

ARCASIA Ar. Barry Will Award

2021



# COMMON GROUND

Community-led productive garden  
and learning centre



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# Inspiration from Ar. Barry Will and his philosophy

ARCASIA launched the Ar. Barry Will Award 2021 in commemoration of renowned architect and urban planner Barry Will, who had always promoted and contributed to environmentally sensitive designs. The theme of the award was to have a focus on socially-related architecture.

Platform of Community Action and Architecture is a network of professionals who work at the community level to create better living environments by co-creating spaces. POCAA's winning proposal for the ARCASIA Ar. Barry Will Award 2021, 'Common Ground', is about creating community-led productive gardens and collective learning space, focusing on waste management in two of Dhaka's densely populated low-income communities.

Our objective was to initiate 'placemaking', which brings together the community, especially the women and youth groups, to create inclusive, green breathing spaces. The process of placemaking would positively impact the mental and physical health of the inhabitants and take a step closer to a healthier neighborhood.

To implement this work, we are working primarily with the natural leaders of low-income communities. Through community mapping and trust-building workshops, we worked with four communities (Gabtoli City Colony, Kallyanpur Adarsho Boshoti, Chand Uddyan community, and Dwipnagar community). We did placemaking interventions of various scales in three communities and produced a book for children, condensing the learning workshops for place activation.



## Actors



## Community

- Leader
- Saving Group
- Women Group
- Men Group
- Children Group
- Youth Group



## Technical Assistance

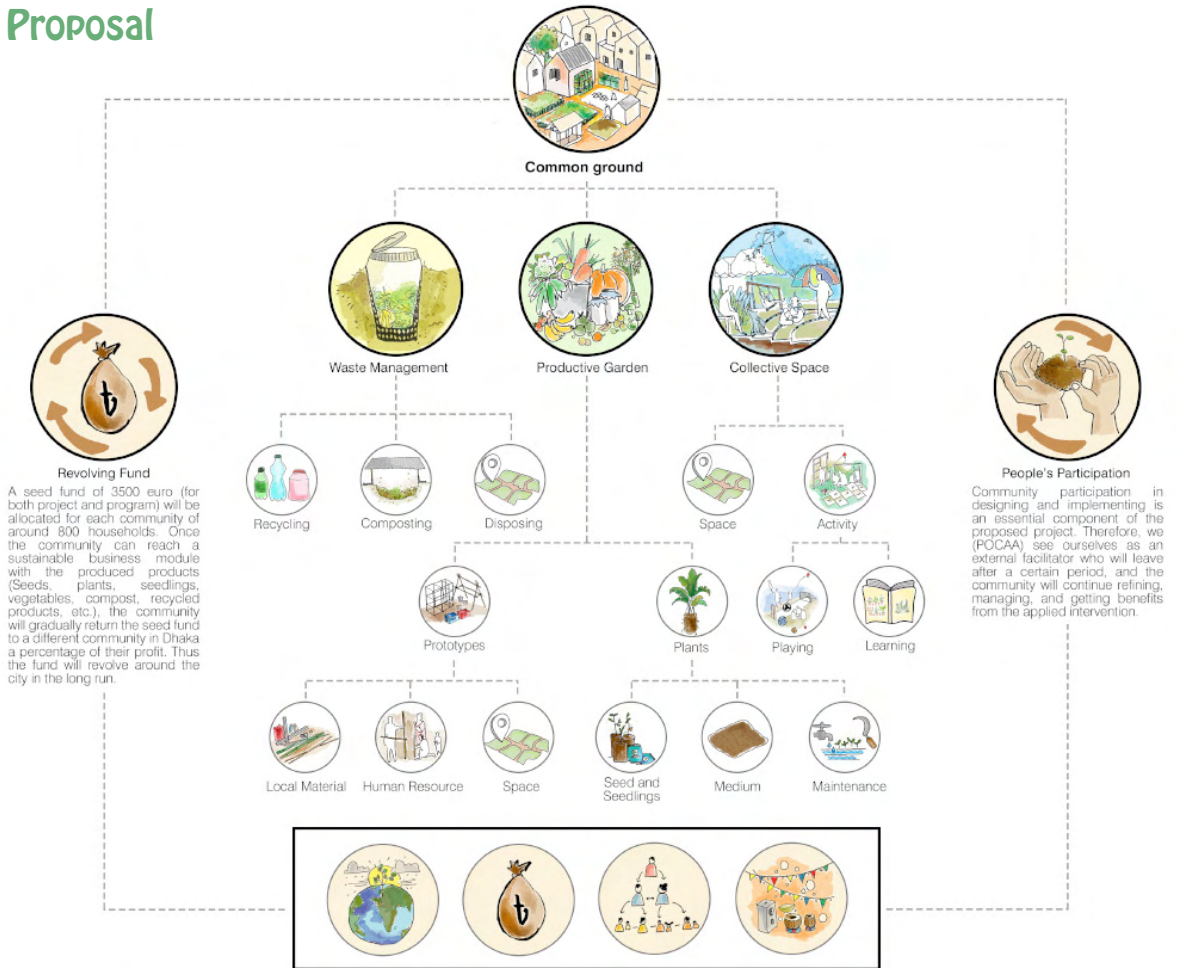
- Designers
- Builders



## Financial Assistance

- Donor

# Proposal



The toolkit will be discussed with the community to determine their existing conditions, resources, needs, and aspirations regarding communal space for physical and mental health. From that point, the community will decide, design, and build appropriate interventions together. While waste management and productive gardening will be the common interventions across all participating communities, the collective space for gathering, playing, or learning will be defined and programmed by the community according to their need. From our previous researches and communications with these communities, we understand that the collective space can be a learning space in Gabtoli and a youth center in Dholpur. However, these functions are yet to be decided and detailed out more by the community groups themselves, where we will play facilitator/ animator.

## Background of informal settlements in Dhaka, Bangladesh

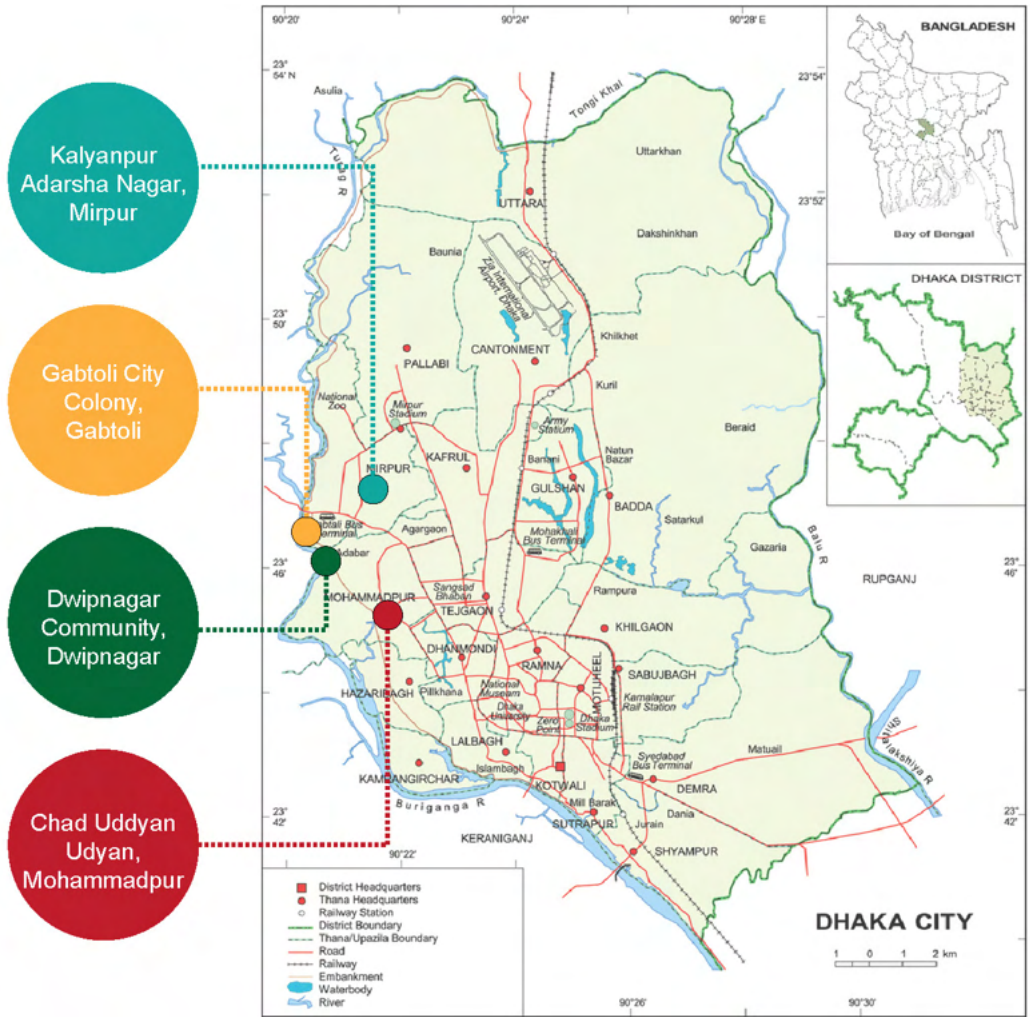
Being one of the most dense cities in the world, Dhaka has a vast lack of open spaces in general. The ideal amount of greenery for a city is 25% of its total area, but in today's Dhaka, barely 5% of the city is green and open, which is hugely inadequate and unhealthy for its residents. And in low-income communities, finding a breathing space for the inhabitants is almost impossible. Almost one-third of the city's population (over 12 million) lives in more than 4,500 slums in the capital city of Dhaka alone, which are characterized by congestion and a lack of access to utilities like electricity, clean water, and sanitary facilities. It is estimated that more than half the slum inhabitants are children, and they suffer the most physically and mentally from growing up in such an unhealthy environment. Children living in such areas have a greater chance of delaying or failing to enroll in school, and even if they do, they have higher chances of dropping out. They usually utilize the narrow alleys, veranda spaces, shopfronts, and school premises to play and spend time

with each other. They invent games with their imagination, which can be played in those narrow spaces without additional equipment and resources.

### Methodology

We began working with the communities to create a shared understanding of current situations and people's waste and productive gardening habits. We used tools such as observation, focused group discussion, interviews, and, most importantly, community mapping to create a helpful database for professionals that can become a communication and negotiation tool for the communities. Later, we conducted a series of placemaking, food growing, and waste-to-resource workshops with children in the four communities. This report will hopefully unveil how this information creates awareness, and placemaking has become a continuous process within the community, especially for children.





