

দ্রুতগার্শার মাঁচা
SOS Children's Village

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A thesis submitted to the Department of Architecture in partial
fulfillment of the requirements for the degree of
Bachelor of Architecture

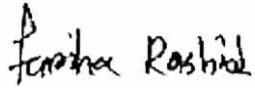
Department of Architecture
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22nd August 2019
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Declaration

It is hereby declared that

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2. The thesis does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.
3. The thesis does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.
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Approval

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Ethics Statement

The immense concern of the project is the absence of basic social training and survival skills that the children exhibit when they join the society. Without acceptance from the society, they are unable to harness their individual potentials and fail to cope with the life outside the institutional structure that they grew up in. They fight to survive and end up being involved in different socio-negative issues such as drug abuse, prostitution and many other criminal activities for sustenance. When these orphans can do something productive for the society, they themselves increase their acceptance towards society. Here, the project work SOS Children's Village is the platform, where they learn about self – dependence to become self - reliant and self – sufficient citizens without having trouble blending into the society. Thus local neighborhood is getting an asset and playing a vital role through mixing which is a positive issue. As, 70% students from Barisal city come at SOS Hermann Gmeiner , school , it creates another range of social mixing through which the psychological mental health of both sides become cordial, and orphans are treated same as normal child. Furthermore, the institutional complex is essential in terms of the context of Barisal as there is number of “Madrasa” which focuses more on religion but no adequate number of orphanages that can provide services and fulfill all their needs.

ABSTRACT

The word “Orphan” refers to someone who has lost both his/her natural parents.

Generally, we imagine downhearted sad little children, when we think of orphans. A home for orphan children is no replacement for a house with loving parents, even if they are adopted. Furthermore, “Orphanage” is the place where children without parents are cared for and housed. The place care for her children until the children can be placed in homes and adopted.

“Save Our Souls” – is where the name “SOS” comes from. SOS Children village is something different than the images of any typical orphanage comes into mind at first glance. The organization looks for individual donors from across the world to sponsor a newly admitted orphan and the donor supports the entire expenses of a kid till the child grows up. The homes are somewhat like a real family and “village” is thus built up consisting clusters of homes and additional facilities.

My project intends to give these orphan souls the platform where they can receive all their needs and get a bit of happiness. Additional to providing a family and a society; the project adds blending with the entire neighborhood locality. It is hoped that, with the long span of time, these children will be educated and will become self-dependent. If they get the adequate opportunity, there will be moment when these orphan souls will be referred as an asset towards the nation. The project will be a parochial overpass between the orphan world and the other world.

Keywords: Orphan, Family, Identity, Social-acceptance, Psychology, Equity.

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TABLE OF CONTENTS

- i) Declaration
- ii) Approval
- iii) Ethics Statement
- iv) Abstract
- v) Acknowledgement
- vi) Table of Contents
- vii) List of Tables
- viii) List of Figures
- ix) List of Diagrams
- x) List of Images

1. CHAPTER 1: Background of the Project

1.1 Introduction

1.2 Project Brief

1.2.1 Brief on “SOS”

1.3 Problem Statement

1.4 Rationale of the Project

1.5 Needs and Aim of the Project

1.6 Rationale for the Site

1.7 Basis of choosing the Program and Key functions of the community

1.8 Methodology

2. CHAPTER 2: Literature Review

2.1 Understanding ‘Orphan’ and ‘Orphanage’

2.2 Origin and Role of Orphanage

2.3 Study of Children (Orphans)

2.3.1 Concepts of ideal Parents

2.3.2 Concept of Mother

2.3.3 Contribution of the Family

2.4 Situation analysis of Orphan Children

2.5 Psychological well-being (mental health) for Orphan Children

2.6 Responsibilities and Criteria of lending helping hands

2.7 Features

2.7.1 Schooling

2.7.2 Socializing

2.7.3 Environment for Children

3. CHAPTER 3: Site Appraisal

3.1 Location of the site

3.2 Site Topography

3.2.1 Climate

3.2.1.1 Temperature

3.2.1.2 Humidity and Wind flow

3.2.1.3 Comfort Zone

3.2.1.4 Rainfall

3.2.2 Terrain and Road Pattern

3.2.3 Ecological Factors

3.3 Site Area at a glance

3.3.1 About Barisal

3.3.2 History and Culture of Barisal

3.3.3 Population and Transportation

3.3.4 Access to the site

3.3.5 *Utilities and Services*

3.3.6 *Architectural Vision*

4. CHAPTER 4: Context Analysis

4.1 Existing Condition of the site

4.1.1 *Site and Surroundings*

4.1.2 *Site Photographs*

4.1.3 *SWOT Analysis*

4.2 Contextual Analysis

5. CHAPTER 5: Case Studies

- Introduction

5.1 Local case study

5.2 Sub Continental case study

5.3 International case study

- Own Comprehension

- Conclusion

6. CHAPTER 6: Program Development

6.1 Program Derivation

6.2 Targeted group of user

6.3 Standard Analysis

6.4 Program Analysis

6.5 Functional Flow

7. CHAPTER 7: Conceptual Stage and Design Development

7.1 Introduction

7.2 Form Development , Schematic Arrangement and Programmatic Layout

7.3 Concept Development

7.4 Final Design Drawings

7.5 3-Dimensional Visuals

7.6 Final Images of Model

7.7 Conclusion

8. Conclusion

9. Bibliography

10. Reference Index

LIST OF TABLES

Table3.1: Comparison among the guideline and the present scenario.

Table3.2: An overview of temperature in Barisal.

Table6.1: Program Analysis Chart.

Table6.2: Conceptual Requirement of Program Chart.

LIST OF FIGURES

Figure 1.1: Existing and Future locations of SOS children village in Bangladesh.

Figure 1.2: Types of emotional and behavioral problems sample.

Figure 2.1: Illustration of a developing stage of orphan child.

Figure 2.2: The cyclic process of conducting an Orphanage how it works.

Figure 3.1: Location of Division for site in the context of Bangladesh.

Figure 3.2: Location of the site in the context of Barisal.

Figure 3.3: Pattern of topographic condition.

Figure 3.4: Average monthly temperature and precipitation in Barisal.

Figure 3.5: Graph of climate and average temperature pattern in Barisal.

Figure 3.6: Illustration of humidity and wind flow pattern in Barisal.

Figure 3.7: Illustration of annual rainfall series and graphical monthly rainfall.

Figure 3.8: Illustration of comfort zone Barisal District.

Figure 3.9: Illustration of topographical terrain and road networking pattern.

Figure 3.10: Illustration of access to the site and connections.

Figure 4.1: Illustration of Site including the surrounding.

Figure 4.2: Figure Ground Map.

Figure 4.3: Land use pattern.

Figure 4.4: Building height pattern.

Figure 4.5: Route network pattern for communication system.

Figure 4.6: Space use pattern.

Figure 4.7: Options of amenities.

Figure 4.8: Existing vehicular stoppage and possible footprint.

Figure 4.9: Inter district bus route pattern.

Figure 4.10: Probability of human density and peripheral route.

Figure 4.11: Impression map.

Figure 5.1: Zoning analysis of the school section.

Figure 5.2: Entire zoning analysis of SOS Children's village, Dhaka.

Figure 5.3: Zoning analysis of the youth village section from youth hostel Mirpur layout.

Figure 5.4: Zoomed in analysis of identified zone on figure 5.3.

Figure 5.5: Master plan including blow up of the mother house plan and the community house plan.

Figure 5.6: The zoning analysis and functional flow of the entire village.

Figure 5.7: The circulation pattern and figure ground map.

Figure 5.8: The zoning analysis and functional flow of mother house.

Figure 5.9: Sectional layout from mother house, Section A-A.

Figure 5.10: Elevation layout from mother house, Section B-B.

Figure 5.11: Sectional layout from mother house, Section C-C.

Figure 5.12: Plan layout of community house.

Figure 5.13: Sectional layout of community houses including courtyard.

Figure 5.14: Elevation layout of community houses including courtyard.

Figure 5.15: Site Plan and massing of SOS Children's Village, Aqaba.

Figure 5.16: Functional zoning and identification.

Figure 5.17: Floor plans, elevations and sectional layout of typical Family building.

Figure 5.18: Floor plans, elevations and sectional layout of Kindergarten building.

Figure 5.19: Floor plans, elevations and sectional layout of Service building.

Figure 5.20: Family house typology.

Figure 5.21: Administration building plan and sectional layout.

Figure 5.22: Administration building elevation layout.

Figure 5.23: Family house duplex building plan and sectional layout.

Figure 5.24: Family house duplex building elevation layout.

Figure 5.25: Ground coverage analysis from local case study.

Figure 5.26: Ground coverage analysis from Sub-Continental case study.

Figure 5.27: Ground coverage analysis from International case study.

Figure 6.1: Standard for Class room module.

Figure 6.2: Standard for Class room capacity for High School.

Figure 6.3: Standard for General office module.

Figure 6.4: Standard for Dormitory.

Figure 6.5: Standard for Dining.

Figure 6.6: Standard Dining layout.

Figure 6.7: Standard for Multipurpose hall and Cafeteria.

Figure 6.8: Standard for Library.

Figure7.1: Conceptual space derivation – “চত্বর” as landmark.

Figure7.2: Conceptual space derivation – play space.

Figure7.3: Conceptual space derivation – Space for vendors.

Figure7.4: Conceptual space derivation – Private “চত্বর” for play space.

Figure7.5: Roof Plan.

Figure7.6: Shared communal space module.

Figure7.7: Ground Floor Plan.

Figure7.8: Rural story derivation of উঠান, চত্বর এবং প্রাঙ্গণ।

Figure7.9: Space connection with one function to another through time distribution.

Figure7.10: First Floor Plan.

Figure7.11: Spot sketches.

Figure7.12: Family house type-01.

Figure7.13: Family house type-02.

Figure7.14: Community house type-03.

Figure7.15: Staff quarter type-04.

Figure7.16: Director's residence type-05.

Figure7.17: Window detail blow-up of family house type-01 and Veranda detail of staff quarter.

Figure7.18: Typical floor plans.

Figure7.19: Elevations.

Figure7.20: Sections.

Figure7.21: Perspective view from “চত্বর”।

Figure7.22: Perspective view from residential shared space.

Figure7.23: Perspective view from the prominent pathway.

Figure7.24: Site model image.

Figure7.25: Model Image – 01.

Figure7.26: Model Image – 02.

Figure7.27: Blow-up model image of Family house type – 01.

LIST OF DIAGRAMS

Diagram2.1: Organogram chart to the development of orphan of SOS Children's village.

Diagram2.2: Determining the range of emotions.

Diagram2.3: Fulfillment of Basic needs.

Diagram2.4: Children interaction pattern.

Diagram2.5: Environmental pattern for children.

Diagram4.1: Illustration of SWOT Analysis from the site survey.

Diagram4.2: Percentage exploration from SWOT Analysis.

Diagram4.3: Percentage review of Figure Ground Map.

Diagram4.4: Percentage review of Land Use Pattern.

Diagram4.5: Percentage review of Building Height Pattern.

Diagram4.6: Percentage review of Route Network Pattern.

Diagram4.7: Percentage review of Space Use Pattern.

Diagram4.8: Percentage review of Amenity Options.

Diagram4.9: Percentage review of Vehicular Footprint.

Diagram4.10: Range between numbers of human density per minute.

Diagram6.1: Program derivation that may encourage increasing awareness.

Diagram6.2: Functional organogram including number of users.

Diagram6.3: Targeted users for the community.

Diagram6.4: Demonstration of Program Analysis for the community.

Diagram6.5: Primary zoning layout.

Diagram6.6: Functional flow chart and connectivity.

Diagram7.1: Aim of the institutional complex.

Diagram7.2: Necessity and Contribution of the project.

Diagram7.3: Pattern of Children Psychology for orphans.

Diagram7.4: Findings from the existing site.

Diagram7.5: Site forces for concept development.

Diagram7.6: Concept Generation.

Diagram7.7: Axonometric analysis.

LIST OF IMAGES

Image1.1: Panoramic View from the site, along with South to East direction and surroundings.

Image3.1: Images of “Kirtankhola” River and large floating market in Barisal.

Image4.1: Image of Barisal - Bhola Highway route connected to site.

Image4.2: View towards the site from Highway.

Image4.3: Pattern of local houses surrounded to the site.

Image4.4: Local bazaar and pharmacy.

Image4.5: Local “Macha” and environment friendly enormous green.

Image4.6: Image of Internal road network and local ponds.

Image4.7: Daily life-style and panoramic view of site.

Image5.1: Site location of SOS Children’s Village, Dhaka.

Image5.2: Images of the courtyard in the village.

Image5.3: Images of circulation area inside the school and the play field surrounded by the school building.

Image5.4: Image of the entrance path way and the mother training section.

Image5.5: Image of the vocational and automobile training section.

Image5.6: Images of School playground.

Image5.7: Images of school corridor outside classrooms.

Image5.8: Images of circulation area and basket ball court.

Image5.9: Images of seating facilities at the terraces.

Image5.10: Images of visually permeable spaces.

Image5.11: Images of backyard of junior section with soft surface play ground.

Image5.12: Images of invitation of natural light in the internal corridors and in library that creates heaven like space.

Image5.13: Images of vocational training section, mechanical and electrical training.

Image5.14: Site location of SOS Children's Village, Anuradhapura.

Image5.15: Image of play ground and vocational training center.

Image5.16: Image of the mother house and the community house.

Image5.17: Children playing including playing equipments and usage of courtyard in different purpose.

Image5.18: Site location of SOS Children's Village, Aqaba.

Image5.19: Children play on the shaded patio in front of a family house.

Image5.20: Wooden trellises shade the courtyard of the kindergarten and a concrete wind tower, which proved insufficient and are no longer in use.

Image5.21: Image of communal living area in a family and a typical bedroom for three children.

Image5.22: Image of concrete lintels and wooden screens frame window opening and typical "*Mashrabiya*".

Image5.23: General view from East side of the site.

Image7.1: Understanding site with programmatic layout.

Image7.2: Schematic arrangement Phase-01.

Image7.3: Schematic arrangement Phase-02.

Image7.4: Schematic arrangement Phase-03 and 04.

Image7.5: Schematic arrangement Phase-05 and 06.

Image7.6: Schematic arrangement and form development Phase-07.

Image7.7: Sectional arrangement and space derivation Phase-07.

Image7.8: Schematic arrangement and form development Phase-08.

Image7.9: Schematic arrangement and form development Phase-09.

Image7.10: Schematic arrangement and form development Phase-10 and 11.

Image7.11: Schematic arrangement and form development Phase-12.

Image7.12: Sectional arrangement and space derivation Phase-12.

Image7.13: Study Blow-up modules of residential housing zone Phase-12.

CHAPTER 1

BACKGROUND OF THE PROJECT

1.1 Introduction

1.2 Project Brief

1.2.1 Brief on “SOS”

1.3 Problem Statement

1.4 Rationale of the Project

1.5 Needs and Aim of the Project

1.6 Objectives of preferring the site

1.7 Basis of choosing the Program and Key functions of the community

1.8 Methodology

CHAPTER 1: BACKGROUND OF THE PROJECT

1.1 Introduction

“When you lose your parents as a child, you are indoctrinated into a club, you are taken into life's severest confidence. You are undeceived.” — Hilary Thayer Hamann

Children who are deprived by the death of one or sometimes both parents, do not get parental care, sometimes neglected and abused by the society due to poverty and lack of identity, are determined as orphans. Currently there are about 14 million orphans living in the world today and more than 130 million children have lost one of their parents. There are few factors which triggers orphan children to the wrong direction, such as:

- Street Children
- Child Labor
- Children living with HIV AIDS
- Child Trafficking
- Child Prostitution
- Children without access to Education

When a child gets hurt, the first instinct must be to rescue and protect the child.

Vulnerable children certainly need nutrition, education and a secure location to live.

These alone, however, are not sufficient to overcome the suffering. Orphan children need counseling and adequate nurture to heal emotional scars that they have gone through, learn to build a positive future and generate nourishing spiritual lives.

As Bangladesh is a developing country, it is her responsibility to ensure five basic rights (food, clothes, proper place of living, education and medical facilities) genuinely.

Children are considered as future leader of a nation for which it is essential to ensure their life with proper guidance. The current population of Bangladesh is approximately 16.7 billion and nearly 31% of the total population is children, where 9.70% of them are orphans. There are two sorts of orphanage in Bangladesh, one known as a state-run orphanage and another religious orphanage.

1.2 Project Brief

Project Title: SOS Children Village

Client: SOS Foundation

Location: Barisal

Site Area: 6.7 acres or, 295191.81 sq-ft

Building Type: Social Welfare

Building Usage: Orphanage

1.2.1 Brief on “SOS”

The SOS children’s village is the largest non-governmental, non-profit, international children welfare organization, working in 135 countries and territories around the globe, where each Associations carries out the international organizations’ missions, protocols and policies. Looking back to the historical timeline, it is the Second World War emerged with a huge number of children becoming homeless and orphaned. An Austrian soldier, who himself participated in the war founded the first SOS Children’s Village in the Austrian Federal State of Tyrol in 1949. Though, it might cross one’s mind

as any typical orphanage but the ideology and ethics is slightly divergent. Actually, it was established to look after the orphans of the Second World War, but later it ultimately started taking care of other children such as neglected, abused, and abandoned. Till then it has been acting including four fundamental principles, a) a mother, b) brother and sister, c) the house, and d) the entire village community.

SOS Children's Village contributes alternative families to children, who are deprived from adequate parental care. Moreover, it runs a large range of programs and facilities to brace socially disadvantaged and economically weaken families by providing its sponsored kindergartens, primary and secondary schools, youth facilities, vocational training centers, medical and social centers and emergency response relief operations. The organization depends on the donations from government and private networks and establishments.

It has been working in Bangladesh since 1974 and the first alliance was in the capital city, Dhaka. Before starting the operation, one year expenses are ensured by each division. However, democracy was restored in 1990 after 15 years of military rule; Bangladesh continues to have an unstable political climate. And it is not only the political climate which is unstable; the country is frequently affected by natural disasters such as heavy rainfall, flood or cyclones that cause damage to infrastructure, crops and livestock. Furthermore, in the circumstances of our country, if families migrate to cities in search of work to lead their lives, children end up living either in overflowing squatter settlements or over the open streets. Sometimes they are forced to work as domestic workers and in some cases they do not attend school.

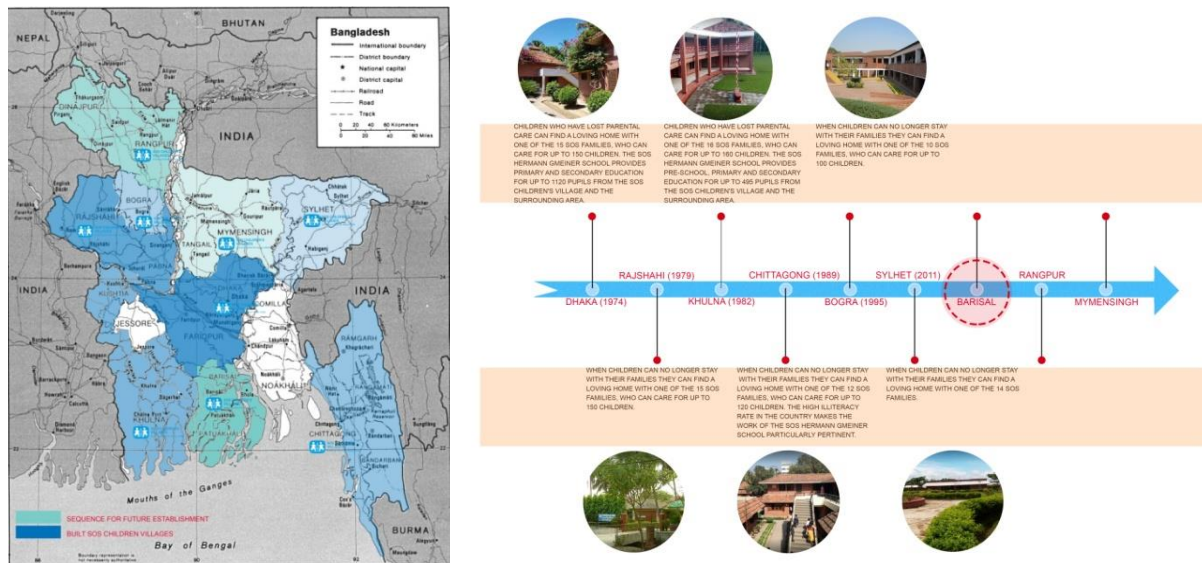


Figure 1.1: Existing and Future locations of SOS children village in Bangladesh.

(Source: Author; SOS children village, Dhaka)

1.3 Problem Statement

Children living and brought up in orphanage institutions may suffer from severe sentimental, psychological behavior difficulties, such as trauma, hostile or anti-social behavior, less understanding of the world and grow up become adults with psychiatric impairments, which are becoming burning issues day by day. They learn great survival skills, but not great family skills and may have less sense of permanency.

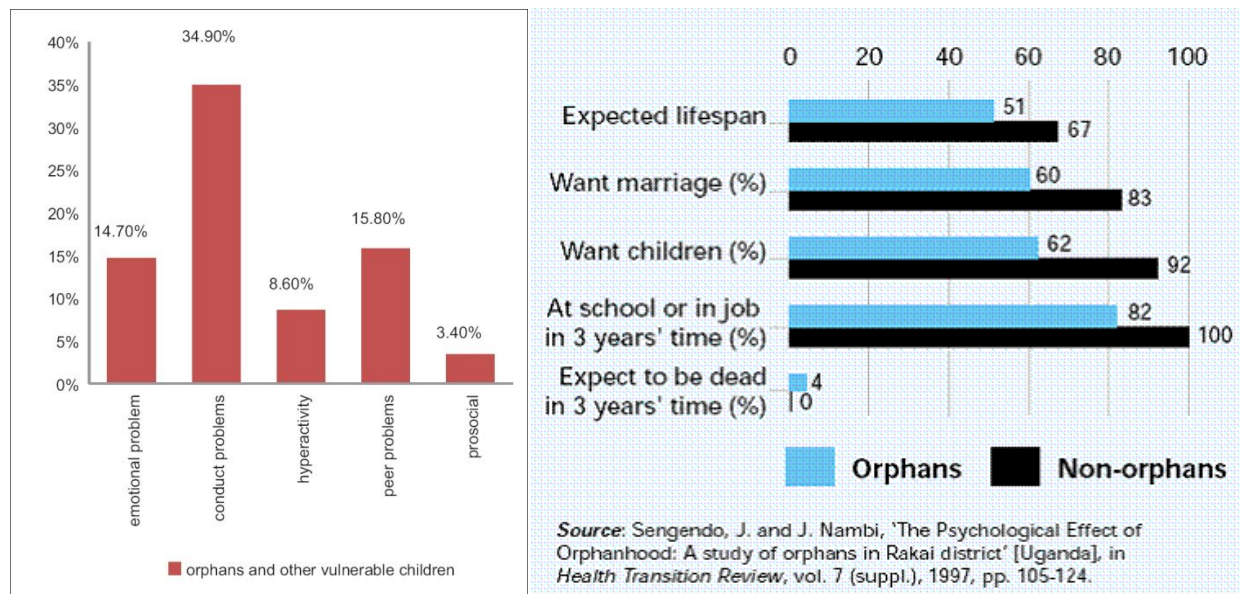


Figure 1.2: Types of emotional and behavioral problems sample. (Source: Indian Journal of psychological medicine)

1.4 Rationale of the Project

The project is associated with the socio-economic appearance of the nation. In terms of the welfare of orphan children an initiative has been taken and the attempt is to revive the system of extended family, where orphan children can get a possibility of sharing and togetherness of a real family life. Additionally, there is an opportunity to encounter few challenges such as,

1. Grip children psychology
2. Gratifying their needs
3. As orphan children have to spend a long period of their life here, therefore, serving an orphan community by providing adequate design facilities including hierarchy of spaces so that they can grow creatively
4. Human factors of a Child

5. Involvement with the community
6. Promoting productivity through different activity and encourage built environment by “Productive Architecture”
7. Nurturing creativity and training opportunities
8. Scope of creating a stimulating, productive and healthy environment.
9. To create an opportunity to enhance friendly relations internationally through sharing and promoting our platform of learning and culture.
10. To change the destinies of orphan children so that they get personal attention and command to move beyond their heartaches.

The project is not only limited into the accommodation and educational purpose, but also open up a large area for different facilities, modern technology, to provide safe home and shelter for the distress. In brief, the eventual challenge is to generate an environment that can enlighten the orphan children where they will spend a long span of their life and grow by playing, learning, working even when they are just little kids.

1.5 Needs and Aim of the Project

The basic needs and aim of the project is to make orphan children self-reliant, economically self-supported and mentally healthy in their after years. Hence, they can cope with any sorts of situations and get the capability to handle practical life where they will not be threatened with any situations that make them feel defeated or lost.

Besides, there are certain goals alike,

1. The project aims to build strong relationships with society, bonding and support to sustain a long-term assurance to childcare so that orphan children get the equal rights

to show potentials and lead habitual existence.

2. When a child can no longer live with his/her family, this project is the platform to work with communities & to provide these orphan souls with loving and supportive alternative care.

3. This leads to work with children, families, communities and states to prevent family breakdown & ensuring the meet point of children's rights.

1.6 Rationale for the Site

The determined site of the project is located adjacent to the 'kirtankhola River', which is one of the popular rivers of Bangladesh. Moreover, the site destination is about 2 km from University of Barisal. The area of the site is approximately 10 acres and the longest part of the site is in South. Barisal-Bhola highway road is on the West from the site which is directly connected and the site surrounding is attached with road networks. The positive aspect of this site is, there is a good amount of green land and plants that can support as an environment friendly neighborhood community.



Image 1.1: Panoramic View from the site, along with South to East direction and surroundings. (Source: Author)

1.7 Basis of choosing the Program and key functions of the community

The inspiration of this project is to develop houses into real homes both mentally and physically for the children and establishing the cluster of homes into real village, which can ensure proper growth for the orphans, equally as just other kid in a family and society. Furthermore, there are few more reasons behind choosing the program (i.e.),

1. It is a platform to work for orphan children and as the organization help families and communities to become strong by taking care of their children through arranging child care, proper education and healthcare.
2. The organization provides an opportunity to regulate better facilities for orphan children and a field to shaping up a brilliant future for them.
3. They assist to improve the policies and practices of the state.

The basic key functional elements of the project are:

- Office Block
- Social Center
- School
- Community Housing
- Multipurpose Hall
- Assistant Director's Residence
- Director's Residence
- Family House
- Common facilities
- Meditation Center

1.8 Methodology

The methodology part describes about a sequence that has been followed for the project progression. Reviewing different literature according the issue as well as reports, case studies, articles, newspapers, books on children, their psychological issues and orphanages, national and international documents to receive information are the primary stage. Moreover, analyzing the situation, present circumstance following their needs, several interviews and surveys were done. Focusing the perspective of the issue, few qualitative researches are done to establish reasons and solutions according to the situations.

Conclusion: To conclude, it must be mentioned that, today's children are the future of tomorrow. Since, they would lead the world of tomorrow; they are at the centre and heart of social development. The future depends on how children prepare themselves to enter into the real practical field of life.

CHAPTER 2

LITERATURE REVIEW

2.1 Understanding 'Orphan' and 'Orphanage'

2.2 Origin and Role of Orphanage

2.3 Study of Children (Orphans)

2.3.1 Concepts of ideal Parents

2.3.2 *Concept of Mother*

2.3.3 *Contribution of the Family*

2.4 Situation analysis of Orphan Children

2.5 Psychological well-being (mental health) for Orphan Children

2.6 Responsibilities and Criteria of lending helping hands

2.7 Features

2.7.1 *Schooling*

2.7.2 *Socializing*

2.7.3 *Environment for Children*

CHAPTER 2: LITERATURE REVIEW

This chapter highlights the understanding among the basic principles to create an environment not for orphan but treating them as normal children by keeping some aspect with explicit description. It is an opportunity to create a platform for orphan children by giving equal care and bring them out as an asset. Additional to the feature, it takes a closer look how designed and organized natural environment plays a part with children psychology as well as our creating a better territory. The chapter includes basic understanding about orphan and orphanage, their origin from history, concepts of family, necessity of a mother, different situation of orphan children, their state of mental health and psychology, our responsibilities toward them and few features of scenario that would help orphan children to bring themselves out from the cage of sorrow and prepare to handle practical life by their own as making them active and responsible citizens.

2.1 Understanding ‘Orphan’ and ‘Orphanage’

Bereft of parents, orphan child is who, requires care, protection, shelter and guidance in an alternative manner. Thus orphans reveal their cultural understanding and social responsibilities to meet those points. Debates about the importance and potential of these children often crystallize among the orphans. A child can be for numerous reasons such as, for broken families, AIDS victim parents, extremely poor families with single parent, both the parents’ death, insurgency problem, abandoned by parents etc. issues.

Orphanage is a particular quality of idea known as an institution that houses the children whose parents died or whereabouts are unknown. It is a residential institute dedicated to the treatment of a large number of children in a society who are helpless. There are international charities continue to fund orphanages. There are significant charities that come forward to help orphans such as, SOS Children’s Village, Orphaned Starfish Foundation, Lumos, Hope and Homes for Children, Orphan Resources International, and Joint Council on International Children’s Services.

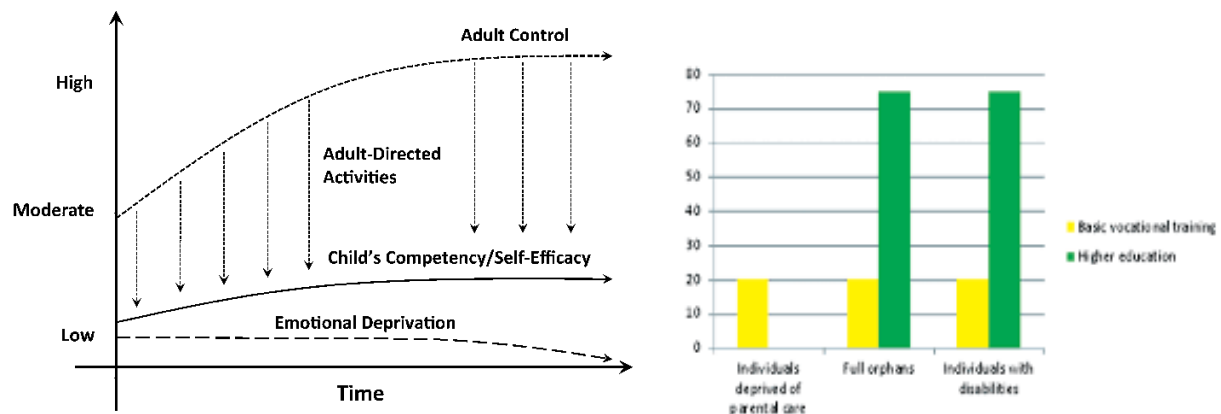


Figure 2.1: Illustration of a developing stage of orphan child. (Source: Bishkek, 2015. “Research assessment of rights and needs”)

2.2 Origin and Role of Orphanage

The first orphanages, called ‘Orphanotrophía’, were founded by the Roman Catholic Church’s nuns for alternative orphan support in 1729 after Indians massacred all the adult settlers in Natchez, Mississippi. By the time of 1830s, the United States had 23 orphanages. Twenty years later, in 1850, New York state alone had 27 orphanages and the conditions in these orphanages were not very good compared to the present orphanages Philadelphia’s House of refuge orphanage packed 100 number of orphan

children into four dormitories. In 1747, the number of children abandoned in London made Thomas Conram shocked and established the first orphanage in Bloomsbury. In 1916, in response to a child abuse scandal, New York state government commission investigated orphanages and found little children with their hair cropped, sitting at wooden benches and eating out of tin plates where some without anything to eat at all which are few tragedy scenarios. (Source: Family and Children's Services Division Minnesota Department of Human Services, March 1995, "Orphanages, an historical overview")

In terms of the scenario of Bangladesh, the weather was not that suitable factor causing the founders of the orphanage. In response to a devastating cyclone and tidal surge that killed hundreds of thousands of people in November 1970 and it was build in 1972. The land for the orphanage was donated by a local landowner and UNICEF contributed to the construction of assets resulted in an orphanage.

By definition, the word 'orphan' indicates a child who left without parents to care for him/her, may be because of their death. At present, our international orphans tend to be older, but they have abandoned them or their parents' rights have been terminated. There are few reasons why people abandon their children, and these reasons appear to be similar all over the world. The list of the common phenomenon why children are replaced for adoption worldwide is given below:

1. Parents' illness, mental or physical
2. Poverty, poor economic conditions
3. Mental retardation

4. Incarceration
5. Drug or alcohol abuse by parents
6. Complexity of disease, the family cannot handle
7. The political and economic policies of different countries (one-child policy)
8. Termination of parental rights because of neglect or abuse.
9. Failure and Isolation (Source: Chowdhury, Dewrat, 2015. "Idea interventions for orphan children to accommodate their Psychological needs")

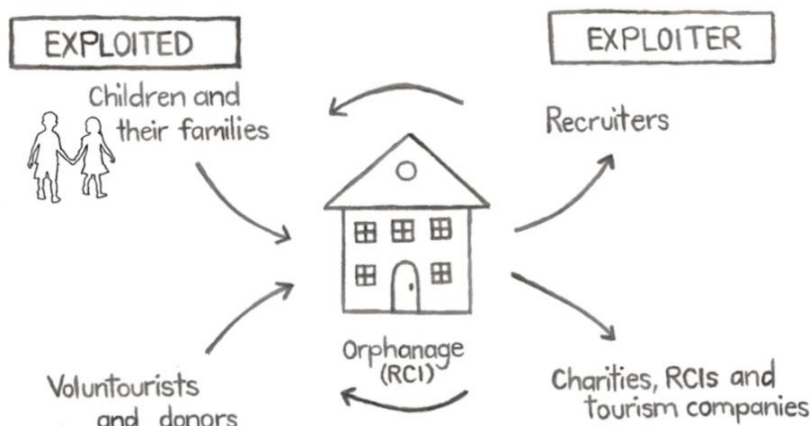


Figure 2.2: The cyclic process of conducting an Orphanage how it works. (Source: 2018, Ethical mission Strips.org)

Homes for children are a vital part of the culture of every society. The situation of Orphanages depends according to the national outlook for orphan children and surely the economic situation in these countries and territories.

2.3 Study of Children (Orphans)

Scientific researches for children requires many years of scientific investigation to construct valid evidence. Hence, it is predictable that our knowledge of the psychological phenomena characteristics of the childhood years is far from complete.

Nevertheless, this is an effort to analyze to some extent, the individual who are known as a child with respect to their thinking process, preferences, need, adjustment to certain situations, behavioral pattern and other psychological traits. The ages within 1-18 are classified as children in our country as well as the entire world and most of the orphans of SOS Children's Village are of this category (i.e.) Children category.

2.3.1 Concepts of ideal Parents

Family-ties and bonding grow naturally 10 to 12 children of various ages and sexes live together in the same family, always staying together. These children and their SOS - mother as well as the family build an emotional attachment that is precious and last a lifetime. As an absolute concept of ideal parents, the parent who more closely fits for a child's betterment of what a parent should be at that moment of his/her life will be chosen as favorite parent. And usually it is the mother.

There are factors in favor of choosing a mother instead of a father for the care of children in SOS Children's Village. A mother is the woman who is trained to do such jobs as mentioned before and the mothers of this organization can not marry, so they can spend full time to the children in the orphanage. They must also necessarily be amicable and kindhearted by the nature and love the children as knowing as own child.

2.3.2 Concept of Mother

The basic reason behind choosing a mother is, young children usually think of ‘mother’ as a person who does things for them, who takes care of their physical needs (i.e.) care giver, who gives them both affection and attention, sacrificing, who is almost always happy and in good sense of humor, who tolerates a great deal of childish mischief and who comes to their aid in times of trouble. Basically, a mother is the person who is always beside her child whenever her child needs. In the factor of orphans, even if they have lost their mother at a very early age will look up persons possessing such qualities, as a child would do to his natural mother.

2.3.3 Contribution of the Family to the development of children

Every child belongs to a certain family as ‘family’ is the heart of a society. Within a family each child is protected and enjoys a sense of belonging. Here, children come to learn norms, values, share responsibilities and form life-long relationships. A family environment gives them solid foundation on which to build their lives. Children grow with love. Through love and acceptance, emotional wounds are healed and the level of confidence is built. They learn to trust and believe in themselves and others. With this self assurance they come to recognize and accomplish their potential.

- Feeling of security from members of stable group
- They can rely on to meet their need both physical and psychological
- Source of affection and acceptance
- Proper guidance for the development of children behavior

- Stimulation of their abilities to achieve success both in the educational sector and in social life.

There are several paths of progressing the intellectual capacities and limits of the orphaned children of society and make them a healthy, successful and self-reliant one; but, from other perspective, Family is the best institution considering these point of views to water these innocent souls. The village ensures, SOS families live together, forming supportive village environment where children enjoy a happy childhood through family, village and community, each child learns to participate actively in society.

