# Not just a floor!

## Nizamuddin Renewal Initiatives

The image of young children in our mind is often one consisting of them running around from one place to another. Having mastered their skills of walking around the age of 1 ½ - 2 years, they are constantly practicing what they have already learnt. Most parents and preschool teachers would appreciate how difficult it is to trick children into sitting for long periods of time, except if they are deeply engaged in some activity. The need for open spaces and playgrounds for children of any age cannot be overstated. Many of our own fond memories emanate from hours of free exploration and running around. United Nations Convention on the Rights of the child (UNCRC) also states the right to play as an important right, emphasizing its importance in holistic development of children (Article 31). For very young children, it is important that spaces exist where children can play freely with some adult supervision. Designing of these spaces for children has received attention from practitioners working in the field of early childhood development as well as design.

We have often talked about the need for open spaces for children. It has been well proven by research that open spaces and free play is essential for children to develop various skills. With the obvious physical aspects of development, free play is also essential to cognitive, language as well as creative development of the child. (Refer to Dr Asha Singh's Paper on play). Having enough physical exercise has also been linked to formation of neural pathways of development. (Refer to Harvard research) This combined with positive spaces is crucial as well. The developmental impact of warm, positive and bright spaces for preschool children cannot be stated enough. The spaces should not be only bright and positive but also give opportunities to children for active learning. Since young children make most of the sensorial experiences, many activities in the preschool are geared towards giving children these experiences. These activities should also appeal to the playful nature of children. There is an inherent sense of wonder amongst children, animals take lifelike characteristics. This is reflected in many stories meant for young children where animals are anthropomorphized carry out full conversations. In the world of imagination, anything is possible and can come to life.

This paper discusses the process behind the development of an 'interactive' floor which takes into account some of the features mentioned above. The floor is not 'interactive' with the features which can be manipulated as they are literally set in stone. However, the interactive aspect refers to the narrative behind the floor and how it tells a story, not just one, but as many

as one can come up with. The paper is titled 'not just a floor' as we address various issues through the development of this floor which address not only issues related to child development but also urban spaces and place of children in it. This paper is divided in four sections. The first section talks about the need for open spaces in Nizamuddin Basti especially young children. It presents an impressionistic account of the childhood in the basti which emphasis on the relevance of this intervention. The second section presents the process through which this floor was designed and implemented. The third section enumerates the different activities which can be done around the floor. The fourth and the final section gives recommendations as well as step forwards in dealing with the issue of space.

# Section 1: Need for open spaces in the basti

Nizamuddin basti lies in the heart of Delhi; however over a period of time it has been much neglected by the government services. However, the rich cultural background of the *basti* renders it a somewhat unique environment. The revered Nizamuddin Dargah is flocked by people from different social, religious and economic background. This *basti* dates to around 700 year old, which has traditionally been destination for people travelling from across the nation in the hopes of being buried close to *Hazrat Nizamuddin Aulia*. Even in today's scenario, the *basti* is an abode for people migrating to find better employment opportunities at urban centres.

The basic services include those pertaining to education, health, employment opportunities. Along with this, infrastructure is a crucial requirement which is quite often overlooked. More so in the case of young children, who are the most vulnerable section of the society. The government scheme which looks after the needs of children below six years of age is ICDS. As a part of this scheme, in every urban settlement with a population of 1000, an aanganwadi center should be set up. This aanagnwadi centre caters to the nutritional needs through a supplementary program; the educational needs through a preschool program and the health needs through immunization and growth monitoring program. Interesting gamut of services, however, the space in which these are confined to are only given a monthly rent of Rs 750/- as per the current norms\*. However, considering high cost of living in urban areas, this rent is often too little to interest people in renting out their spaces for an aanganwadi centre. A small room, 10 ft\*12ft in size, costs anywhere between Rs 3000-5000/- depending on the state in which it is. The gap between the government rates and the actual rates is too high so most of the aanganwadi centers end up functioning from residential units where the space is often shared by T.V; refrigerator, washing machine, cooking stoves and sleeping guests. Even the promise to substantiate the rent is faced with resistance as there is a genuine space crunch. Among the

cramped, dark streets (a street actually named andhere waali gali) it is very difficult to find spaces which are suitable to run aanganwadi centres. This lack of space impedes the preschool component as various activities involve children freely moving around in a relatively larger area. Also, not only the space is lacking, any form of vibrant or children friendly play elements are difficult to incorporate in the existing spaces. A preliminary round of interviews with the families of children with severe undernourishment especially among the younger children reveled that they were not playing outside their homes and were confined to the homes which already lack access to sunlight. There may not be an exact correlation between the two factors however the interaction gave an idea about poor access of children to open spaces especially young children.