● Kallyanpur Adarsho Boshoti    
 ● Gabtoli City Colony    
 ● Chaad Uddan Community    
 ● Dwipnagar Community



**Top:** Four explored communities (Kallyanpur Adarsho Boshoti, Gabtoli City Colony, Dwipnagar community and Chand Uddyan Community) in the context of Dhaka city

**Bottom:** Understanding density of the four communities

**Left:** The tool of community mapping

‘Placemaking’ is a method for promoting the “right to the city,” the democratic power of design, and the potential for urban development. It is not a one-time act or policy action but a continuous process that empowers the inhabitants.

Placemaking can inform the participants of healthy development in densely populated informal settlements. Nonetheless, it is a complex process due to the availability of resources. First, the land is the most critical point. In Dhaka, most of the informal communities are built on government lands. Legally, no one holds a lease on this land, but we get to see a practice of informal ownership and renting/leasing out (the most powerful lease out to the least powerful). Leaving a small parcel of land for children/ community gatherings becomes impossible in such scenarios. It also draws attention to the existing land grabbers. Second, the monetary resources for collective development (instead of individual) are often inadequate in such settlements.

ARCASIA Ar. Barry Will Award came with an opportunity to engage a few children of the informal settlements of Dhaka in the placemaking process. Keeping this reality in mind, we were determined to engage with children for placemaking to engage children with tangible and intangible resources in a meaningful way and encourage children to develop new skills, be kind and empathetic, and coexist with nature. The shared values contribute to the community’s social, physical, ecological, and cultural growth. Placemaking positively impacts the mental and physical health of the inhabitants and takes a step closer to a healthier neighborhood.

Among the four communities in which we were involved through the ARCASIA Ar.

Barry Will Award 2021 project in Gabtoli city colony, the process initiated an art curriculum development in a communal kindergarten school. First, we engaged with the children in creating a playspace on the school plinth and teaching them about the plantation in limited space. Gradually, we focused on turning the alleys into learning spaces, using the vertical lengths of the lanes since no other space was available. Through the soft yet bold process of illustrations, the children started to claim the right to use the area as they would like.

In the second community, Mohammadpur Chad Udyan, some enthusiastic young children started dreaming about a place to sit, sing, learn, draw, play, and plant. ARCASIA Ar. Barry Will Award 2021 project supported them to create two small communal and smaller gardens at each participating child’s houses. Through tree plantation training, children develop new skills, learn to take responsibility, and gain confidence in their work. They become aware of the environment from a young age, and it instills a love for nature. Despite several attempts, a built installation (minor as sitters) was not possible in this community because of several interests in the land ownership of the common (road, open space) areas.

The placemaking process is visible in Kallyanpur where a designed interactive and educative playspace has brought the children and the adults of the community to enjoy the place to the fullest, even before the placemaking is completed. The way community people use the space tells us the necessity of small, open gathering spaces in such a dense community. The design incorporates recycled waste materials turned into play items and engages children in productive growing in common space.

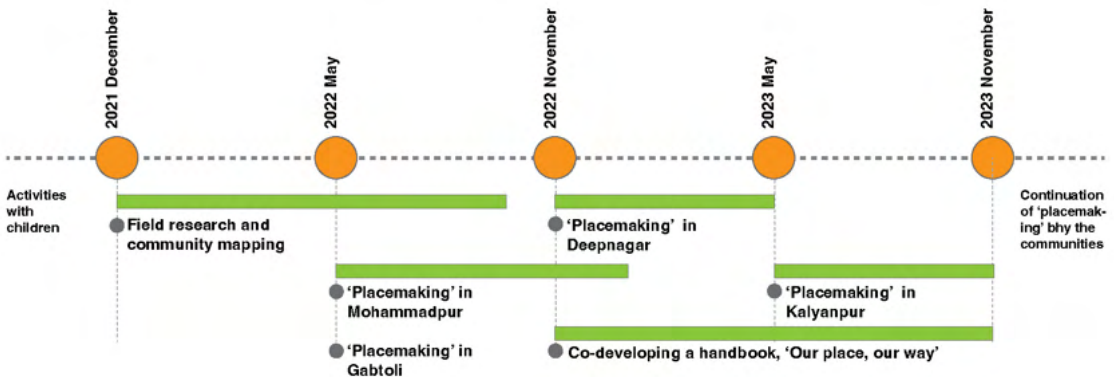
Community, especially children, interaction with the place over time will continue here, and they will have the freedom/flexibility to shape the area according to their wishes.

In Dwipnagar, the children started learning about plants in-depth while co-creating a linear garden with a sitting area, surrounding their school and uncovering their inner desires for a healthy community through such green, open spaces. They created the garden on three sides of their school so that the creepers would flow over the roof and create better thermal comfort inside the school. Cooperation, creativity, and understanding also increase among themselves through the garden design and making process. However, the whole community, the school, and the garden were evicted after a few months of the garden creation for a waterfront eco-park development project of Dhaka North City

Corporation.

The eviction of the Dwipnagar community forced us to think about what the children could take from the involvement? We then developed a children’s booklet incorporating this series of activities that took place through this project.

There have been and will be more evictions like these for the children living in informal settlements all over the city. We felt that the eviction force was bigger than any physical intervention we could do. We focused on what each child can take through the learning process of placemaking that they were part of. We hope that through ARCASIA Ar. Barry Will Award 2021 project, the children have been indulged in the spirit of co-creation to make their own space in their way, even in the densest parts of the city, a fun learning space that gives a better hope for tomorrow.



### The process is helping children to-



A row of hanging terracotta pots is shown. The pots are light brown and feature embossed floral patterns. They are suspended by braided rope. The plants include green leafy varieties and one with vibrant purple and pink leaves. The background is a soft-focus outdoor setting.

# Gabtoli City Colony



## Gabtoli city colony

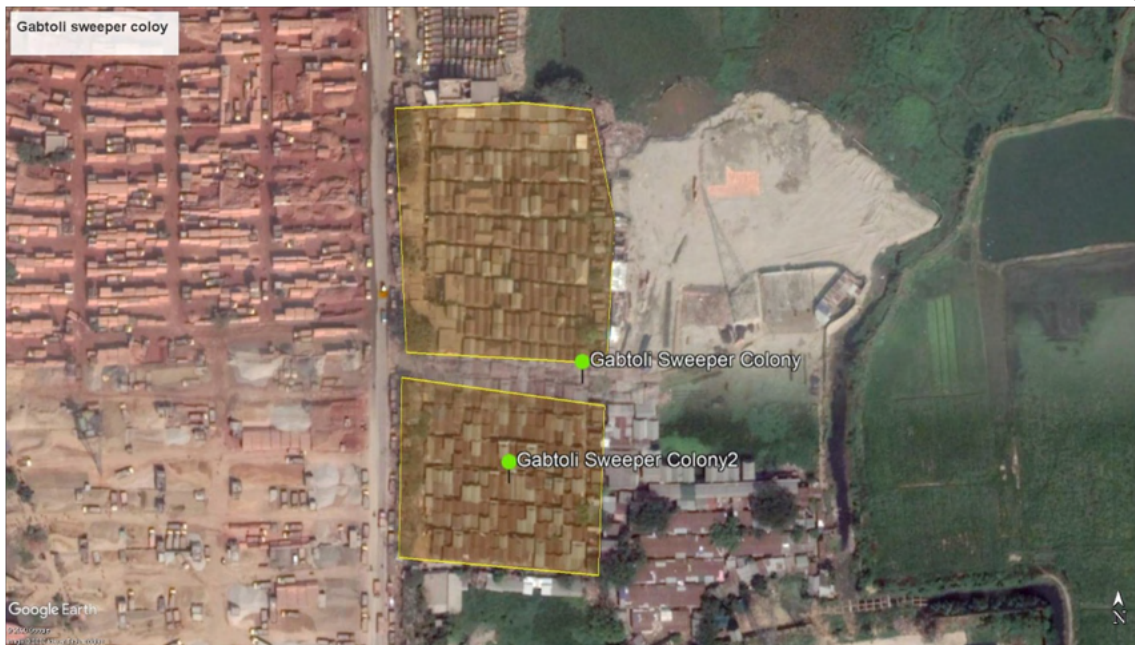
Gabtoli City Colony is located at Ward-9, Gabtoli, in Dhaka city. Behind the intercity bus terminal lives this community of more than 900 households. The community primarily works as city cleaners for the municipality of Dhaka city. All the houses of Gabtoli own almost an equal size of plot, 15' by 12'. All homes are adjacent, without any gap, so the houses are only open towards the access alley. A family of at least 4-5 people lives on this 180 sq ft land. The community has access to communal water points and shared toilets at the end of each alley. Usually, 7-8 families share a bathroom.

Children are commonly seen playing on the narrow alleys. Most houses have a verandah towards the ally, and it is a typical scene to see women cooking on the veranda and keeping a protective eye on each other's children. Within

the community, there were no schools until 2021. Despite land scarcity, a few community leaders came together to start a community school on a rented plot with minimum support from outside. Also, community women use the space as their meeting, emergency, and leisure space after school.

As our standard working method, we first sat with the elders to map the community for various services (houses, infrastructure, waste and vegetation practices, etc.). After that, we focused our work through ARCASIA Ar. Barry Will Award, creating places with children surrounding the previously mentioned community school.





**Top:** Gabtoli city colony is surrounded by brickfields on the West and low-lying land on the East. On its North stands one of the largest bus terminals of Dhaka city, which connects the city with the Northern part of Bangladesh. The community's West is demarcated with Dhaka city's western embankment road. 15 years ago, this community was evicted from the city center for the Hatirjheel development project. The community is at massive risk of getting evicted again and pushed further from the city once the western embankment road and its surrounding development projects start.

**Bottom:** Densely populated Gabtoli city colony

**Left:** The narrow alleys of gabtoli city colony

Vegetable plants by the families living in Gabtoli city colony

## 1.1 Initial study

### 1.1.1 Waste management

Like many other communities, household waste is the main portion of produced waste and the waste from Kacha Bazar (wet market). No formal or informal waste management system is running in this community. Every household gathers their waste in polythene bags or buckets in front of their house, usually in the kitchen. At the end of the day, they dump it in the roadside open space. Unfortunately, this road (locally called 60 feet) is the main entrance to the community. Eventually, both sides of this road remain filled with waste from houses and Kacha Bazar, and concerned transports from City Corporation collect them. A few households with access to the water body nearby are also involved in fly-tipping.

### 1.1.2 Plantation

In this dense community, hardly any space can be found for plantations. People's interest in plantation and gardening can be expressed by their vegetable macha, little roof garden, and flower pots hanging in front of houses. Most of these approaches are adjacent to the communal wash and bath zone, with relatively more open and leftover spaces. POCAA once initiated a gardening movement called "Magic Garden" here with the children, as a series of workshops upheld gardening as their prime interest. It also could beautify their leading community gathering space 60 feet. A prototype of the vertical garden was developed and installed in several community locations; various flower seedlings were planted in the leftover areas near the wash zone.