There are few influences that play a vital role for orphan children in SOS Children's Village:

- Brother and Sister: The philosophy of the village is that biological brothers and sisters stay in the same SOS family. Often also, the other children and youth living in the same family become like natural siblings with whom they grow life-long relationships.
- The House: Each family organizes its own home. A house is known as family's home, with its own unique feeling, taste, rhythm, identity and routine. Under the roof children enjoy a real sense of security and belongings. Children grow here together by sharing responsibilities and all the joy and sorrows of the daily journey of life. With individual kitchen, living space and households, the house is run by mother independently under the guidance and help of the village director, who is known as the father figure for the children.

- The Village: SOS family is a part of our community, and the families live together forming supportive village environment so that children can enjoy their happy childhood. The families share experiences and offer each other their helping hands when needed, also live as integrated and contributing members of the local community.

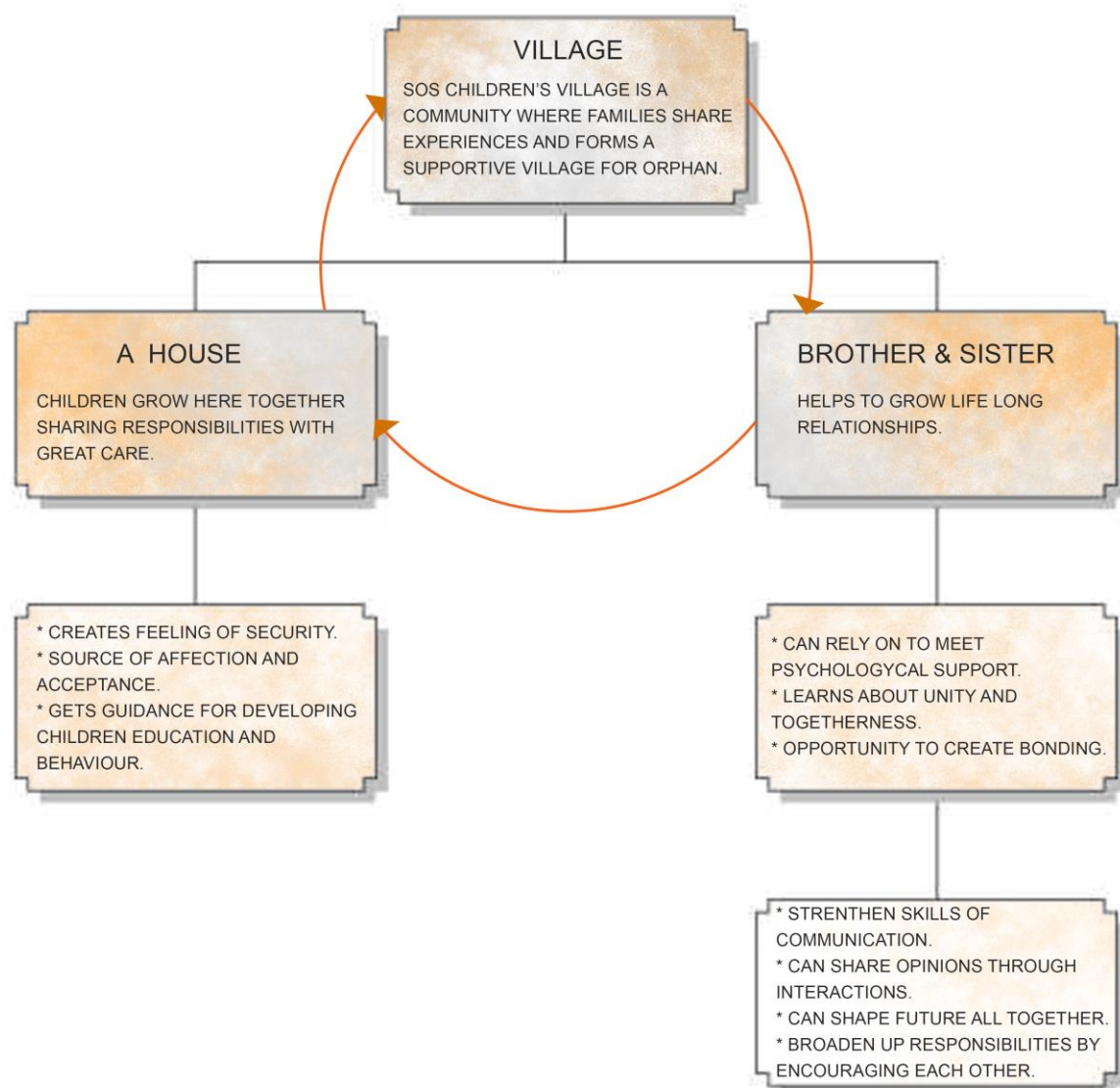


Diagram2.1: Organogram chart to the development of orphan of SOS Children's village.

(Source: Author)

Through orphan child's family, village and community, each and every child comes to learn how to participate actively in society. The village itself is independent and sustainable, having several houses, its own community center, educational institution (i.e.) school and simplified with other essential facilities.

2.4 Situation analysis of Orphan Children

The problems orphan children usually encounter include:

- **Emotional Factor:** As they can stay for life time at orphanage and leave after they cross 18, it is hard for them to leave family for both male and female orphan. They face some critical reality after they leave such as, male children face problem while seeking employment or in marriage issue for lack of identity. At the same time, some female children wants to continue study but they are given marriage for want of funding for higher education, thus their dreams come to an end.
- **Educational Factor:** Though no one wants to create differentiation among orphan and a normal child, but in some case subconsciously there comes phases when orphan children are a matter of sympathy or deprivation may be in school or college.
- **Identity Factor:** For lack of identity issue, they suffer from inferiority and hardly upgrade themselves to cope with the flow of social wave without the helping hand of society.

2.5 Psychological well-being (mental health) for Orphan Children

Looking at few scenarios, adults do not seem to appreciate that children are also adversely affected by bereavement even though they may not have an adult's understanding of death. Little observation is therefore given to children's emotion. Children are not given the required support and encouragement to express their emotions nor are they guided to deal with them. For example, children are not always talked to, nor listened to, and therefore their emotions are not understood. When they have no appetite for food or when they have no strength for household chores, or lack the strength to attend school, or when they become inattentive in class, they are simply penalized. Children therefore are at risk of growing up with unresolved negative emotions which are often expressed with anger and depression. Not only in the aspect of children, but also these factors are extreme in the cases of orphan children.

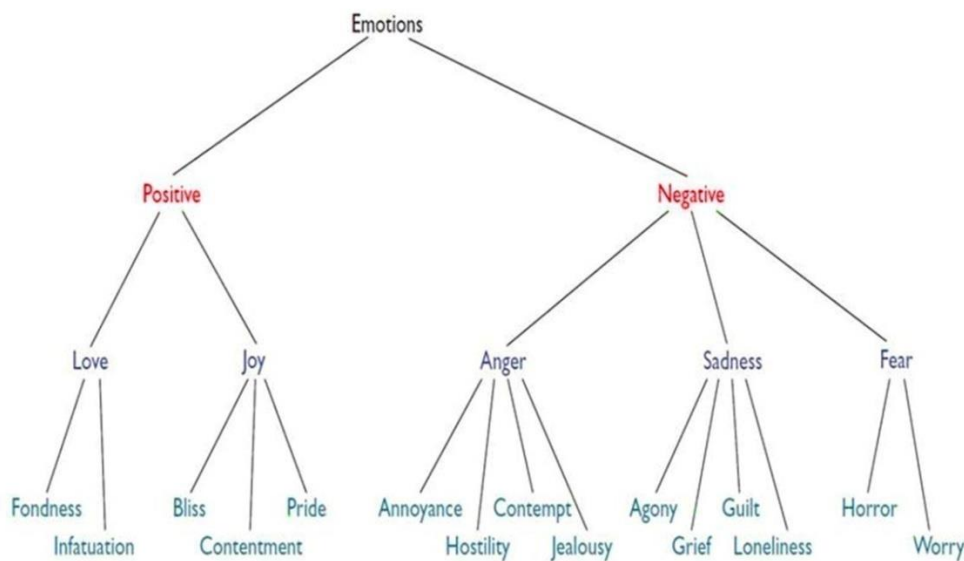


Diagram2.2: Determining the range of emotions. (Source: Adapted from Fischer et al. 1990)

Feelings that generally have both psychological and cognitive elements which influence behavior known as emotion. Thus These functions of emotions are appreciated to focus on:

- Preparing for action
- Shaping our future behavior
- Helping us interact more effectively with others.

Shaping the future behavior of orphan children is the basic responsibility. Emotions promote learning that will help us make appropriate response in the future. For instance, emotional response to unpleasant events teaches to avoid similar circumstances in the future. Secondly, helping them to interact more effectively with others can enrich socially and mentally acceptable. Communicating the emotions one experience through verbal and nonverbal behavior and making emotions obvious to observers. These behaviors' can act as a signal to observers, allowing to understand better what one is experiencing and to help predict future behavior. There are five constituents of mental health that are reticulated to each other and most necessarily for reassign up child mental condition. In the opinion of, Emeritus Professor Peter Warr (1987), those five mental health major elements are:

- Happiness: affective well-being
- Competence
- Internal Locus of control
- Aspiration
- Integrated functioning or adjustment

Orphan children who feel in control of their environment would have a better capacity to adjust. Similarly, these adjustments should negatively correlate with frustration, depression, anxiety and orphan who experience increased adjustment to their environment would be less depressed and countenance to less mental and psychological disorder.

2.6 Responsibilities and Criteria of lending helping hands

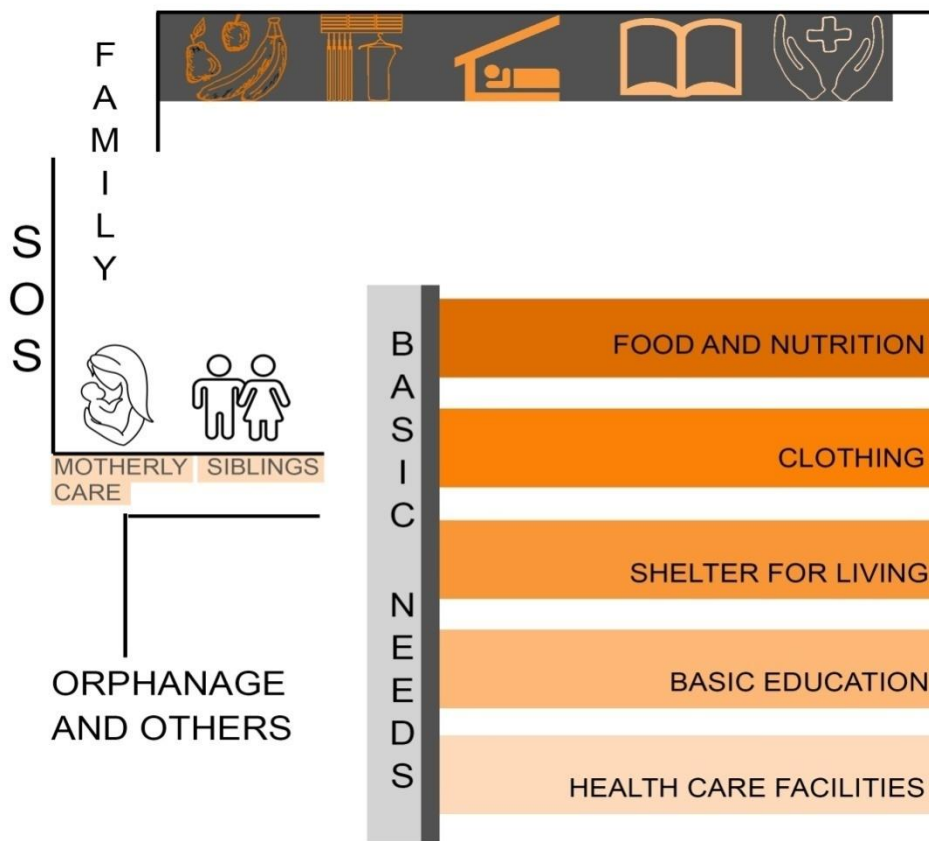
SOS Children's Village is better from other international organizations for several objectives and they are:

- SOS increases awareness among people and saves from family breakdowns.
- Campaigning for increase the understanding level regarding the aspect of orphan children.
- SOS does not take responsibility that has one of their parents alive, but the organization takes care of abandoned children, if their parent does not want to take care of his/her children.
- The organization does not provide children for adoption. For example, if there are 2 orphan siblings, and a couple wants to adopt one of them, it becomes hard for the orphan children to leave one of their brother or sister. As a bold attempt, orphan children are not for adoption from SOS Children's Village.
- SOS Children's village, grow a orphan with great care and supervision by making them learn about their responsibilities so that they can serve the country with a proper identity.

It is the organization that not only gives shelter to the orphan children but also helps them to grow in such a way and lifestyle so that they can serve the society and represent the county.

2.7. Features

There are few features that can help orphan to become self-dependent, responsible and gain the ability to cope with the competitive practical life. There are five basic needs for human life to survive. Additional to these features are hierarchy of needs of five stage model that includes: Physiological needs, Safety needs, Love and belongingness needs, Esteem needs and self-actualization needs. Firstly, physiological needs are biological requirements for survival like air, food, drink, shelter, clothing, warmth, sleep etc. basically the basic needs focus on physiological needs. Secondly, protection from elements, security, order, law, stability, and freedom from fear these are known as safety needs. Thirdly, after physiological and safety needs have been fulfilled, next level comes is social and involves feelings of belongingness, for example: friendship, trust, acceptance, being a part of group (family, friends, work or task etc.). Moreover, esteem needs are classified into two categories: 1.Esteem for oneself (e.g. dignity, achievement, independence, mastery etc.) and another 2.The desire for reputation or respect from others (e.g. status, prestige etc.) and lastly, realizing personal potential, self-fulfillment, seeking personal growth and peak experiences are self-actualization needs. Orphan children are not different from normal children and as human being they all deserve the right of fulfillment of all the needs. On the other hand, it is more essential to focus basic needs such as, food, clothing, shelter, education, health care.



Digram2.3: Fulfillment of Basic needs. (Source: Author)

While focusing on the basic needs, the psychological and social aspects create different phenomenon for orphan children. Hence, proper education, schooling, socializing to enhance social acceptance and socializing for getting better communication skill and updated to the daily life are not less important than basic needs.

2.7.1 Schooling

The word school derives from Greek, originally meaning “leisure” and also “that in which leisure is employed”, but later it turned into “a group to whom lectures were given, known as school”. A School is an educational institution designed to provide learning

spaces and creating a knowledge gathering environment for the teaching of students (i.e.) “Pupils” under the direction of teachers or instructors. Schools are commonly organized in several contrasting organizational models, including departmental, small learning communities, academies, integrated and school-with-in-a-school.

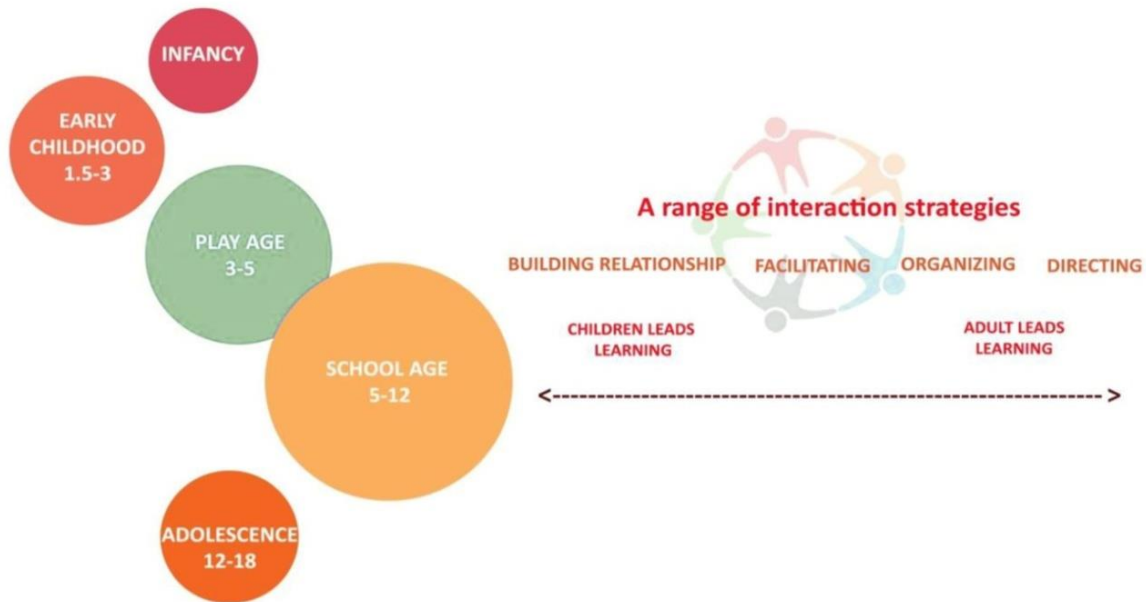


Diagram2.4: Children interaction pattern. (Source: Erikson’s psychological crisis)

The concept of grouping students together in a centralized location for learning has existed since Classical antiquity. Formal schools have existed at least since ancient Greece, ancient Rome, ancient India (Gurukul), and ancient China (see history of education China). The Byzantine Empire had an established schooling system beginning at the primary level. Islam was another culture that developed a school system in the modern sense of the word. Emphasis was to put on knowledge, which required a systematic way of teaching and spreading knowledge, and purpose-built structure. Initially, mosques combined both religious performance and learning

activities, but by the 9th century, the Madrassa was introduced, a proper school that was built independently from the mosque. They were also the first to make the Madrassa system a public domain under the control of the Caliph. (Source: Wikipedia)

With a short period of time and effort, schools and teachers can make a tremendous impact on the lives of orphan children. The aim of a school is not only providing education, but also it should be the second home for children. Orphan children come to learn from school as well as they can socialize and make friends from outside from the boundary. School is a status-conferring symbol and a power that provides an individual or his/her family upward social mobility. To obtain a good education, schooling is a way to avoid being poor as an adult. At the present age of competitive world, people who have higher levels of academic achievement and more years of schooling earn more than those with lower levels of human capital. Economists believe that schooling makes people more productive and that wages are related to productivity, which is not an alarming issue.

A number of benches and a board do not turn a room into a classroom, and these rooms cannot turn into a school or a place where we are talking about nurturing tomorrow's future. Classroom is the place where children will pick up a comprehension of their place on the planet and the endowments that they bring to the table. Moreover, it is the place where the understudy creates what they need their future to resemble and additionally learning of the abilities expected to achieve that objective. The environment reminds to provide the end goal is to get the greatest appropriateness in guideline.

In the contest of schooling truly do presume an expansion part in showing the cutting edge the most effective method to be fruitful individuals from society and then every precautionary measure ought be taken to verify that the learning environment is one that helps to flourish. These aspects matter as we are talking about education, not about literacy. On the other hand, when we talk about orphan children, we focus on some other factors. For instance, there is a background story of each orphan child. Some of them are from broken family who does not take responsibilities of their children, some children do not have both of their parents may be died or may be never met before. Hence, an additional training is mandatory for the teachers who will teach there. In the context of Bangladesh, it is mandatory for children between 6 and 10. Furthermore, they are encouraged to attend school and at the same time education is free for them.

2.7.2 Socializing

Socialization is the process of learning how to become an integral part of a culture, to increase communication skills and to get updated with the daily changes of life. It is a necessary process in the forming of personality. For example, it occurs when one verbally interact with other people. Without socialization it is impossible to develop different physical and mental disabilities.

When children are born, during the first few years of their lives, they interact only with a few different people specially the closest ones like, family. Everything children see and hear leaves an impression on them and by the period of time children learn to walk, learn, talk, develop the ability to have a relationship and here starts developing

personality. Orphan children are not different at all from normal children society. It is the society and environment that creates differentiation among them. Another part of the process of socialization is cognitive development. It refers to the development of thinking, knowing, perceiving, judging and reasoning. The sensorimotor stage begins at birth and ends around age 2. During this stage the children learns how to coordinate body movements with thoughts. They learn that they are separate from other objects and can cause things to happen. The second stage is the preoperational stage which starts around 2 and ends around age 7. It is the stage when children learn to associate symbols and language with objects. Children see everything through their own point of view. During this stage children are very self-centered. The third stage of concrete operation, starts around age 8 and ends around age 12. In this short period of span, children learn to solve problems and reason using physical objects. The fourth and final stage is the formal operation stage, and begins around age 13 and continues into adulthood. This stage starts the story towards reality, accepting them and individuals begin to reason without using physical objects or symbols. They learn to make hypothesis to solve a problem or making decisions.

Without socializing children will not develop skills necessary for living and it would be hard to cope with the competitive world and impossible to survive. There are three major sources of socialization that can affect children. They are: family, school and mass media. Firstly, family is the most important part of socialization for children, because their first contact is with family, and for the first few years of life children interact mostly with family. They come to learn their values norms and beliefs from their family. In the case of SOS Children's Village, it is the village that provides family for the

orphan children. Their family is a large factor in what other people think about individuals. Secondly, in school, children are in the hands of adults other than parents. They learn to be less dependent on their parents; rather they learn discipline, order, co-operation and conformity. In schools children come to socialize with friends. Thirdly, mass media includes television, radio, newspaper, magazines, movies, books and the internet. This form of socialization can be both positive and negative for which awareness is a must. Children learn how different social statuses are expected to behave. On the other hand, sometimes mass media distorts reality and makes things appear more exciting than it really is. These things have a great influence on children and are a very important part of socialization (Shepard, 2009, p. 102-106).

2.7.3 Environment for Children

Architecture is the field which can help to create space or making environment that fosters a sense of community besides it will also support creating an environment that offers children a sense of family, security, confidence, value and being welcomed. A children environment should own calm, non-violent, and full of motherhood love and care. Furthermore, the environment for orphan children should not be similar to prison or fortified cave, rather an open to the community that creates a space for children including safety and security. This first environment offered to an orphan, shapes children perception of the world inside from their territory. Above all, for a healthy environment the place should have long term childcare, promote interaction spaces and ensuring a place where children can receive their identity and at the same time be integrated into a broader context.

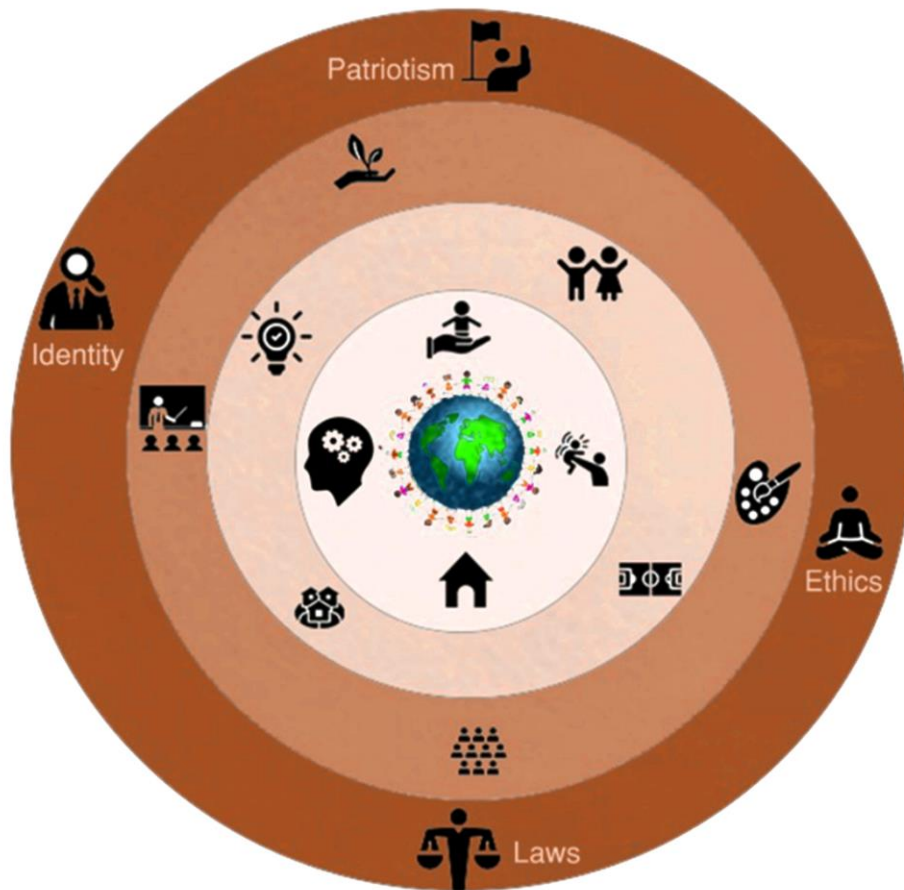


Diagram2.5: Environmental pattern for children. (Source: Author)

In short, this have to be place where orphan can gather parental love and care, attention, courage, become an instance where a child attains their identity and stability.

Conclusion: To conclude, the chapter focused on the basic understanding about orphan children, where it started form, different concepts and terminologies, facing situations of orphan children, their state of mental health and psychology, our responsibilities toward them and possible scenario that would help orphan children to bring themselves out to represent in front of the world by preparing them to handle practical life by their own as making them active and responsible citizens.

CHAPTER 3

SITE APPRAISAL

3.1 Location of the site

3.2 Site Topography

3.2.1 Climate

3.2.1.1 Temperature

3.2.1.2 Humidity and Wind flow

3.2.1.3 Comfort Zone

3.2.1.4 Rainfall

3.2.2 Terrain and Road Pattern

3.2.3 Ecological Factors

3.3 Site Area at a glance

3.3.1 About Barisal

3.3.2 History and Culture of Barisal

3.3.3 Population and Transportation

3.3.4 Access to the site

3.3.5 Utilities and Services

3.3.6 Architectural Vision

CHAPTER 3: SITE APPRAISAL

A site appraisal is a survey and evaluation of the existing characteristics of a certain site area and its surroundings. A site appraisal should be undertaken for every development where it is required before the details of a scheme are drawn up.

3.1 Location of the Site

The location of the site is in Barisal district that has been going through major development. The major city lies on the bank of “Kirtankhola” river in south central Bangladesh. Moreover, it is the largest city and the administrative headquarter of both Barisal district and Barisal division. It is one of the oldest municipalities and river ports of the country. At present the, road networking system and air way services has been developed.

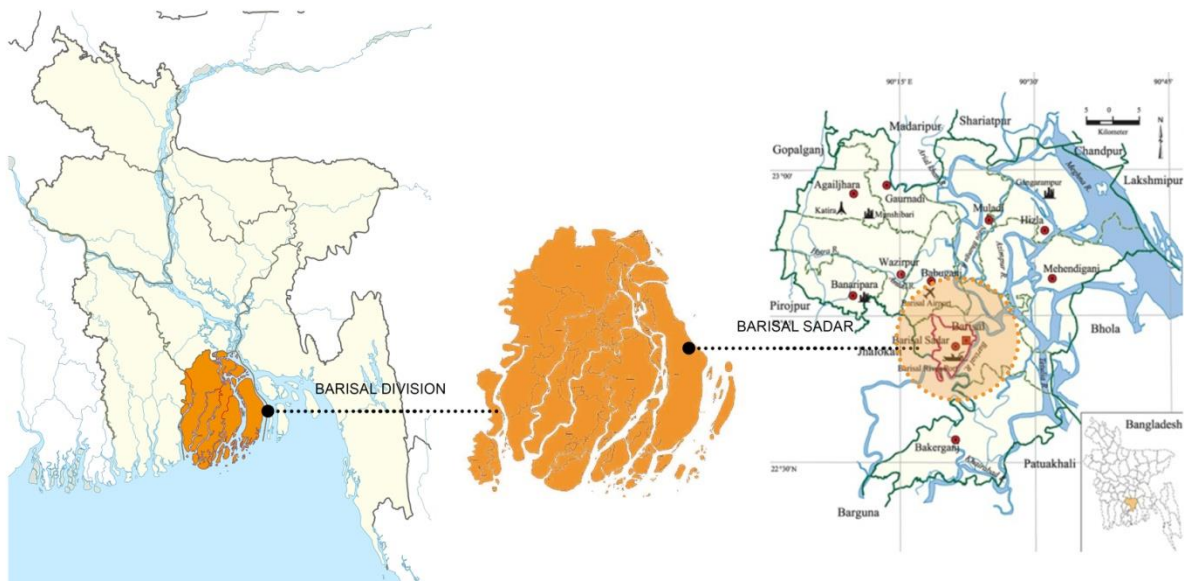


Figure 3.1: Location of Division for site in the context of Bangladesh. (Source: Author)

SOS Children Village, Barisal is located closely to the river “Kirtankhola”, about five kilometers from the site location and adjacent to the city of Barisal, as there are few terms and conditions for locating SOS Children village. They are:

1. The site must be directly connected with high way roads with the main city, as public functions are serving the city and nearest areas. For example: The site of Barisal SOS Children village is proposed adjoining to Barisal-Bhola high way road so that normal children from the city can come for education from SOS Hermann Gmeiner school, which is playing a vital part for Barisal division to serve from educational perspective.
2. As SOS Children village, is basically organized for children community, for the sake of safety and security issues, the proposed site must be located in a distance to any sort of riverside of water body.
3. The site cannot be located in a least densely populated or isolated zone. It must have better communication opportunity with locality and a centre point, surrounded with partial functions. For example: There are necessary shops, local bazaar, pharmacy, local residential houses etc. Most importantly, it is only two kilometers from University of Barisal.
4. The policy also describes, it is better if the location of the site is placed at the city centre. But it is a must that the location of the site should be such a way that during emergency conditions, there can be an access to reach the main city in the shortest possible way (i.e.) taking action to bring children in emergency situations to safety, ensure their survival and support healthy childhood development.

5. Easiest way of communication is an essential condition for an Orphanage.

Following the guideline, the real condition and the failure from choosing the location of the site for SOS Children's village, Barisal is demonstrated below:

Guideline	Real Condition	Failure
1. Direct Highway linkage	Barisal-Bhola Highway connection.	N/A
2. Distant riverbed	Existing "Kirtankhola" river, which is located more than 5 km distance from the site.	N/A
3. Sociable zone	Consist with an enclosure of shops, local bazaar, pharmacy, local residences etc.	N/A
4. City centre or access to reach the main city	Maintains the accessibility to reach the main city in the shortest possible way.	Not Located at the city centre but at the entry point of the town of Barisal.
5. Easy way of communication	The highway route, bus terminal, river port launch terminals as well as airport make communication system easier. There are no difficulties for communication system for the located site.	N/A

Table3.1: Comparison among the guideline and the present scenario. (Source: Author)

The code of conduct aims to uphold and promote the highest standards of ethical and professional conduct among all co-workers and persons affiliated to the organization. It

is an action framework that defines every aspect of how co-workers and related everyone to the organization work to help children for establishing a better future. The location of the site and site forces such as: Barisal University, cafeteria, business center, different grocery shops, bazaar, mosque, river etc. are featured with illustrations.

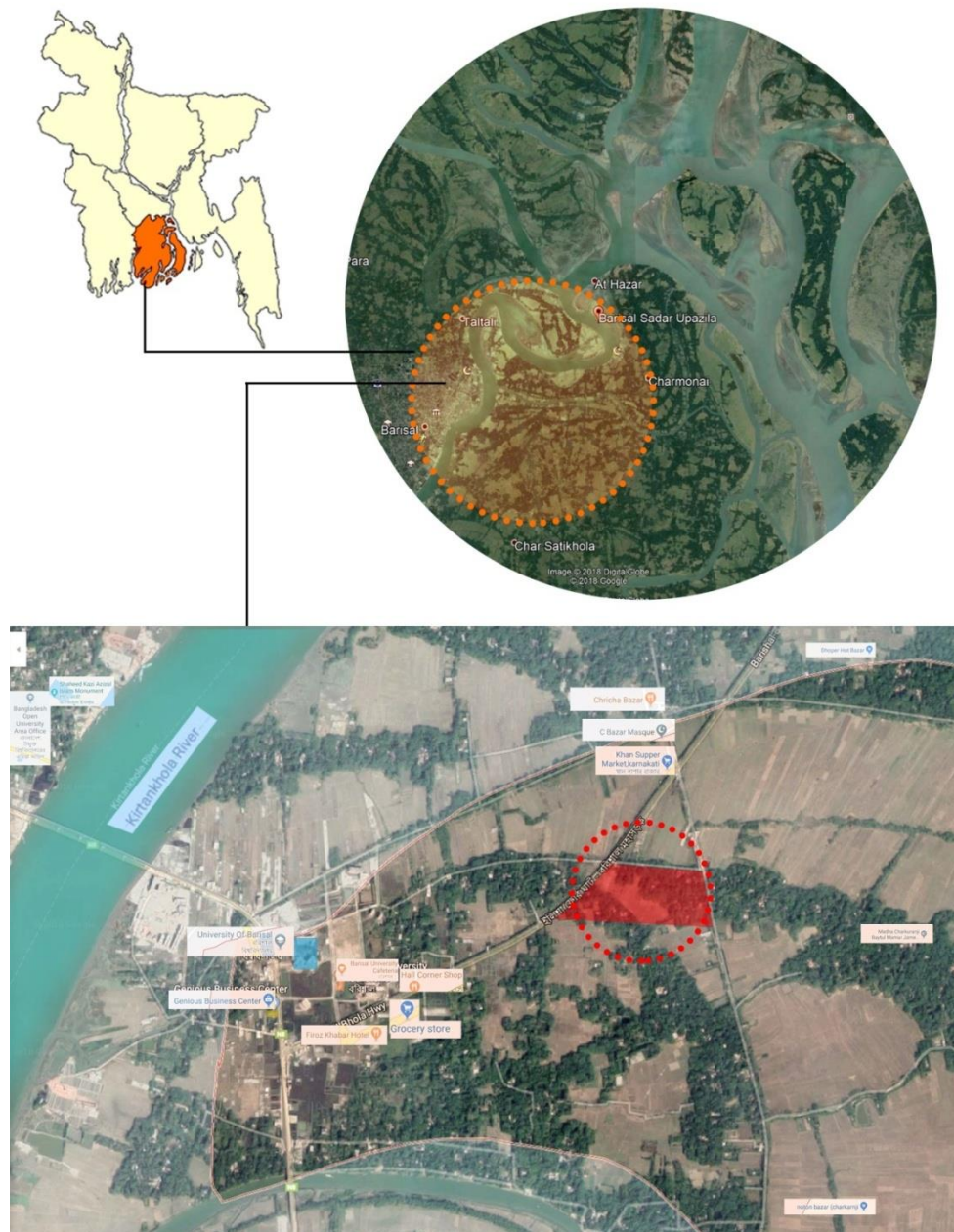


Figure 3.2: Location of the site in the context of Barisal. (Source: Author)

3.2 Site Topography

Site topography defines as the arrangement of the natural and artificial physical features of an area. For example, land pattern, shape of surface, mountains, lakes, oceans, rivers, cities, weather, temperature etc. It is a distribution of parts or features on particular surface or area to determine the context. Barisal division lies on the plane surface zone of Bangladesh.

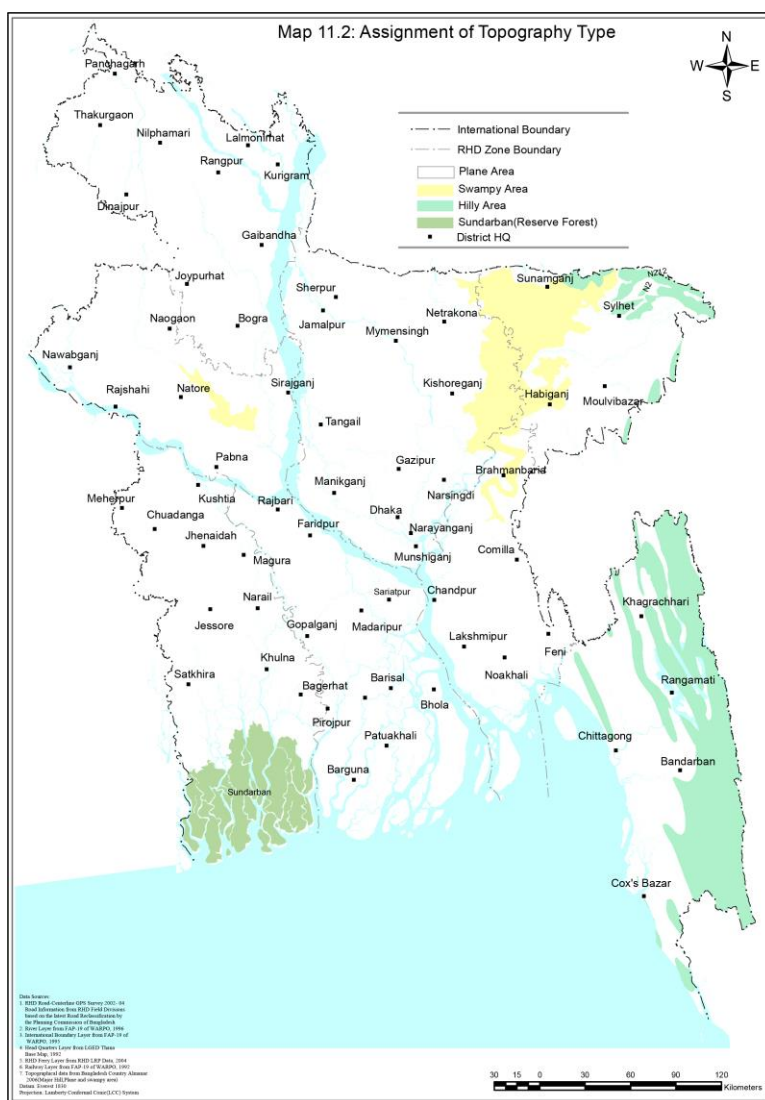


Figure 3.3: Pattern of topographic condition. (Source: Google map, Author)

3.2.1 Climate

Weather refers to the condition of the atmosphere at a particular place over a short period of time. Furthermore, climate focuses on the weather pattern, using statistical data, of a place over a long enough period to yield meaningful average. Barisal has a tropical wet and dry climate. Here, the climatic weather is a compilation of temperature, humidity and rainfall.

