20,000 taka (US\$ 240) for building the toilet and making the frameless pivoted windows and doors.
- House type 2: The two storied brick house with corrugated iron sheet roofing has two rooms of 12 x 10 feet (3.7 x 3 meters), one above the other, which are connected by a stair made of precast concrete slabs. The upper floor has a small balcony as a landing of the stair. The house has a total living area of 300 square feet (28 square meters). This basic house costs 100,000 taka (US\$ 1,200), and each family would add another 20,000 taka (US\$ 240) for building the toilet and making the frameless pivoted windows and doors.

Housing construction:

After building the two demonstration houses, the community people worked together to build the other 15 houses, managing the whole construction process themselves. The housing loans were not disbursed in cash, but in the form of building materials. And the community members purchased all the building materials together, in bulk, and the women's savings group worked with the NGO to keep accounts. The community people dismantled their old fragile houses very quickly. During the time their new houses were being built, people stayed with neighbors or in makeshift shelters on the site.

Two groups of skilled local masons were hired by the women's savings group to build the remaining 15 houses. The community people provided all the unskilled labor (carrying sand, soil, bricks and trays of mortar, and breaking up brick chips for aggregate and infill), working without pay, after completing their own household chores. Each house owner took responsibility for curing the new brick walls with water, and moving sand and bricks around the site. A volunteer civil engineer from the Jhenaidah Polytechnic Institute helped to monitor the structural aspects and to oversee the quality of the work. Several innovative construction techniques were adopted to reduce costs. A few of the families raised additional funds to build more rooms and add more finishes to their new houses immediately after the core house construction. Interestingly, each houses became visibly unique due to the type of different material usage by individual households. For an example, the carpenter had all heavily decorated woodwork in the staircase railing and door. The metal worker expanded verandah and protected it with metal grills, which they eventually converted into a dining room. And indeed, the color of the earthen pots in the filler slab roof kept changing in a paint worker's house. The community became beautifully converted into an artwork of the core houses that reflect their own everyday aesthetics!

Cost cutting strategies:

Since the housing process in Bhennatola was designed and managed by the community, the cost was much lower than conventional house construction. The skilled masons were all hired from within the community network, and the construction management was done by the community women. The community architects were able to incorporate innovative and cost cutting design solutions, without compromising on the quality of building materials, so that the houses were not perceived as being somehow inferior. Cost cutting strategies were adopted inspiring from architect Laurie Baker such as, filler slab, pre-cast slabs for stairs, window without lintel, pivoted windows without frames, reduction of floor height etc. These were warmly accepted by the community as they could do it within their budget. Local community architects volunteered in the process, which also reduced project costs. Since lots of local professionals volunteered to help, that eliminated the costs of hiring outside professionals. The municipal government's engagement with the project helped speed things up, and helped reduce paperwork costs, since the mayor agreed to waive the building permit fees.

Project timeline:

- **2014:** Community mobilization starts. Savings group in Bhennatola begins.
- **2015:** Community mapping workshop is organized in October.
- **2016:** Housing design workshops in Bhennatola. First two demonstration houses are built with the most vulnerable families.
- **2017:** Materials are purchased for the remaining 18 houses, and construction is finished in 6 months.

IMPACTS OF THE PROJECT

Impacts on the community:

The housing process dramatically transformed the environment of the community and the neighborhood which surrounds it. Before the intervention, the people's fragile mud houses and flimsy roofs were not strong enough to withstand strong winds, and living in those houses during the monsoon and winter seasons was difficult. While the physical transformation was evident in the community the impact of visitors visiting from home and abroad and appreciating the process amplified the social transformation. It has made them confident and gave them enormous courage. The outcome of this collective effort is rooted in the strength of doing things together. That collective strength has brought about a transformation in people's social, psychological and communal well-being.

Impacts on women:

The housing process helped unite the women in the community. Normally, women in Bangladesh are not much involved in house design and construction - that's traditionally seen as men's work. But the women in Bhennatola community took the lead in every part of the design, planning and construction of their new houses, and that boosted their confidence. Being part of the network and visiting other communities also exposed them to new ideas and new solutions and gave them a better understanding of their city. It was also important that many of the community architects and others professionals who supported the project were women - this also empowered the community women and showed new possibilities. The self-help housing process has given the women many new ideas for future projects as they say *"In our heart, we always think how to go forward. The process has established a base, now every woman in the community work for better future".*

Many people from government agencies, from local and foreign academic institutions and from international development agencies have visited the community to see the new housing. The admiration expressed by all these distinguished visitors has given the women in the community a new dignity and a new position. They have also been invited by others from within Bangladesh and abroad to share their experiences, and that also gives them confidence, happiness and a sense of dignity.