Children groups of the community took the responsibility for caring for these plantations.

### 1.1.3 Gram-Bangla Shapla Boshoti Unnayan Community School

During the pandemic, a community school system emerged in Gabtoli colony where pre-school children could study without any cost. A total of 30 children aged 5-10 years are currently receiving pre-primary education in this school. The school was built with the collective efforts of local residents to prevent children from dropping out of school during the Corona period. POCAA has partnered in this journey to promote ‘art-based life-skill learning’, ‘food production’, and academic studies. With the opportunity from the ARCASIA Ar. Barry Will award, the children of this school were

engaged to make this school their collective learning space beyond academics and participate actively in placemaking for a healthier neighborhood.

This process led the children group to paint their school premises collectively and continue the paintings throughout the narrow alley. The illustrations are not mere drawings; they developed from their interest and understanding of productive gardening and the steps required for tree plantation. As they did not have any open playspace in such a congested area, the small plinth area of their community school was converted into a lively playspace where children could spend time.



**Right:** Productive gardening by the families living in Gabtoli city colony  
**Left:** Gram-Bangla Shapla Boshoti Unnayan Community School

## 1.2 Mapping and designing with children

Children from ages 3 to 10 come to Gabtoli community school. We started communicating with children through drawing activities. They painted their favorite food, person, and sports. They also painted something they wanted to see: flowers, trees, butterflies, and birds. Trees are scarce at the Gabtoli colony, and so are the birds. As a result, the children are hardly familiar with any species. We thought of painting on the school walls and the adjacent alley to introduce children to plants, how to care for them, how the ecosystem works, etc.

We divided the painting into three parts. The first part shows how to plant trees and take care of them. The 2nd part shows what a plantation or garden can do. It is a picture of a garden with many local flowers, birds, and

butterflies. It shows that flowers and plants attract birds and insects.

The third part shows what we can get from plants. We drew fruits and vegetables like mango, watermelon, jackfruit, tomato, brinjal, carrot, etc. The composition of the final illustration came from individual drawings and paintings of the children. The whole illustration process was completed with the children of Gabtoli. We considered the children's height, so we limited the height of the painting according to their height. This activity created immense energy among the children, who became keen on planting trees.





**Right:** Collective idea discussion and drawing session for “What do we want to see on our school wall?”  
**Left:** Individual drawing books of the children

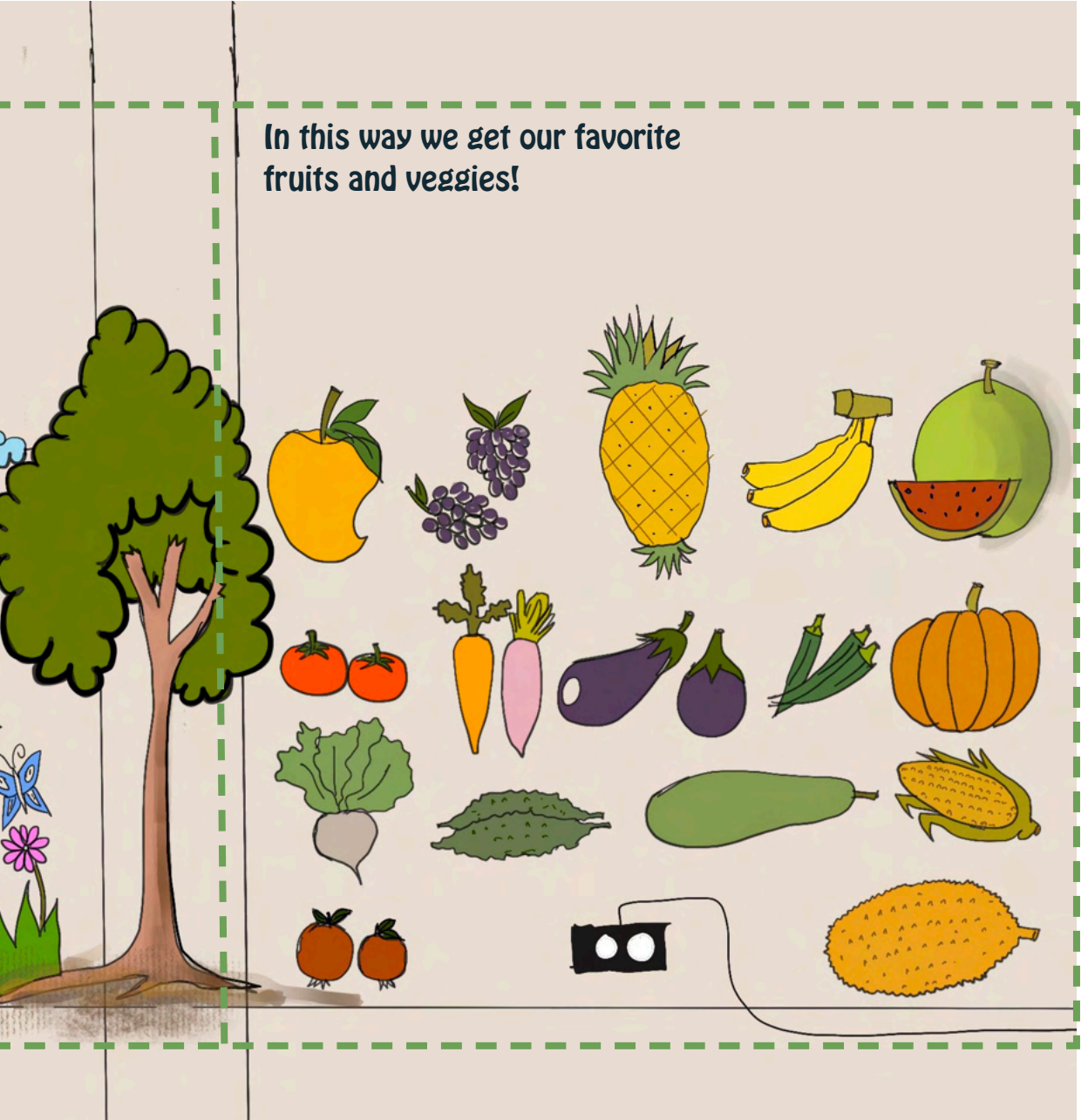
### 1.3 Participatory illustration (educational)

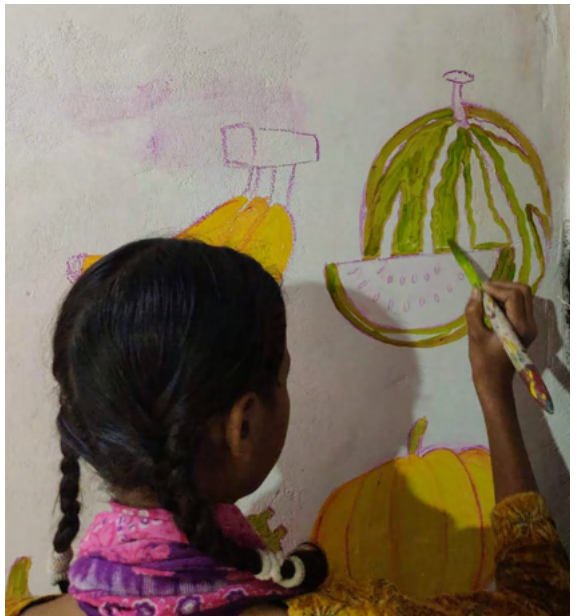
**We can take care of our garden collectively!**

**Our garden needs Sun, rain and micro-organisms!**



In this way we get our favorite fruits and veggies!







**Images:** Transforming the interior of school through participatory illustration (Step by step)

# 1.4 Learning through playing

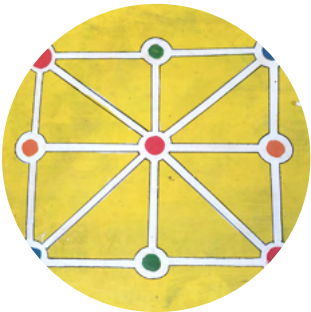




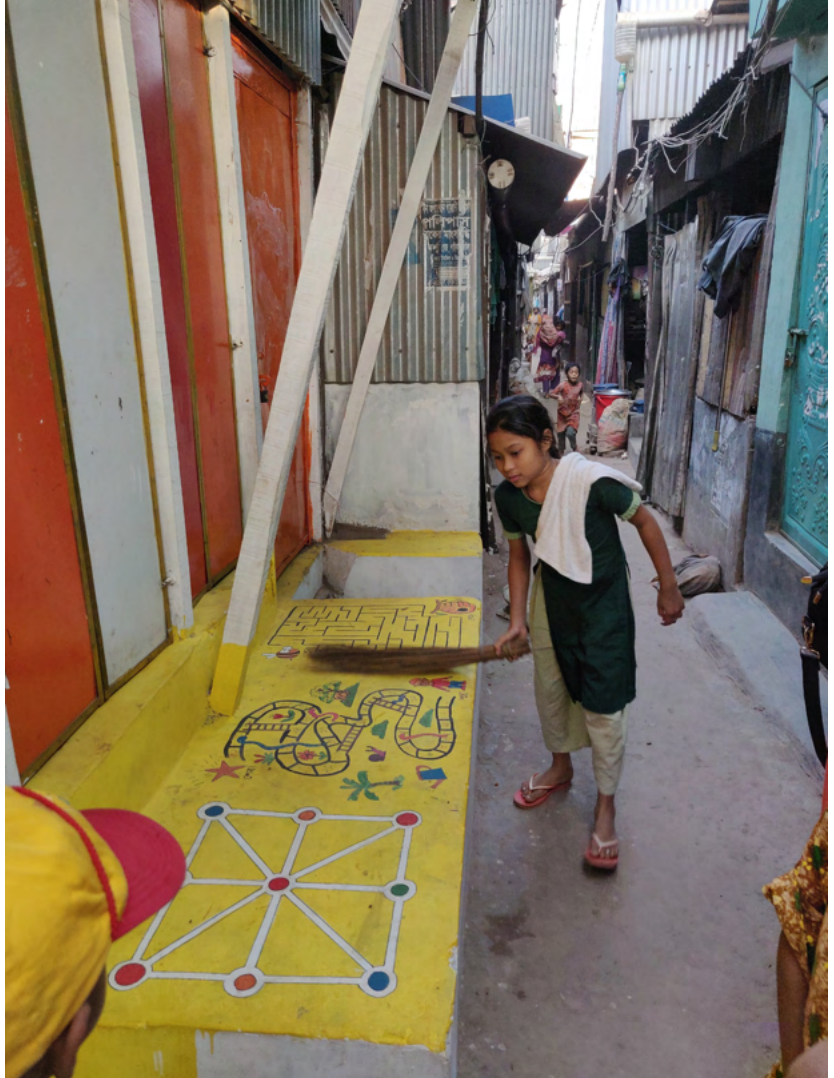
Take the bee to the hive!