A major issue which leads to this poor access to open spaces amongst young children is related to the safety concerns. Despite one's constant wishing away, the abuse of young children is a pertinent issue. The safety of children can often not be guaranteed inside the homes, neither are there safe spaces outside the homes where children can freely play. The incidents involving abuse of young children raises the critical need for availability of safe spaces for young children.

As part of the Nizamuddin Basti Renewal initiative, parks have been created and maintained which is accessed by residents. Development of Zanana Bagh has been quite useful especially for women and children as they are relatively free from the 'male gaze' and are able to spend some time either exercising, watching their children play or just being. 2 more parks are located in the basti, one is called 'Central Park' which is also used to host functions and other one is called 'Outer Park'. However, these parks are meant for general population of the basti. The younger ones often require assistance to visit parks; either a parent or an older sibling. Leaving younger children unattended is often out of question which also means the access to an open space is further reduced.

The lack of spaces for young children is an important issue when it comes to providing healthy living spaces to children. Bernard vanLeer foundation research shows the critical need for health living spaces and its impact on children's health. Following infographic shows the impact of lack of access to public spaces on development of young children. The complete chart is added in the

# Lack of safe spaces to play can harm children

- - Lack of safe public spaces to play can harm learning ability, especially between the ages of zero and four.
  - Lack of safe spaces for play and exploration can harm children's physical development and social skills.

### Poor quality of public space can harm children's well being and social skills

- Lack of spaces for interaction, like youth clubs and community centres, can harm children's social skills.
- Unsafe public spaces prohibit children from participating in communal life, play and recreation activities.
- Crowded and chaotic public space can harm children's emotional well being due to increased stress levels.
- Lack of spaces to play that provide challenges (but no great risk) can harm children's development.

#### Annex.

More recently, the issue of Child Friendly cities is being raised which should look at all factors which lead to safe and health lives of children. In a community like Nizammudin Basti, or any urban slum community, it becomes essential to address these issues. This leads us directly to fact that investment in improving physical infrastructure for young children is need for the hour.

# **Section 2: Process involved**

The idea behind creating a lively space emerged for children from the above mentioned concerns. As a part of the existing early childhood care and development programme; a demonstration centre has been functioning since mid 2012. It has been housed in the MCD Polyclinic, not by chance, but with the intention of integrating health and educational needs of children in form of a Maternal and Child Health (MCH) Centre. The MCH centre houses Gynecologist and Pediatric OPD; Immunization centre and a preschool centre. Awareness activities are also a part of this centre. In backyard of the polyclinic lies an abandoned pump house which has been converted into an aanganwadi centre. The flooring of the backyard was in a poor condition due to constant issues with the drainage system. The building above the Polyclinic houses a Night shelter for homeless people. Many things from dirty clothes to broken bottles are thrown from the roof during the night. The uneven surface of the floor makes it difficult to clean. Water logging is also observed due to this surface. Renovation of the area was in order especially if the surface was to be made safe for children to play freely in.

As a precursor to the renovation of the area behind MCH centre; a *Bal Divas* (Children's Day) was organized in the space where different activities such as a drawing completion; puppet show; storytelling and sports event for children studying in all aanganwadi centers of the *basti* was organized. The space was sufficient to accommodate upto 150 children engaged in different activities. The long gallery was used for races and the old tank was converted to a platform for art competition and puppet show for children. The space was ideal for hosting the event for children. During this event parents were invited to attend. Aim was also for people to start associating that space as a space for children under 6 to ensure attention is paid to early childhood development in the *basti*.

The area was to be made visually appealing as we have already discussed that children are attracted towards bright and colorful spaces. Throughout the Nizamuddin Initiatives, a common theme of integrating aesthetics into everyday spaces is seen. Be it the MCD school where the space is filled with the traditional art from different regions of the country along with the

staircase or mosaic work at the Musafir Khana roundabout and other locations in the basti. Being surrounded by aesthetic elements in everyday lives is also an essential part of learning processes from a very young age.

