SPACE FOR MIGRANT WORKERS

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Abstract

In the country like India there is numerous amounts of migrants who have their own reasons to step out to cities and give their degree of economic activity. They stay on footpath and in open areas where they have to face various problems especially for women and children's and also effect cities economy and urban development, By this research we are trying to solve the problems of migrants as well as coming in front of cities. The aim is to carve out space in an urban environment for squatter and pavement dwellers and to provide a proper, secured and usable space to migrant workers, Who Come from various areas and having no proper space to stay or spend their days and nights. Provide the affordable or free of cost space in urban area for these migrant workers who live on the footpath up to get employment to sustain and settling down city. In this process, we have criteria to take account of various by which lives of people living in the city, we’re not disturbing them or they don’t have to face any trouble or problem. Also, we have to follow rules and do our work considering all government official laws and also create some laws for a migrant who is using these redundant spaces for their security and safety and convenience of them as of cities. Also, we should have to provide facilities for disabled persons, Security of women and children, people don’t have to get face any violence by any group gang, organized criminal’s, etc.

- The research is redesign of surrounding public area or setting down in order way
- It basically the research outputs become an urban design.

Keywords – migrant, squatter, pavement, labours

Introduction

More than half of the world's population lives in cities. The city is growing very fast. This growth is exacerbat ed by pressure to migrate from rural areas where land cannot support the population. The city continues to attract people seeking a better life, better jobs and services. People came to the city and it became slums, living ilegally on the sidewalks or whatever they could find.
If these migrant workers have houses or residences in the city, they can stay and spend the night there.
1.1 Migration

More than half of the world's population lives in cities and this number is increasing every year. India, where most of the population still depends on agriculture, is no exception. The city continues to attract people seeking a better life, good job opportunities and services. The city responds to the urgent needs of immigrants and solves their integration problems. The 2017 Indian Economic Survey estimated that between 2011 and 2016 there were around 9 million immigrants in India each year.

135.26cr - Magic Population
13.9cr – Immigrants

1.2 Urbanization

Approximately 55% of the world's population (4.2 billion people) lives in cities. This thought must continue. With the urban population more than doubled by 2050, about 7 out of 10 people in the world will live in cities.

However, the pace and scale of urbanization poses challenges, especially for those living in the informal economy, including meeting urgent needs such as affordable housing, good transport and other infrastructure, basic services and employment for the nearly 1 billion people living in the informal economy. The time of resolution is near. The escalating conflict has resulted in 60% of the displaced people living in cities. According to the 1901 census, 11.4% of India's population lived in urban areas, this rate increased to 28.53% according to the 2001 census and is currently 34% in 2017 according to the World Bank. Mumbai experienced rural to urban migration in the 20th century. Mumbai, which was India's largest city with a population of 22.1 million in 2018, is followed by Delhi with a population of 28 million. Delhi has seen the fastest urban growth in the world with a population increase of 4.1% as per the 2011 census.
1.3 IMPACT ON URBAN INFRASTRUCTURE AND SERVICE

**Housing** - With their exorbitant housing prices, the global cities of London, Mumbai, New York, Paris and Shanghai are also among the major cities impacted by migration. Cities in Sub-Saharan Africa also suffer from severe housing shortages, causing steep inflation in the price of housing units. - A lack of affordable housing has resulted in people living in slums or squatting.

**Education and employment** - Soaring immigration directly affects the availability of places in primary school, and inevitably pushes schools towards increasing class sizes and adding classrooms. - Migrants have a skills spectrum ranging from unskilled labour to highly-skilled workers, and have become a key driver for matching the skill demand and supply ratios around the globe.

**Health** - In cities with a significant migrant population living in slums, migrants' living conditions and other social determinants exacerbate physical, mental and social health risks. - Realities resulting from new social and political environments and from language barriers place great demands on the coping skills of first- and second generation migrants and their ability to adapt.