Seed to plant- how is the path?



Where the dots are?



**Images:** The community school’s plinth is accessible to all local children due to its location on the front of a small alley and has become a dynamic play place, allowing kids to engage with one another. The plays on the plinth were also developed with children, including small information regarding food growing.

21  
**1.5 Seed bank, learning and gardening equipment storage**

The children in the school were introduced to an art curriculum through ARCASIA Ar. Barry Will Award project. Before that, the children did not have access to art and craft materials. A drawing book was designed for 3-5-year-old children to encourage them to see things more deeply and try to visualize their aspirations. Everyone leaped with joy after getting the drawing book and engulfed in coloring, making collages with waste papers, and creating crafts. With the exciting tasks, they started using new equipment like pastel color, colored papers, watercolors, brushes, etc. On the other hand, they were also engaged in full-scale gardening activities- preparing soil, planting seeds, watering, mulching, etc. All these activities required various tools for which

they had no storage. So, a multipurpose unit was designed, equipped with a seed tray with sufficient storage for gardening tools, play, and learning materials like story books, puzzles, drawing books, craft supplies, etc.



## 1.6 Placemaking through illustration

The placemaking initiated in the school area spilled into the alleys, and all the alley spaces became learning and play spaces for the children. In the dense fabric of the informal settlements, where these passages are the most significant open space, they are used by people of all ages and genders, and the use varies with different times of the day. The vision was to transform the blank walls into meaningful backdrops with different themes so that everyone might learn something new as they passed by. The children could explore and engage with each other, claiming the alleys as their own space, like a gallery.

For example, one wall illustrates various

types of beneficial insects, how they help pest control in a garden, what they provide for nature, and another wall enables the children to play some mind games to help develop their mental growth.



**Right:** Storage for gardening, art and craft related equipments

**Left:** Illustration of different insects, depicting how they are useful for plants and overall environment.

# 1.7 Training series for productive gardening and waste to resource



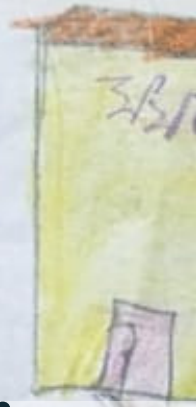
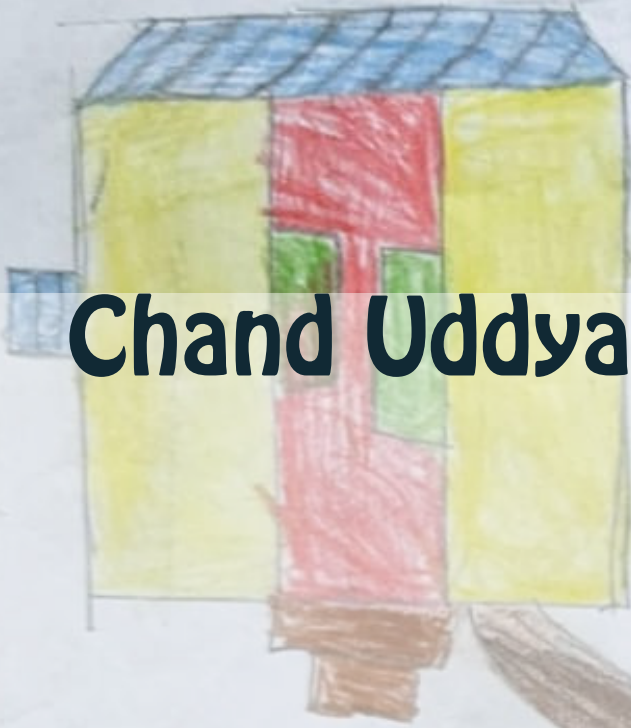


After drawing pictures, the children of Gabtoli wanted to create their own garden and plant trees. We brought soil, compost, and plants for the school. Children were excited to prepare the soil for the plantation by themselves. Each planted trees in the school garden (on the verandah) and brought plants home to create individual gardens. They learned about soil's nutrition, micro-organisms for soil, etc. The

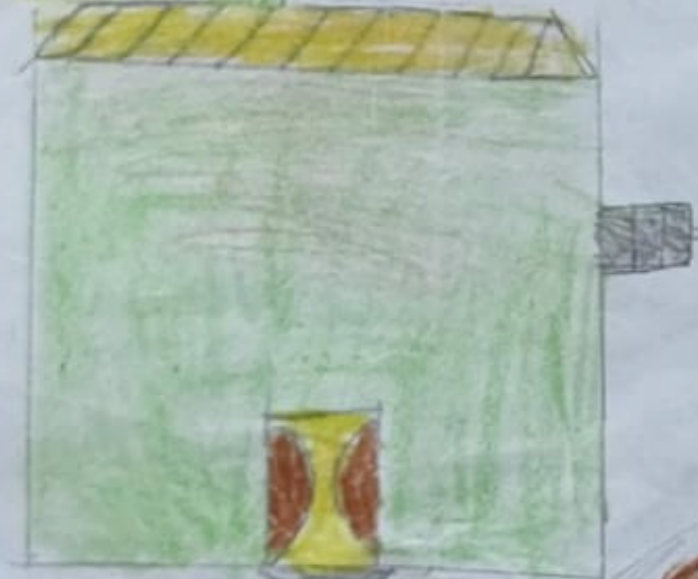
children are also taught to collect seeds from vegetables and vegetable waste for fertilizing plants. They collected seeds for the school garden. They used recycled plastic bottles and crates as planters. These activities helped them to build good practices. Through trial, children learned about over/under watering plants, making compost, etc.

**Images:** The garden making process with children at Gabtoli community

शायगा



# Chand Uddyan Community



बानि



15/12/21

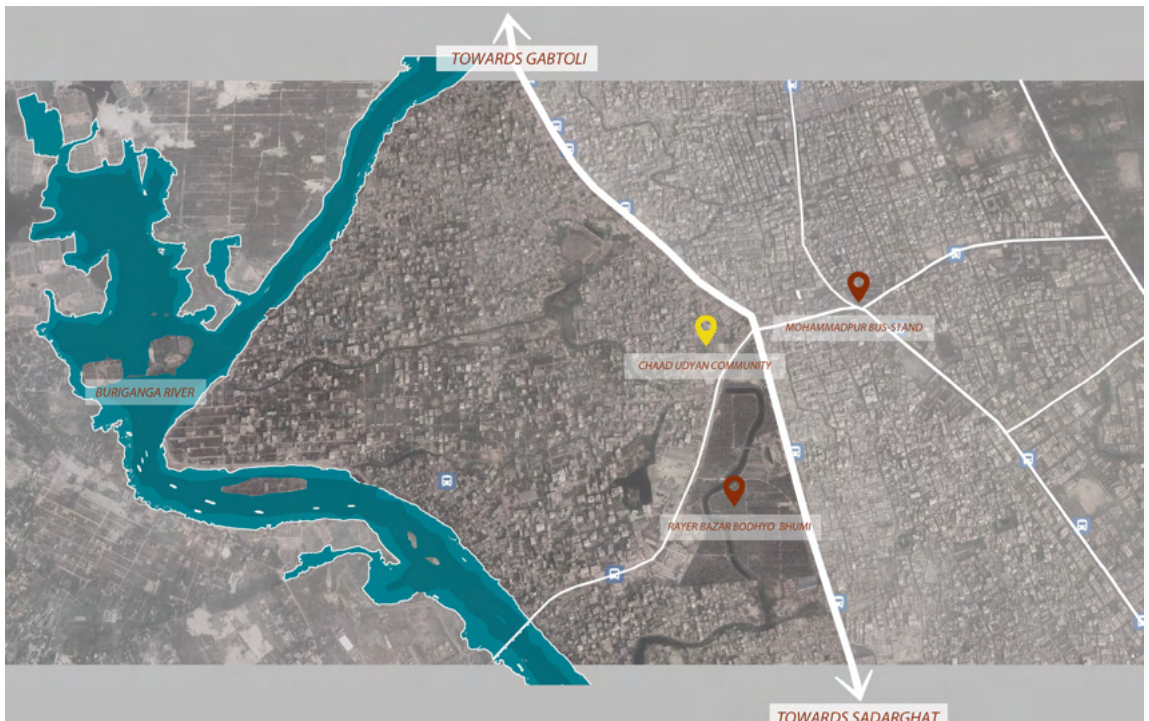
## 2 Chand Uddyan Community

Chand Uddyan community is located near Mohammadpur-Bosila beside Beribandh in Dhaka city. The community has been living in this location for 30 years now. It was a low-lying, river-side area (Buriganga River) where the first community members built their houses on stilts. Gradually, they started to fill up the land with waste and land-filling. Until now, some parts of the community are still building on stilts, while others have their houses on elevated soil. Many of the community has migrated to this area from Bangladesh's southern cities and villages (Bhola, Satkhira, Barisal, etc.), where flooding cyclones are regular natural calamities. They had left their villages after losing homes and ways of living to the rivers or cyclones.

The community lacks essential services for living. The settlement does not have any

drainage facility or internal roads. People enter their houses by a complex maze of narrow alleys, passing each other's houses. Houses are made with temporary, make-shift material. There are only 3 communal toilet blocks for 250+ households. Among them, 1 toilet block is for personalized use of a housing block consisting of 32 families. The other 2 toilet blocks housing 6 toilets are the only sanitary option for the other 200+ households.

There are 3 water points, which stay active from 7am to 10am and 2pm to 5pm.





**Right:** Waste and wastewater situation at Chand Uddyan Community  
**Left:** Chand Uddyan Community's location in regards to the Dhaka city

## 2.1 Initial study

### 2.1.1 Community mapping

POCAA began creating a community map in order to understand the community better and take appropriate steps to address challenges. The mapping process got underway quickly due to the assistance of members of the community. To address the residences, bathrooms, and facilities, various coloured papers were cut down. The residents of the community placed their own houses on the community map by themselves. We discussed the living conditions and the difficulties they encountered during the rainy season as a result of the open drain. They pointed out every single detail of the neighbourhood on the community map.

condition of the community, the discussion was prompted towards identifying the most concerning problem of the community. It was the condition of the open drain and upcoming rainy season, when the community suffer from water logging for an extended period of time. It was then decided that the first physical intervention to improve the quality of life in the community has to be upgrading the drain. Immediately, the community member and POCAA sat down for a workshop to design the drain and figure out the relevant cost for the drain upgrading. As of now, the drain construction work has been finished.