3.2.1.1 Temperature

Gathering the weather information of Barisal, the average lowest daily temperature in January and is about 12.6°C, whereas the highest in May when it turn into 25.7°C.

	January	February	March	April	May	June	July	August	September	October	November	December
Avg. Temperature (°C)	19.2	21.9	26.2	28.7	30.3	28.7	28.1	28.2	28.4	27.5	23.8	20.2
Min. Temperature (°C)	12.6	15.4	20.2	23.8	25.3	25.7	25.6	25.7	25.6	23.9	18.7	14
Max. Temperature (°C)	26.8	28.4	32.3	33.7	35.4	31.7	30.6	30.7	31.3	31.2	28.9	26.4
Avg. Temperature (°F)	66.6	71.4	79.2	83.7	86.5	83.7	82.6	82.8	83.1	81.5	74.8	68.4
Min. Temperature (°F)	54.7	59.7	68.4	74.8	77.5	78.3	78.1	78.3	78.1	75.0	65.7	57.2
Max. Temperature (°F)	78.4	83.1	90.1	92.7	95.7	89.1	87.1	87.3	88.3	88.2	84.0	79.5
Precipitation / Rainfall (mm)	10	20	45	107	211	427	444	390	294	183	43	10

The difference in precipitation between the driest month and the wettest month is 434 mm. During the year, the average temperatures vary by 11.1 °C.

Table3.2: An overview of temperature in Barisal. (Source: The weather network)

The average maximum daily temperature is lowest in January and is about 25.8°C and the highest in May 35.4°C.

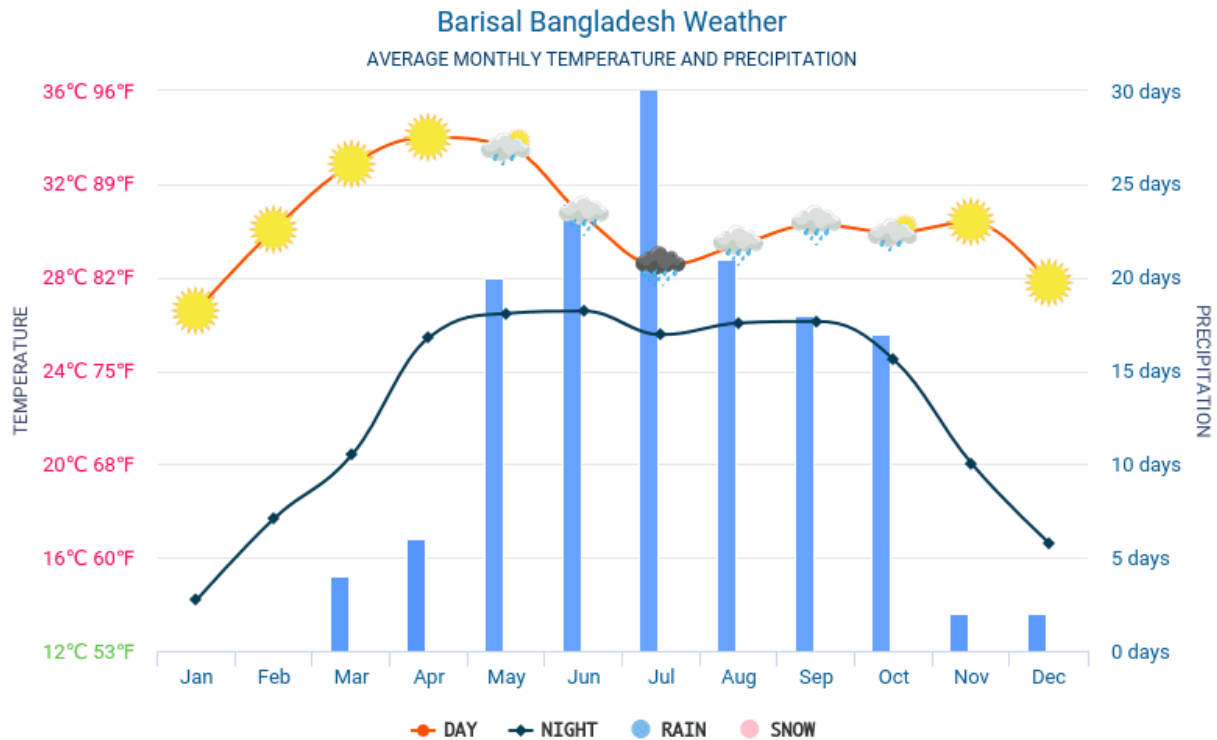


Figure 3.4: Average monthly temperature and precipitation in Barisal.

(Source:hikersbay.com/climate/Bangladesh/barisal)

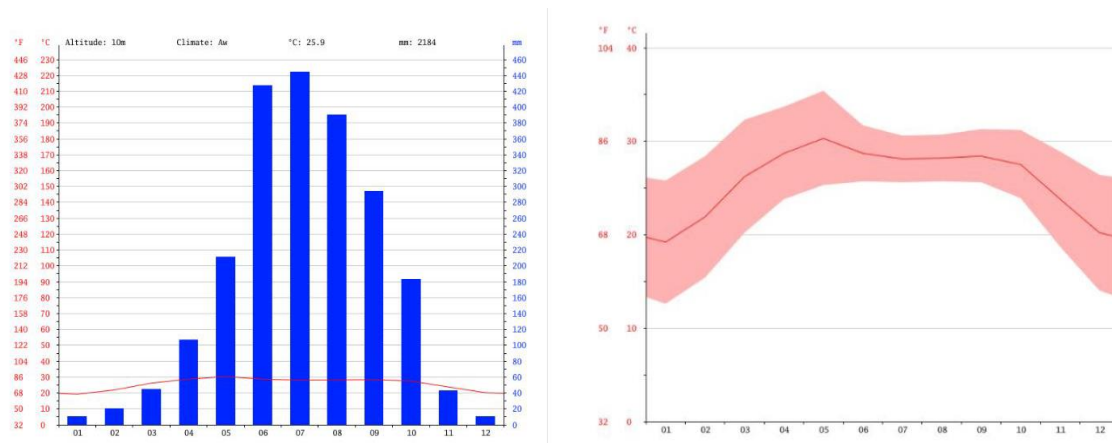


Figure 3.5: Graph of climate and average temperature pattern in Barisal. (Source:

<https://en.climate-data.org>)

3.2.1.2 Humidity and wind flow

It is the state or quality of being humid, a quantity representing this amount of water vapor in the atmosphere or in a gas, defines as humidity. A monthly wind formation generated through wind data from 2013 to 2020. The data and humidity illustration is given below:

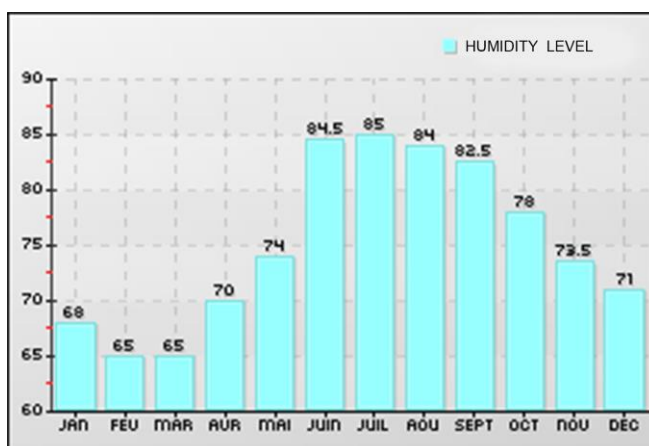
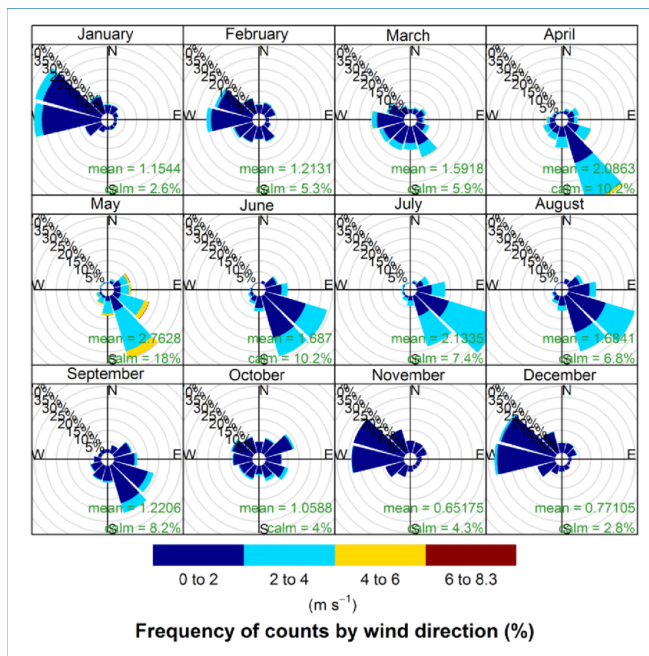


Figure 3.6: Illustration of wind flow pattern and humidity in Barisal. (Source:

<https://www.researchgate.net>)

3.2.1.3 Comfort Zone

The comfort zone is defined as the range of climatic condition within which a majority of people would feel thermal comfort. People, particularly in hot and warm climates, feel comfortable under free-running conditions while environmental parameters were found far away from traditional comfort zones. If the temperature's between 70 and 80 degrees Fahrenheit and the relative humidity (RH) between 30% and 70%, we're more or less comfortable. Of course, the colder the humidity is to 70%, the lower the temperature needs to be for us to be comfortable.

COMFORT ZONE OF BARISAL

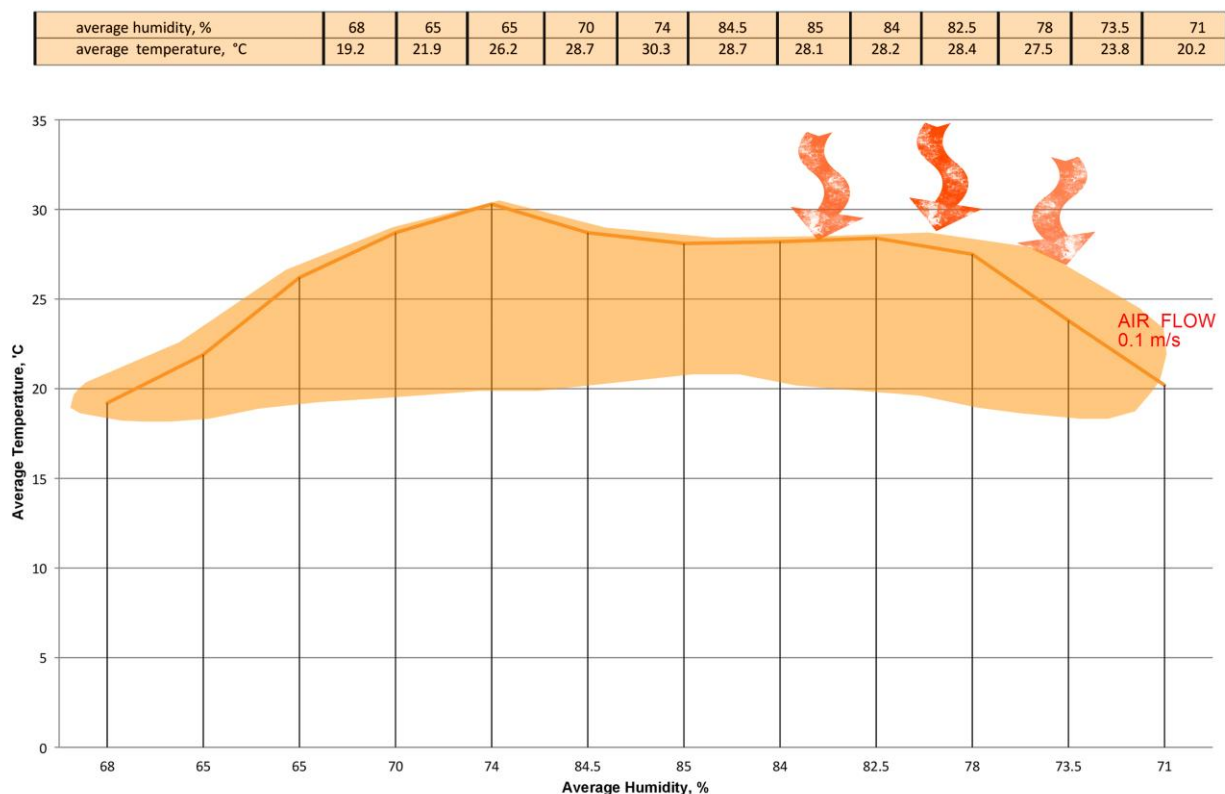


Figure 3.8: Illustration of comfort zone Barisal District. (Source: Author,

<https://www.researchgate.net>)

3.2.1.4 Rainfall

The quantity of rain falling within a given area in a given period of time is how rainfall is measured. It helps to assume the climatic condition of the certain area, most necessarily, in architectural point of view; it helps the orientation of structure, placement, choosing materials and different technical issues. The average annual rainfall in Barisal is about 2184 mm. The time series of annual rainfall of Barisal is illustrated below:

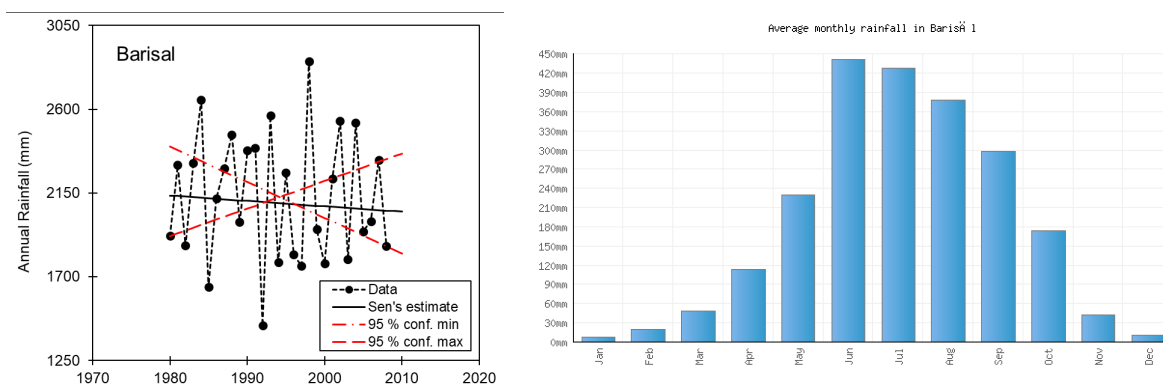


Figure 3.7: Illustration of annual rainfall series and graphical monthly rainfall. (Source: hikersbay.com/climate/Bangladesh/Barisal)

3.2.2 Terrain and Road Pattern

A stretch of land, especially with regard to its physical features is known as terrain. For example: landscape, territory, road network pattern etc.



FIGURE: LANDSCAPE PATTERN



FIGURE: OPEN CYCLE PATTERN

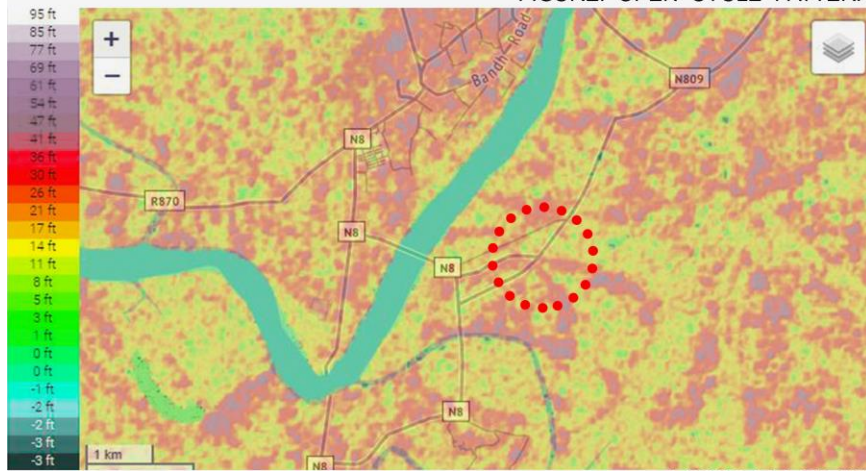


FIGURE: TERRAIN

Figure 3.9: Illustration of topographical terrain and road networking pattern. (Source: <https://en.climate-data.org>)

Road: Barisal is connected to most other region of the country via the N8 national highway. There are two bus terminals in Barisal, one is Nathullabad Central Bus terminal, which is closely located to the site of SOS Children's village. And the other one is Rupatali Bus terminal.

River port: Barisal river port is the second largest river port in Bangladesh. It is the most popular way of communication for people of Barisal to Dhaka, the capital city. It is also a popular transport system with other districts like Bhola, Barguna, Lakshmipur.

Air: Barisal airport is a domestic airport. Biman Bangladesh Airlines, Novoair and US-Bangla use this port. Active air-route is Barisal-Dhaka-Barisal.

3.2.3 Ecological Factors

There are different kinds of trees located in a disperse manner throughout the site.

There are some fruit trees such as guava, jackfruit, mango, betel nut, hog plum, Banana, litchi, melon, coconut, velvety apple and a large amount of timber trees which includes, mahogany, shegun etc. There are couples of varieties of shrubs surrounding the site. And most of the site was cultivation lands.

Free floating plants such as mahogany, bamboo trees, koroi, banana etc helps to create territory for individual locality. Furthermore, there are two types of aquatic ecology in the existing water bodies. Floating grass, water hyacinth, water lily are sub merged floating plants.

3.3 Site Area at a glance

To know about the existing site and site surrounding, it is an essential issue to learn about that certain city or district. Therefore, few key elements such as history and culture of Barisal, its population, utilities, transportation and communication system etc. are kept into the consideration.

3.3.1 About Barisal

According to the provisional results of the 2011 national census, the population of Barisal stands at 328,278 and by gender, the population came 51.63 male and 48.37 percent female. The literacy rate among the urban people of Barisal is 75.3%, which is significantly higher than the national average of 56.5%. Looking at religious factor, the majority of Barisal people are Muslims (89.30%), and others are Hindus (9.7%), Christians (0.98%) and Buddhists (0.01%). Barisal exports agricultural products, Medicine, Empty gelatine capsules, anchor cement, Hilsha fish etc. The buildings of Barisal are too diverse to be characterized by any particular architectural style, and have been built over a long period of time. Focusing on sports, Cricket and football are the two most popular sports in Barisal, at the same time tennis and kabaddi are popular as well. Barisal is comparatively in higher position in terms of education and is called home to many educational institutions. It is a center for newspaper, periodical and book publishers. (Source: Wikipedia)

3.3.2 History and Culture of Barisal

Barisal was a semi-independent area in Mughal period. In course of time, it fell under Bengal Nawabs and British India, later passed to Bangladesh. Following the partition of

India in 1947, the area of Bangladesh became a province of Pakistan, initially known as East Bengal, and then, from 1955, as East Pakistan. The people of East Pakistan Province declared their independence as the nation of Bangladesh on March 26, 1971, while fighting a savage war against the central Pakistani government. The separation from Pakistan took place, with extensive aid from India, on December 16, 1971 as a result of the third Indo-Pakistan War. Bangladesh was soon recognized by most other nations, although Pakistan withheld diplomatic recognition until 1974 and China did not recognize the nation until 1976. Bangladesh was admitted to the United Nations in 1974. Barisal district traces its origins to Bakerganj district which was established in 1797. It was placed in Barisal division on 1ST January 1993.



Image3.1: Images of “Kirtankhola” River and large floating market in Barisal. (Source: [www. history of Barisal .com](http://www.historyofbarisal.com))

Barisal is called the dream place of culture. From time to time several accomplished personnel in different fields of art, culture and politics were born here. Their unprejudiced participation in the restoration of our culture and heritage is worth remembering. There are some targets of Barisal’s cultural activities, such as:

- To generate a socio-cultural central point for the Barisal
- Giving the cultural activity of Barisal a institutional stability
- Showing respect towards existing traditional cultural feature
- Adding something new to the traditional culture
- Complete oneness of various, to search for own specific pattern and identifiable vocabulary for Barisal.

Mrit shilpo, pot chitro, Alpona, Nokshikatha etc are the traditional culture of Barisal and it has a strong background of lokoshahitto and lokoshongskriti. The villagers love to enjoy the theatrical and musical entertainments. The kabi gaan, pirer gaan, bhatiali, bhawaia, murshidi, baul gaan are held in Barisal at different time of the year. (Source: [www. Folk culture of Barisal.com](http://www.Folk culture of Barisal.com))

3.3.3 Population and Transportation of Barisal

Municipality of Barisal was established in the year 1876 during the British Raj and upgraded to City Corporation on 25th July 2002. The city consists of 30 wards and 50 mahallas with a population of 328,278 according to the 2011 national census, the area of the city is 58 km².

Focusing on the transport system of Barisal:

- Road: 200 km
- Airport: 1
- Port: Internal port

River is a popular transport system with other district. The luxurious and enjoyable launch journey connects between the south and Dhaka city. It is one of the delightful night journeys ever one could get in one's life. The royal and majestic launches are one of the best parts for journey to Barisal with pomp and pleasure.

3.3.4 Access to the site

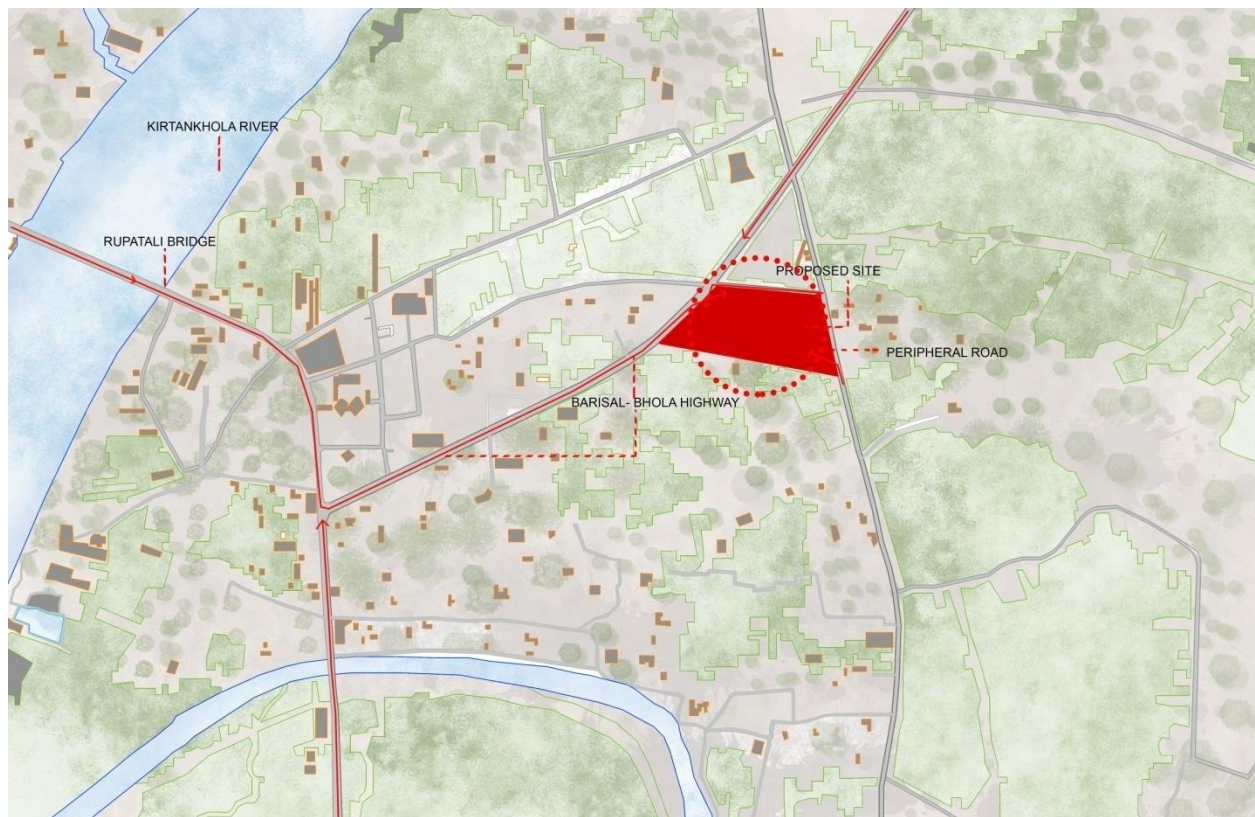


Figure 3.10: Illustration of access to the site and connections. (Source: Author)

The proposed site is directly connected to the Barisal-Bhola highway road, which provides a direct access of connection from the main city. Furthermore, the site owns peripheral road and generates access from all directions from the site. There are secondary roads as well for getting an access towards the site, but the main primary roads play a vital role for the site of SOS Children's Village.

3.3.5 Utilities and Services

There are few utilities and services which work as an advantage from the site. They are:

- Though there are lacking of gas supply, but at the same time there is a useful service of LP Gas cylinder in Barisal, especially in the area of specific proposed site. Hence, there are no difficulties of gas supply.
- Positive supply of electricity. As the site for SOS Children's village is directly connected to the highway, therefore, the shortage of electricity is a minor issue for the particular zone.
- As Barisal is a division surrounded with rivers, there is a good supply of water, which can be used for different purposes by purifying them. There are numbers of ponds inside the locality as well.
- A huge percentage of green helps the area environmentally healthy and friendly. The rate of pollution is less than other areas of Bangladesh. This large portion of green help to keep the environment cool and welcome different seasons gently.
- Local people use the opportunities as there income source, for example: through using small ponds, they generate the production of fish and continues business which helps the economy.
- There are local markets at the east direction of the site. These markets ensure safety and security of the area.
- Supply of medicine and an adequate amount of pharmacy ensures medical services for the particular area.

3.3.6 Architectural Vision

In the perspective of architecture,

- The extended portion of both sides of the site is on North and South side and the narrow portion located on East and West side, which acts as positive impact and gets the wider exposure for better wind flow, as well as indirect sun light.
- Large amount of green creates a boundary as well as a territory for the site and an environment friendly with healthy habitat.
- The site owns peripheral road network pattern, which is essential for the terms and conditions of SOS Children's Village and also for emergency access routes.

Conclusion: The chapter consists of a survey and evaluation of the existing characteristics of Barisal and its surroundings. The discussion would work as a supportive element while design considerations are determined and while generating ideas.

CHAPTER 4

CONTEXT ANALYSIS

4.1 Existing Condition of the site

4.1.1 Site and Surroundings

4.1.2 Site Photographs

4.1.3 SWOT Analysis

4.2 Contextual Analysis

CHAPTER 4: CONTEXT ANALYSIS

Context is simply an external element that influences both the building structure and site. It refers to the environment in which a development is located. It is the specific and immediate setting in which the development sits and with which it engages. It is this ability and willingness to engage with the specific qualities of the site and context that has led to many examples of outstanding development. Basically, the context analysis determines the architectural style, building, material, selection and site layout, which is very essential in creating an effective design. All these promote continuity between the building and local circumstances. It is a method to analyze the environment in which a project would operate. Environmental scanning mainly focuses on the basic key elements and site forces of a certain area of site. It considers The entire environment of project, including its internal and external values.

The purpose of contextual analysis is to provide thorough information about the assets and liabilities prior to starting the design process. It is an inventory of the site factors and forces, and how they coexist and interact.

4.1 Existing Condition of the site

At present the land of the site is given to the foundation of SOS to build the village for orphan children by the land owner. Currently, it is a uniform barren land surrounded with large amount of green. The existing condition of the site is wrapped up below:

4.1.1 Site and Surroundings

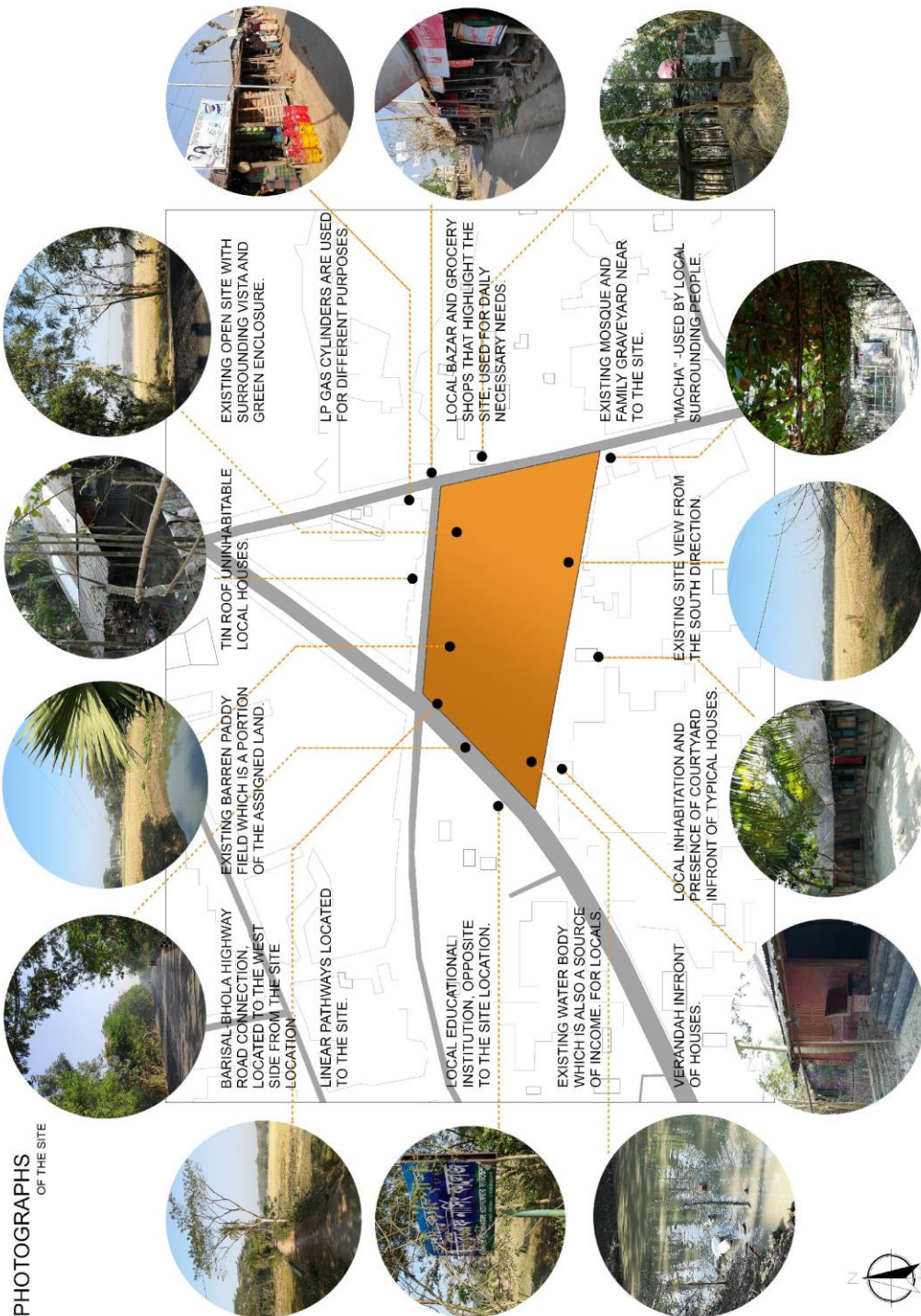


Figure 4.1: Illustration of Site including the surrounding. (Source: Author)

4.1.2 Site Photograph



Image4.1: Image of Barisal - Bhola Highway route connected to site. (Source: Author)



Image4.2: View towards the site from Highway. (Source: Author)



Image4.3: Pattern of local houses surrounded to the site. (Source: Author)



Image4.4: Local bazaar and pharmacy. (Source: Author)



Image4.5: Local “Macha” and environment friendly enormous green. (Source: Author)



Image4.6: Image of Internal road network and local ponds. (Source: Author)



Image4.7: Daily life-style and panoramic view of site. (Source: Author)

4.1.3 SWOT Analysis

SWOT Analysis refers to a study undertaken by an organization to discover its internal strengths and weaknesses; additionally, its external opportunities and threats. The analysis is demonstrated below:

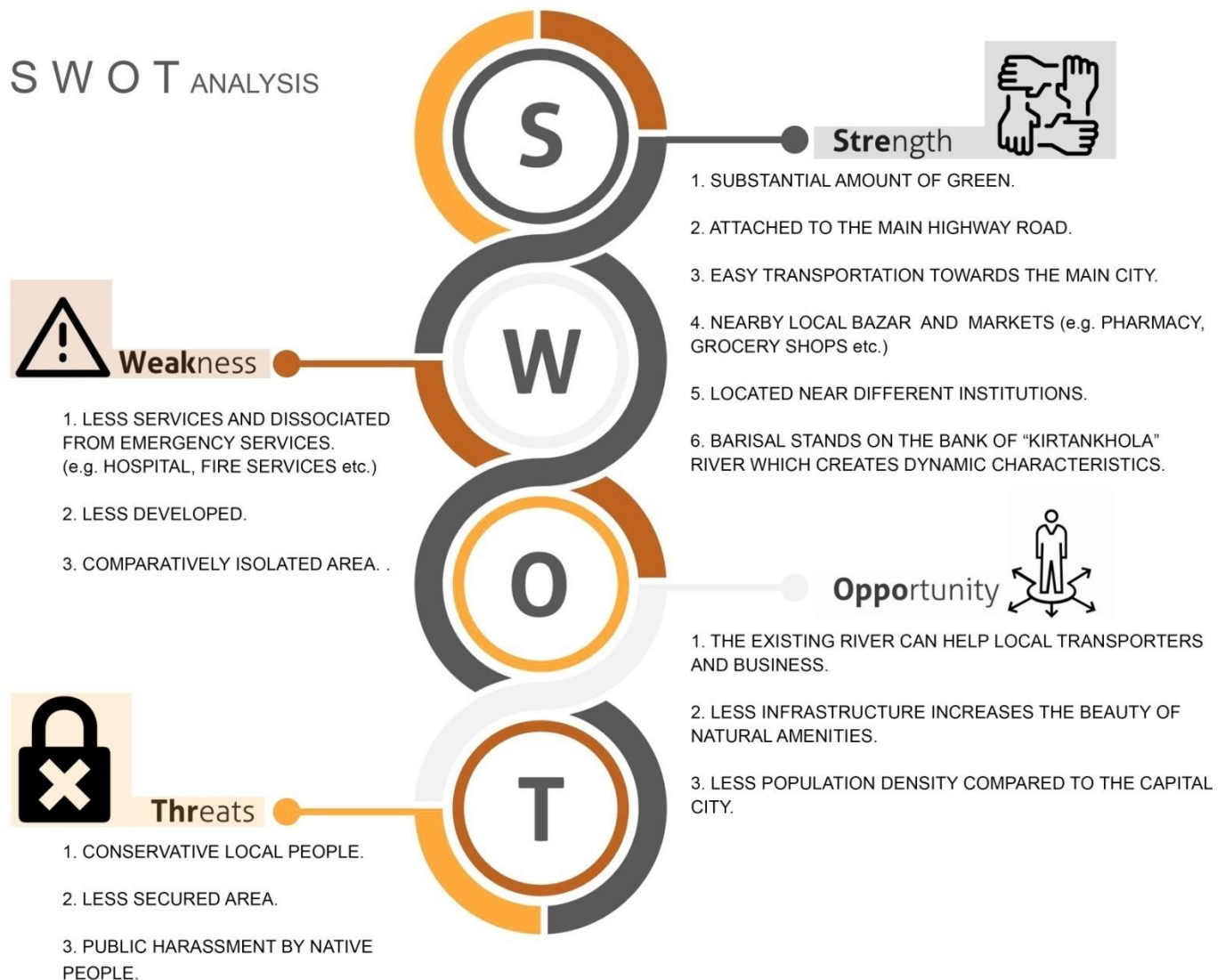


Diagram4.1: Illustration of SWOT Analysis from the site survey. (Source: Author)

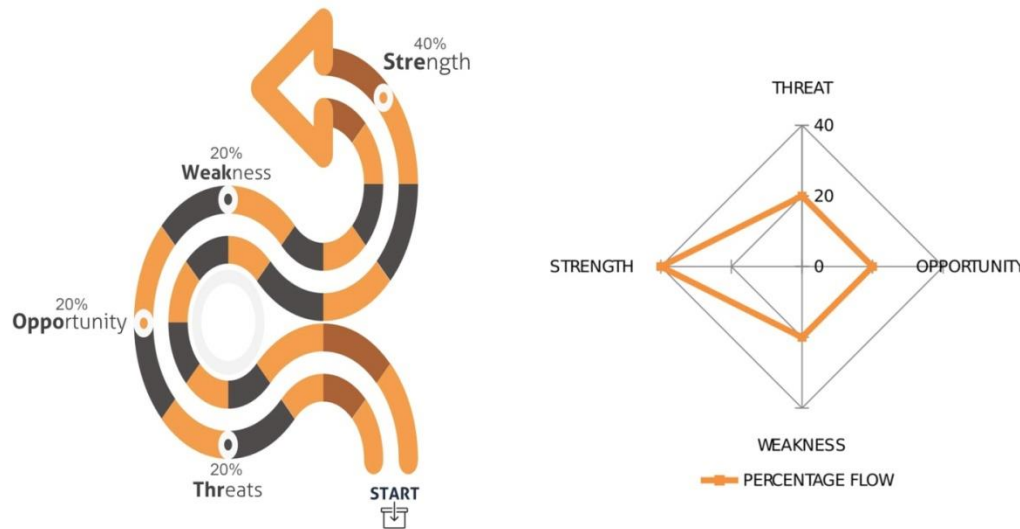


Diagram4.2: Percentage exploration from SWOT Analysis. (Source: Author)

4.2 Contextual Analysis

Contextual analysis is highlighted as an analysis that assists to assess a specific area within the context (e.g.) cultural, traditional or historical setting, in terms of the qualities of demands that are characterized. This contextual analysis can help to determine essential forces, positive or negative impacts, needs, potentials etc. while design progress and possibilities to generate a meaningful community or issue. Here, the contextual analysis created focal point in few aspects and they are:

- Figure ground map, which can assume the texture of the area and its density.
- Land use pattern, which can highlight how the land is used through identification.
- Building height pattern helps to undertake a probability of height for design.
- Route network pattern shows the communication system at a glance.
- Space use pattern focus on amount of green areas to determine environment.
- Options of hospitality ensure services within the range of site.

