ECCE Centres in Urban Migrant Slums

A report on designing creches, anganwadi and bridge centres that are transitionary
Case Study on Designing Portable Learning Spaces

Brief of Bridge or Tent Schools, Creches in Labour Colonies, Anganwadis in Urban Slums

**URBAN SLUMS**
- lack of available land for construction
- No WASH facilities
- lack of learning material and safe play spaces

**LABOUR COLONY**
- Migrant population
- lack of child-friendly spaces
- lack of spaces for bridge learning and day care

**MIGRANT COMMUNITY**
- Migrant population
- Lack of land rights
- No WASH facilities
- Lack of a conducive learning environment for bridge learning and day care
- Lack of energy
Issues/Problem Statement

- Insufficient documentary proof of identity and local residence leading to exclusion from access to public services like health and education, subsidised food, etc.
- Shelter programmes like slum rehabilitation schemes are discriminatory towards new migrants and seasonal migrants
- Overlap between the academic session in schools (Jun-Apr) and the seasonal migration cycle (Nov-Jun), children end up attending school only from Jun-Nov
- Children face difficulties in learning owing to differences in academic curricula and language, especially in the case of inter-state migration
- In the absence of crèches, early childcare services, initiatives for pre-school education and growth monitoring, migrant children miss critical inputs necessary for early years (0-6 yrs) developmental milestones
- Migrant children are often inducted as child labour and paid wages on a piece-rate basis, making them work for long hours leading them to stay away from schooling
- Migrant children are exposed to communicable diseases such as malaria and tuberculosis due to unhygienic spaces, and are invariably malnourished
- Older children are often held back due to household chores and caregiving for their younger siblings
- These children also suffer with low self esteem and mental health issues due to the aforementioned factors
- All of the above factors lead to the right of migrant children to education and health being continuously compromised, leading to intergenerational transmission of poverty
The Approach

**Lifespan of the Structure**

Structural lifespan maximum of 30 years and Envelope lifespan of 15-20 years with 3-4 transportation cycles.

**Size of the Structure**

30 to 40 students of various age groups can be accommodated in an optimal utilised space of 12ft by 24ft.

**Modular Portable Design**

Prefabricated modular structure can be expanded based on the increase in number of children and transported.

**Overall Expenditure**

Each module of 12ft by 4ft costs Rs.43,000/- (Rs.14,500/- considering 3 cycles - Rs.87,000/-)
Analysing the Built Spaces

Tent Schools - The Gaps

- Ad-hoc structures built with hazardous or flimsy material
- Insufficient lighting and ventilation in learning spaces.
- Lack of enthusiasm in children to come to school due to less attractive built structure and learning methods.
- No child friendly strategies of learning considering different age groups coming to the school.
- Safety and storage of learning materials, books, tools, and food is not present.

EXISTING SCENARIO

[Images of tent schools and learning environments]

[Images of children learning in tent schools]

[Images of poorly lit and ventilated learning spaces]
Designing Built Spaces

Portable Classrooms - External

- SHADED ANAGAN
- DIGITAL LEARNING (SOLAR POWERED)
- RAISED FLOORING
- FOOD SUPPLIED BY AKSHAYA PATRA FOUNDATION ANGAN TO BE USED FOR DINING
- RAIN WATER HARVESTING AS WATER SUPPLY FOR THE TENT SCHOOL

CHILD FRIENDLY LEARNING TOOLS
Designing Built Spaces
Portable Classrooms - Internal

- Insulated Roofing
- Adequate Light and Ventilation
- Storage for Learning Materials
- Interactive Flooring for Creative Learning
- Interactive Walling with Black Paint
- Digital Learning
- Interactive Walling for Creative Early Learning
Impacts

Optimal Space Design

- Organized and lockable storage spaces to accommodate learning material with designated spaces for each child - improves ownership and responsibility.
- Life of the learning materials increased.
- Safety and security of the materials.
- Helps in achieving thermal comfort in the interior and creates comfortable learning space.
- Roofing overhangs protect structure from rains and heat.
- Optimum openings enhance the illuminance for the learning activity in the space.
- Openings are located according to orientation to facilitate cross ventilation.

“Due to the segregated play and learning areas designed for different age groups, managing and teaching the children has become easier and days are much more productive”

- Pushpa, Teacher
  NRI Colony Tent School

DIGITAL LEARNING (1 to 14)
INTERACTIVE FLOORING FOR CREATIVE LEARNING (3 to 6)
INTERACTIVE WALLING FOR CREATIVE LEARNING (1 to 3)
INTERACTIVE WALLING WITH BLACK PAINT

- Increases the enthusiasm among the children to come to school.
- Increases the efficiency of interactive method of learning.
- Provides multiple opportunity for learning and opportunity for smaller group session with the teacher.