One of the leaders from this community Kolpona Rani Kormokar said, *"I have learnt to manage, procure and supervise construction work along with the responsibilities of my family and husband"* while another Jomuna Rani said, *"My husband, children and in-laws respect and appreciate what I do for our community"*

Impacts on the children:

During the housing process, children in the community helped their mothers to measure and map the whole community and to draw their own houses. In this way, the aspirations of many women were reflected by their children, through their drawings and models. Learning new skills such as mapping and making models was a fun and empowering process for these children. The appreciation of their friends and neighbors for

the new houses makes them proud of their community. They feel better in school now, because they can proudly invite their friends from better-off communities to come to their houses to study and play together. The work their mothers have done to improve their houses and living conditions is already reflecting on the children's future. Children are inspired by their mothers work as teachers appreciate them at school. So much have been changed without any direct intervention with the kids. During COVID-19 pandemic the children of this community became member of Citywide Children Gardening Network and created gardens around their houses.

Impacts on other low-income communities:

This first demonstration of an affordable, possible, beautiful and people-driven housing alternative has inspired all the poor communities in the city of Jhenaidah. There have been lots of visits and exchanges of ideas and good practices between communities in the city - starting with housing, and later including many other things, like growing vegetables together in community gardens. This has helped build a stronger sense of togetherness within the network. Jhenaidah's community-led process has become an inspiration for many other low-income communities in other parts of Bangladesh - both urban and rural. The process that began in Jhenaidah is being scaled up and replicated now in 20 municipalities across Bangladesh by one of the big NGOs. The Prime Minister's office has visited the community housing projects in Jhenaidah and is trying to pilot a similar community-driven housing process in one of the rural areas in Khulna District.

Impacts on architectural education:

There are many students of architecture with a desire in their hearts to make their technical skills more useful by working with disadvantaged communities to improve their living conditions. But it is not easy to find opportunities to work with poor communities. The housing process in Jhenaidah was opened up for students and young professionals from around the country, and it provided an opportunity for them to learn from these communities, who were leading their own change process. Several universities have also taken advantage of this kind of hands-on learning in communities. Now, the learning is not limited to the classrooms, but has broadened to include on-the-ground work in communities. In these ways, both the students and the community people are learning from each other. In recent year communities in the network are hosting young professionals for home-stay while they are working with the household to find solution and design together.

Impacts on local authorities and city planning:

The housing process in Bhennatola is the continuation of the first housing process that happened in Jhenaidah. It strengthened the process locally and nationally quite firmly. The relationship between the lowincome communities and the city authorities in Jhenaidah has changed too. Usually, development is seen as something the government delivers to the poor, who are the passive recipients of someone else's idea what they need. The housing and community network process in Jhenaidah has challenged that top-down view of things, and built a new confidence on both sides to work together - as equal development partners who bring different skills and resources to the task of making the city better for everyone.

As the municipality and the communities have understood the power of this partnering, many offshoot development initiatives have taken off, to improve other aspects of the city's public life and spaces. This project has given confidence to the city to plan with more involvement of its citizens. The project poses the question, *"If poor people can design their own housing together, why can't the citizens design their own city together?"* Now in Jhenaidah, citizens' groups of different backgrounds have come together to do just that, and are designing many aspects of their own city. Some of their plans are being implemented, including the creation of new pedestrian pathways and public spaces along the *Naboganga* River. This process has been recognized internationally by winning Union of Architects 2030 award and also shortlisted by Aga Khan Award for Architecture 2022.

Impacts on housing policy:

Even though Bangladesh has such enormous problems of inadequate and insecure housing for the urban poor, community-driven housing initiatives are still very rare. By becoming an important example, this community-led housing initiative in Jhenaidah could lead an important new direction of community-led housing in the country. Although the project is small, it has shown a new process, in a context that is starving for new ideas, new solutions and new ways of working. Many organizations are already using this example positively and trying to replicate it and scale it up. Lots of policy makers, practitioners, researchers, activists and community people from other cities have come to visit and learn from Jhenaidah.