➤ Figure Ground Map:

Grain map which is known as Figure ground map highlights the texture of the site and its surrounding area.

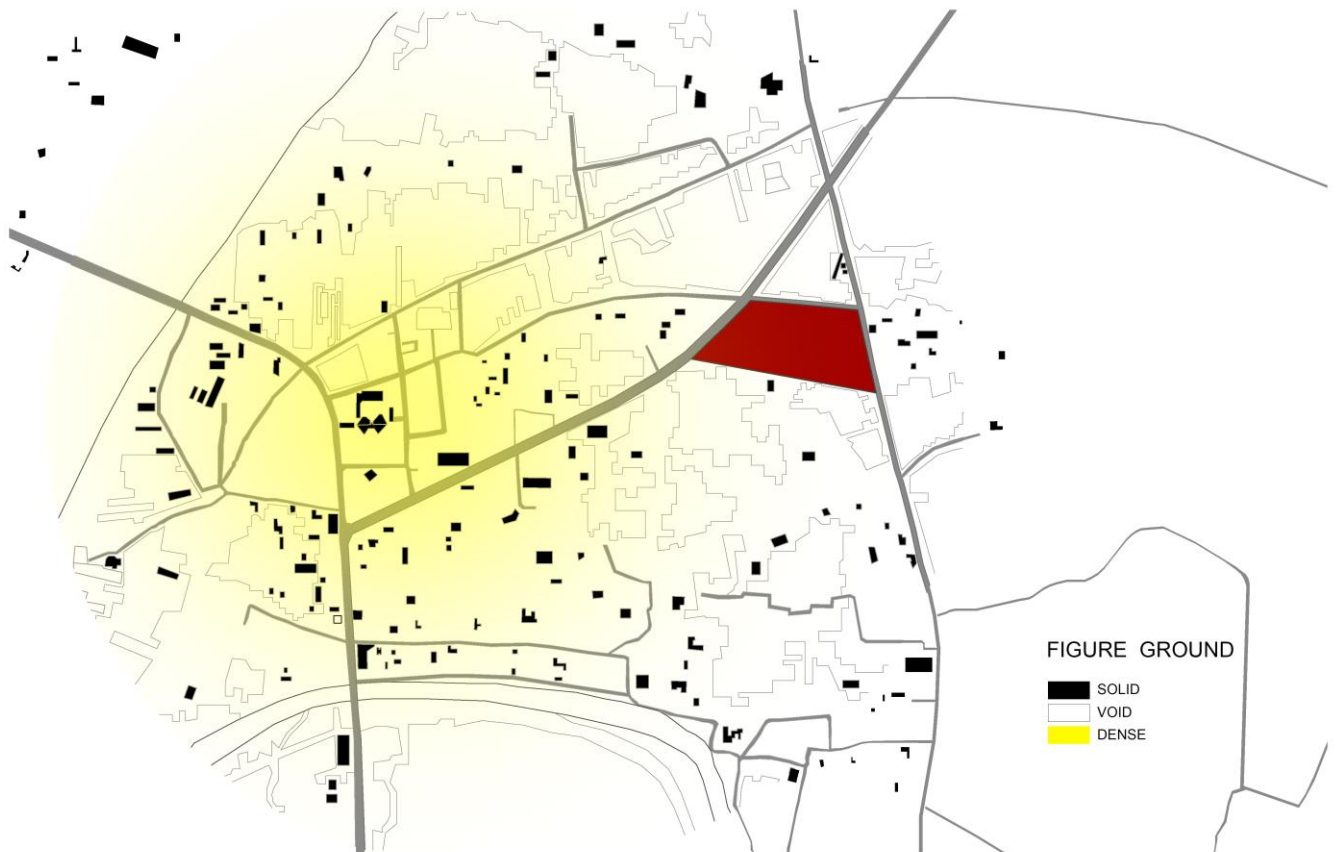
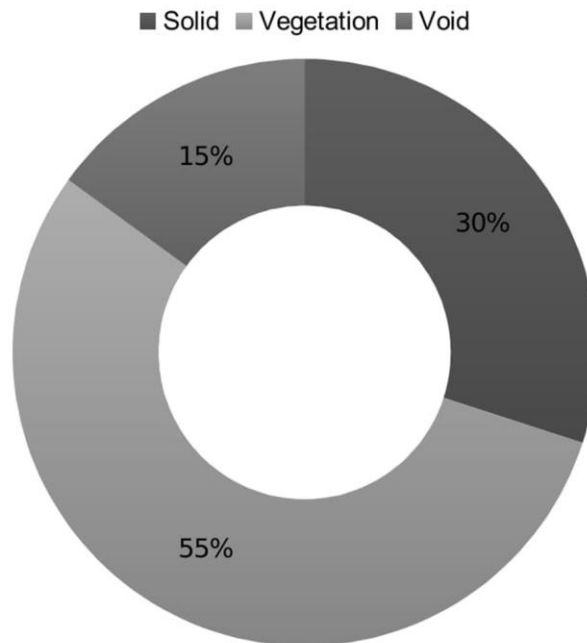


Figure 4.2: Figure Ground Map. (Source: Author)

The existing footprint of the site surrounding can make parallel alliance or co-relation while design decisions are taken.

Percentage of Figure Ground



	Percentage of Figure Ground
Solid	30%
Vegetation	55%
Void	15%

Diagram4.3: Percentage review of Figure Ground Map. (Source: Author)

Focusing on the existing site, most of the site is green vegetation covered area and void spaces, which is environmentally positive. Moreover, rest of the spaces is built form (i.e.) solid.

➤ Land Use Pattern:

Land use pattern focuses on different types of building pattern distributed on the site surrounding.

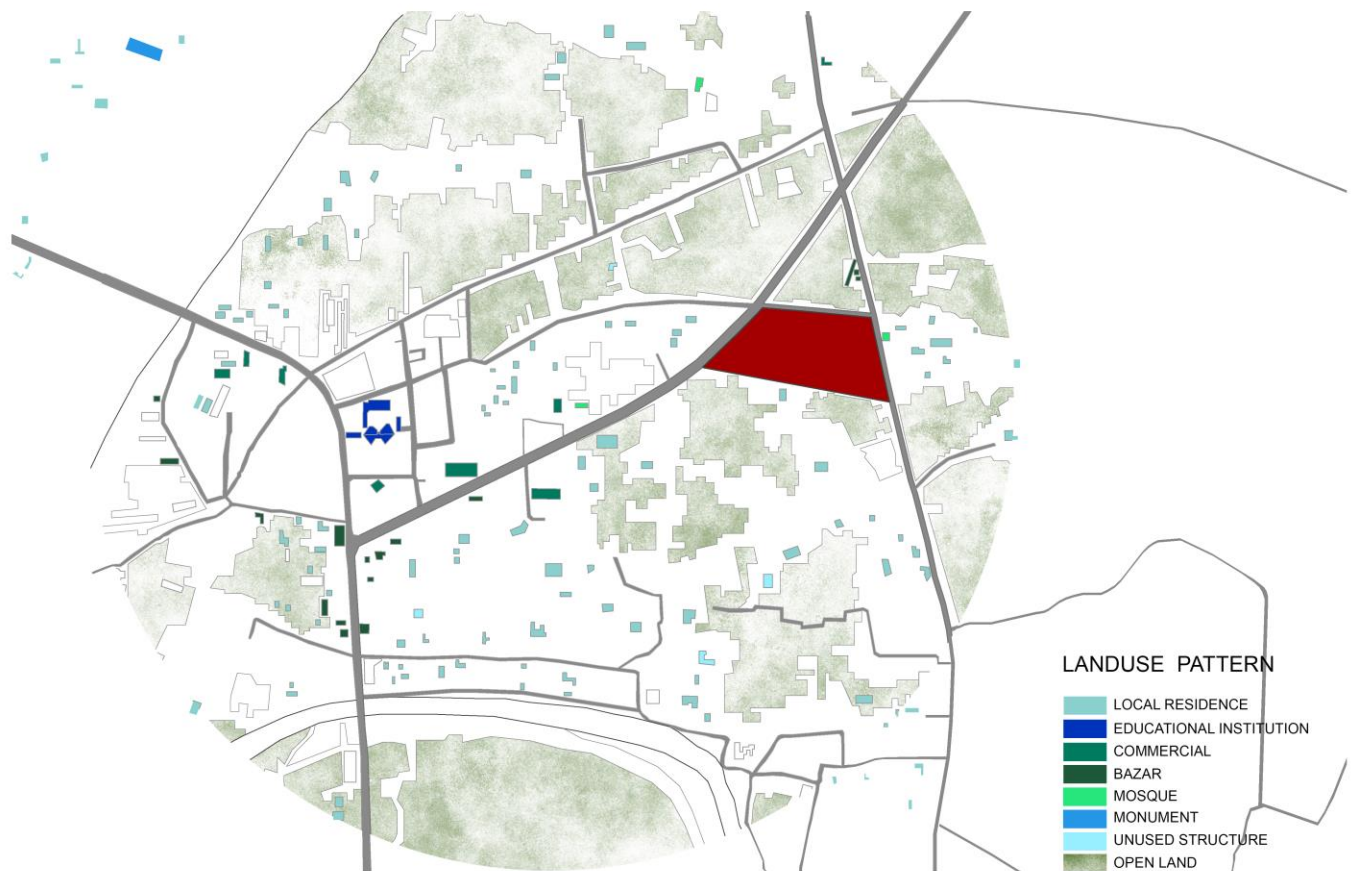
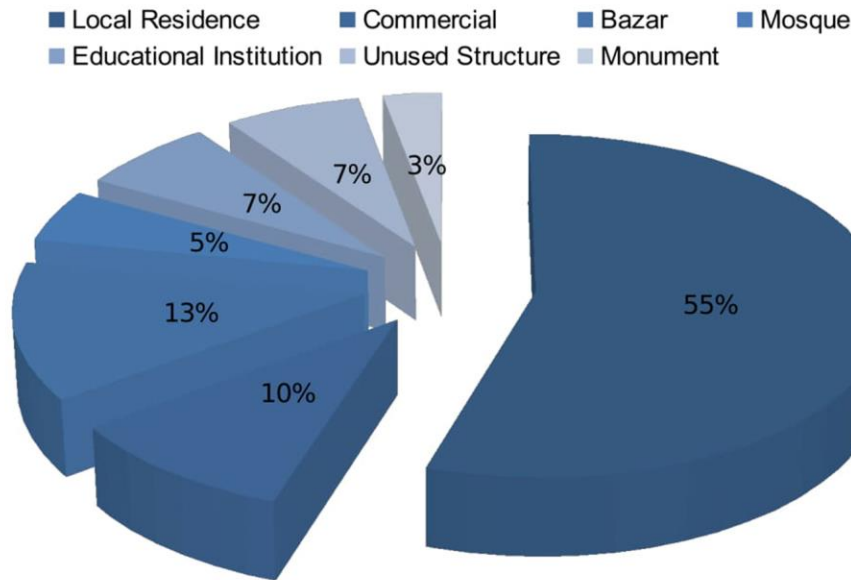


Figure 4.3: Land use pattern. (Source: Author)

It also justifies the site forces equally how the site can be treated. Land use pattern can work as an assumption of population density as well.

Percentage of Land Use Pattern



	Percentage of Land Use Pattern
Local Residence	55%
Commercial	10%
Bazar	13%
Mosque	5%
Educational Institution	7%
Unused Structure	7%
Monument	3%

Diagram4.4: Percentage review of Land Use Pattern. (Source: Author)

The land use pattern interprets that, most of the built forms are local residences, which is the dominant portion from the existing site. Sequentially come bazaar, commercials, educational institution, unused structure, mosque, monument.

➤ Building Height Pattern:

Building height pattern from the site surrounding brings an estimation of probable height pattern of the certain area.

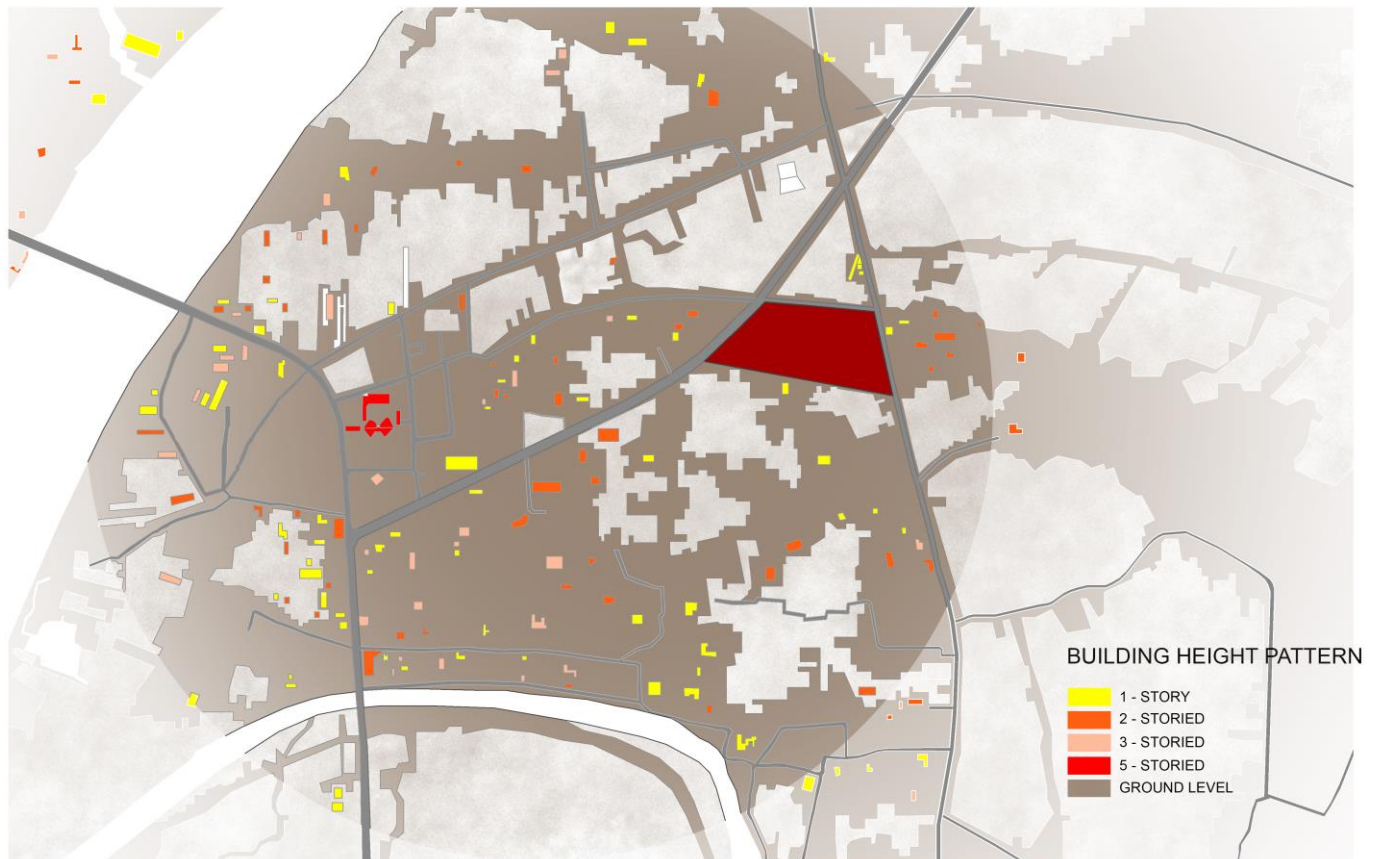
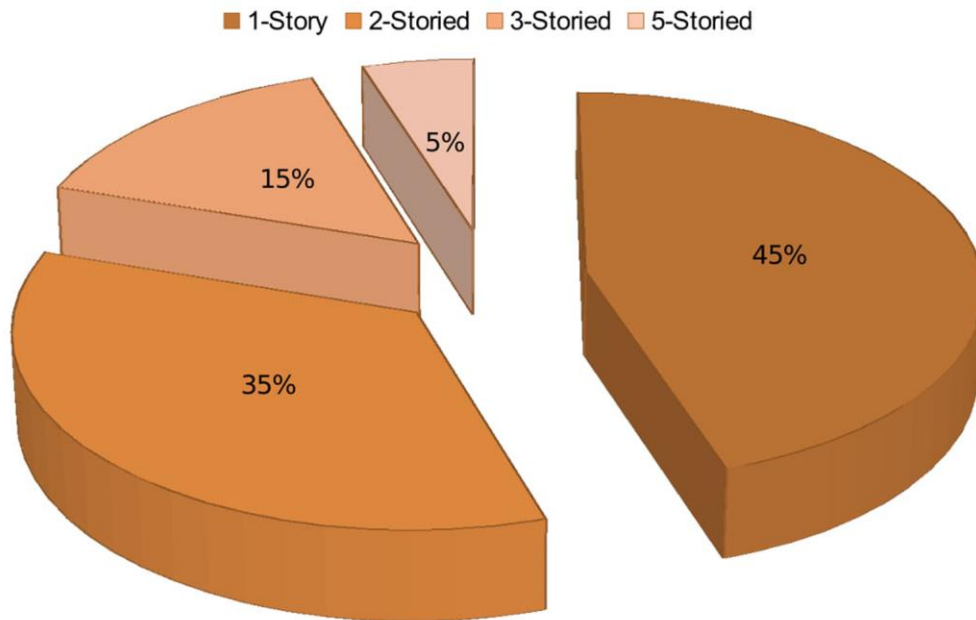


Figure 4.4: Building height pattern. (Source: Author)

The collaboration of approximate estimation and program analysis can be considered while making design decisions.

Percentage of Building Height Pattern



	Percentage of Building Height Pattern
1-Story	45%
2-Story	35%
3-Story	15%
5-Story	5%

Diagram4.5: Percentage review of Building Height Pattern. (Source: Author)

The most supreme part is 1-story built forms on the existing site. Then sequentially come 2-storied and 3-storied. The only 5-story built form is the University of Barisal, which includes individual department buildings as well.

➤ Route Network Pattern:

Route network pattern highlights different road networks as well as water body connections, which help to focus on communication system and its pattern.

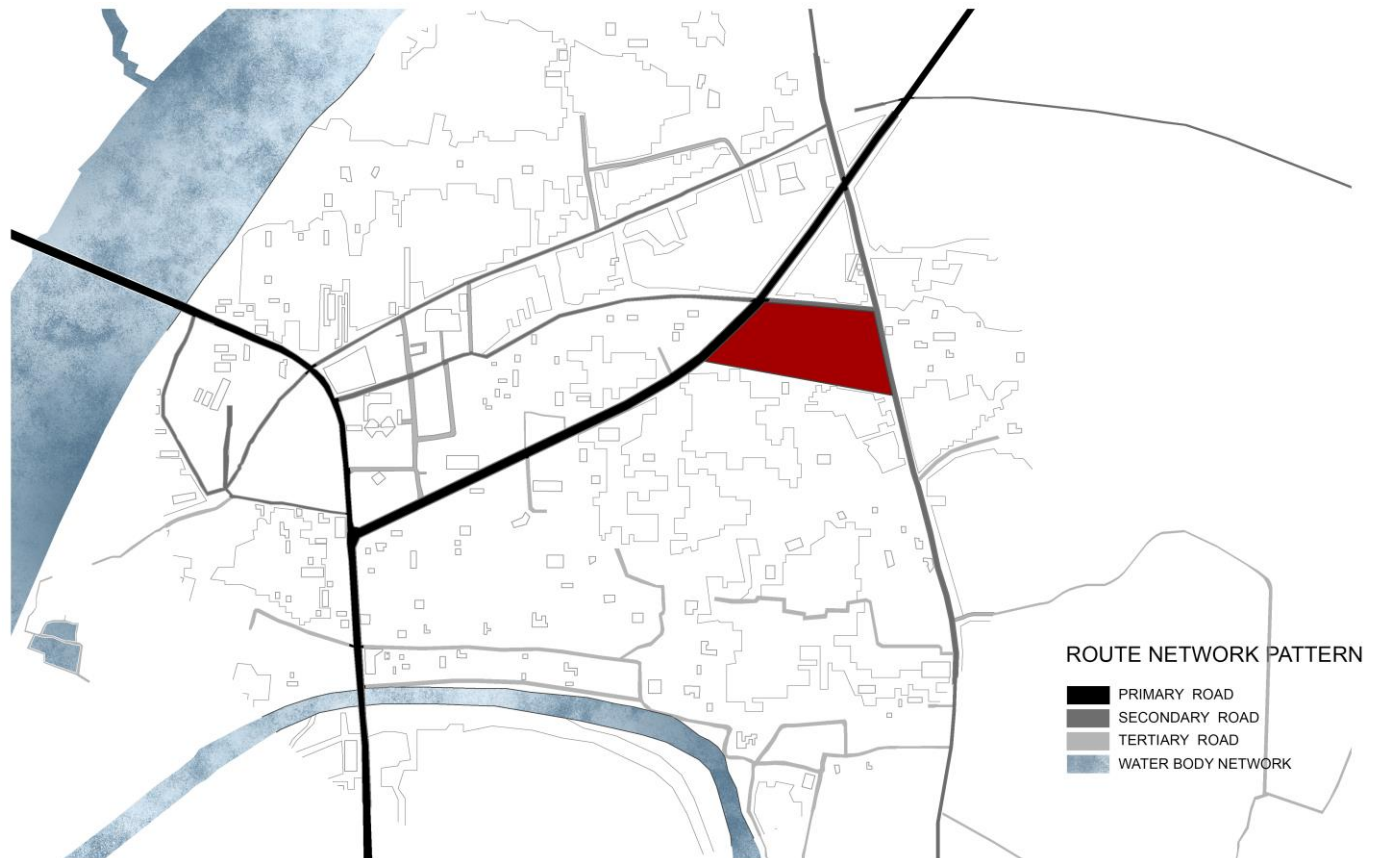
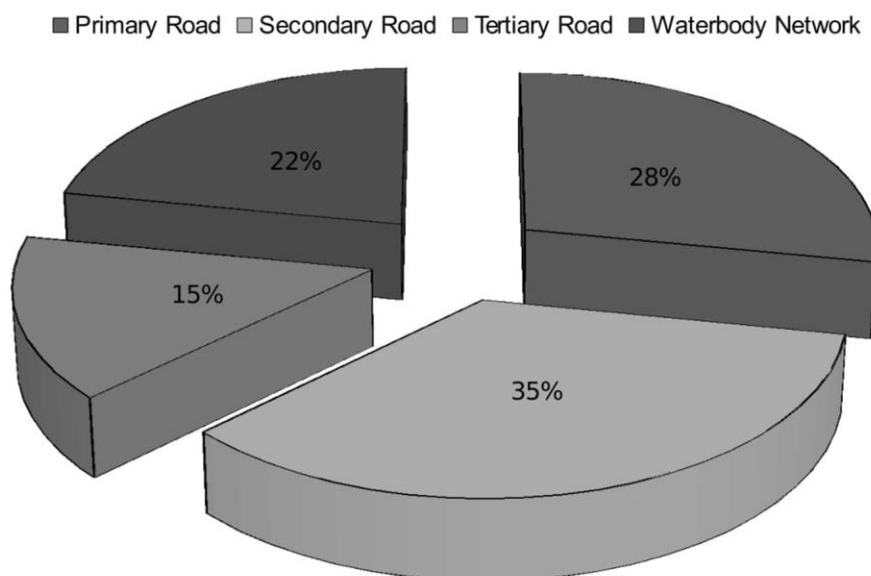


Figure 4.5: Route network pattern for communication system. (Source: Author)

The web of lattice emphasizing on primary, secondary and tertiary module helps point out axis, directions and orientation.

Percentage of Route Network Pattern



	Percentage of Route Network Pattern
Primary Road	28%
Secondary Road	35%
Tertiary Road	15%
Waterbody Network	22%

Diagram4.6: Percentage review of Route Network Pattern. (Source: Author)

Focusing on the busy road network, it is the secondary road as local people frequently prefer to use it for communication. Then the most prominent Road of the proposed site is the primary Road network, which is the highway road. Water body Network is an essential route for communication. Last but not least, tertiary roads play a vital role for locals.

➤ Space Use Pattern:

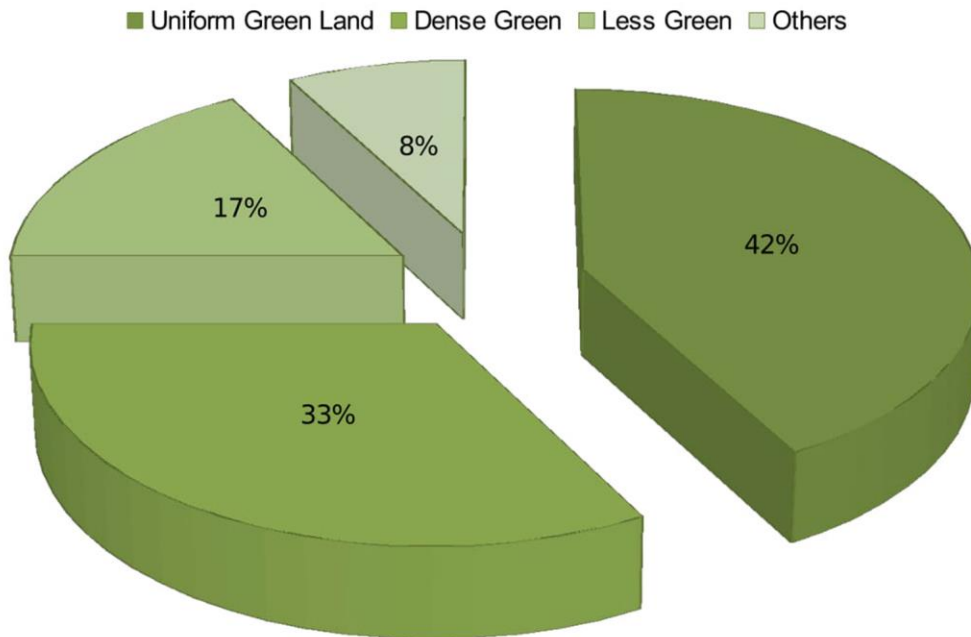
The space use pattern, foreground the figure of vegetation and amount of green, which may reflect the environmental issues from the site and its surrounding.



Figure 4.6: Space use pattern. (Source: Author)

The existing site area offers a positive presence of large amount of green vegetation and open spaces.

Percentage of Space Use Pattern



	Percentage of Space Use Pattern
Uniform Green Land	42%
Dense Green	33%
Less Green	17%
Others	8%

Diagram4.7: Percentage review of Space Use Pattern. (Source: Author)

Most portion of the land area of site surrounding is uniform green land for cultivation. There is a large amount of green vegetation. The open land areas are renowned as comparatively less green. Rest of the area is route network for communication through the site.

➤ Options for Amenity:

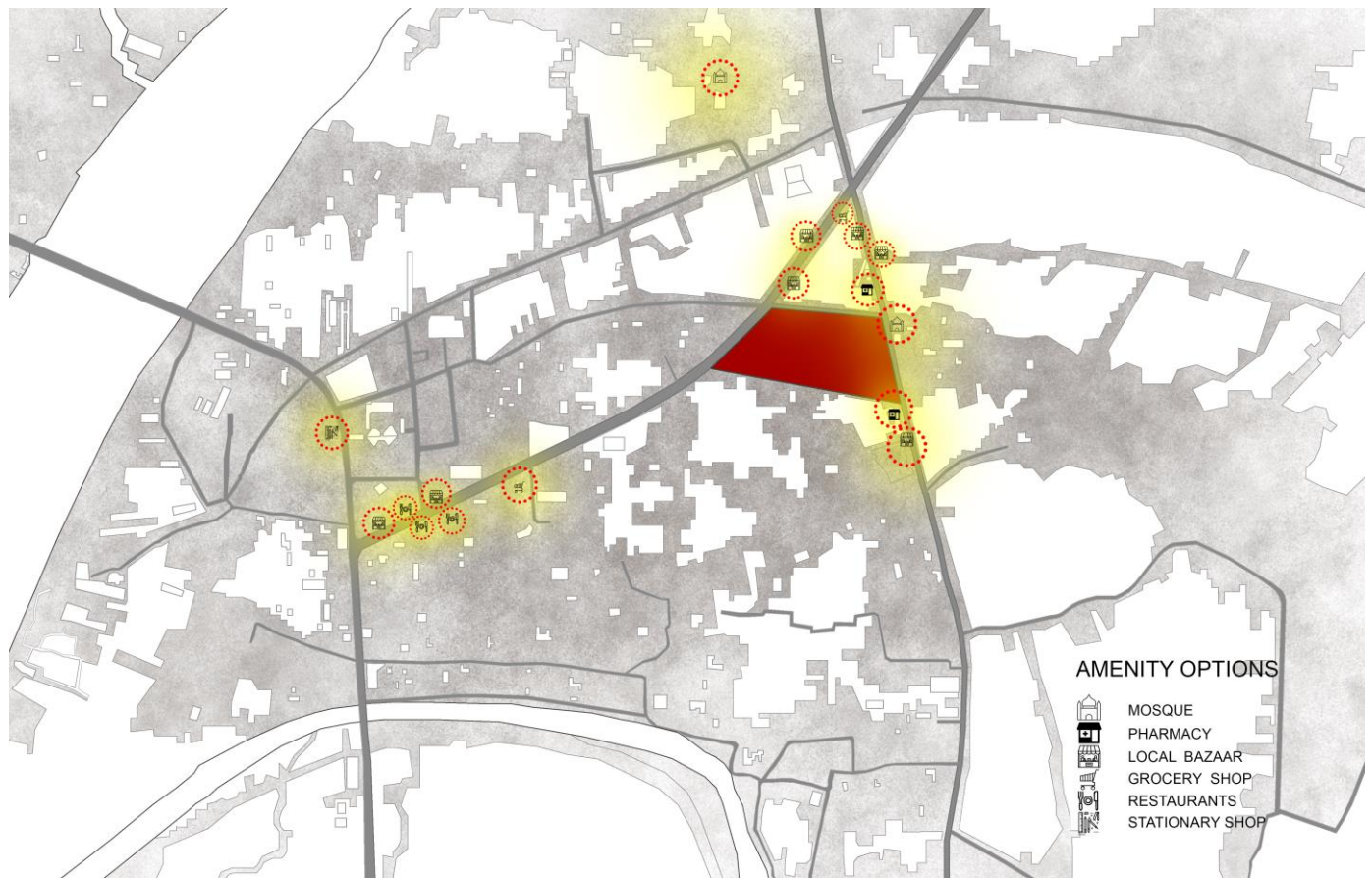
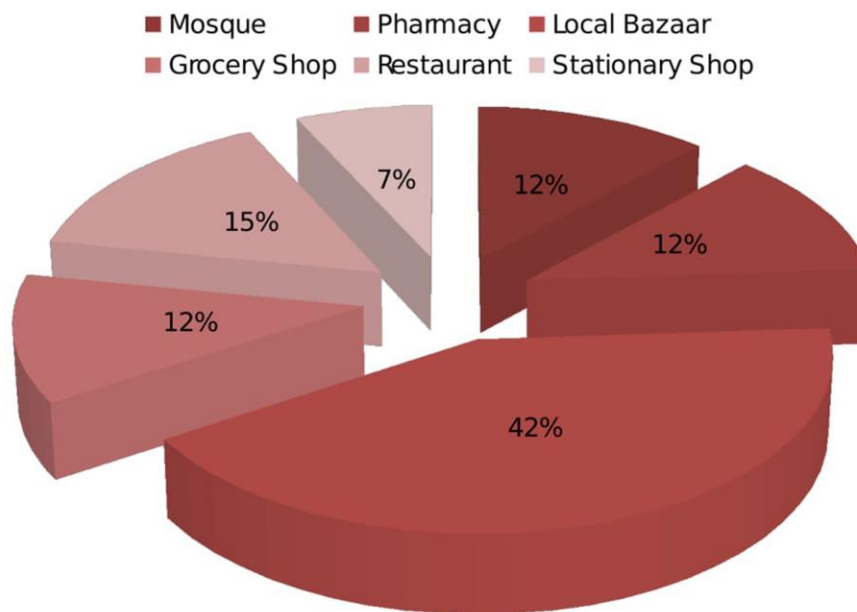


Figure 4.7: Options of Amenities. (Source: Author)

Pointing out the “options of Amenity” in the context of site location is essential, as it is important to know which may serve the site area for welfare and may provide advantages in terms of sociability.

Percentage of **Amenity Options**



	Percentage of Amenity Options
Mosque	12%
Pharmacy	12%
Local Bazaar	42%
Grocery Shop	12%
Restaurant	15%
Stationary Shop	7%

Diagram4.8: Percentage review of Amenity Options. (Source: Author)

The entire site is surrounded with mostly local bazaar and restaurants. Moreover, there are an equal distribution of grocery shops, pharmacy and mosque. The site is nearly adjacent to a neighborhood mosque.