After the drainage construction, POCAA began the ARCASIA Ar. Barry Will Award work at Chand Uddyan, mostly with children.

After creating the map of existing physical

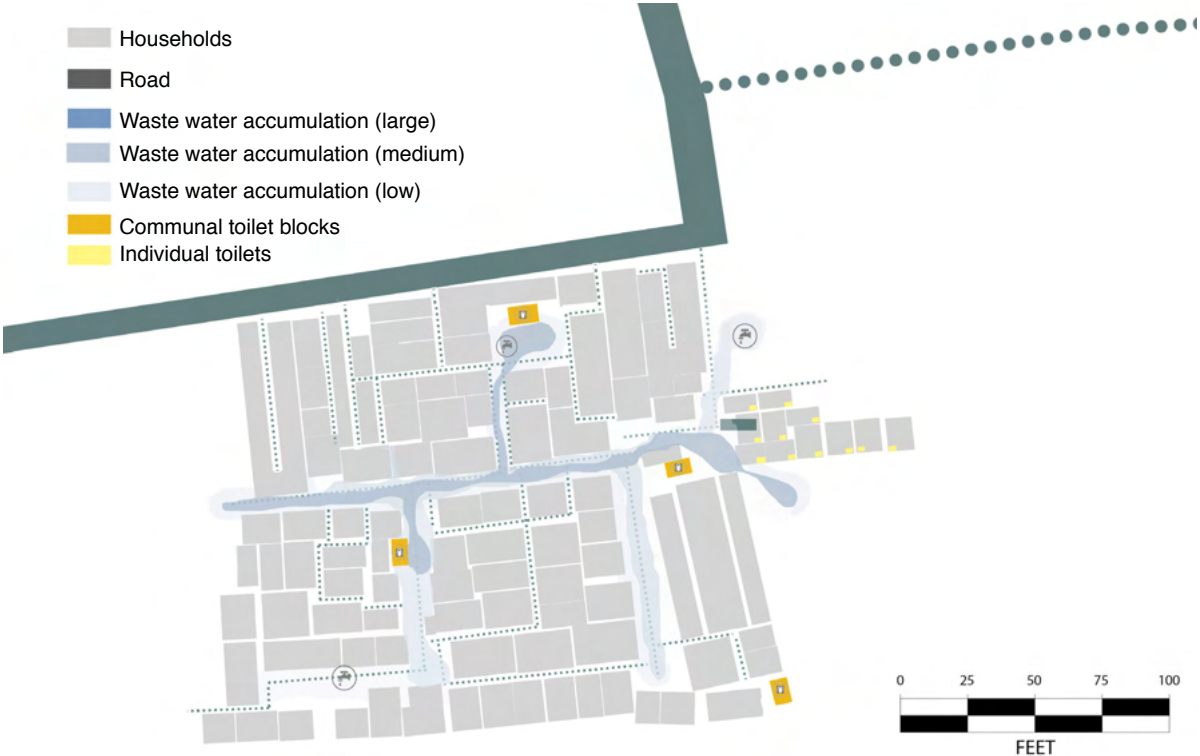


### 2.1.2 Wastewater management

The community did not benefit from any formal or informal waste and wastewater management system. The central spine was a wide-open drain that works as a drainage solution. The pits of community toilet blocks are insufficient, and black water overflows from the toilet base. As a result, black water from toilets and grey water from water taps were directly connected to the significant open drain that flows like a vein through the community. Recently, the community has intervened to improve the drain with pre-cast RCC pipe, they came together, to built the drain with material support from POCAA.



### Waste-water Map: Chaad Uddan Community



### 2.1.3 Plantation

Though the land is very scarce, the community is still inclined towards growing some sort of fruit, vegetable, or other valuable plants if they have the scope. Households separately grow vegetables here and there. Since the land is very limited in the community, developing an efficient land use system (vertical space, space over the roof, etc.) will allow them to grow more.

The Plantation map (right) shows the current locations where community members have grown plants and vegetables, such as Moringa, Henna, Mango, Guava, Jack-fruit, Papaya Potato, Tomato, Eggplant, Banana, Gourd, Balsam pear, Malabar spinach, Lemon, Arum, Peeper, etc.

### 2.1.4 Communal open space

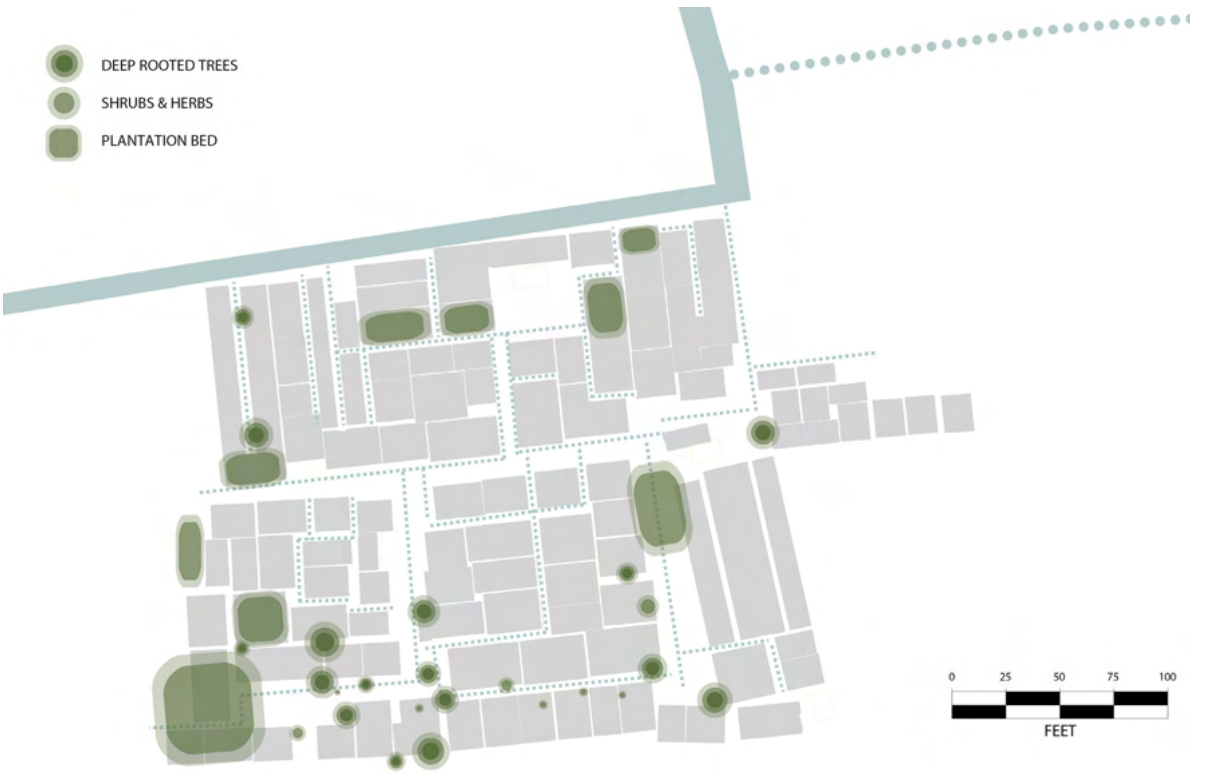
Small and scattered open spaces are where children and women spend time. The drain, which also acts as the primary accessway for the community, is another open space with the possibility to become a vibrant, usable community space if the waste is managed carefully out of this space. Small shops and tea stalls also act as communal gathering spaces for both men and women.

The community is also where many families keep domesticated animals and birds (Chicken, duck, goat, etc.) mainly for consumption and selling. Unfortunately, the animals are seen to be roaming around near the waste dumping sites or the open wastewater drain.



# Plantation Map: Chaad Uddan Community

- DEEP ROOTED TREES
- SHRUBS & HERBS
- PLANTATION BED



Images: Common space and waste scenario of Chand uddyan community

### 2.1.5 Waste management

The community started to live on low-lying land, dumping waste directly to raise the level of the land. As a result, the habit of dumping waste near the homesteads stayed with them. The community is not connected with the city corporation's operation of collecting trash from the neighborhood because of the land status of the community.

During our first few visits at Chand Uddyan community, it was mentally difficult for us to accept the real scenario of the community where an open drain of visually black-water run through the community. Children playing and roaming around with their domesticated animals near this drain are in compromised physical health. Moreover, the sides of the

drain are piled up with household organic and non-organic waste, spilling over to the water, blocking the flow now and then. The whole situation is hard to accept that humans can live in such a dilapidated state.

Since the drain upgrading work has been completed in the community, the adults are more focused on setting up a waste management system. They are now thinking of ways to get city corporations involved in collecting waste from this neighborhood, like the rest of the city. The drain work has brought different parties together and given them the confidence to work collectively.



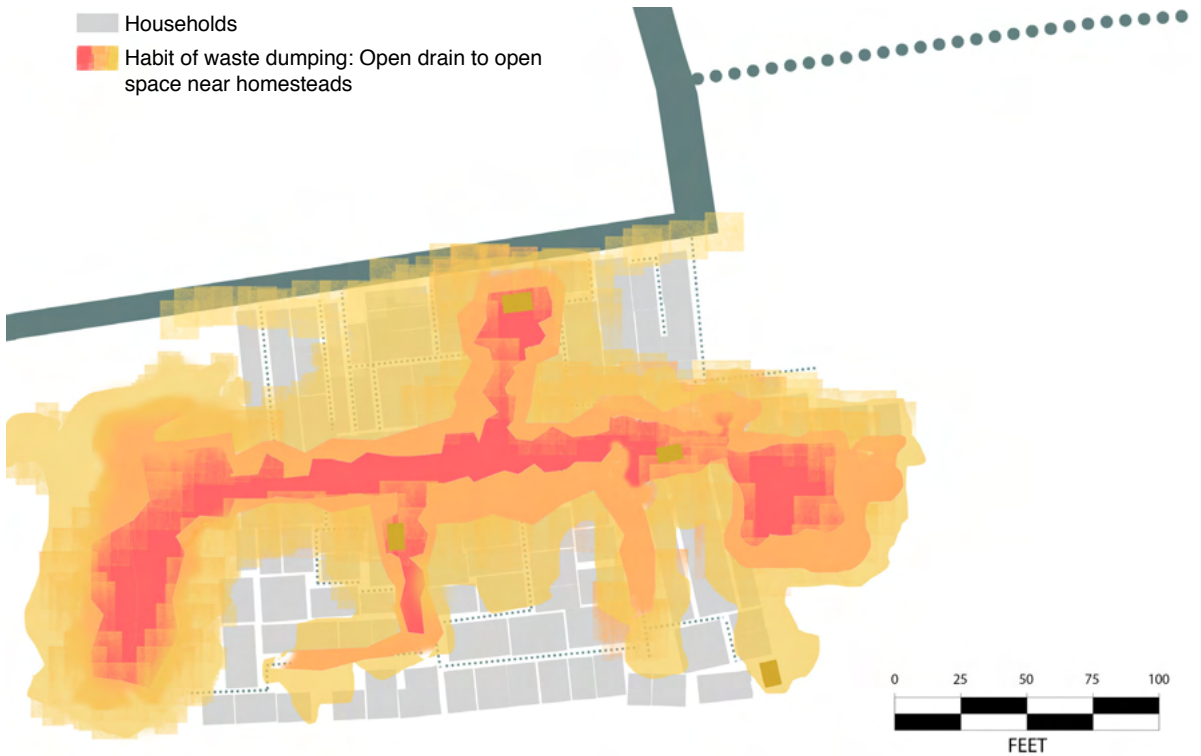
### Waste Dumping Points Map: Chaad Uddan Community