Problems:

Lots of good things happened in this process, but there were certainly plenty of challenges. The traditional male leaders in the community hampered the process by discouraging the women from repaying their housing loans. At the beginning, the loan repayment went quite well. But with time, the people stopped

repaying, and conflicts between community members arose. Because the citywide community network was not very strong, they were not able to help the community work through these loan repayment problems. The municipality was also unable to help, since they had no experience of this kind of community-managed finance. When everyone saw that the people in Mohishakundu Shordarpara (the first community) were not repaying their loans, Bhennatola community also lost confidence in the process and stopped repaying their loans. Where the funds were supposed to revolve and help many more families rebuild their houses, no more house could be built in this community.

Later, when the enormous national NGO BRAC launched a new community development project in Jhenaidah, it overlooked the existing community network and survey data the communities had collected, and imposed its own system. Because the community network was not strong enough yet, they were not able to contest this imposition of new models and new controls from outside. As a result, there were new divisions and new sources of confusion among the city's low-income communities and in the municipal government. Dependency on NGOs in Bangladesh has been a problem since the country became independent in 1971. The predominance of NGOs has left communities and their organizations and networks weak and reluctant to believe in their own power.

Impressions from community members:

Ms. Kolpona Rani Kormoker (*community leader*) "The most important transformation that has happened through this housing process is, the exposer that we, the women groups, have got. Before the intervention, we could hardly interact with outsiders and were quite shy to talk. The process has helped us to go beyond our community and connect with other women of the city. Also, going to different places to share has connected us to greater platform. This has made us confident."

Ms. Jamuna Rani Kormoker (community leader) "There is an overall uplift in the community, be it in the physical or mental situation. The children have got exposed to a different environment which is helpful for their future. However, its sad that we couldn't hold the good change and stretch it further for members losing interest. But whatever has happened till now in our community is one of best changes for us."

FOR MORE INFORMATION ABOUT THE PROJECT

This case study was written in August 2022 by Khondaker Hasibul Kabir and Suhailey Farzana, who work with Co.Creation.Architects in Jhenaidah.

Please check out these films and reports about the housing process in Jhenaidah: https://www.youtube.com/watch?v=1R9yrGE3QkE

https://www.youtube.com/watch?v=ygpJaSOHBjl&feature=youtu.be

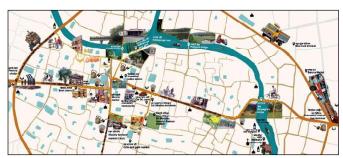
http://communityarchitectsnetwork.info/upload/opensources/public/file 26082016102031.pdf

https://www.youtube.com/watch?v=wkhpiljLGdQ&feature=youtu.be

For more information about the project, please contact: Mr. Khondaker Hasibul Kabir Co.Creation.Architects co.creation.architects@gmail.com e-mail: <u>khondaker.kabir@gmail.com</u> website: <u>https://cocreationarchitects.wordpress.com/</u>



Jhenaidah District is in the lush, rice-growing heartland of Bangladesh, just 150 kms north of Calcutta (now called Kolkota).



On this tourist map of Jhenaidah, you can see the Naboganga River snaking through the commercial center of town. The Bhennatola community is on the banks of the river.





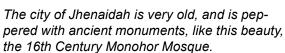
An aerial photo of the commercial center of Jhenaidah, a bustling district capital with a population of about 256,000 people.

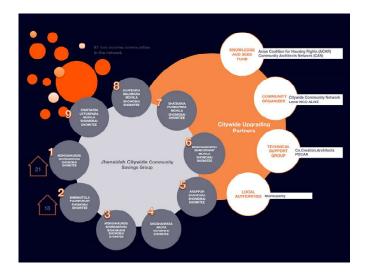




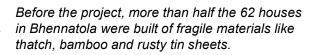


Since 2014, the citywide network of women's community savings groups has brought together women from most of the city's 81 poor communities, including Bhennatola. The network has undertaken many development initiatives, in collaboration with the municipal government, local NGOs and community architects.







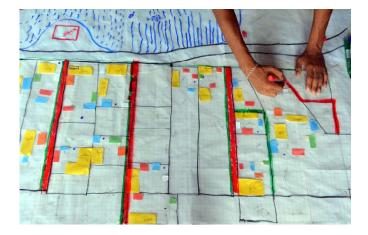




Most of Bhennatola's residents come from the Hindu Karmakar caste, and some still practice their traditional caste-based trade of blacksmithing.