➤ Vehicular Stoppage and Footprint:

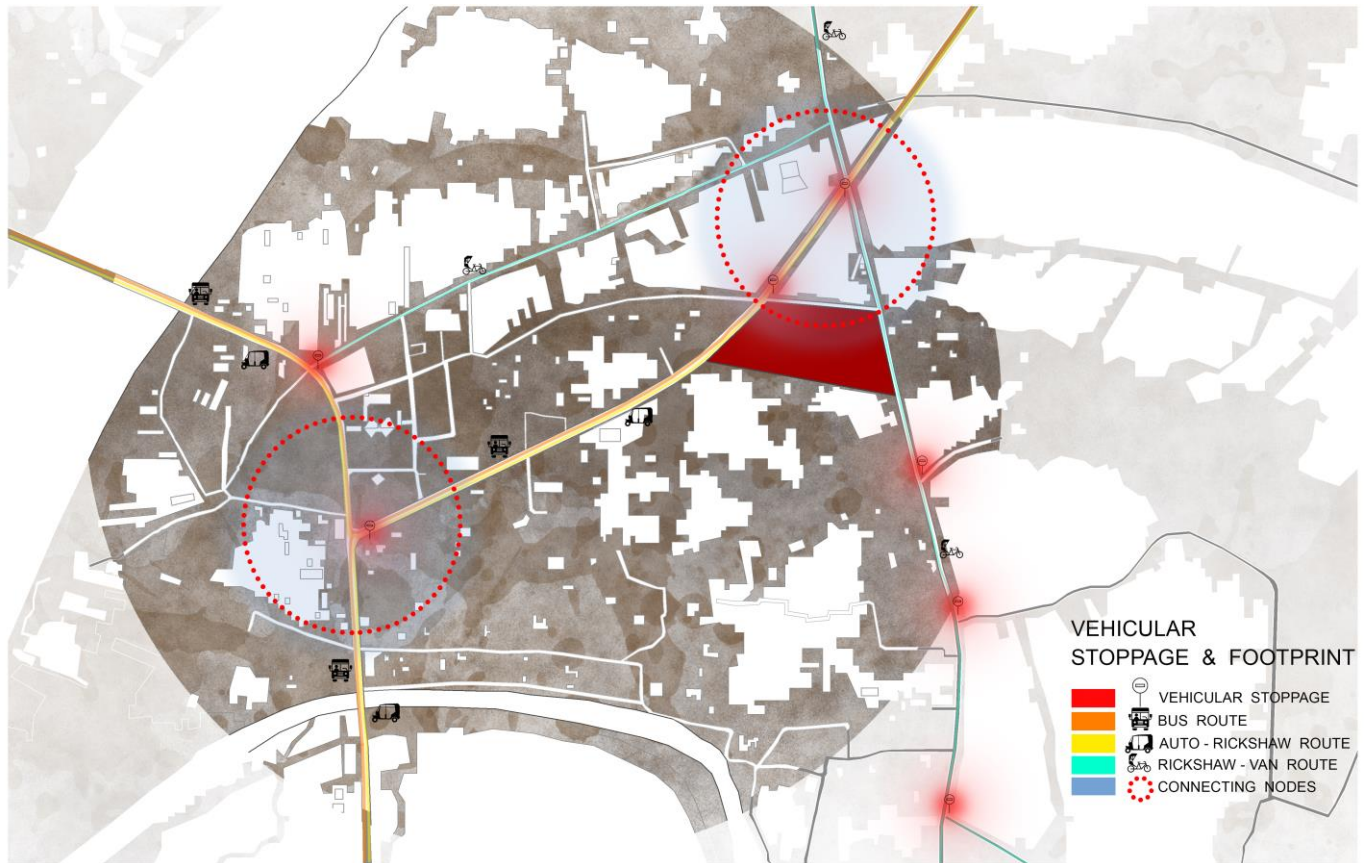
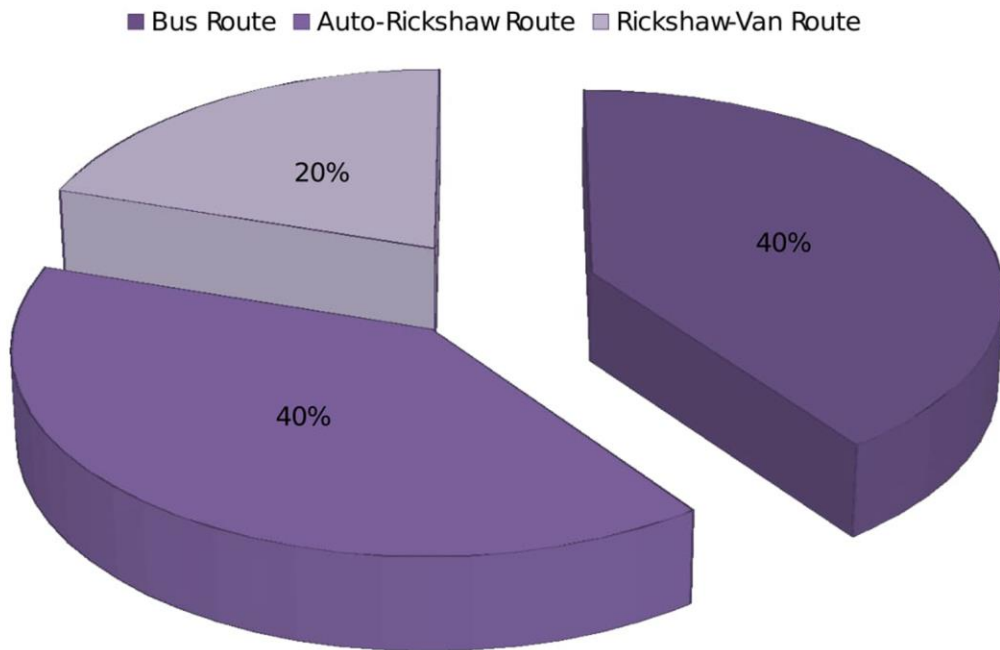


Figure 4.8: Existing vehicular stoppage and possible footprint. (Source: Author)

Detecting the vehicular stoppage and its footprint pinpoints the position of node connections, general figure of route, types of vehicles, proximity and dialogue of communication system.

Vehicular Footprint



	Percentage Vehicular Footprint
Bus Route	40%
Auto-Rickshaw Route	40%
Rickshaw-Van Route	20%

Diagram4.9: Percentage review of Vehicular Footprint. (Source: Author)

Percentage review of vehicular footprint from the site for SOS Children’s village, Barisal highlights that the most influential routes are the bus route and auto-rickshaw route. Rickshaw-van routes are interchanged by walking pathways or pedestrians sometimes who ever prefer to walk.

➤ Inter District Bus Route Pattern:

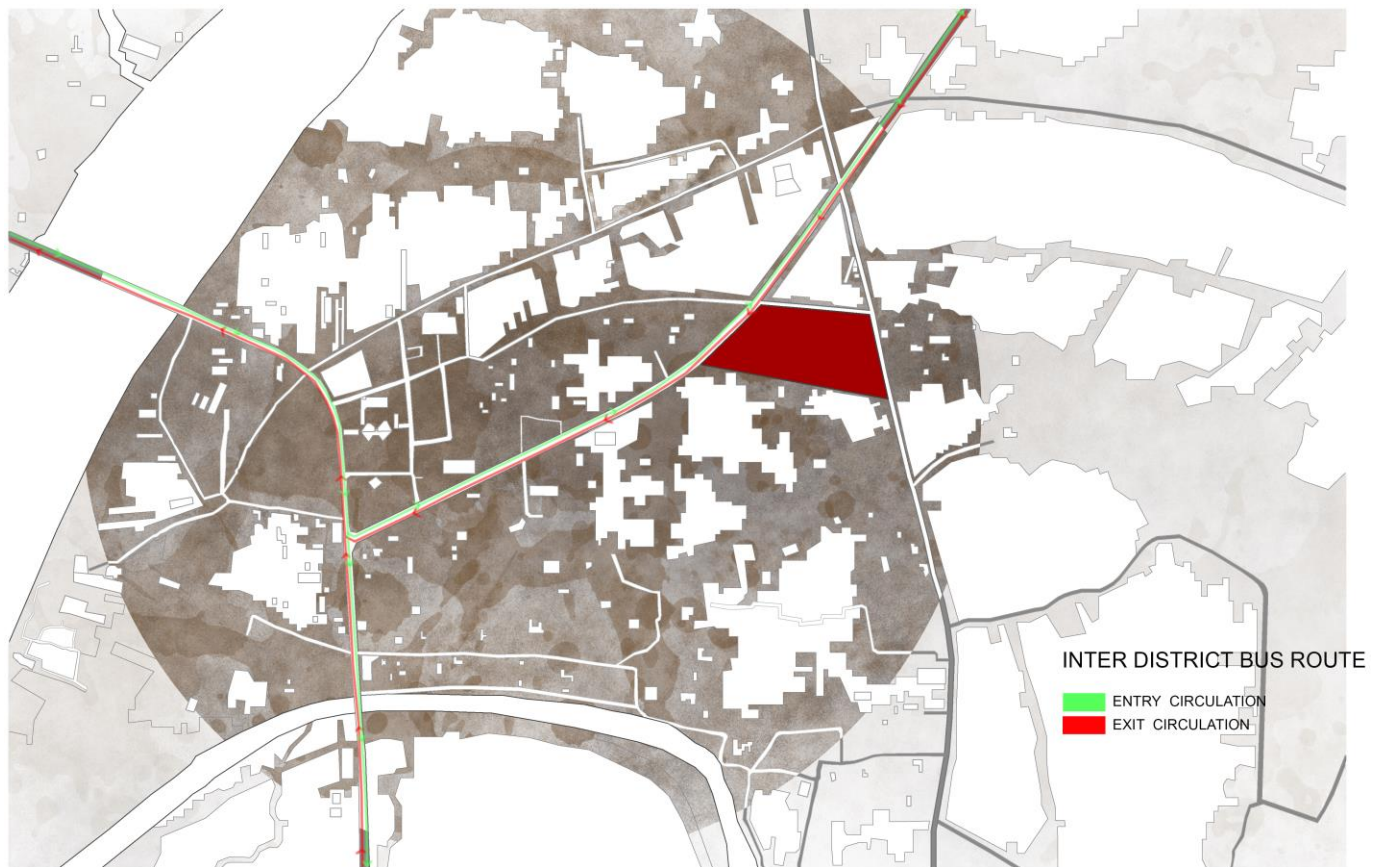


Figure 4.9: Inter district bus route pattern. (Source: Author)

The site comprises inter district bus route and identifying the route focuses on the emergency route pattern, its circulation and access and a typology making dialogue of communication system.

➤ Detection Portray:

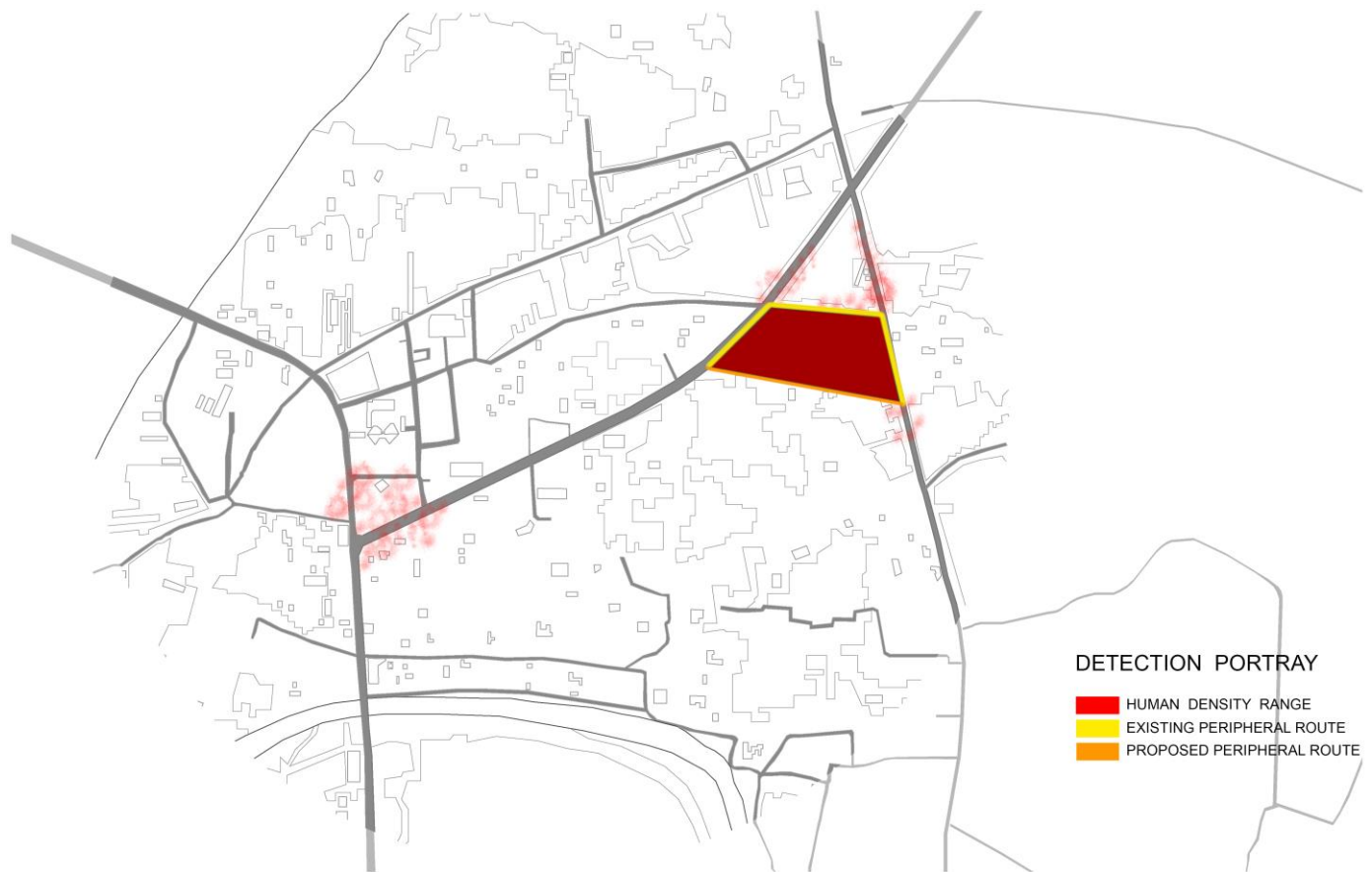


Figure 4.10: Probability of human density and peripheral route. (Source: Author)

- Inter district bus route, vehicular footprint and stoppage ensures communication factors, as well as security system.
- Human density highlights social issues.
- Peripheral road ensures emergency transmission which is an integral part for SOS Children's Village.

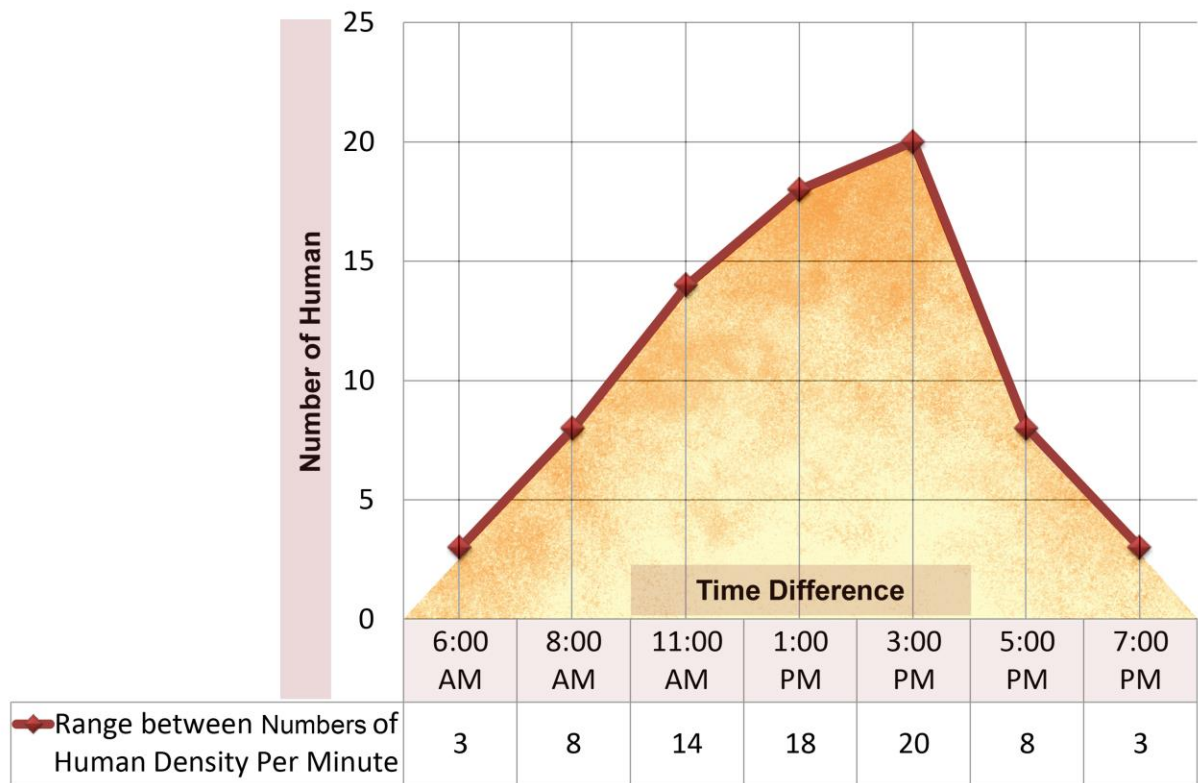


Diagram4.10: Range between numbers of human density per minute. (Source: Author)

The large numbers of human gather at 3:00 PM after lunch (e.g.) nearby bazaar; whereas, the lowest numbers at 6:00 AM and 7:00 PM (i.e.) in the dawn and evening period of time.

➤ Impression Map:

Impression map carries the notification of noise prone zone adjacent to the site as it is highway and a portion from local bazaar.

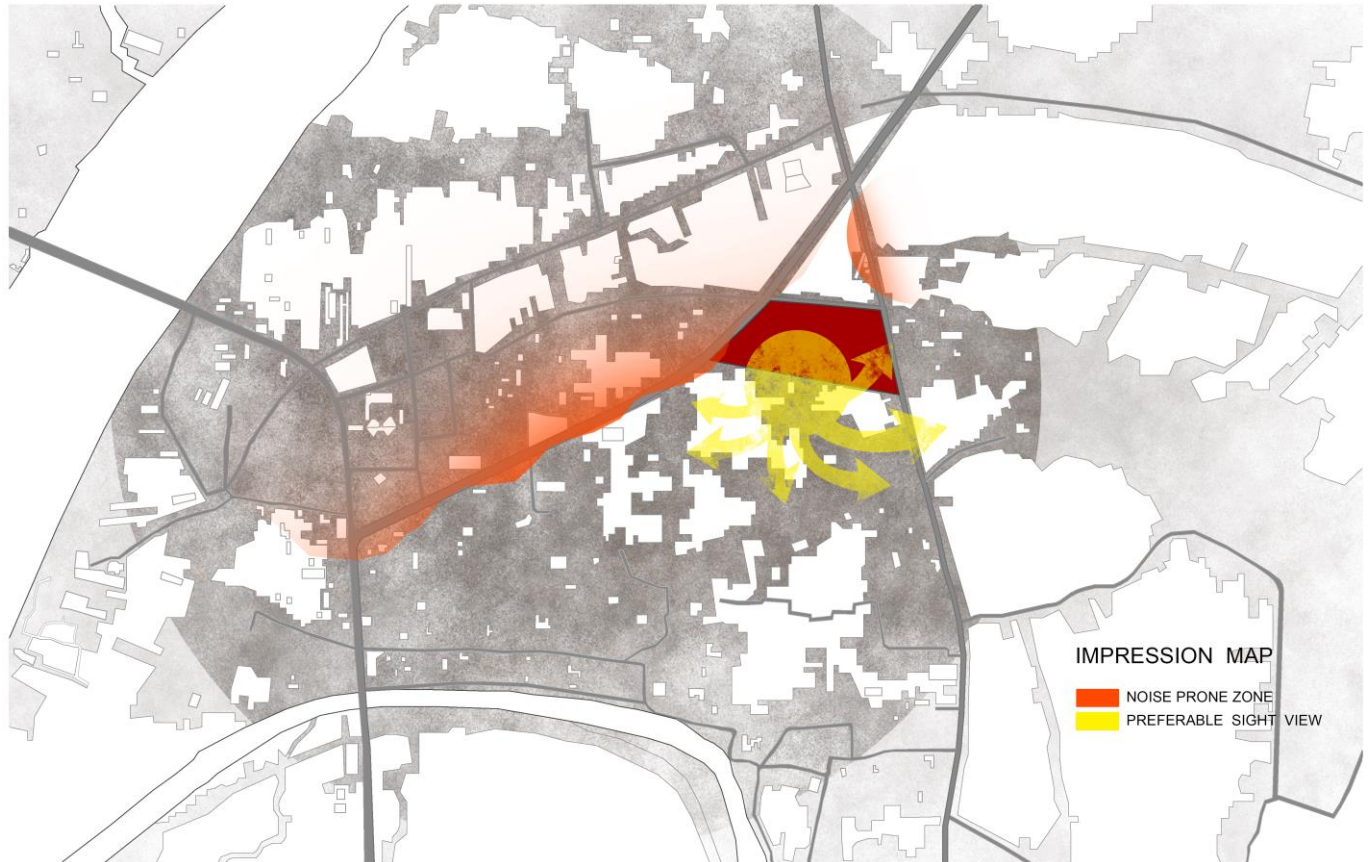


Figure 4.11: Impression map. (Source: Author)

Furthermore, the map indicates the preferable sight view from the site which locates on the south direction.

Conclusion: To conclude, the chapter consists of contextual study from site, where the mappings are done within the radius of 6 kilometers, so that the existing context can be portrayed more detail way including necessary information.

CHAPTER 5

CASE STUDIES

- Introduction
 - 5.1 Local case study
 - 5.2 Sub-Continental case study
 - 5.3 International case study
- Own Comprehension
- Conclusion

CHAPTER 5: CASE STUDIES

A case study is a research strategy and an empirical inquiry that investigates a phenomenon within its real-life context. The research can be single or multiple case studies, includes quantitative evidence, relies on multiple sources of evidence and benefits from the prior development of theoretical propositions. Case studies are important to know about any report, to be aware of certain issues, to gather descriptive information on data of research of an experiment, project, event or analysis. The general purpose of a case study is to describe an individual situation (case), (e.g.) a person, a project, an organization or an institution in detail. There is no doubt that case studies are a valuable and important form of research for all of the fields. However, along with all their advantages, they also have some disadvantages. It is important to ensure that whether the case is real or not, if it is reliable; only then a case study can highlight the part of advantages.

Here, the case studies are divided into three perspectives and they are: local case study, sub-continental case study and international case study, which has been chosen to elaborate contextual, traditional and project related issues as well as to study projects that are existing in the country and abroad. All the studies have been done keeping in mind the context of the site, program requirements of “ children’s villages” in general and to acquire basic knowledge about how to generate space within a space for children to perceive and for a better psychology as well as future. According to chapter 1 and 2 from my point of view, SOS Children’s Villages should treat all the children specially and equally, recognizing the exceptional qualities of each of them and fulfilling

all sorts of needs that may be required to help them grow into an independent, responsible citizen.

These case studies would help to compare the different aspects to be considered while going into the depths of design. By the stages of studying different sorts of orphanages, it is possible to understand what the differences are and about the lacking at the same time. It is essential to understand philosophical belief for orphan children in comparison to other general children to treat them in an equal manner.

A case study report of,

- SOS Children's village, Dhaka;
- SOS Children's village, Anuradhapura in Sri Lanka and
- SOS Children's village, Aqaba in Jordan

Brings meaning to the requirement list provided to progress on SOS Children's village, Barisal.

5.1 Local case study

The SOS Children's village, Dhaka; has been chosen as the local case study from Bangladesh that can relate the contextual phenomenon as research purpose so that it can be implemented for project progression.



Image5.1: Site location of SOS Children's Village, Dhaka. (Source: 2013, Shahreen Jalal's dissertation paper on children rehabilitation center, Brac Univeristy)

Project: SOS Children's Village, Dhaka, Bangladesh

Location: Mirpur, Dhaka

Architect: Raziul Ahsan, Nahas Khalil

Client: SOS Foundation

Area: 1.45 Acres.

Building type: Social welfare

Building usage: Orphanage

Objective of SOS Foundation:

The main objective is to help and guide the orphan young boys in the process of preparing the through higher education and training skills, so that they are in a capable position to integrate themselves into a society as law abiding and productive citizen.

Proposed Program:

- Administration with director's residence
- Hostels
- Workshop
- Play field

Description:

The fundamental program of the project is to provide home for orphan children, where they are raised by a mother and live a normal family life. Client wanted to have a village to house 120 youth and various other ancillary facilities, such as a common room and dining room, kitchen, director's residence and office. Brief asked for four residential building and married tutor in the other two. On the 6868 sq-m plot, 6 buildings are arranged around a rectangular courtyard. The director's office sum-residence was centrally located so that he could have visual control over the houses. A large open hall served as a dining area and a common room.

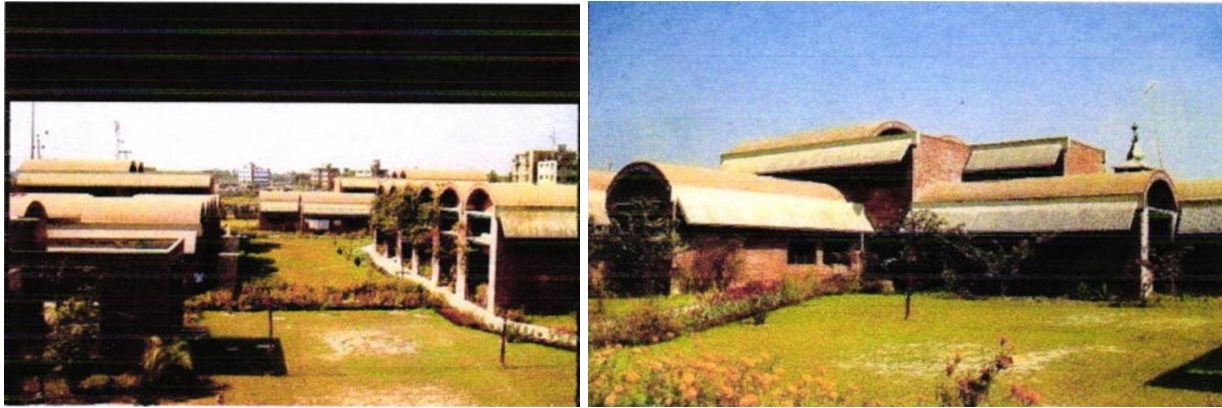


Image5.2: Images of the courtyard in the village. (Source: 2013, Shahreen Jalal's dissertation paper on children rehabilitation center, Brac Univeristy)

Brick vaults are of 12" thick, were used, in two directions for the roof and provide natural ventilation, better heat insulation and also give a comfortable visual scale, when used in conjunction with sloping, projecting eaves. The eaves also protect the brick walls on all sides from rain and sun, and are in adequate harmony with the traditional architecture of the country. A plot of land beside the main road measuring approximately 8094 sq-m and only a few plots away from the SOS youth village was procured for constructing the Hermann Gmeiner School, which has class from nursery up to college level. Other facilities included an administrative section, five laboratories, a library, gymnasium-cum-auditorium, a projection room, a basket ball court and a play field. Two blocks for junior and senior classes, which were placed on the northern and southern sides of the plot segregated by a play field. The eastern block running north-south was programmed by all other facilities. The entire school is attached by a single loaded corridor which connects the classrooms and provides better light and air into the interior.

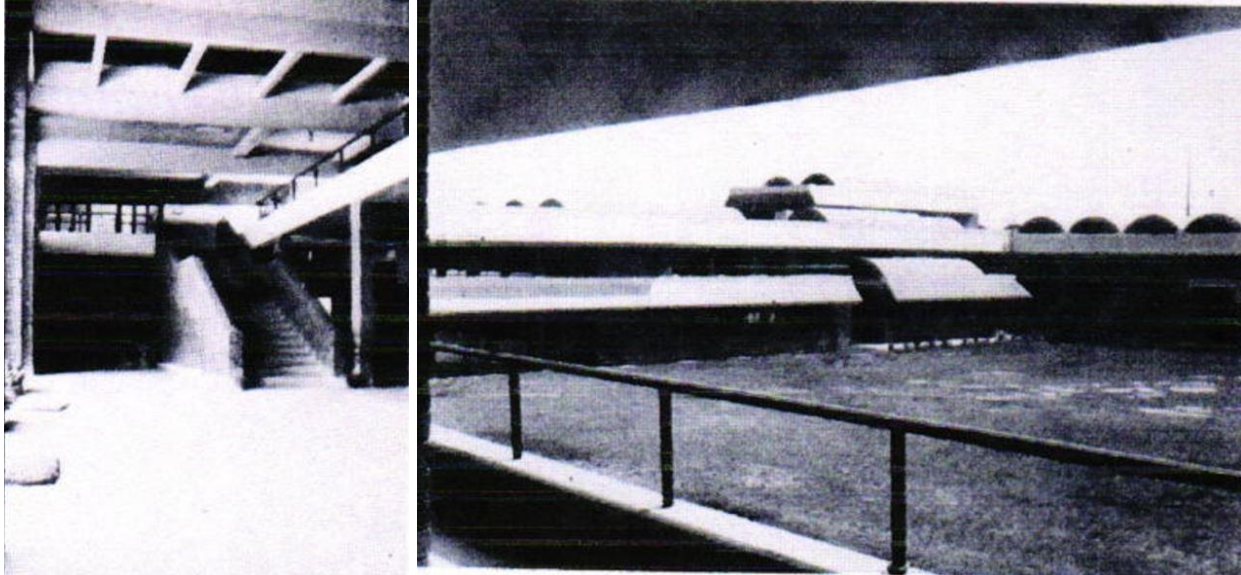


Image5.3: Images of circulation area inside the school and the play field surrounded by the school building. (Source: 2013, Shahreen Jalal's dissertation paper on children rehabilitation center, Brac Univeristy))

Deep over-hangs are projecting eaves similar to the village run all around the building protecting the exposed brick wall. Small courts provide ventilation and light, wh8ich serve as play areas for the children. Open to sky terraces and wide corridors become play spaces during the recess hours. The wide corridor provides ample exhibition spaces. An elaborate children's play area with play equipment is provided adjacent to their class rooms. RC column and spread foundation was used for the extra depth below grade and composite brick, where RC columns were used for load bearing.

The structural system of the village consists of brick foundations, load bearing shear walls, vaulted roof and RC eaves. Exposed machine made bricks, virtually maintenance free, are used both inside and outside of building.



Image5.4: Image of the entrance path way and the mother training section. (Source: 2013, Shahreen Jalal's dissertation paper on children rehabilitation center, Brac Univeristy)

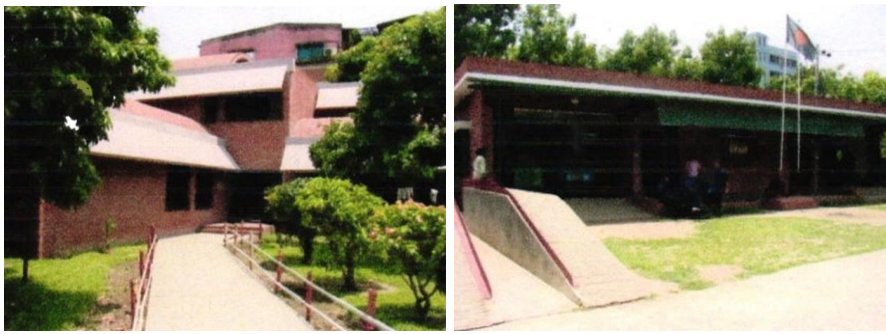


Image5.5: Image of the vocational and automobile training section. (Source: 2013, Shahreen Jalal's dissertation paper on children rehabilitation center, Brac Univeristy)

Own Learning:

Own learning is a self directed strategy of learning, with guidance from any source; decide what and how to learn. Here, from the plan; zoning analysis has been done to understand the functional flow and how it works.

The red marks on figure 5.1, figure 5.2 and figure 5.3, indicates the locations that has been captured as images for the key map of plan of the figures.

ZONING ANALYSIS OF THE SCHOOL SECTION

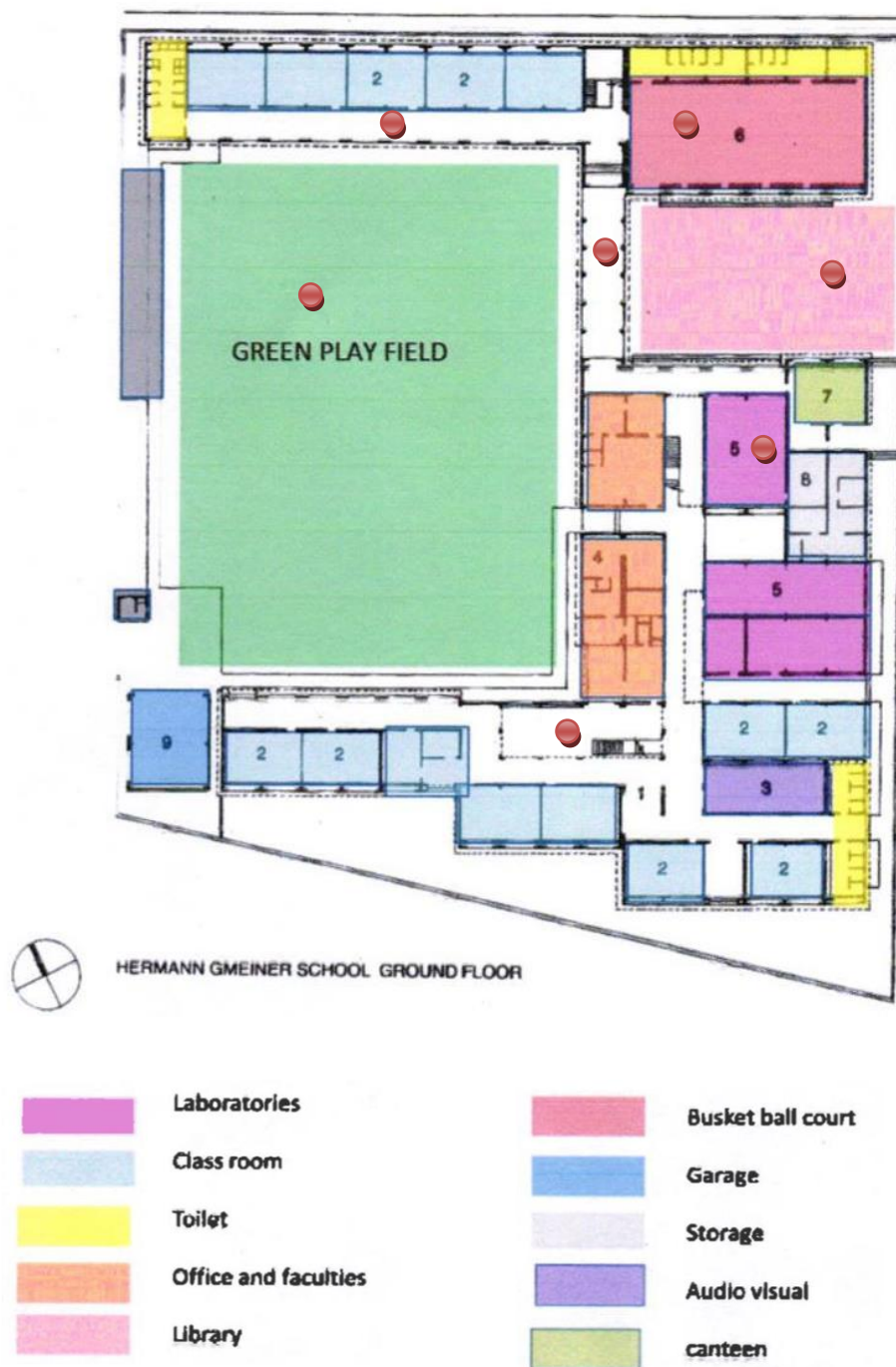


Figure 5.1: Zoning analysis of the school section. (Source: 2018, Emran's dissertation paper on Ahsania Mission Children City at Jessore, Ahsanullah University of Science and Technology)

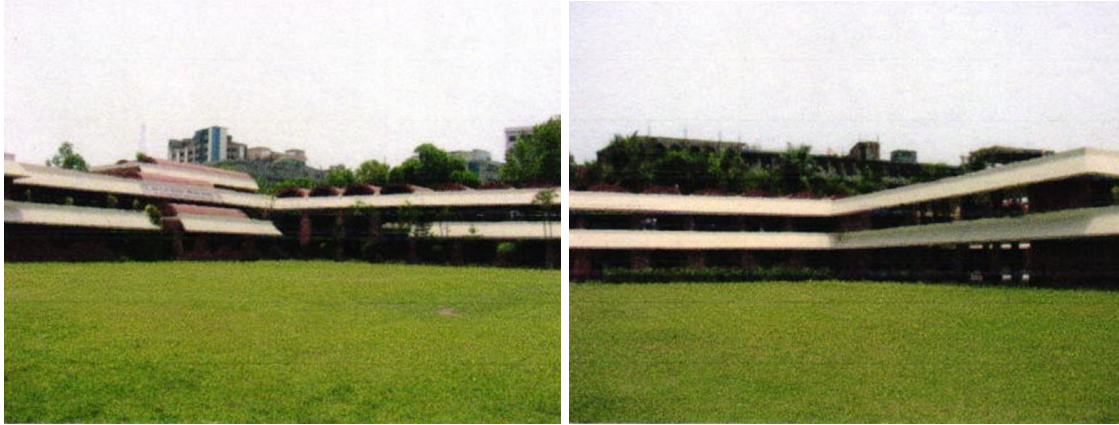


Image5.6: Images of School playground. (Source: Author)



Image5.7: Images of school corridor outside classrooms. (Source: Author)

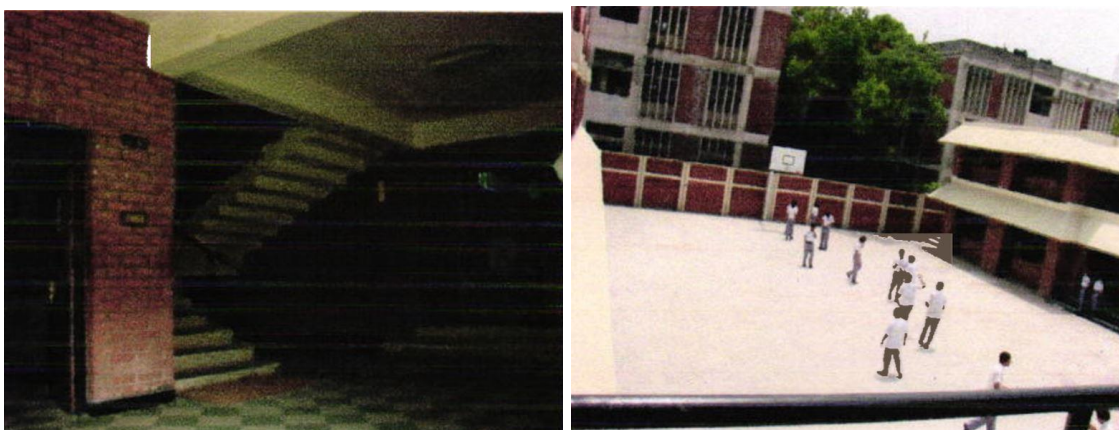


Image5.8: Images of circulation area and basket ball court. (Source: Author)

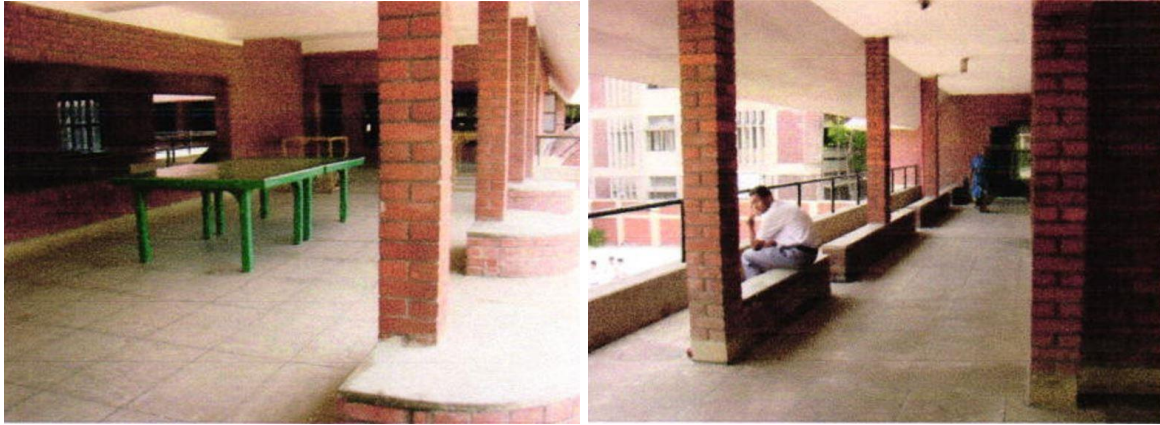


Image5.9: Images of seating facilities at the terraces. (Source: Author)

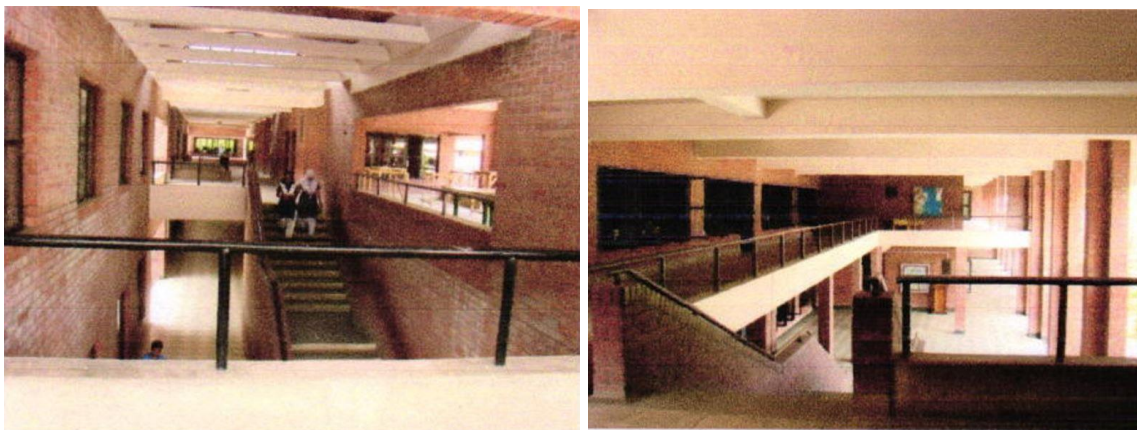


Image5.10: Images of visually permeable spaces. (Source: Author)



Image5.11: Images of backyard of junior section with soft surface play ground.