- Households
- Waste dumping points
- Communal toilet blocks



### Waste-behavior Map: Chaad Uddan Community

- Households
- Habit of waste dumping: Open drain to open space near homesteads



**Top:** The waste dumping points map shows waste accumulation points within the community.  
**Bottom:** The waste behavior map (on the right side page, bottom) shows the household's inclination of dumping waste near the open drain to near the homesteads  
**Right:** Waste management scenario of Chand Uddyan community

### 2.1.6 Social and political dynamic: Understanding the complex land occupancy situation

Legally, the land belongs to the Water Development Board of Bangladesh. However, the occupants of the land have seen various power-playing and shifts of power regarding the hold over the land. The influential people with political connections from the community and outside have been collecting land rents from the lesser-powered people. Over time, who is collecting rent has changed quite a lot. There are significant disputes between different parties about the hold of the land.

The tenure-ship condition has an impact on housing conditions. The families usually rent a piece of land and build the house at their own cost. For approximately 15'x15' piece of land, the rent is 300 tk per month. Since this informal arrangement does not guarantee anything, the families do not want to invest much in the houses.

### 2.1.7 Workshop with children

After the initial community mapping with the adults, we did a workshop with children about what kind of space they aspire to. Children expressed their dream neighborhood with drawings where they mentioned trees/plants and places to play with animals.





**Images:** Children expressed their dream neighborhood with drawings where they mentioned trees/plants and places to play with animals.

## 2.2 Tree planting festival with children

POCAA members organized and celebrated a planting festival with children. On the first day, the children drew their spatial plans for gardening with their favorite plants. They listed the names of the children responsible for “who would plant which tree” and “who would play what responsibility” for taking care of the garden. They divided themselves into two groups, as only two tiny spaces were available for planting in the settlement without any objection from the adults. The ‘Tom and Jerry’ group planted trees in front of the communal office, and the ‘Motu-Patlu’ group planted trees in their school area. Everyone shares the responsibility of watering and caring for the

tree. This tree-planting festival went on with happiness because of the children’s interest amid enthusiasm and pride!





**Images:** Tree planting with children, both in communal spaces and in front of individual hoses.

## 2.3 Prototype design for the community

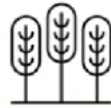
Chand Uddyan Community had no space for informal gatherings of women, men, and children. POCAA team designed a simple prototype of a platform with storage, shading, and scope for vegetation, which could be placed on both sides of the main access alley of the community. Women could have used this platform for small businesses, such as tailoring shops, tea-stall or selling vegetables. It could have been used as an extended space for women to gather for household chores, such as food preparation, as they hardly have

enough space within their houses. Children could also use it as a meeting place for the plantation teams, with a secure place to keep their standard gardening tools. At a minimum, the space could be simply used by everyone to sit and socialize under shade. However, the dispute between community members regarding the use of space spiked up at the time, and the prototype could not be realized to see those in use.





**Relaxing, Seating**



**Vegetation/  
Productive  
Garden**



# Dwipnagar community





## 3 Dwipnagar community

Dwipnagar Community was situated close to the Gabtoli City Colony. It was located by the Gabtoli Sadarghat Highway road but is landlocked. The main housing settlement, which developed on the land of the Water Development Board, did not have any formal vehicular or pedestrian access from the Gabtoli Sadarghat highway. A relatively large informal settlement of 800 families made up this community. No proper wash zone or waste management system can be seen here.

### 3.1 Dwipnagar Upanushathanik Prathomik Bidyalaya (Primary school)

A non-formal primary school was located in Dwipnagar area, with 60 children studying in two shifts. The name of the school was “Dwipnagar Upanushathanik Prathomik Bidyalaya”. Support from the non-government organization BRAC came for the young teacher, Jhumur, who was also from the same

community and handled various activities with children. The school is basically a single room where walls and roof are made of corrugated iron sheets with a bamboo frame structure. The school’s length, width, and height are approximately 22 feet, 9 feet, and 8 feet. The school has two entry doors from the west and only two windows, one in the west and the other in the south. The students and their teachers are responsible for caring for the school. They clean the school regularly, whether rearranging school materials such as books or sitting mats. The activities of the school are not limited to reading and writing only. They also do extracurricular activities such as drawing, making handicrafts, making models with clay, singing, dancing, etc. Here, the homes of the students are close to their school. So they were divided into groups whose houses were close to each other. The teacher and students are very active and enthusiastic about running the school properly.





**Top:** Children with their drawings in front of Dwipnagar school

**Bottom:** During a learning exchange visit, Dwipnagar school's children went to Gabtoli school to learn from their garden making and received plants as gifts.

**Left:** Children exploring ideas for their garden using art materials

## 3.2 Mapping and designing with children



**What I see: Dirty Water with garbage floating!**

The story began with drawing local maps and pictures and the children learned more about their locality, surroundings, and nature. The POCAA team gradually talked to the children of Dwipnagar School about the environment and the climate. Children told stories about their favorite seasons and what fruits and flowers were available. Through this



**What I want to see: Clean water and flowers!**

discussion, children could understand about weather and climate change. They pointed out to the POCAA team the problem of having classes in the school room in the scorching summer heat. To solve that problem and do something for the environment, POCAA and the children of Dipnagar planned to create a garden around their school.



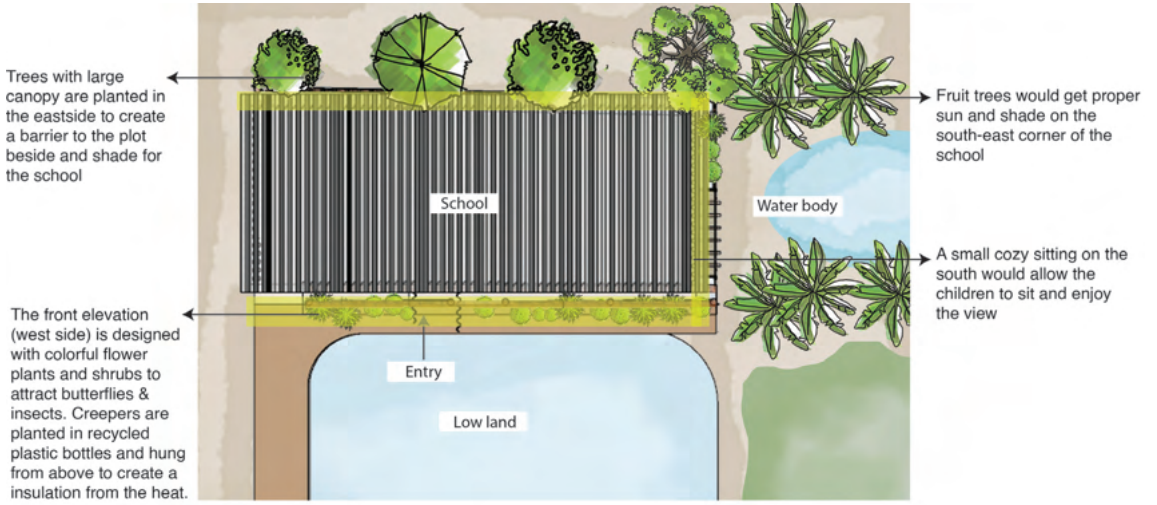
Everyone worked together to create a model for how the school and neighborhood garden would look like. There was not much space available as there was a pond in front of the school and houses on the other three sides. They started working with whatever space was open, aligned with the lengths on three sides of the school. The kids found a lot of

pleasure in activities like preparing the soil for the garden, gathering trees, and planting tools and pots. Working with the POCAA team, the children discussed different landscaping principles (where and how to create shade and suitable locations for other plant species). Children contributed plants from their own home gardens.

**Right:** Children making model of their school and the surround with planned garden

**Left:** Children making maps of existing condition (What do I see on my way to school) and desired condition (What do I want to see one my way to school) in their neighborhood

### 3.3 Dwipnagar children's garden



z ◀ Plan of the garden





South side of the garden



West side of the garden





**Images:** The making and planting processes of Dwipnagar children's garden



Unfortunately, the school and the whole Dwipnagar community were evicted in March 2023 for a waterfront eco-park development project by Dhaka North City Corporation in the city, just when the flowers in the garden were starting to bloom.

The families (and the children) spread out to rent houses in neighboring areas. The community got scattered, and so did the children. The school teacher has started the school in another dilapidated room, though she does not know all the children's whereabouts. She salvaged the materials from the previous garden so they could build a small space again once they got a suitable space.



**Right:** Images of the eviction of Dwipnagar community  
**Left:** Dwipnagar children's garden in use

লাইব্রেরি

গল্পের বই

বই রাখার জায়

# Kallyanpur Adarsho Boshoti

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কোনো কোনো জিনিস কেউ  
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বানান থাকবে আছে  
কিছোই থাকবে আছে  
হলে ০ ময় থাকবে

রাউজার মাঝে  
গাছ আর্কো  
জিরানি আল  
হাথেরে) পরিষ্কার  
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১৫/১১/১৭



## 4.1 Initial study

Kallyanpur Adarsho Nagar is located beside Kallyanpur Natun Bazar area on 50 acres of government land owned by HBRI (Housing and Building Research Institute). Approximately 40,000 people are living in this community. In the last decade, the community faced too many eviction threats from the government and the several fires that broke out allegedly had been intentional. Our first impression of the community was of their strong sense of identity. They prefer to call their community as 'Kallyanpur Adarsho Nagar' (Kallyanpur Model Town) instead of Kallyanpur 'pora' bosti (Kallyanpur burnt slum) as it is locally known as. The community has built a resource center with the help of an NGO where the leaders of the community meet regularly. They have created a very informative community map indicating all the zones, landmarks, facilities and internal roads. The map is a prominent fixture of the resource center as many NGO's are assessing information easily from the map. For POCAA it was a great tool to navigate the community with and get an understanding pretty quickly.