In 2016, a series of community planning workshops were organized by the architects to help the Bhennatola community members plan improvements they would be making to their houses, their joint-family clusters and the overall settlement conditions

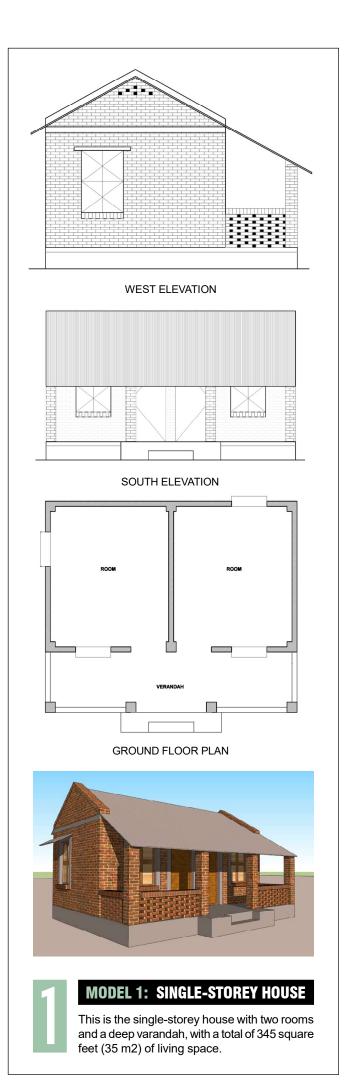


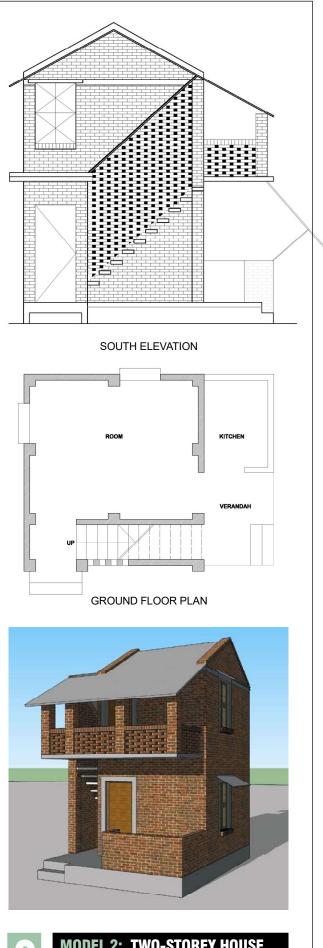




The community women were especially keen on the house design, and wanted to bring all their detailed ideas about house planning into a set of beautiful models, which later became the basis for the two house models.









MODEL 2: TWO-STOREY HOUSE

This is the two-storey house with a room on each floor and a balcony, with 385 square feet (36 m2) of total living space.



The first two model houses to be built were for vulnerable families (above) whose housing needs the community decided were most urgent.





Here the brick masonry walls of the first model house are starting to go up. All the unskilled labor was provided by community members.



The houses incorporated several cost-saving building techniques that had been popularized decades earlier in India by the architect Laurie Baker. One of those techniques is this stairway made from pre-cast and reinforced stair slabs. Cost were from Bake slab stair lintel witho redu heig





Another cost-saving building technique from Laurie Baker was the "filler slab", in which the use of expensive concrete in floor slabs is much reduced by placing terra-cotta pots in the formwork, to create voids where the material is not doing any structural work.



Another cost saving technique was the use of these simple timber pivot windows, which don't require any wooden frame.







Here the two-story model house is being constructed. The projecting bricks along the vertical corners of the walls are there to make it easy to expand the house in the future, so the new walls can be structurally tied to the original part of the house.





The first two-story model house, with cheerful blue and white trim, quickly became a venue for meetings and discussions about the next stages of the project.











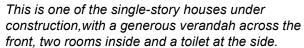
The first two-story model house worked as a powerful tool for building confidence and showing everyone what was possible. The house was much visited and much admired - by other community members from Bhennatola, as well as community people from other settlements in Jhenaidah and other towns in Bangladesh.













Two of Bhennatola's practicing blacksmiths hammer heated iron bars at the forge they have set up outside their new single-story house.



Some families built their new toilets right next to their houses (above), and others preferred to build them as a separate structure (right).







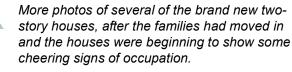


This new two-story house, photographed in the golden early morning light, is completely finished and ready for the family to move in.













Women in the Bhennatola savings group took part in a citywide settlement survey and mapping process, with support from ACHR and SDI.







The housing project at Bhennatola has been visited by many groups, including a group of national government officials (above left), and a group of international architecture students (above right).