Image5.12: Images of invitation of natural light in the internal corridors and in library that creates heaven like space. (Source: Author)



Figure 5.2: Entire zoning analysis of SOS Children's village, Dhaka. (Source: Author)



Figure 5.3: Zoning analysis of the youth village section from youth hostel Mirpur layout.
(Source: 2013, Shahreen Jalal's dissertation paper on children rehabilitation center, Brac Univeristy)

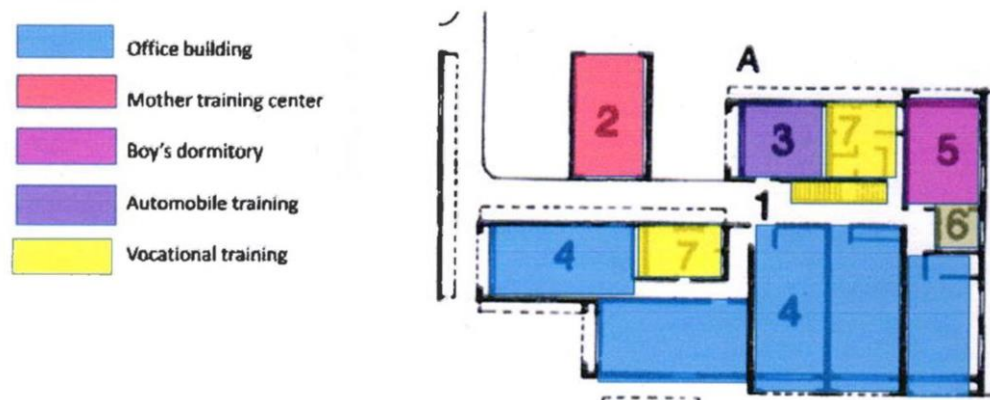


Figure 5.4: Zoomed in analysis of identified zone on figure 5.3. (Source: Author)



Image5.13: Images of vocational training section, mechanical and electrical training.

(Source: Author)

Findings:

- Light inviting spaces create a very breathing environment as the corridors are visually permeable to each other, which increase the visual interaction between the students.
- The interesting seating arrangement zone creates semi private like space which generates spaces for the students to study in group.
- Courtyard successfully handled, around which the necessary functions are arranged.
- Children attachments and philosophy are related through design.
- Divided logically into four zones according to the functional flow.
- Highly influenced by the traditional and regional architecture of Bangladesh.
- Vaulted roof with its inclined sun-shade enriches aesthetical beauty and fulfills necessity at the same time.

To conclude, the local case study focused more on aesthetics and breathing environment, zoning arrangement and children philosophy.

5.2 Sub-Continental case study

The SOS Children's village, Anuradhapura; has been chosen as the sub-continental case study from Sri-Lanka that can relate the typology and pattern as research purpose so that it can be implemented for project progression.



Image5.14: Site location of SOS Children's Village, Anuradhapura. (Source: Prasad Weerasinghe)

Project: SOS Children's Village, Anuradhapura, Sri Lanka

Architect: Chelvadurai Anjalendran

Client: SOS Foundation

Area: 5.5 Acres

Building type: Social welfare

Building usage: Orphanage

Description:

SOS Children's village, Anuradhapura, which is a loving home to 140 children, was dedicated to Sri Lankan children on January 27, 1997 by SOS Children's villages President Helmut Kutin. A SOS kindergarten, a SOS Hermann Gmeiner Social Center, Youth Facility for boys and girls and computer training center are catering to the needs of children of the village as well as the community in the vicinity. This SOS Children's village, which is located at Dahaiyagama, approximately 2 km from Anuradhapura, consists of 14 family houses and the usual additional buildings. The kindergarten has four group rooms, where up to 110 children both from the SOS Children's village and from its neighborhood can be looked after.



Image5.15: Image of play ground and vocational training center. (Source: sos-childrensvillages.org)

There is also an SOS Youth Facility and an SOS Vocational training center, which offers computer courses and technical training (motor mechanical and welding). Older boys from the SOS Children's village normally move to the SOS youth facility when they start a vocational training course or go on to higher education in order to learn to shoulder responsibility and to start making their own decisions.

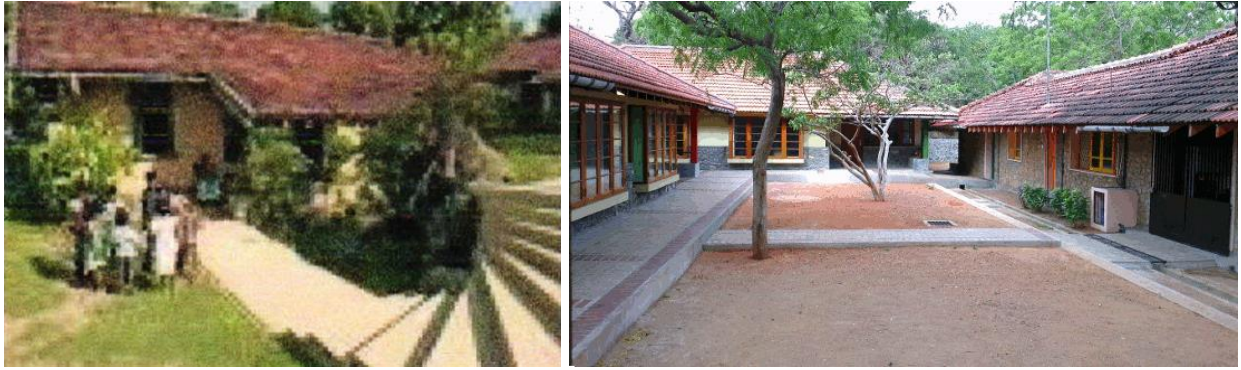


Image5.16: Image of the mother house and the community house. (Source: sos-childrensvillages.org)



Image5.17: Children playing including playing equipments and usage of courtyard in different purpose. (Source: sos-childrensvillages.org)

Own Learning:

Own learning is a strategy of learning that has been self directed, with guidance from certain source; decide what and how to learn. Here, from the plan; blow up plans and zoning analysis of mother house has been done to understand the functional flow and how it works.

The red marks on figure 5.5, indicates the locations that has been captured as images for the key map of plan of the figure.

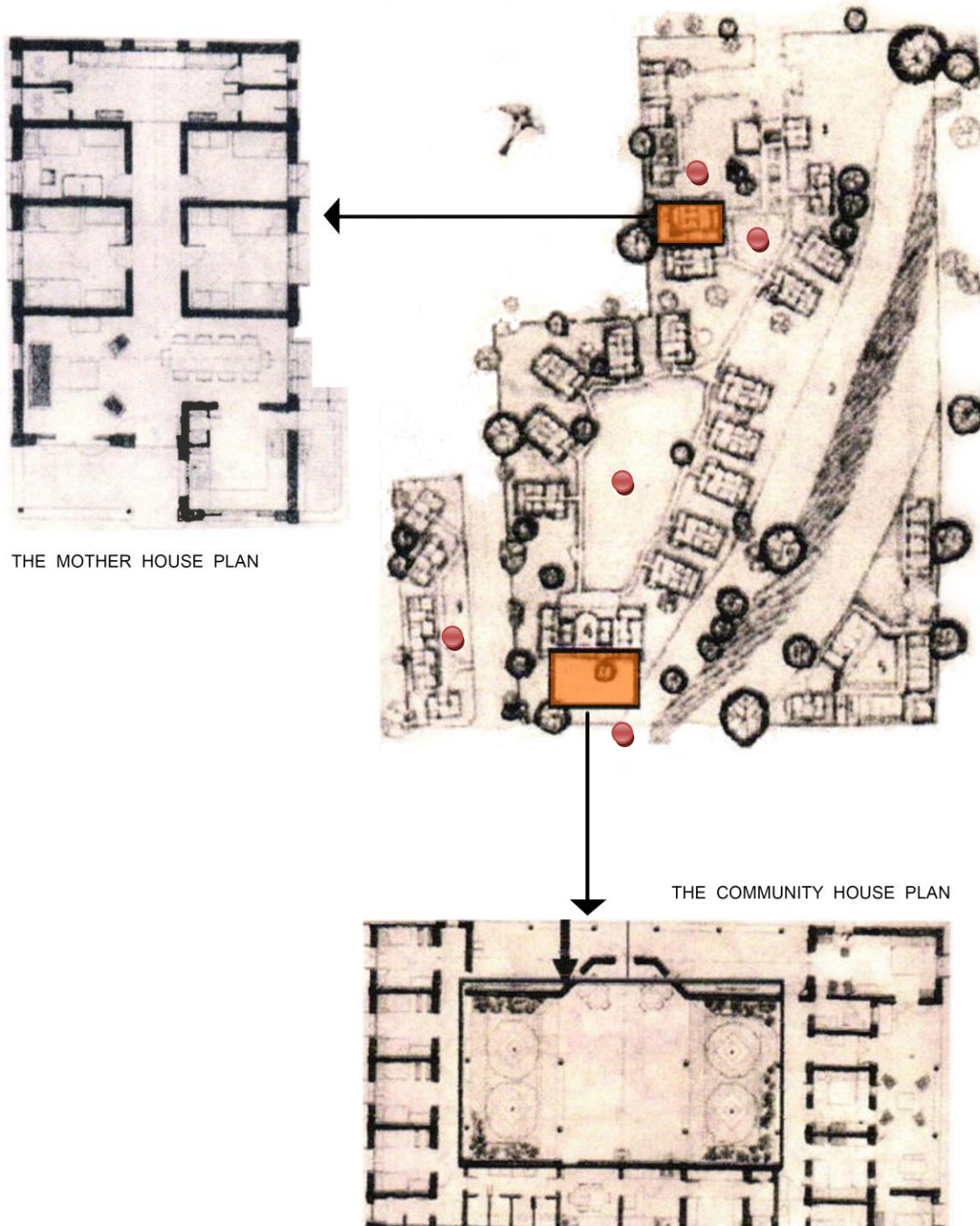


Figure 5.5: Master plan including blow up of the mother house plan and the community house plan. (Source: sos-childrensvillages.org)

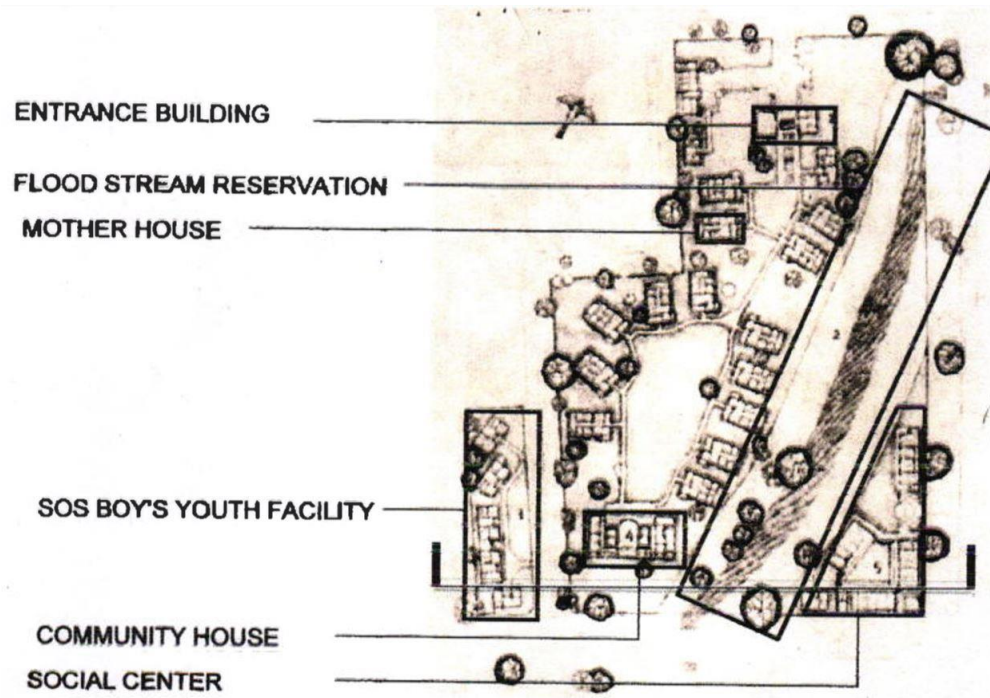


Figure 5.6: The zoning analysis and functional flow of the entire village. (Source: sos-childrensvillages.org)

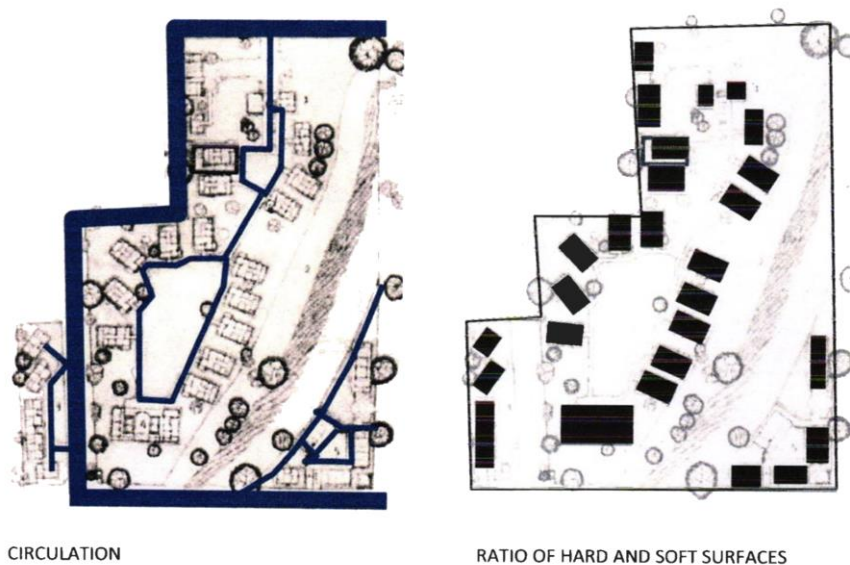


Figure 5.7: The circulation pattern and figure ground map. (Source: sos-childrensvillages.org)

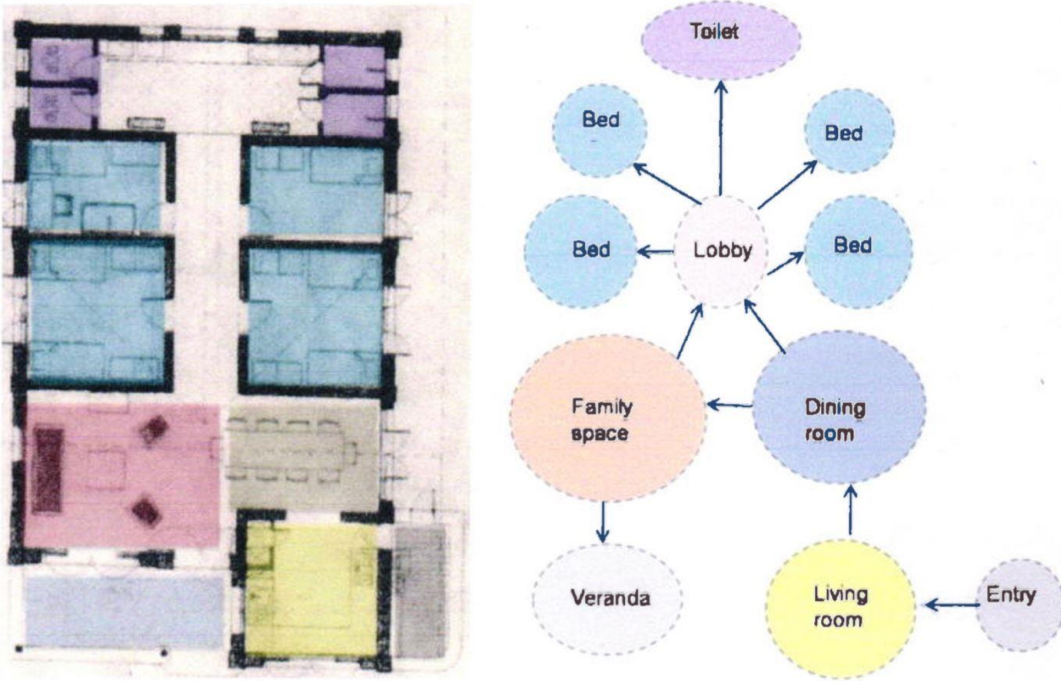


Figure 5.8: The zoning analysis and functional flow of mother house. (Source: sos-childrensvillages.org)

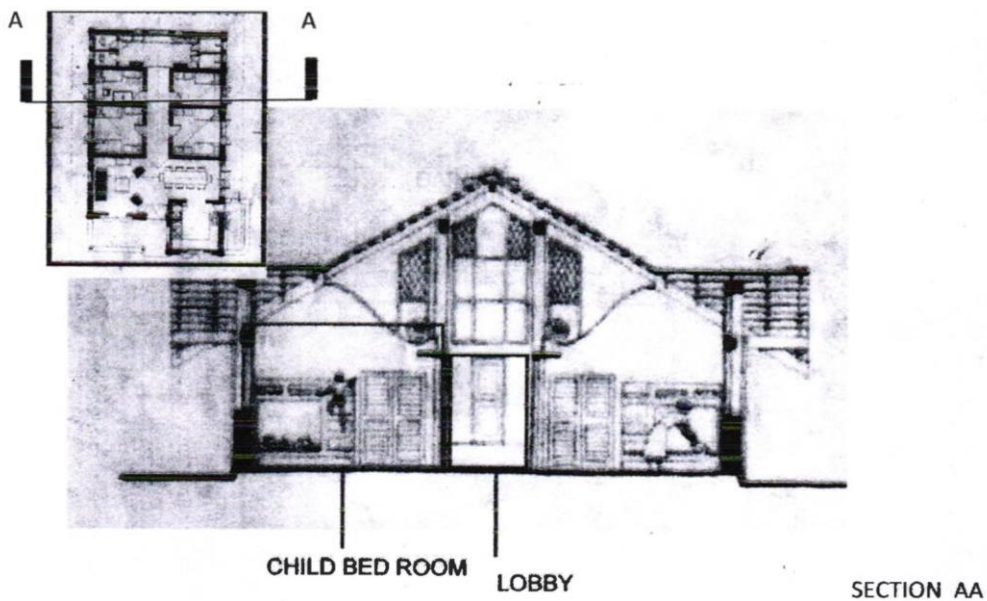
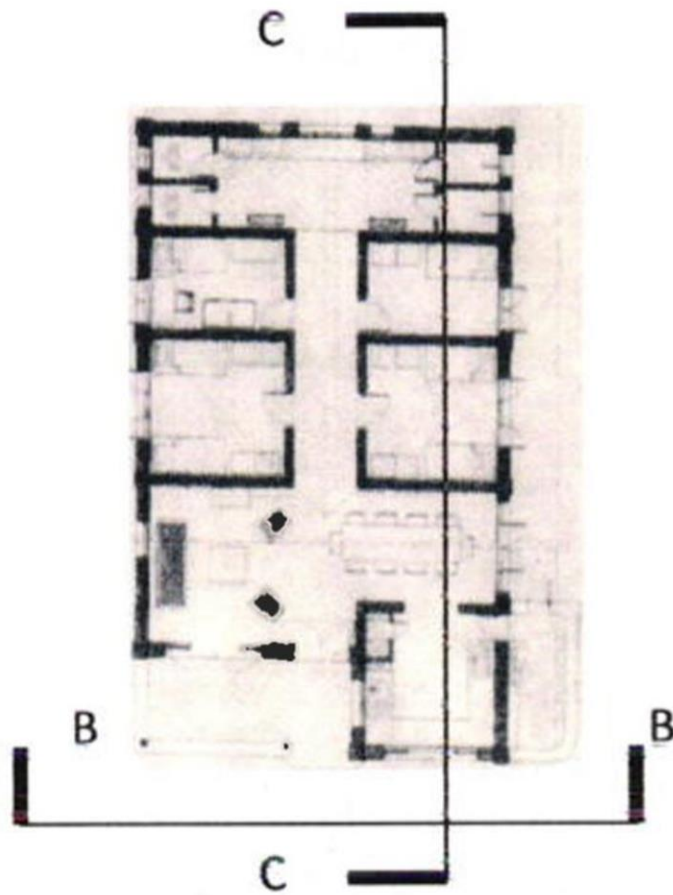
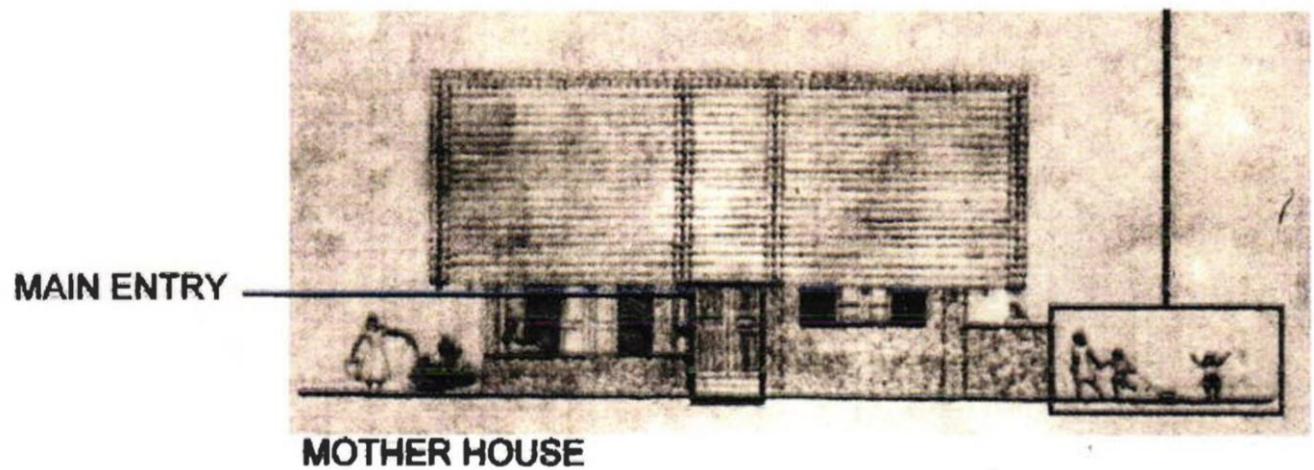


Figure 5.9: Sectional layout from mother house, Section A-A. (Source: sos-childrensvillages.org)



CHILDREN PLAYING



SECTION BB

Figure 5.10: Elevation layout from mother house, Section B-B. (Source: sos-childrensvillages.org)

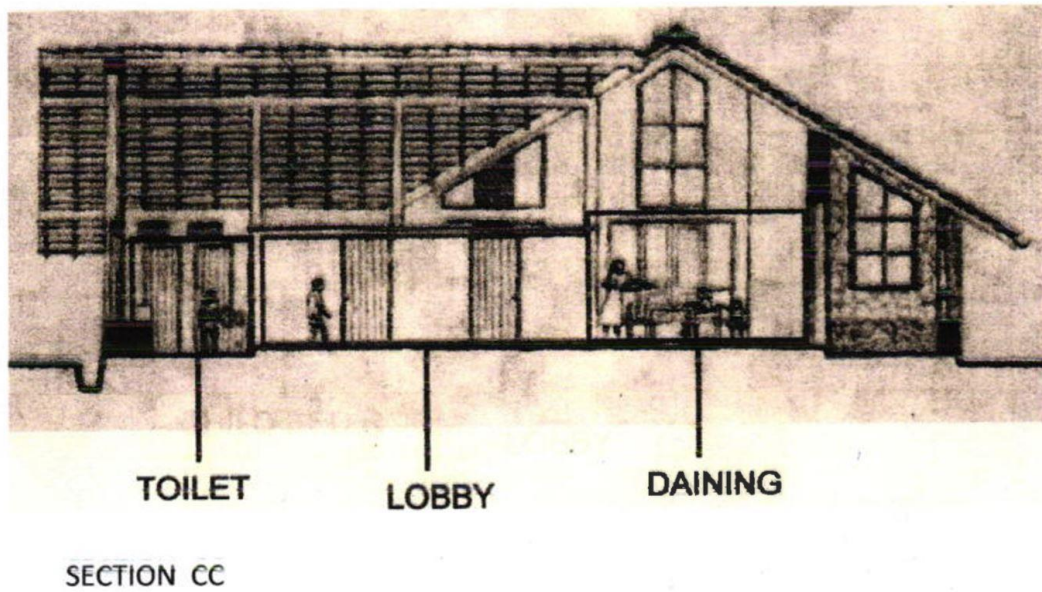


Figure 5.11: Sectional layout from mother house, Section C-C. (Source: sos-childrensvillages.org)

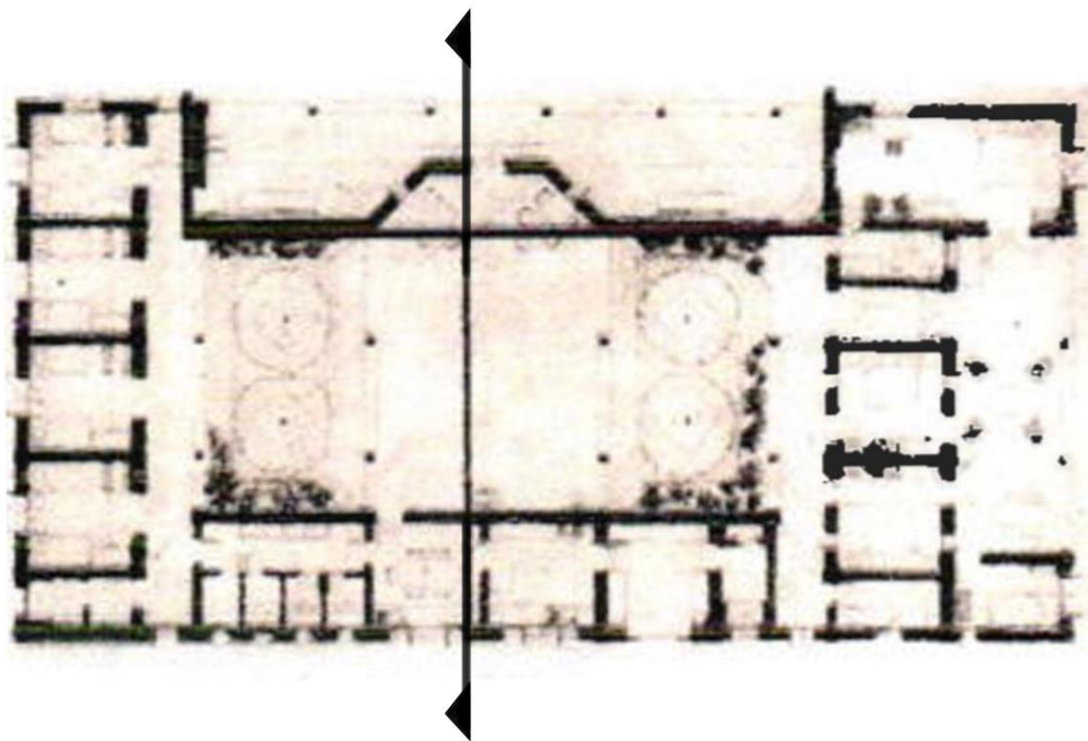


Figure 5.12: Plan layout of community house. (Source: sos-childrensvillages.org)

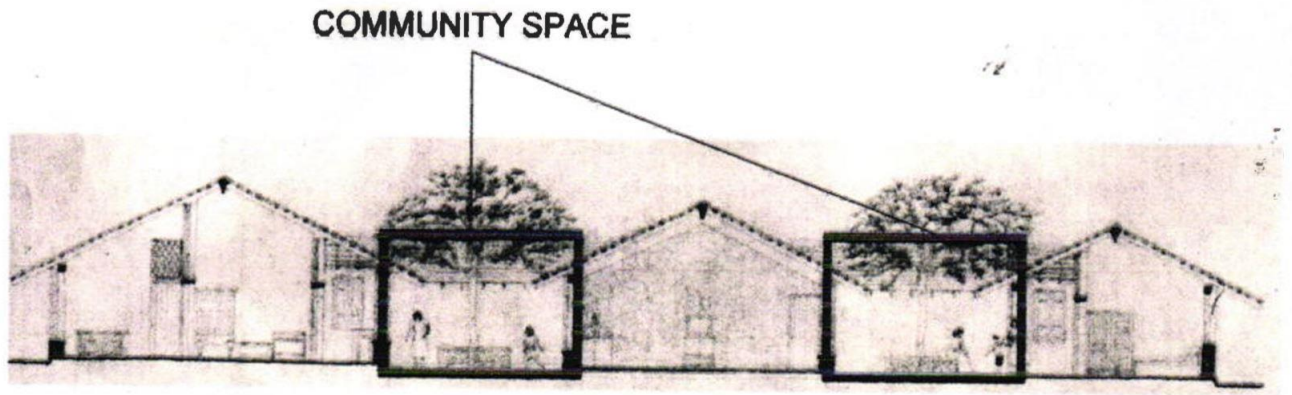


Figure 5.13: Sectional layout of community houses including courtyard. (Source: sos-childrensvillages.org)

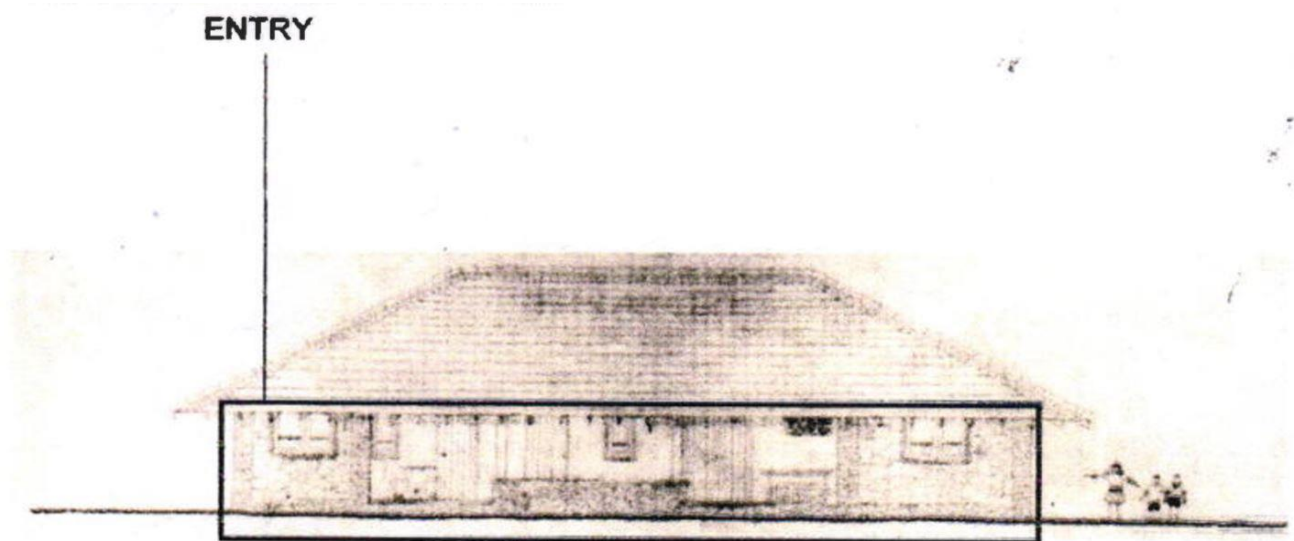


Figure 5.14: Elevation layout of community houses including courtyard. (Source: sos-childrensvillages.org)

A public community space is that space generally open or with enclosure such as courtyard and accessible to people. Here, the community space generates communication skills among the children community, enriches social attachments and strengthens the bonding among one family with another.

Findings:

- More traditional and basically used the local materials of Sri Lanka, such as, granite, sakka (soft yellow stone), laterite and sun-dried earth.
- The educational and social centers are provided to help and ease the village's integration into the surrounding neighborhood.
- The entire community is about one story structure and pitch roof.
- Individual positive enclosure known as pocket spaces are generated so that children can perceive the volume of the space.
- Clear functional flow has been highlighted.
- Forms are segregated and with individual identity.

To conclude the sub-continental case study, it has been highlighted that it is more traditional typology and forms are more segregated pattern with its own identity.

Furthermore, it also came out how the pocket spaces are functionally solved in terms of children psychology.

5.3 International case study

The SOS Children's village, Aqaba; has been chosen as an international case study from Jordan that can relate the modern interpretation an scale of perception as research purpose so that it can be implemented for project progression.



Image5.18: Site location of SOS Children's Village, Aqaba. (Source: Archnet)

Project: SOS Children's Village, Aqaba, Jordan

Architect: Jafar Tukan and Partners

Client: SOS Children's village Association of Jordan

Area: 5 Acres.

Building type: Educational and Social welfare

Building usage: School and Orphanage

Description:

The architecture is attractive, well designed and sincere, represents a modern interpretation of the local vernacular stone building. The scale of the village is dictated by its environmental friendly design and is also related to the scale of the children themselves within a contained and intimate urban setting. The complex comprises eight family houses, a staff house, an administration building, a guest house and the village director's residence. All are planned around a village square and connected via pedestrian paths, gardens and alleyways. Vaulted archways lead to shaded courts, while gardens surround the buildings both within and on the edge of the village. On the southern border of the site, close to the main road, are located facilities that are shared with the local community, namely a kindergarden, a supermarket, a pharmacy and a sports hall.

The project attempts to reinterpret the environmental and traditional architectural characteristics of Aqaba in a direct way, using locally available materials and labor intensive, traditional local technology. The village employs the traditional building style of subtle coursing at random granite boulders, but with the wooden tension members replaced by pre-cast concrete. "*Mashrabiya*s" filter the light of the harsh sun, and wind towers were designed to draw the prevailing local breeze. Doors are painted in bright colors.