**Transportation** - Migrants rely on transportation to move from one place to another, creating increased demand for such facilities.
1.4 Utilities –

➢ **Water**: The influx of migrants places an increasing demand on water resources, followed by an associated increase in sewage generation which, in turn, creates demand for wastewater treatment facilities.

➢ **Energy**: Migration affects energy consumption and CO2 emissions quantitatively. Energy consumption estimates are lower when a city population has increased due to rural-to-urban migration than through urban-to-urban migration and natural population growth.

➢ **Information and communications technology**: The growing speed of information has altered migration flows and increased the potential for mass arrivals in a compressed time frame, thus affecting the destination city.

➢ **Sanitation and waste**: Migration can greatly exacerbate the challenges of managing sewage given the growth of the population, but the city cannot always meet the demand due to insufficient capacity.

➢ **Social cohesion and community integration** - Problems between communities arise from misunderstandings creeping in from language and cultural barriers, reduced knowledge of the environment and social context, and discrimination and xenophobia that contribute to migrants being excluded from basic urban services.

➢ **Safety and security** - Some developed countries regard migration as a security issue and use it as an excuse to instate stringent and restrictive policies. These policies limit asylum seekers' access to safe countries, and in extreme circumstances can lead to migrant smuggling and human trafficking, or their taking unsafe passages en route. Emerging differences between the - interests of migrants, city governments, and countries excessively controlling the movement of migrants have led to a misaligned outlook on immigration in such countries.

1.5 Types of Homeless people in Urban-

In the urban area, there are many types of homeless people such as commuters, hawkers, migrants, old age people, etc. each group of peoples is facing problems. the people are not want to live on the pavement but there in the situation is not good, they can't afford the payable accommodation or rented house. some people physically not able, some peoples are mental, some people are addicted to bad habits. all people have different reasons with their own situation.
2. STUDY AREA INDORE METRO CITY

Only 10 shelters for 3500 homeless people in Hyderabad

For understanding the context situation of migrant workers in urban area, as considered Indore. There are many migrant workers, who are sleeping on pavements and below the bridge structure. They have no proper space where they sleep. In day time people go for searching work and night they occupy the space, where they feel to safe secure. INDORE: The 10 existing Indore Municipal Corporation (IMC) night shelters with a 400-bed capacity are woefully inadequate to cater to the over 3500 homeless people who call the city's streets home.
3. GROUP LABOUR COMMUNITY ACTIVITY TIMING AND TYPES OF LIVING SHELTER ANALYSIS (INDORE METRO PROJECT)

7:00AM – WAKEUP

8:45 AM – ATTENDENCE TO START WORK

9:00 AM – WORK BEGINS

1:00 PM – LUNCH AT OWN RESPONSIBILITY

5:30 PM – WORK ENDS

2:00 PM – WORK RESUME AFTER LUNCH

7:00PM – FOOD PREPRATION

In Metro Project Indore, 150-200 construction works are working daily at the metro station construction site, their living space is about 100 meters away from the construction site, which will save time. And they can come to work comfortably. Due to the construction site nearby, they are getting all the facilities like electricity, water and sanitation. In this research living shelter, it was in the form of a large hall with attached kitchen and toilet on the side. The size of the shelter was 5x15 meters. The shelter was made of a frame of hollow metal pipe and the covering was made of tin sheets.
4 - Literature case study - Urban Nomads- Housing for on-site migrant construction workers at Thane

Project Description
A construction worker, who actually materialized the designs on construction sites and is an integral part of the construction industry often gets neglected. If we trace the architectural history, even though the architectural world has moved on from a hut to tall skyscrapers, the living conditions of workers has not evolved much. The prototype is a cube of size 2.8m x 2.8m x 2.8m, elevated from the ground by 150 mm to prevent rainwater and insects entering in. The specialty of the prototype is its flexibility where structural MS framework is constant and walling panels are variables. As per the availability of materials, funds, climatic zones and other barriers, the users can change the walling material.
Comfort – The design ensures user comfort with the help of proper natural light and ventilation. The upper flap has a dual role - it helps to drain the rain water and allows natural light and ventilation.