The renovation work for the area started in 2014 by the Urban Improvement. The first stage of the process was designing of the floor which was done keeping in mind some basic things:

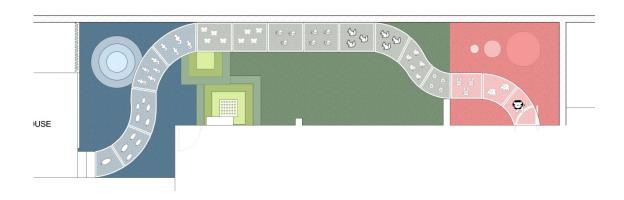
Integrating learning elements into the floor

Making the floor bright and attractive

Use of concrete which makes the floor easier to clean

Use of local techniques (cheeni ka kaami.e Tile Mosaic Work)

With some of these principles in mind, the designing of the floor was initiated. Various ideas were explored for the design which went through many stages of transformation. Below are 2 of the stages (first one is an intermediate stage and the second image is the final stage)





The idea behind this design was to create a mathematical progression which is visible in the first image; so starting with one lion, two elephants, 3 rabbits, 4 monkeys and so on. The different colours were used to classify different habitats of the animals. The red section of the floor had all animals living on the land, the green section with animals living on trees and the blue section with animals living in water. The design underwent many rounds of deliberation to arrive on the final design which was more organic in nature. The colors were also selected keeping in mind the overall aesthetic appeal of the area.

The design of the floor integrates various elements which can be used to teach cognitive concepts to young children. Being able to count is a basic skill which children pick up during early years. This concept is reinforced many times during a preschool year. Starting from counting concrete objects children explore numbers in various forms. They also develop one to one correspondence. During these years they are also learning about classification of objects in different categories though they become proficient with these skills at a later stage. They are also learning concepts related to shapes and colors. Storytelling is one of the most crucial components of any preschool program. Children are not only recipient of stories but they actively create stories. A narrative runs across the floor which takes into account the imagination of children. According one of the stories, the elephants and the turtles can go for a walk in the jungle. The jungle is so dense that they can't even see the sky but they have many birds and trees for company. And when they cross the jungle they see the sky full of stars. Many stories and narratives can be built depending on the imagination of teacher as well as the children. All of the elements on the floor aim to support acquiring and strengthening of skills which are a part of the preschool program. The elements can be independently explored by children or can also be used by the teacher to facilitate different activities.

Second stage involved the execution of the design. It began with clearing of the space and laying the contours of the design. Once the basic structure was laid out, each of the animal and plant figure was first set with broken pieces of tile on a piece of net and then embedded in the cement floor. This labor intensive process was carried out for around 60 figures. As a result each figure is a piece of artwork in itself. Three different pigments were added in the cement floor to signify different habitats. Curing of the floor was done to add to the durability.

# **Section 3: Illustrative activities**

The above section talked about the overall concept behind the design. This section delineates some activities which can be done by the teachers using the floor. These are some illustrative activities, more activities can be thought of as teacher takes the class along.

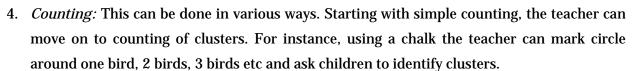
# 1. Identifying bigger and smaller:

Variant 1: The teacher will ask the children to stand around the two circles. One by one she will ask children to jump on either big or small circle. The teacher can make this exercise interesting by adding a rhyme for the activity.

Variant 2: The teacher will collect pebbles and give each child one pebble. Teacher will ask each child to place the pebble either in the bigger or the smaller circle.

- 2. Walk along the zig zag line: The children will walk one by one on the zig zag path; this is a useful activity for developing balance.
- 3. *Follow the instructions*: The teacher can ask children to follow instructions at a quick succession for instance find the elephant or run to the fish. They can get complex

later with specific instructions such as find the bird with the orange beak etc.



- 5. *Classification*: Teacher can begin with telling a story about different habitats and then build a game around finding where different animals live for instance the elephants are on land, the birds live on trees and fish in the water. Each child can also be given flash cards of animals that have same habitat to be placed on that color of floor.
- 6. *Story Board*: As discussed in the earlier section, many stories can be woven around the animals. Or with the use of guided imagery, the teacher can talk about taking children through the forest or to the sea.
- 7. *Colors and Shapes*: Children can identify different colors and shapes which are present on the floor.

These are just some activities which can be done with the children. Teachers can form multiple variations and take the learning outside of the classroom. There is a great deal of research done



which proves that when children are experiencing positive emotions their learning is enhanced. Using and experimenting with interesting features we can keep adding to the learning process of children.