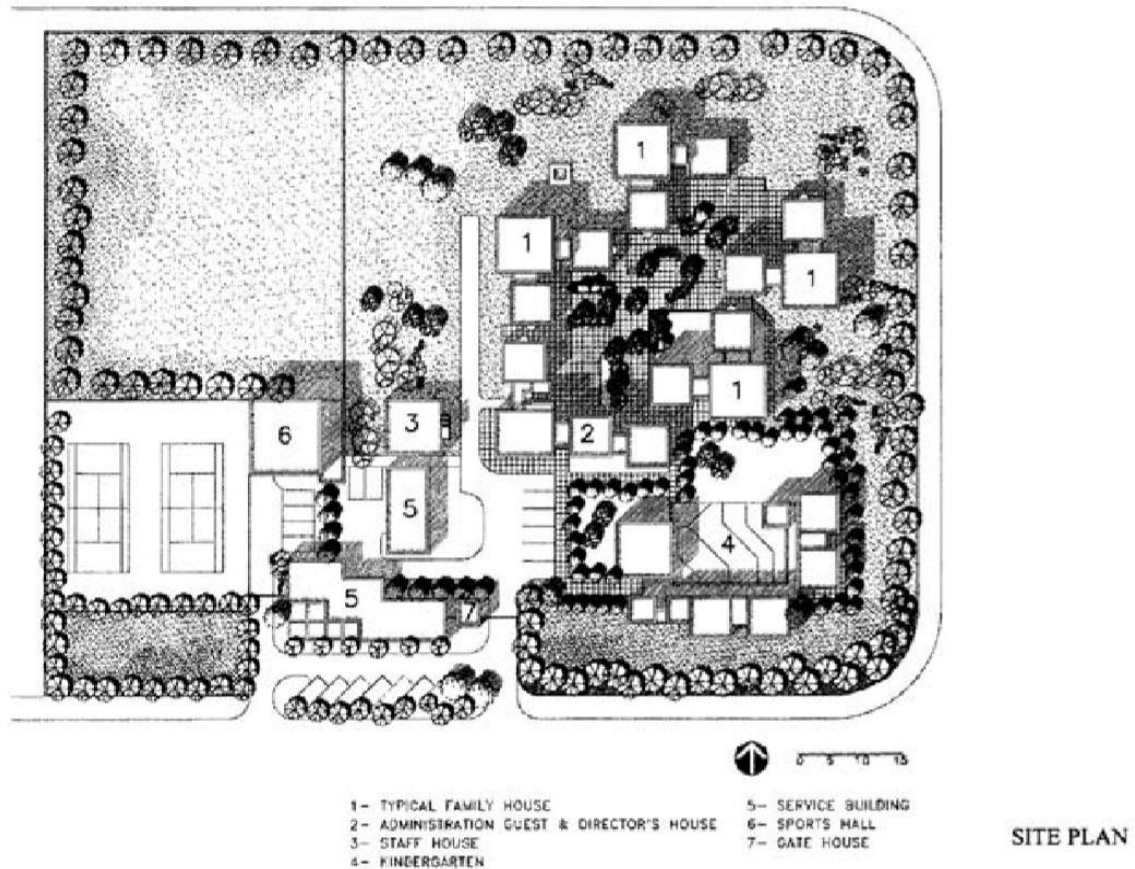


Figure 5.15: Site Plan and massing of SOS Children's Village, Aqaba. (Source: 1991, AGA Khan awards for architecture)

The massing of the project results in clusters of houses and buildings around shaded and breezy outdoor spaces for living and play, animated by lush vegetation and shading trees, the traffic is very light, and the project site is a low-density area. The furniture is kept to a minimum and designed to suit the requirements of the children in scale and form.

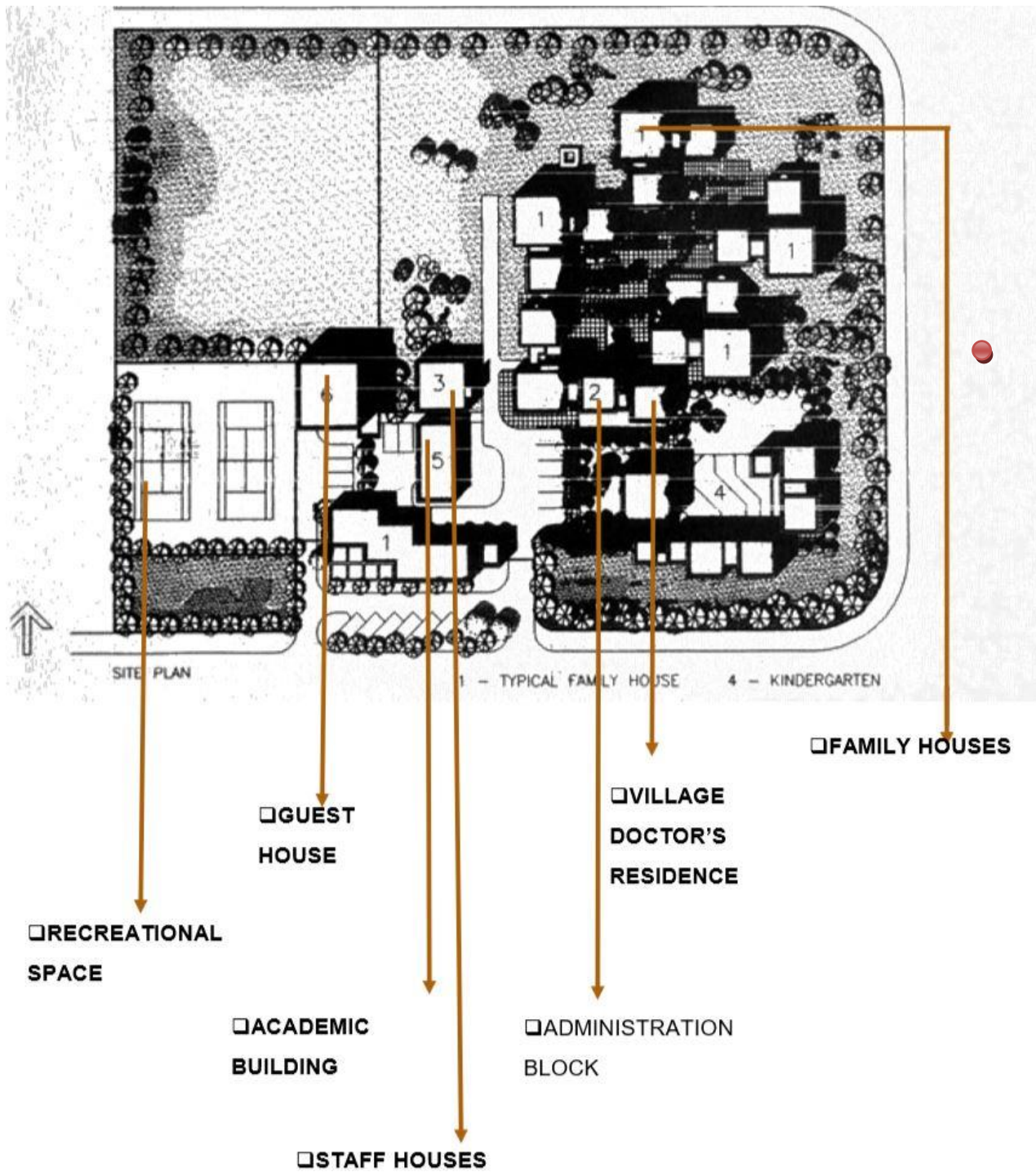
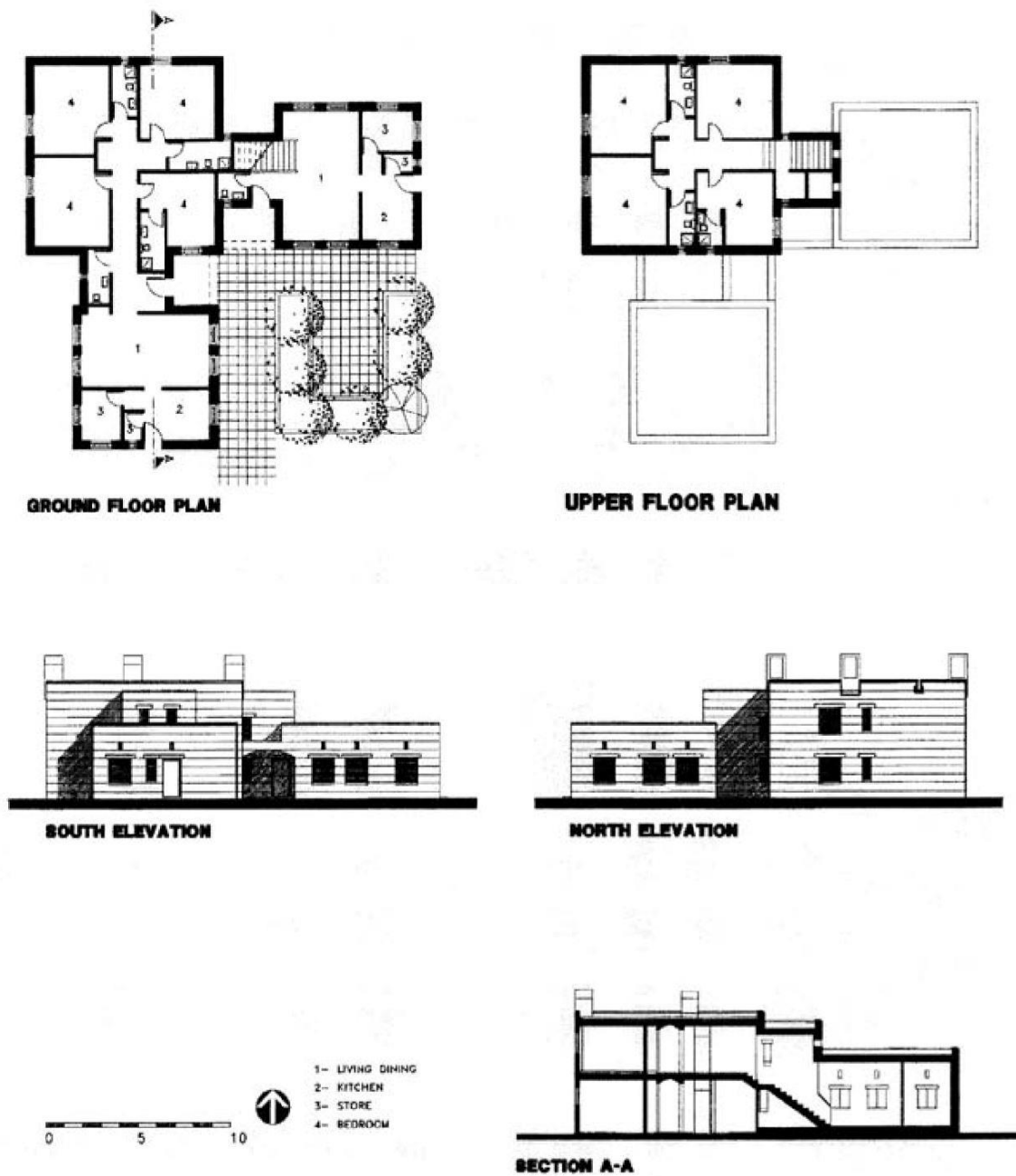


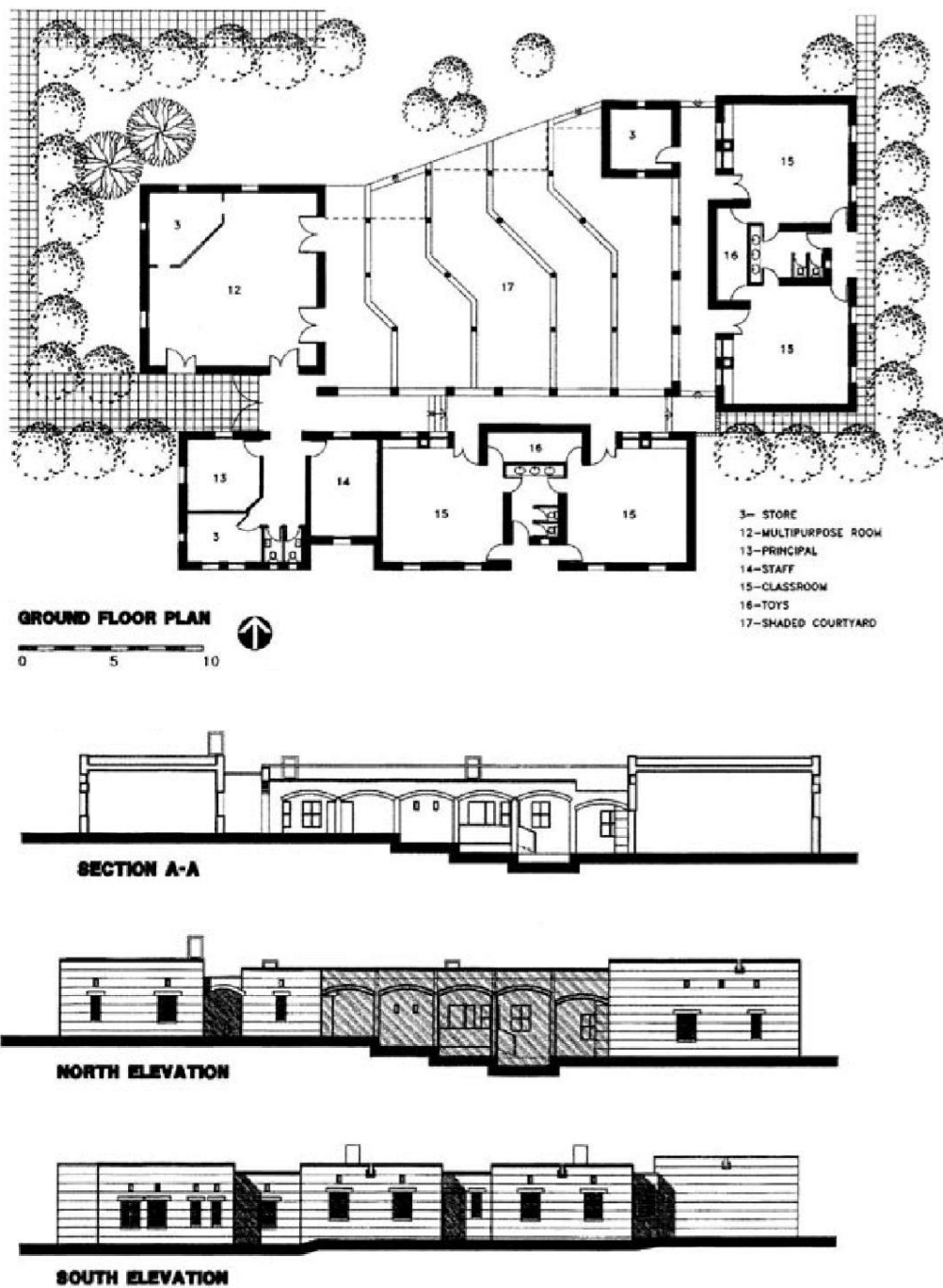
Figure 5.16: Functional zoning and identification. (Source: 1991, AGA Khan awards for architecture)



TYPICAL FAMILY BUILDING

Figure 5.17: Floor plans, elevations and sectional layout of typical Family building.

(Source: 1991, AGA Khan awards for architecture)



KINDERGARTEN BUILDING

Figure 5.18: Floor plans, elevations and sectional layout of Kindergarten building.

(Source: 1991, AGA Khan awards for architecture)

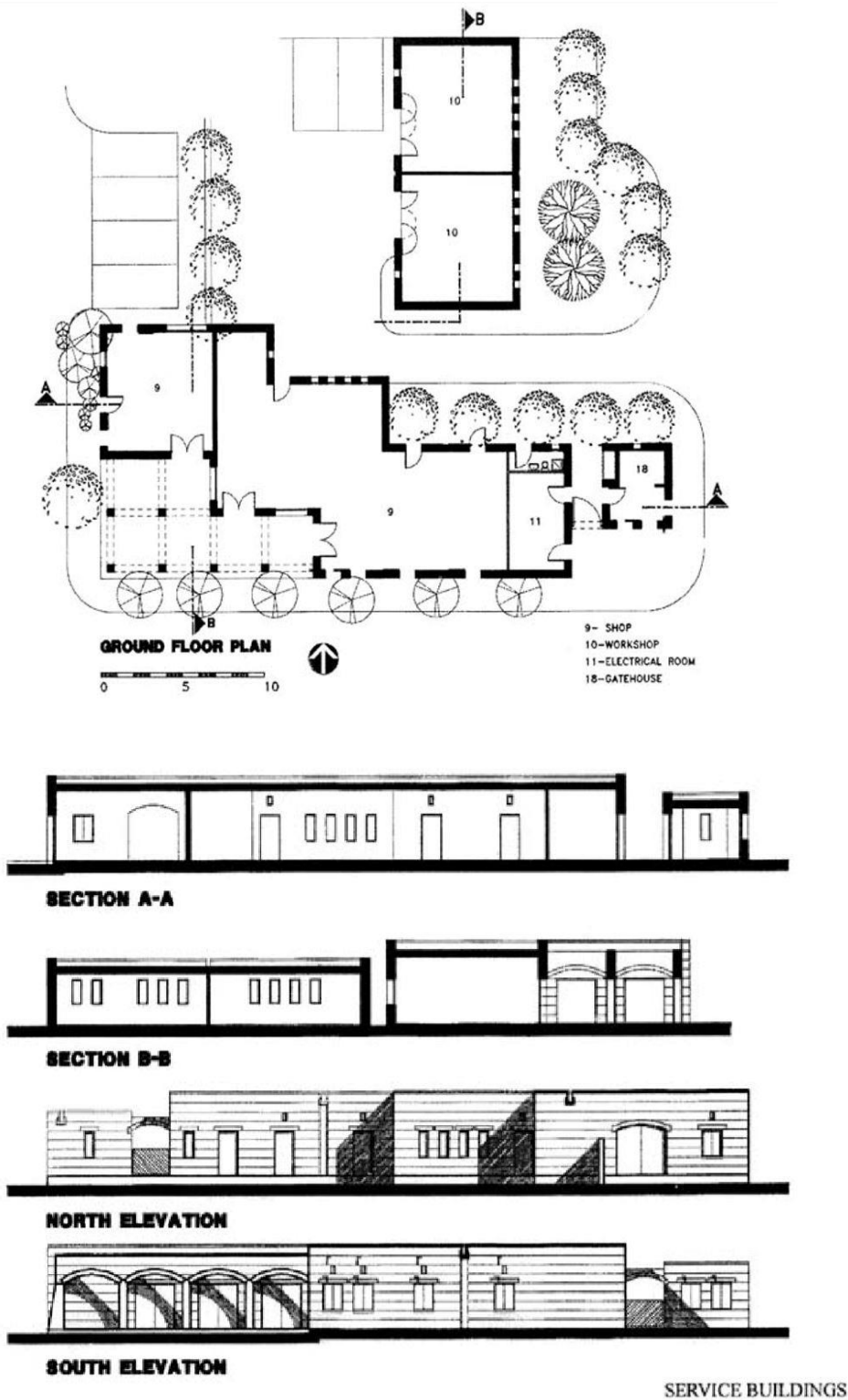


Figure 5.19: Floor plans, elevations and sectional layout of Service building. (Source: 1991, AGA Khan awards for architecture)

Own Learning:



Image5.19: Children play on the shaded patio in front of a family house. (Source: 1991, AGA Khan awards for architecture)

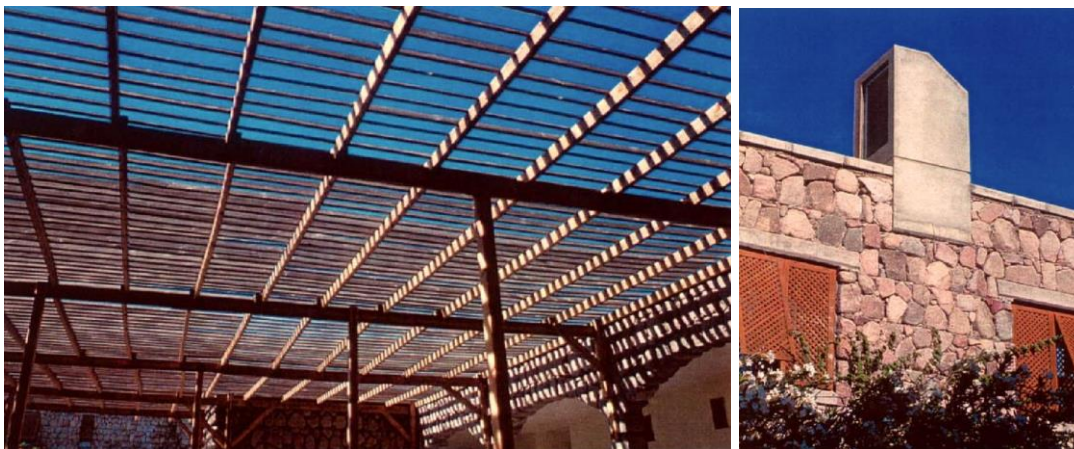


Image5.20: Wooden trellises shade the courtyard of the kindergarten and a concrete wind tower, which proved insufficient and are no longer in use. (Source: 1991, AGA Khan awards for architecture)

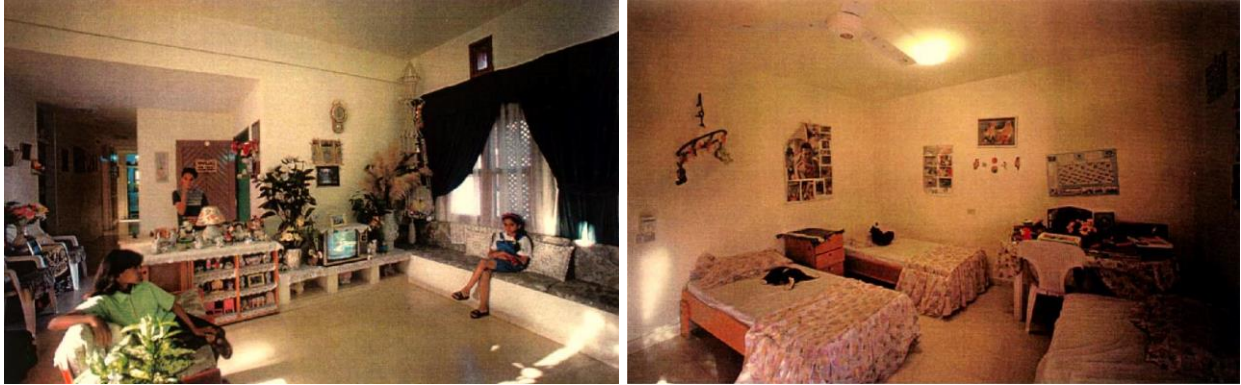


Image5.21: Image of communal living area in a family and a typical bedroom for three children. (Source: 1991, AGA Khan awards for architecture)



Image5.22: Image of concrete lintels and wooden screens frame window opening and typical “Mashrabiya”. (Source: 1991, AGA Khan awards for architecture)

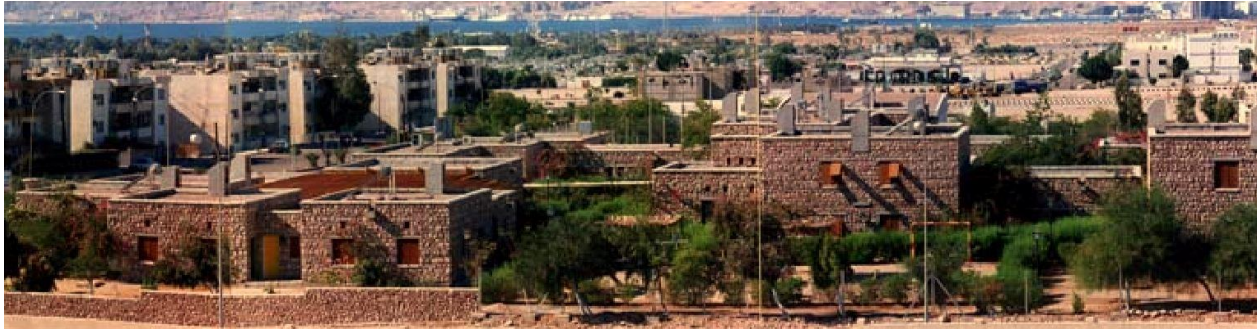


Image5.23: General view from East side of the site. (Source: 1991, AGA Khan awards for architecture)

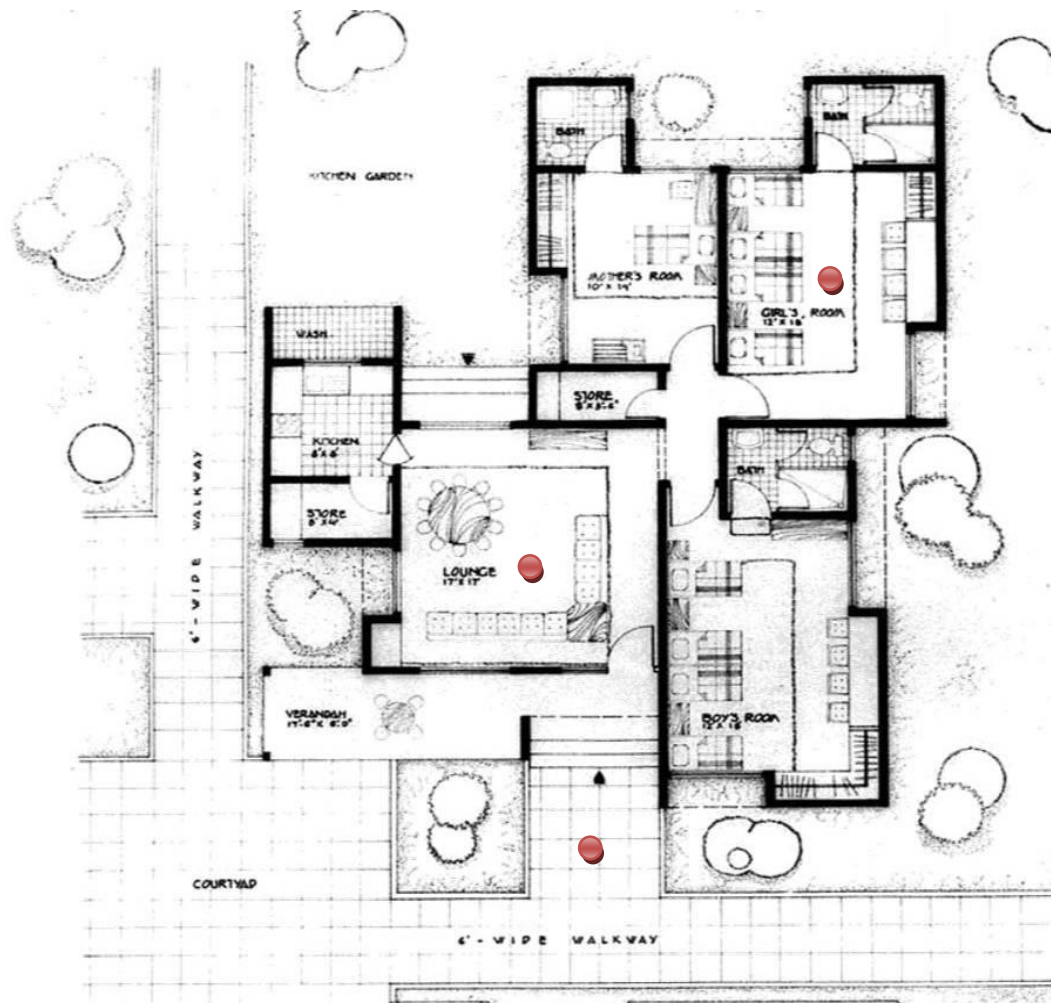


Figure 5.20: Family house typology. (Source: 1991, AGA Khan awards for architecture)

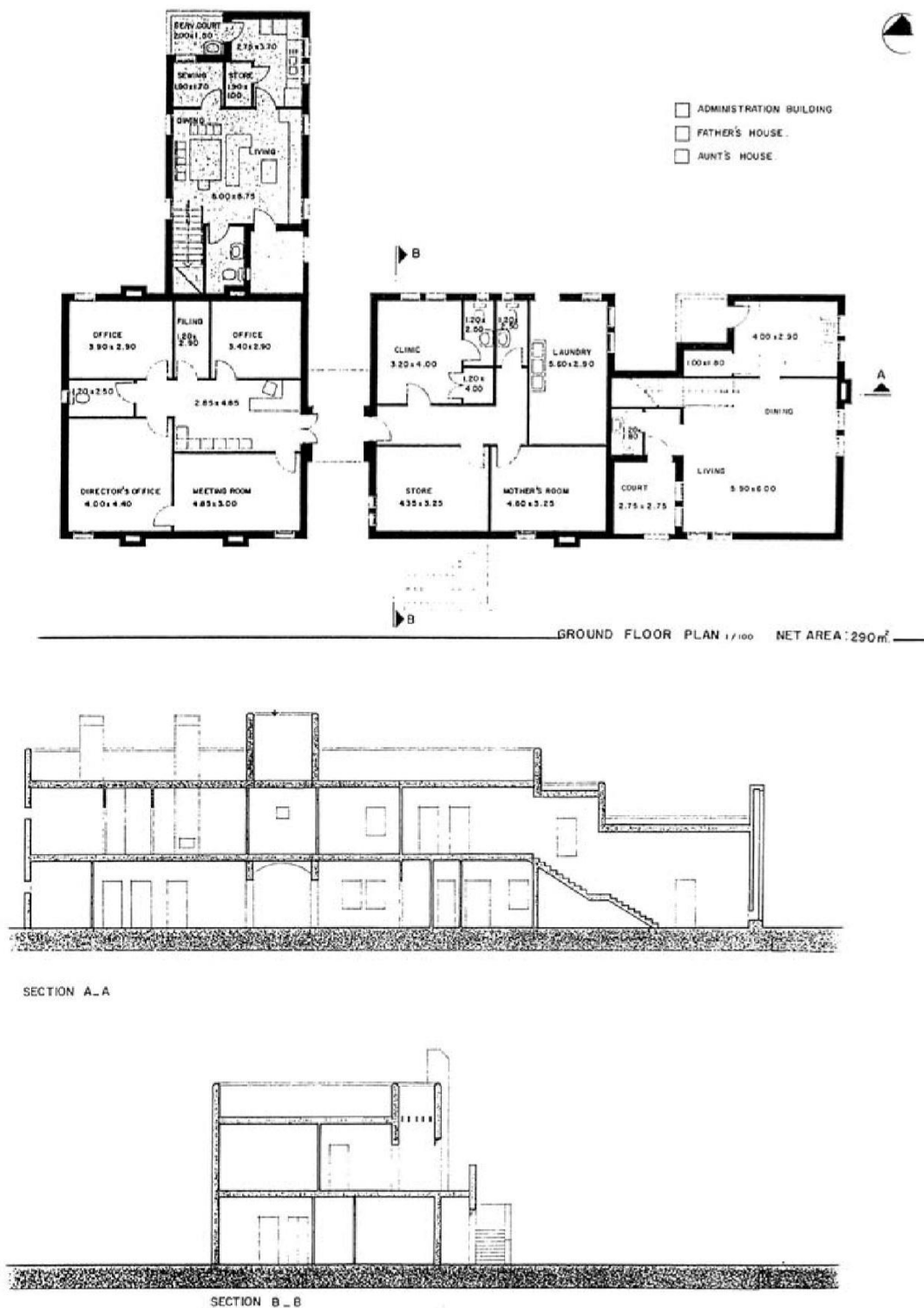


Figure 5.21: Administration building plan and sectional layout. (Source: 1991, AGA Khan awards for architecture)

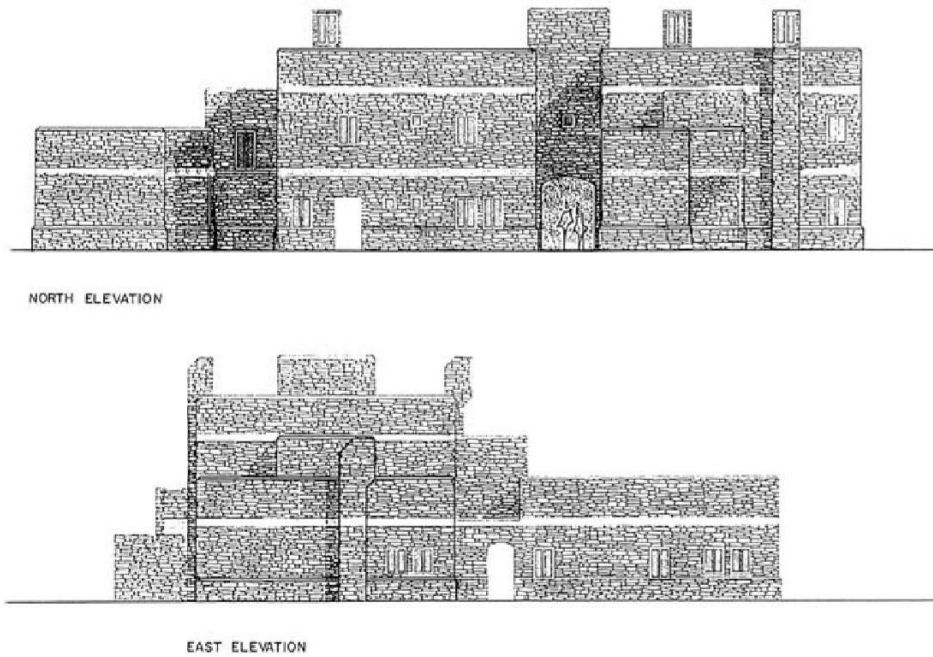
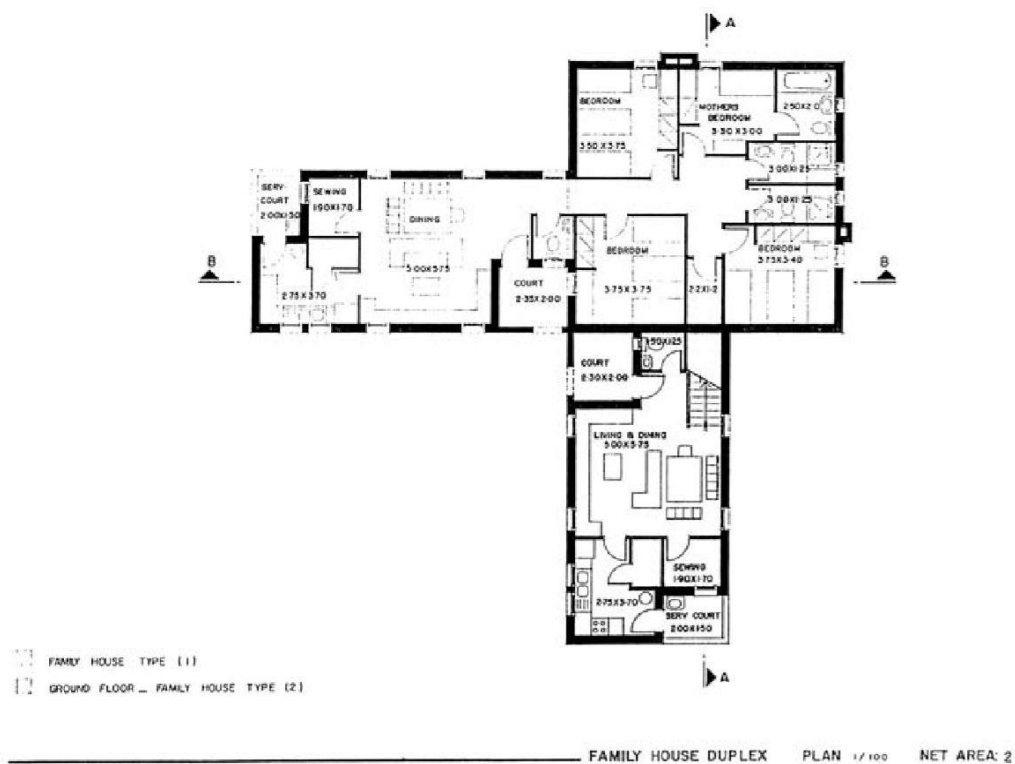


Figure 5.22: Administration building elevation layout. (Source: 1991, AGA Khan awards for architecture)



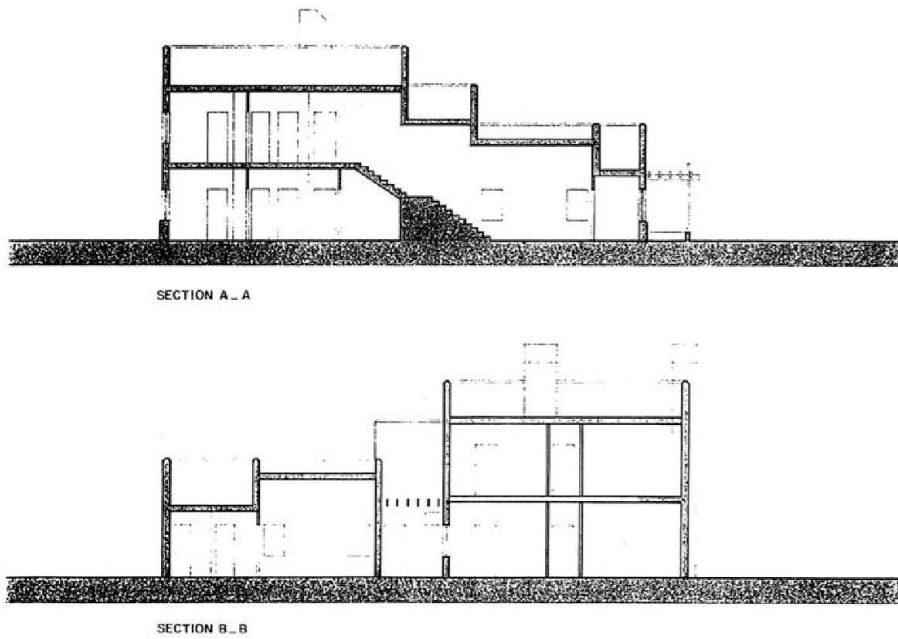


Figure 5.23: Family house duplex building plan and sectional layout. (Source: 1991, AGA Khan awards for architecture)

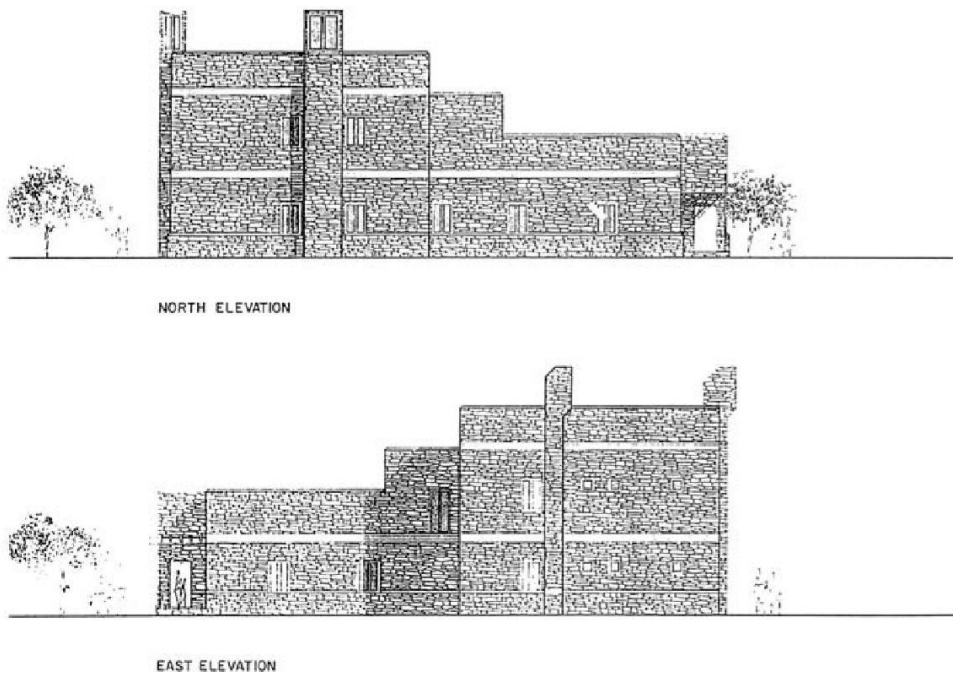


Figure 5.24: Family house duplex building elevation layout. (Source: 1991, AGA Khan awards for architecture)

Findings:

- It has been built within an existing social environment so that they do not feel isolated from the urban context of the town or the city they are in.
- Scale of the village is dictated by its environmental friendly design and also related to the scale of the children themselves.
- Represents a modern interpretation of the local vernacular stone building.
- Creates an environment within an existing urban community where the orphans can enjoy that they are close as possible to normal family.
- Parking problem.
- Low maintenance of red brick facades.
- Used local labor, materials and construction technologies.
- It is modern, light and simple and was all constructed at the vocational training center affiliated to the SOS Association. Very little maintenance has been required since it was first installed in the building.
- Sun control and shading is extremely successful and has been well worked out in the design and planning stages.
- The selection of the envelop material, orientation, geometric shape, the openings and their orientation, and other designed elements working harmoniously with the climatic factors will lead simply to a thermal comfort in the designed building.
- The provision for artificial lighting on the interior of the houses is weak.