### 4.1.1 Physical condition

Comparatively Kallyanpur community has access to better services. House-owners and renters both stay in this community and every cluster of 20-25 households have their own services. The community map provides location information of existing toilet blocks and water points. A significant number of families have their individual toilets. Many toilet blocks are connected to the city's formal sewerage line while others have ring pits. Tube-well water supply is adequate to the point that the residents do not have to hoard water or stand in a queue to collect water. Shower areas exist adjacent to water collection points.

Sewerage line runs under the comparatively wide internal semi-formal route which allows rickshaw vans entry. Houses are linked to these semi-formal routes through narrow pathways. The scarcity of space is very prominent in the existing congested housing clusters.





### 4.1.2 Waste management

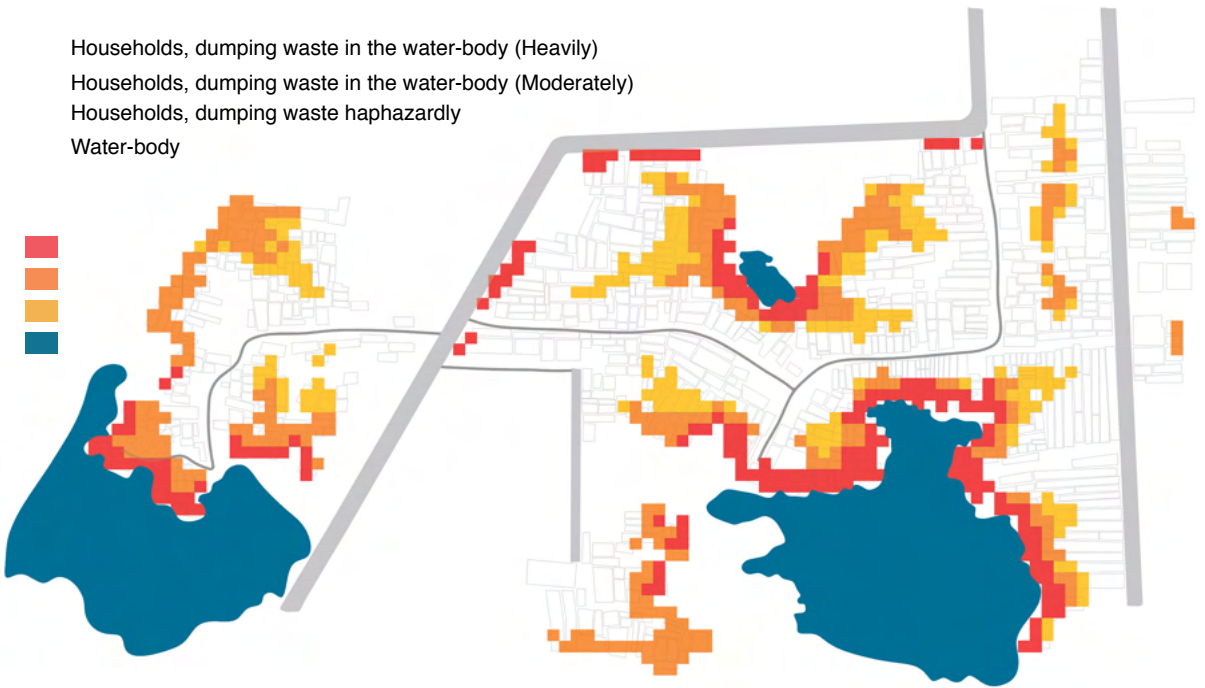
This community handles two types of waste accumulation: first, the waste produced from within and second, waste from all over the city for recycling purposes. There is a semi formal waste collection system in the community to manage the waste generated within. The community zones have dedicated vans for waste collection that take the internal routes and community people dump their garbage in the van. The garbage collector gets paid 50 tk monthly and comes 6 days a week. As the narrow yet long alleys hinder garbage van entry, thus household waste management behaviour varies. As the garbage van can not access majority roads the garbage collector blows his whistle and households take their daily waste to the internal road. The houses are set in row-house format dump their waste in the garbage van everyday. But households farthest from the internal road and near the water-body are reluctant to walk the alley to dispose of garbage everyday. They tend to keep their dry waste in a waste bin to dispose of in 2-3 days but fling their wet food waste

(fish, chicken bone) polythene packaging into the nearby water-body as it stinks within a few hours and attracts flies.

There are a group of waste recycling shops who collect waste from all over the city and recycle them to export. These shops are located along the wide formal road leading towards HBRI from Natun Bazar Road as it allows truck entry. Metal and plastic waste materials such as old window grille, tin can, plastic bottles etc. are re-purposed and later sold. Collected electronic waste such as television, keyboards, cables etc. are sorted and sold on demand. Fish scales are collected from fish markets which are used for cosmetic production purposes. Apart from recycling waste for the whole city, these shops also produce huge amounts of leftover waste which they have no use of. This residue after the recycling is not disposed in any organized manner. Every few days these recycling shops load a van with all their waste haphazardly and burn it at the HBRI open field. Some of the leftover waste also end up on the roadside of the shops.



## Waste-behavior Map: Kallyanpur Adarsha Boshoti



**Right:** Waste dumping on open space within Kallyanpur adarsho boshoti  
**Left:** Waste recycling (Fish scale and jerry can) at Kallyanpur

### 4.1.3 Plantation

With a very few large chunks of space surrounding the water bodies, there is hardly any open space for plantation in the narrow alleys of this area. Still some habitants, mostly tenants, grow plants in the limited space. Mostly they grow productive plants such as tomatoes, peepers, Aloevera, mint, Malabar spinach in their homestead in small tubs or crates or hang them from the roof. In some cases, plantation bed or roof gardening can be noticed with gourds, balsam pear etc.. Areas dominated by house owners living with relatives for a long period of time have more open spaces. These houses have a bit of breathing space, where Mango, Guava, Jack-fruit, papaya, coconut, betel nut, Indian plum etc. various fruit trees have grown. Some house owners even have their own backyard kitchen gardens that produce potatoes, tomatoes, eggplants, bananas, gourds, balsam pear, Malabar spinach, lemon, arum,



bean, peeper etc..

Interestingly, the roofs of many toilets are used for plantation, ladders are set up to access the rooftop and care for the plants. Usually these toilets are owned by house owners and renters are using the toilets

### 4.1.4 Communal open space

The alleys are too narrow for communal gathering. The internal road and roadside shops are main communal spaces where men, women, and children gather. The community resource center has a small open space at the front but the access is not open for all, it is used by the community for meeting with other organizations, or to host cultural events. Other than that there are several large chunks of spaces in zone 8 and 9 among the recycling shops just beside the formal road. Two prominent water bodies present communal space opportunities although one of them is already being filled with land-filling.