# **Section 4: Step forward**

This particular issue of spaces for young children addresses one aspect of the larger issue in the early childhood care and development paradigm. Just as we need good infrastructure for young children, we also need quality early childhood care and education program which systematically addresses the health, education, care and protection needs of children. Through the project we are trying to focus on all these issues as well.

However, through this experiment we have barely scratched the surface of the issue of lack of safe play spaces for the young children. But what we do plan to achieve through this intervention is that children from Nizamuddin basti get an opportunity to use this space and other open spaces located within the basti. As we discussed that aanganwadis have limited space to play in, the teachers can bring children to the centre on rotational basis. The teaching activity for that day can be done using floor as the aid. And more than anything else give children opportunities to freely run around. Though, this in no way denies the inherent nature of children who find opportunities to play even in the most adverse situations.

By demarcating a space especially for young children, we plan to do advocacy with the community and eventually with the government agencies to understand and work towards fulfilling needs of young children. Establishing dialogues within the community is crucial to any social development program. As experienced in many programs, provision of services is not sufficient if the community is not engaged in the whole process. There are good chances that such experiments may remain in the realm of experimenting unless the community adopts and adapts to the changes.

#### Insecure housing can harm children

Insecure tenure can harm children's sense of safety and belonging. •

Evictions can cause traumatic experiences for children and harm their emotional stability and social skills. 🔾 Homelessness poses a threat to children's health due to lack of shelter and facilities.

# Housing

#### A crowded living environment can harm children's development and well being

Lack of space and opportunity to play in the house hampers the development of motor- and social skills. 🔾 Noise negatively influences children's stress level and physical health, such as hormonal functioning. Chronic crowding leads to behavioural difficulties in school and poor academic achievement.



#### Poor quality of housing poses a threat to children's health

Poor construction quality can lead to inadequate protection from (extreme) weather conditions.

Poor construction quality can cause injuries or death, especially in the event of natural disasters. Poor construction quality can lead to inadequate protection from insects and other disease carriers. •

Poor design can lead to lack of sufficient daylight.



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#### Lack of adequate sanitation systems poses a threat to children's health and well-being

Poor sanitary conditions can lead to malnutrition and disease, like diarrhoea.

Poor sanitary conditions can lead to rodents, insects and other carriers of disease.

Lack of adequate drainage systems can spread disease and pose a risk of drowning.

Lack of proper sanitation solutions like private toilets can lead to increased stress levels, fear and shame. 🔾



# Poor infrastructure can pose a threat to children's safety and social skills

Dangerous traffic can lead to physical injuries, such as when playing.

Lack of safe modes of transportation can prevent children from exploring and participating in community life.





## Lack of clean water poses a threat to children's health

- Lack of access to clean drinking water and sanitation causes a range of diseases, like diarrhoea.
- Toxins and chemical pollutants in water can cause a range of health problems.
  - Toxins and chemical pollutants can harm pre-natal development of the body and brain.
  - Unhygienic storage of water increases the risk of contamination with pollutants.

## Difficult access to clean water can harm children's learning abilities and social skills

Time spent by children collecting clean water is lost for other activities, such as school or playing.



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#### Lack of power sources poses a threat to children's safety and development

- Lack of light can harm children's development by preventing them from playing and learning.
- Lack of light poses a threat to children's safety when moving and playing around the house.
- O Lack of adequate power for cooking and preserving food can lead to malnutrition.
  - Lack of power can cause extreme and harmful physical discomfort (extreme heat or cold).

# Unsafe power-infrastructure poses a threat to children's safety and health

- O Power lines and power stations that are accessible to children can lead to physical injuries.
- Radiation can harm the pre-natal body and brain.



#### Contaminated soil poses a threat to children's health

O Soil that has been contaminated with toxic chemicals can cause health problems and harm development.

Contaminated soil has been associated with preterm delivery.



## Poor indoor air quality poses a threat to children's health

- Poor indoor air quality may contribute to respiratory diseases.
- Damp air caused by lack of ventilation leads to moulds that can harm children's brain development.
- Tobacco smoke damages children's respiratory system, leading to illnesses like asthma and pneumonia.
- Poor indoor air quality has been associated with pre-term delivery.



#### Air pollution poses a threat to children's health

- Outdoor air pollution, for example by traffic or industry, contributes to respiratory diseases.

  Air pollution has been associated with pre-term delivery.