Adaptive – The design adapts with respect to the needs of the user and the function.

Stackable – The prototypes can be stacked in case of site constraints. This ensures adequate user comfort in spite of having a compact site. The G+1 module can be access with the help of add-ons like a passage and ladder.

Easy to erect and dismantle – This simplifies the process, minimizes the time taken by the workers to set up the proposed dwellings.

Versatile – The prototype can be arranged in different fashion to house various activities. For example - the same unit can be used as a crèche, a canteen, toilet block, a medical room for construction workers.
MATERIAL STUDY BASED ON CLIMATE

<table>
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<tr>
<th>Hot – dry</th>
<th>Warm humid</th>
<th>Cold</th>
<th>Composite</th>
<th>Temperate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Majors metro cities</td>
<td>Ahmadabad</td>
<td>Mumbai</td>
<td>Shimla</td>
<td>New Delhi</td>
</tr>
<tr>
<td>Material</td>
<td>Tetra pack sheet + plywood</td>
<td>Tetrapack sheet</td>
<td>Tin sheet</td>
<td>PVC flex</td>
</tr>
<tr>
<td>Image</td>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
<td><img src="image3.png" alt="Image" /></td>
<td><img src="image4.png" alt="Image" /></td>
</tr>
<tr>
<td>Properties</td>
<td>Tetrapack sheet and plywood with a air gap will provide required insulation</td>
<td>Tetrapack sheet helps to reflect the sunrays results into desired comfort</td>
<td>Aluminum sheets will helps to increase surface absorptive</td>
<td>PVC flex increase the surface reflectivity</td>
</tr>
<tr>
<td>Temp in (c)</td>
<td>Above 30</td>
<td>Above 30</td>
<td>Below 25</td>
<td>Below 25</td>
</tr>
<tr>
<td>Humidity %</td>
<td>Below 55</td>
<td>Below 55</td>
<td>Below 75</td>
<td>All values</td>
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RECOMMENDATION

Firstly we have researched and taken account of the current situation of the homeless shelters, after studying we came to a point where there have been various conditions that come across the program. Consider the case of Indore city, we found there are only 15 homeless shelters over the city and the majority of them are in the worst condition. We have seen that current homeless shelter in urban areas does not work. And also they are not enough for full fill the requirement. In our research, it has been seen that in many metro cities, the workers are forced to sleep on the footpath and street furniture is of no use at night, so those street furniture can be designed in such a way that it works as a daily activity during the day. And do the work of sleeping in the night. Different types of typology can be designed. There are many alternative building materials that can reuse as a temporary shelter after expiry such as SHUTTERING PLYWOOD, SHUTTERING BALLI, METAL PIPES, TINE SHEET, and FLEX ETC.

CONCLUSION

From this research, I understood that there is no place to live in metro city or no one wants to spend money or affords on the workers, what is your responsibility as an human for the workers. There are many urban voids inside metro cities, that space can be used by migrant workers with temporary shelters. Waste government spaces inside a city can be use as temporary shelters for migrated labour and Small sleeping dome vehicle can provide night stay with minimum cost. Due to lack of land in a metro city the space that are nearly to die can be change multistory buildings means Many such spaces like slums, poor construction housing, garbage, greenbelts can be modified to accommodate large occupancy, such as high-story buildings. So that the wastage of land as well as the beauty of city can be preserve and achieve less spaces and more accommodation. Alternative material (wastage material that can reuse) or we can be say that the material that are not expensive can be used in making small module for migrated labour shelter with difference construction technique and there are many material that we can suggest for good accommodation for living with better thermal comfort and health. We can propose to the government to make some low standard, so that there is proper sanitation or water arrangement for the migrant worker to stay at the construction site, due to which they are not forced to sleep on the footpath.