# Plantation Map: Kallyanpur Adarsha Boshoti

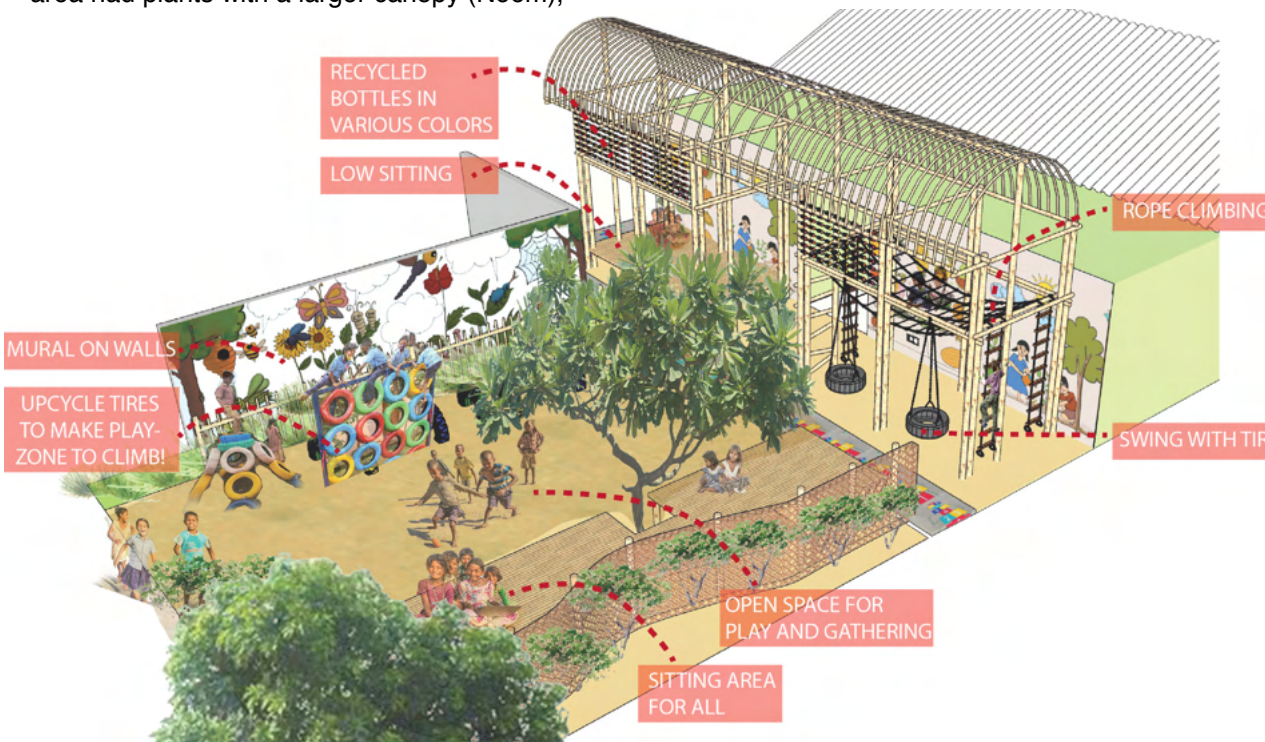


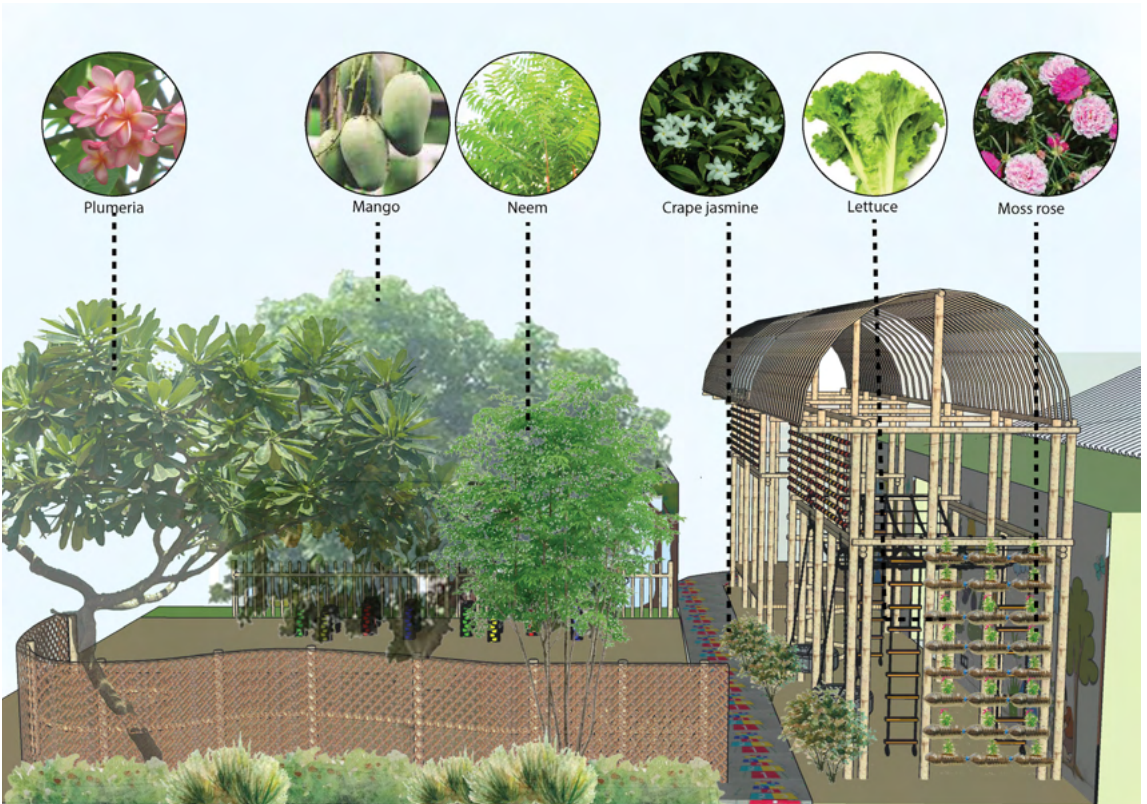
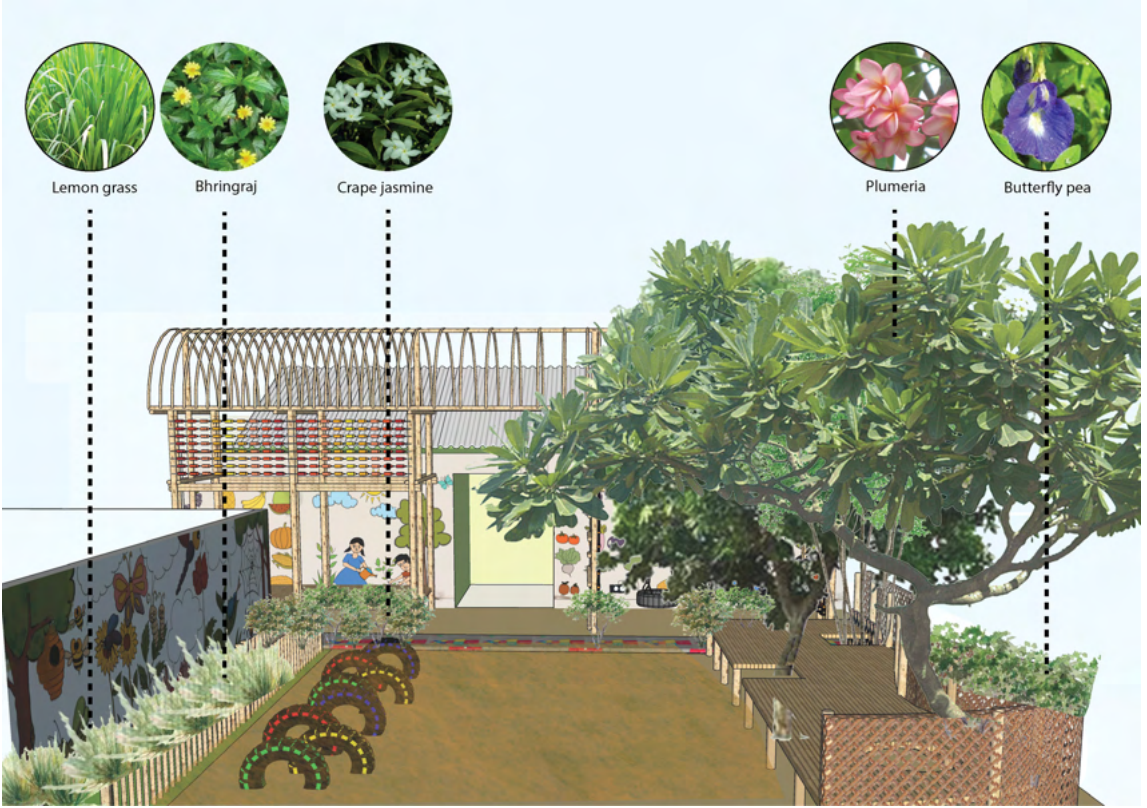
**Right:** Empty site of the children’s learning space at Kallyanpur (before placemaking)  
**Left:** Individual vegetable growing at Kallyanpur adarsho bosoti

## 4.2 Communal learning space design and build

POCAA came in contact with one of the schools, Brightstar Junior School, and they were keen to develop a playspace for children in the small front of the school. The school interior was dilapidated, where 200 children studied in dark classrooms made with makeshift materials (old CI sheets). With a humble support from ARCASIA Ar. Barry Will Award project, POCAA repaired some portion of the school to make it a more well-lit, bright learning environment. For the outdoor learning space, we envisioned the play area to upcycle the waste resources and create an interactive play zone that encourages children to do physical activities. In the school's front yard, a sitting area was designed surrounded by a boundary of greenery, which included herbs, shrubs, flowers, and fruit trees like mango, star apple, golden apples, etc. The sitting area had plants with a larger canopy (Neem),

which are expected to create shade on the platform eventually. The layout encourages people to spontaneously gather, with an open space in the center, sitting on sides and at height (recycled rope-made gallery). The open space is flexible for the community to use in festivals, school programs, etc. Gradually, the community and children can incorporate more plays in the open space if more suitable. A bioswale flows by the place with the runoff, which includes native species (taro, reed) to treat water. The play items encourage the kids to engage in different activities involving jumping, climbing, swinging, etc. All the play tools are developed from trash products like bottles, tires, etc.





**Right:** Plantation planning at Kallyanpur children's learning space  
**Left:** Playspace planning at Kallyanpur children's learning space





**Right:** Waste-to-material-for play-space. Children working with plastic bottles for installing colors in their playspace

**Left:** Making processes of Kallyanpur children's learning space





**Images:** Community people and children using to space at fullest even before the placemaking is completed

This booklet intends to contribute to children's early childhood development, especially children from low-income communities who live in congested areas and can access minimal resources. Through this booklet, the intention is to-

- Encourage children to be creative and sensitive towards nature and their surroundings
- Trigger their imaginative play, creativity, and problem-solving skill
- Spread knowledge about plants and plantation processes
- Aware children of the importance of



জায়গা ঠিক করার সময় মনে রাখবে, গাছের জন্য শুধু পানি নয়, সূর্যের আলোও খুবই প্রয়োজনীয় কারণ ওই আলো থেকেই গাছ খাদ্য তৈরি করে। তাছাড়া বড় গাছের ছায়া, মাটি আর বাতাসে ভেসে বেড়ানো পোকা- গাছের বৃদ্ধির জন্য সবই প্রয়োজন।

Keep in mind, apart from water, sunlight is also essential for trees because trees produce food from sunlight. In addition, the shade of large trees, insects floating in the air and soil - all are necessary for their growth.

recycling, reusing, and understanding the limited resources of the world

- Encourage the children to continue placemaking everywhere they go/live
- Advocate collective action and networking for significant impacts



# আমাদের জগত আমাদের মতন

Our place, our way



পোকার একটি সামাজিক উদ্যোগ  
A PublicAction by POCAA



এসো জেনে নেই কোন ফল গাছের কি প্রয়োজন  
Let's learn what are the requirements for a fruit tree

**আম**

গ্রীষ্মকালে বীজ রোপণ করা ভালো। Mango seeds are best planted in the summer



**কলা**

সারা বছর বীজ রোপণ করা যায়। Banana seeds can be planted all through the year



**ডালিম**

হেমন্তকালে বীজ রোপণ করা ভালো। Pomegranate seeds are best planted in the late autumn



**তরমুজ**

গ্রীষ্মকালে বীজ রোপণ করা ভালো। Watermelon seeds are best planted in the summer



**কামরাজা**

হেমন্তকালে বীজ রোপণ করা ভালো। Star apple seeds are best planted in the late autumn



**লেবু**

শীতকালে বীজ রোপণ করা ভালো। Lemon seeds are best planted in the winter



## Way Forward

Over the last two years, many professionals, researchers, and crowd funds have shown interest in supporting the ongoing placemaking process by the children. We received stationery, books, and play materials to contribute to children's education. We collaborated with researchers focusing on different curriculums, such as play-based early childhood development, life-skill-based education, STEM-based educators, etc. The children's health and educational development process will continue in such collaborations.

Our action research and learning of placemaking with children motivate us to continue working in new communities. In Gabtoli, we will continue converting the alleys into children's learning spaces. In Kallyanpur, we will continue with more placemaking and waste management with other stakeholders (shopkeepers, more schools, etc.)

We believe that the involved communities, the leaders, the mothers, and the school teachers will continue the placemaking process even when we are not there. In the last two years, they got into the fun, joyful aspects of designing, model making, collaborating, and finally visualizing a physical space. Children, on the other hand, will undoubtedly carry on the process. Every time POCAA visits the schools, we see children's imagination coming into reality through new arts, waste-to-fun-products, plants, and stories.

Children and youth in the community received the seed of educational play and green practices, and many adults and other professionals are now connected to nurture them. Many more children would be inspired by the heartwarming tales of placemaking and the joy of co-creating, even with limited resources.

**Young community representatives**

Children from Gram-Bangla Shapla Boshoti  
Unnayan Community School, Gabtoli  
Children from Dwipnagar Upanushathanik Primary  
school, Dwipnagar  
Children from Brightstar Junior school, Kallyanpur  
Children groups from Mohammadpur Chand  
Uddyan

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Towhidul Alam

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**Planning and Coordination**

Platform of Community Action and Architecture  
(POCAA)