Own Comprehension:

Own comprehension represents the differences and outcomes between the three case studies that has been done in own pattern of way to perceive spaces that has already been done.



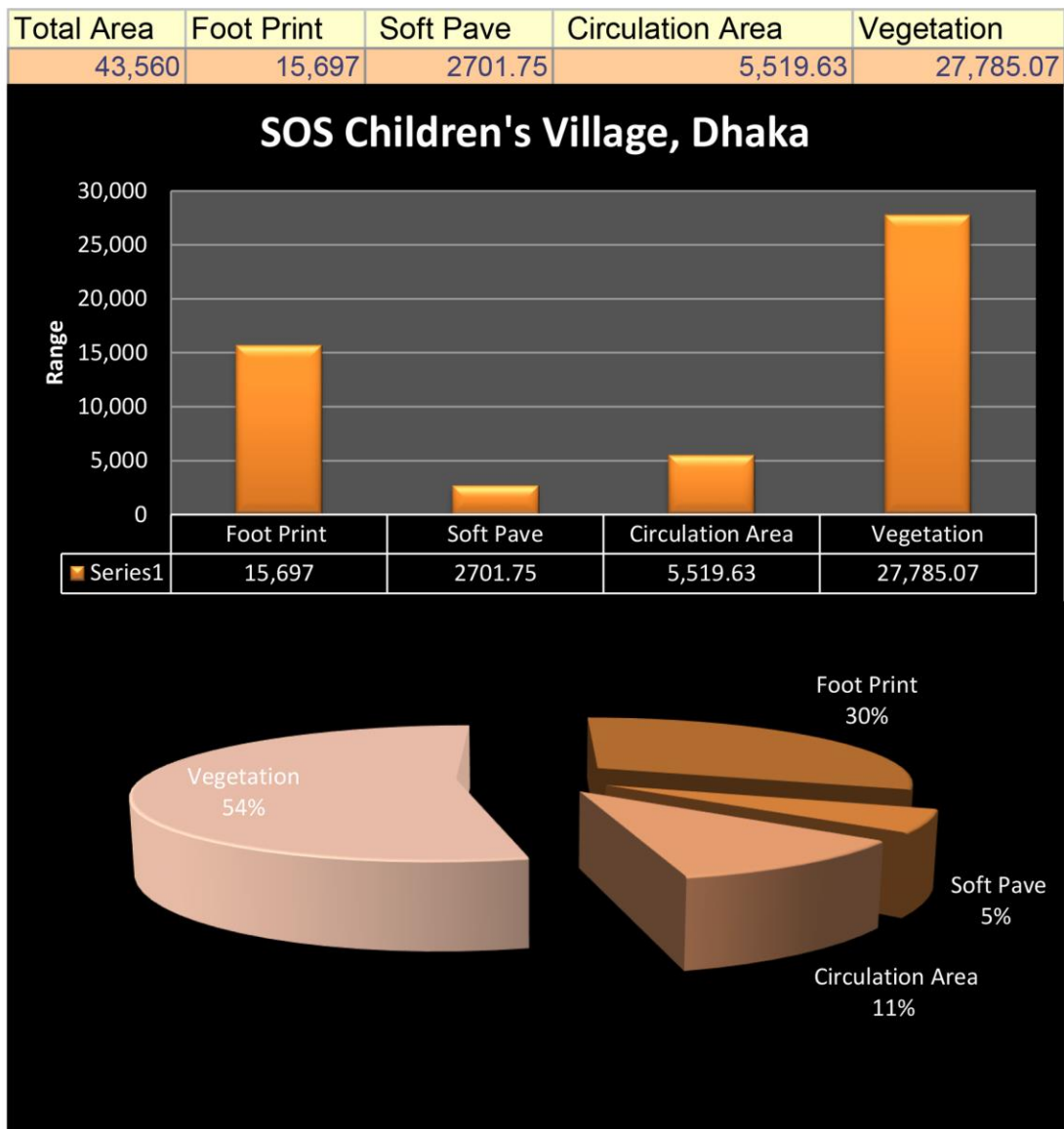


Figure 5.25: Ground coverage analysis from local case study. (Source: Author)

Here, total area about 43,560 sq-ft. Ground coverage foot print around 15,697 sq-ft, where soft pave 2,701.75 sq-ft and 30% of its circulation area comes 5,519.625 sq-ft, where almost half of the site is for green vegetation and breathing spaces and rest include footprint, soft pave and area for circulation.



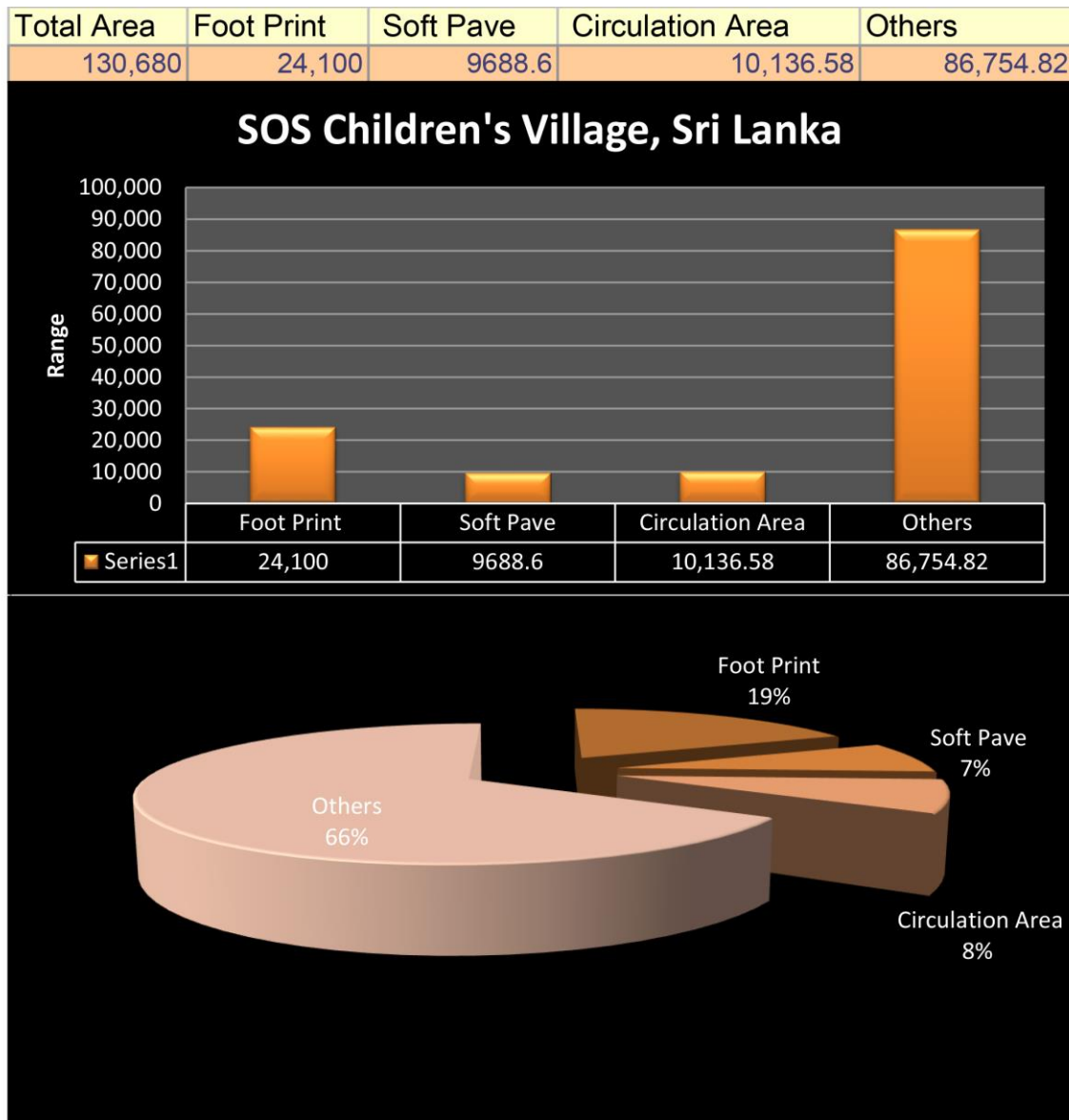


Figure 5.26: Ground coverage analysis from Sub-Continental case study. (Source: Author)

Here, total area about 1,30,680 sq-ft. Ground coverage foot print around 24,100 sq-ft, where soft pave 9,688.6 sq-ft and 30% of its circulation area comes 86,754 sq-ft. A large amount of area is open spaces and vegetation including various pavement and intermediate spaces. Rest includes footprint, soft pave and circulation area.



Here, total area about 1,30,680 sq-ft. Ground coverage foot print around 16,844.27 sq-ft, where soft pave 31,227.25 sq-ft, hard pave 22,054.82 and 30% of its circulation area comes 21,037.902 sq-ft. It is one of the compact ideas, which include open spaces, soft pave, hard pave, circulation area and footprint with harmony and variation.

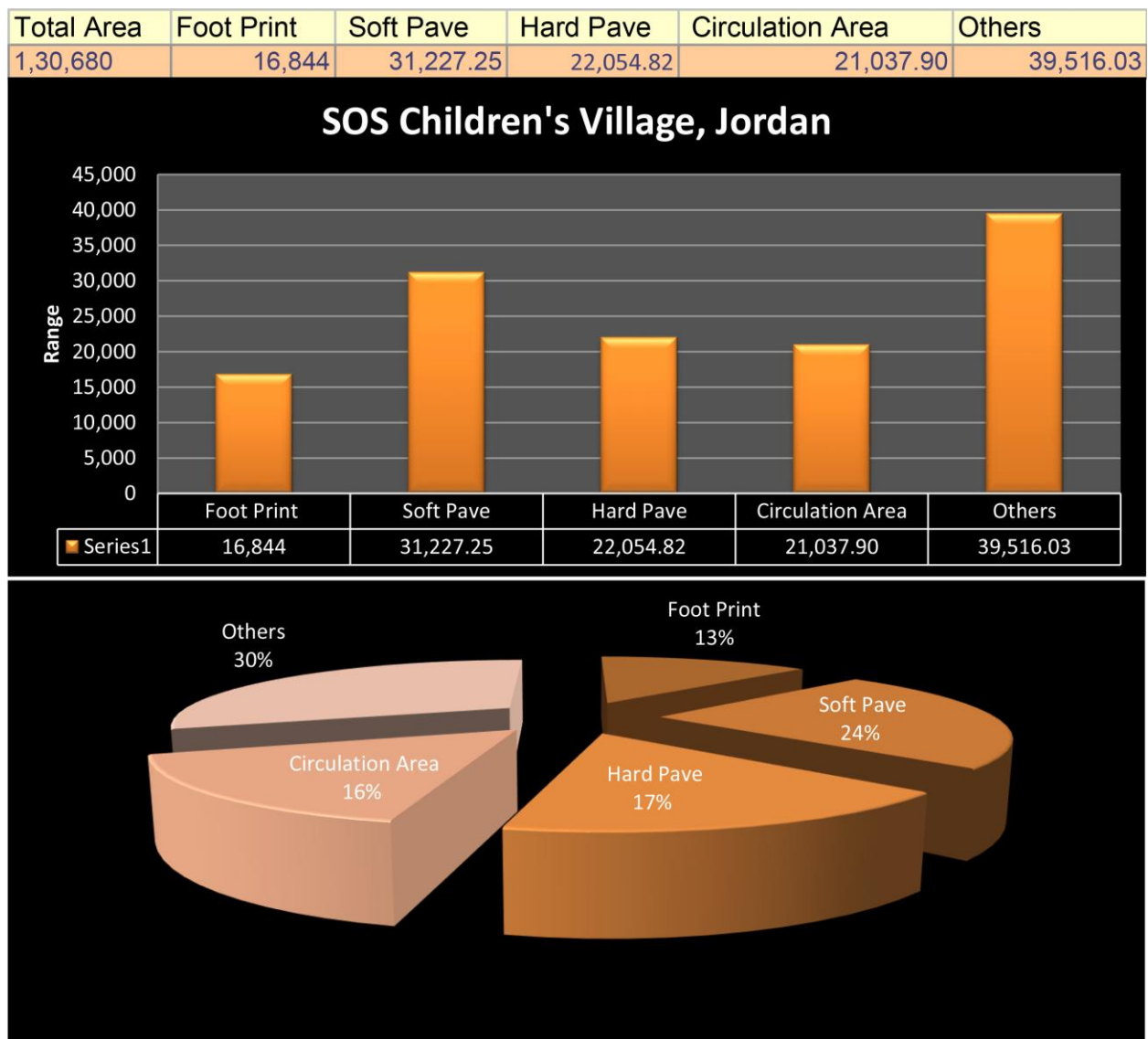


Figure 5.27: Ground coverage analysis from International case study. (Source: Author)

Conclusion: To conclude, these case studies helped to compare the different aspects to be considered. In terms of orphanages, it has been known what the differences are, what should be picked and about the lacking at the same time

CHAPTER 6

PROGRAM DEVELOPMENT

- 6.1 Program Derivation
- 6.2 Targeted group of user
- 6.3 Standard Analysis
- 6.4 Program Analysis
- 6.5 Functional Flow

CHAPTER 6: PROGRAM DEVELOPMENT

The establishment of a detailed progress of functions that may lead the entire project work or design phases is known as program development. It is a framework or structure that provides guidance to help make the best use of spatial use, resources and deals with users as well. Program development derives from client's requirements and sometimes arranged by the basis of needs.

6.1 Program Derivation

An orphanage is a prime factor for the development of a country, as a huge percentage of density is related to it. Consequently, for program derivation considerations are taken to promote the orphan community through taking following steps below:

- Providing a normal life-style to improve oneself both physically and psychologically. (Family, residence, educational institution, recreation, medical service etc.)
- Promoting inner skills to show their potentials. Training courses such as (Vocational training, workshop, enriching creativity, amphitheatre, awareness program)
- Generating different interaction and communication process. (Play filed)
- Proper guidance (Administrative office)
- Promoting a sense of responsibility, so that they can work for society. (Computer lab, library)

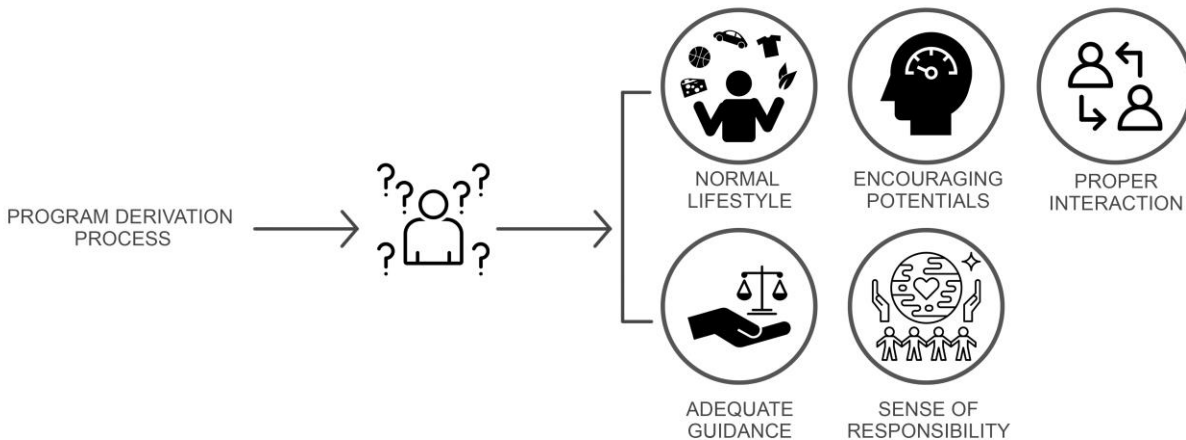


Diagram6.1: Program derivation that may encourage increasing awareness. (Source: Author)

6.2 Targeted group of users

The project is organized in creating a children community that can achieve an identity of their own and contribute the society. In a whole, targeting them as an asset of our country is aim of the project. To create awareness of its necessity among a group of people and showing the assertive issues in front of them is the important thing before targeting the group.

The total numbers of families are 14 in number. Each family consist around 10 children, which stands 140 children. After the age of 8 to 9, they are being separated to dormitories. There are mother for each family. The arrangement of food is done by mother, but there are staffs that always help to prepare food for children. Sometimes when mother turns ill, it is the staff who prepare food. Moreover, there are school block that has an access publicly and the administration block controls the entire village. A functional organogram of the village including number of users is given below:

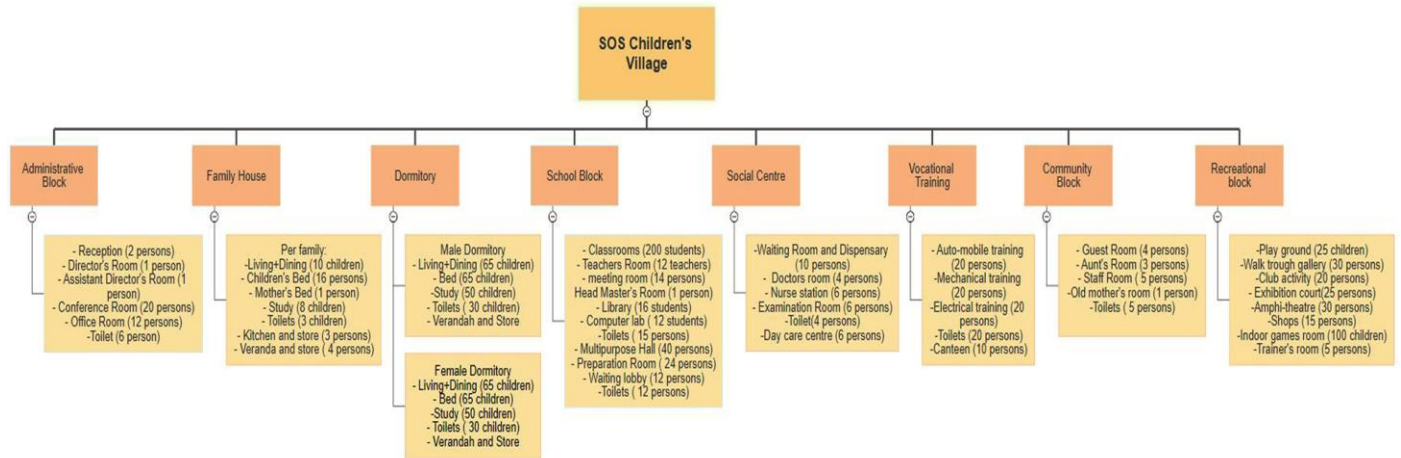


Diagram6.2: Functional organogram including number of users. (Source: Author)

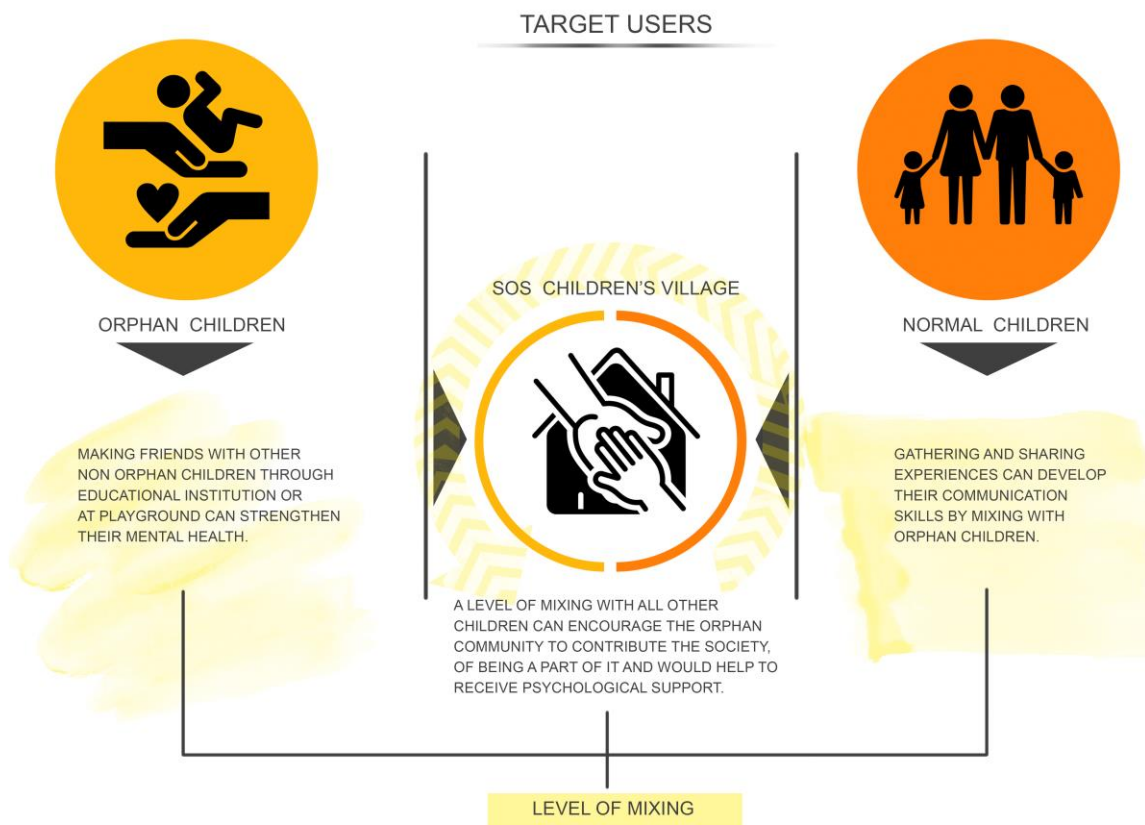


Diagram6.3: Targeted users for the community. (Source: Author)

6.3 Standard Analysis

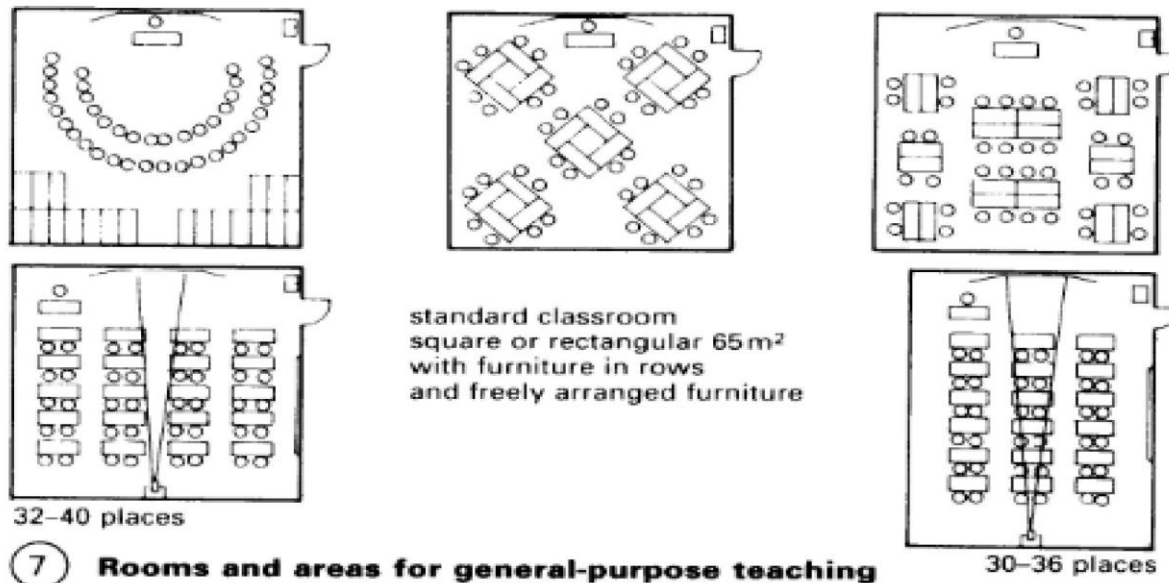
For designing a happening and useful architectural work, standard analysis is an integral part. There are certain ergonomic modules, without focusing on it design will remain incomplete and unsuccessful. The standard varies in different cases, for example: ergonomic standard for children aged (5-7) is different from the children aged (13-14). Standard analysis assists to,

1. Provide the ability of idea about scale and proportion while analyzing design aspects.
2. Provide standard and precise information so that documentation can be well defined.
3. Develop functional sequence and generate ideas.

SOS Children's Village offers the major functions before elaborating the programmatic analysis, and they are:

1. Academic
2. Administration
3. Residential
4. Multipurpose hall and Cafeteria
5. Library

CLASS ROOM PLAN



Class Area 65 Sq meter
700 Sq feet
Student 30-40 Nos

Figure 6.1: Standard for Class room module. (Source: Timesaver standards for building types)

CLASS ROOM

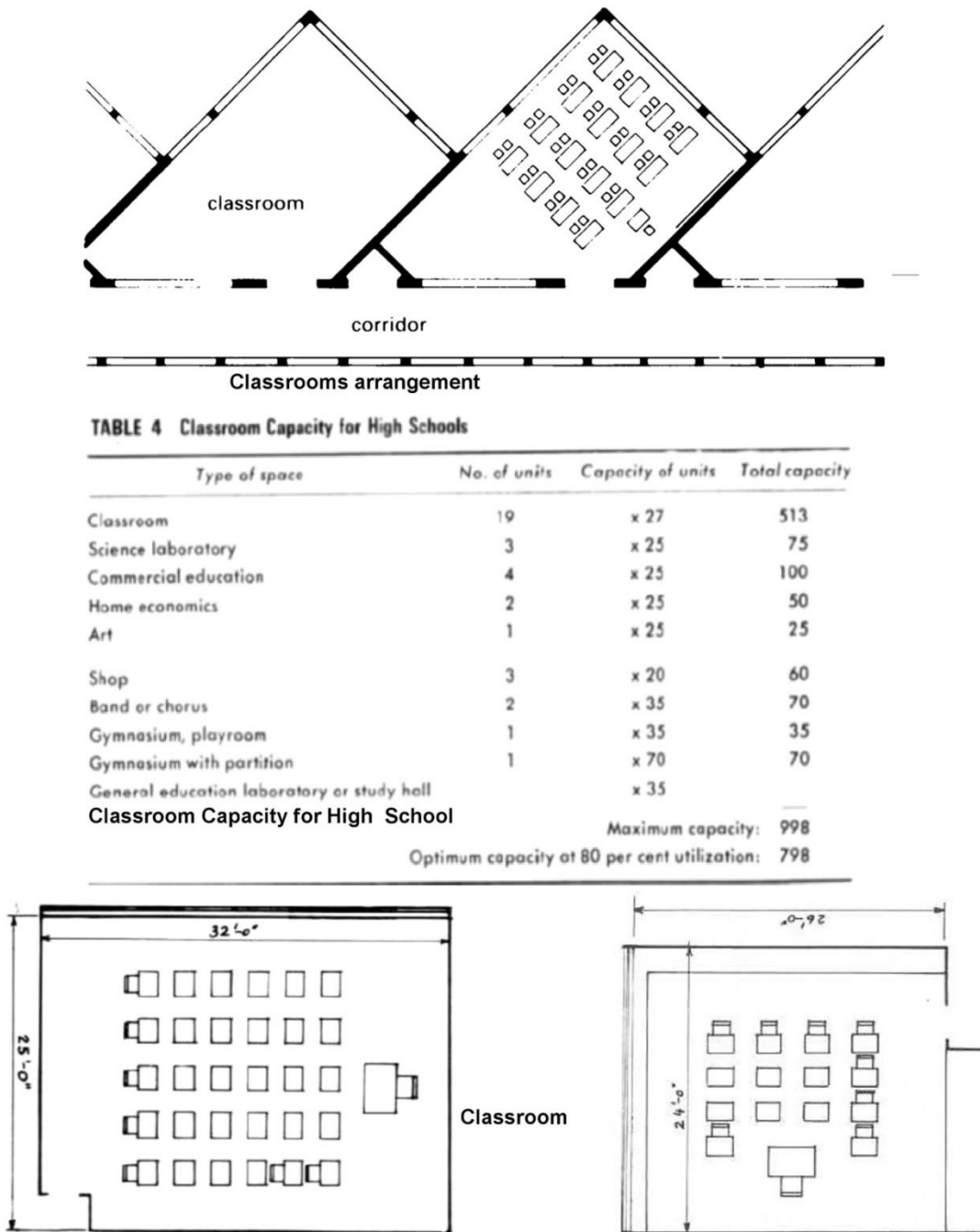


Figure 6.2: Standard for Class room capacity for High School. (Source: Timesaver standards for building types)

GENERAL OFFICE

Commercial

OFFICES, GENERAL

Work Stations

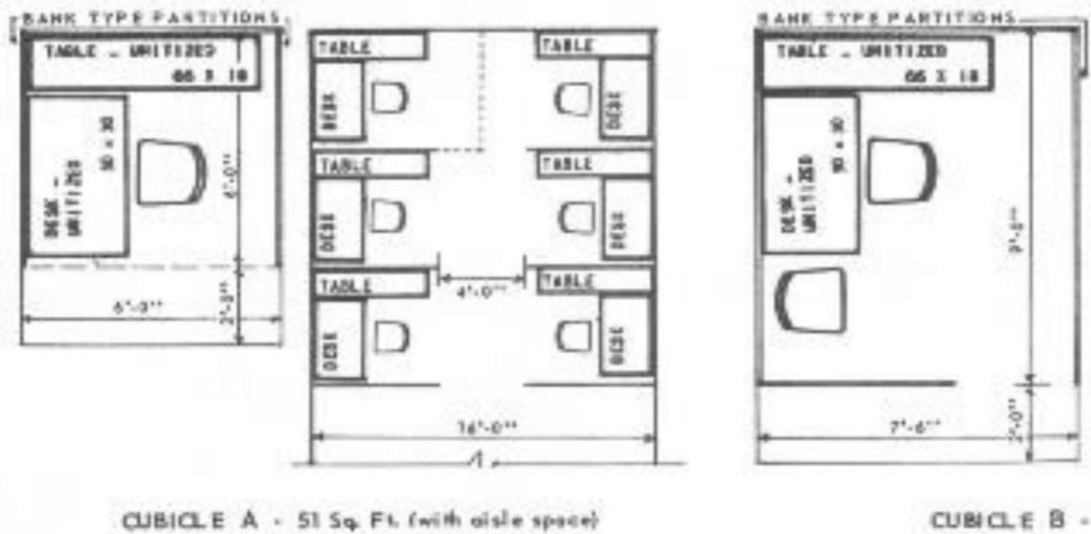
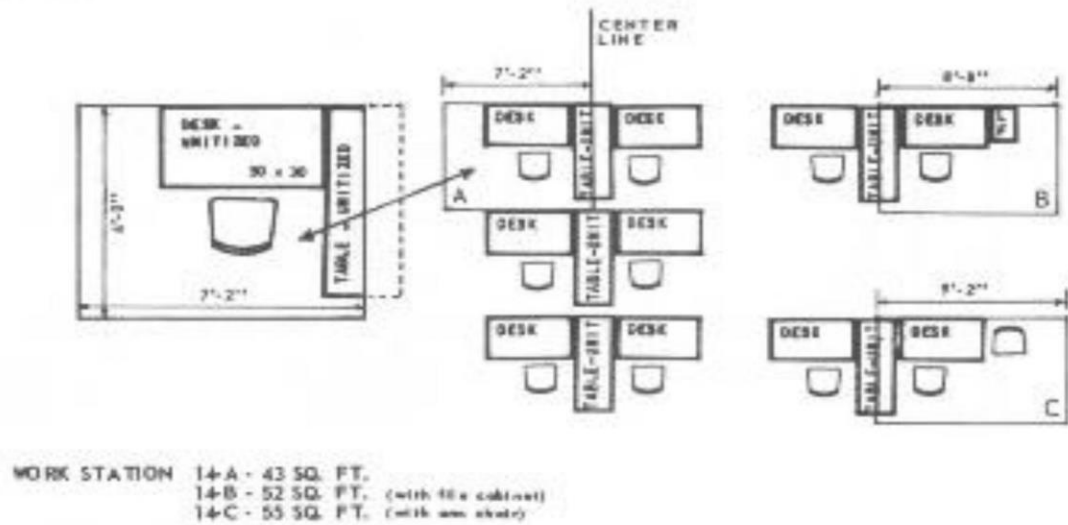


Figure 6.3: Standard for General office module. (Source: Timesaver standards for building types)

DORMITORY

HOUSEPARENTS' APARTMENT

- Houseparents' apartment should be located next to and connected with the hostel common room for control.
- A small office is a good connection to the hostel from the apartment. It should overlook the hostel entrance, if possible.
- A separate outside entrance should be provided.

TABLE 6 Minimum Room Size Schedule

Room	Area, sq ft
Living room	198
Kitchen-dining	80
Bedroom	140
Storage	20
Bathroom	35
Office	80

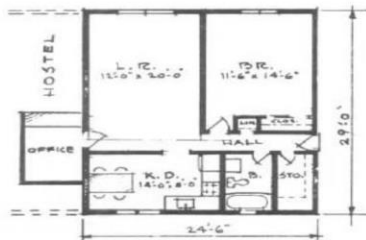


Fig. 11 Typical apartment layout. Note: This is an average-size apartment. More space and room is always desirable. This is one of many possible layouts.

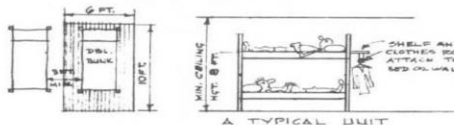


Fig. 8 Minimum area per double bunk, 60 sq ft.

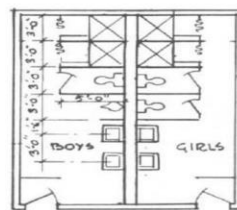


Fig. 10 Typical toilet layout. Note back-to-back placement of plumbing fixtures for economy; common plumbing wall for ease of plumbing access; washroom area separate from toilet area for better usage; water closets in separate compartment for privacy; screen of entrance door to shield interior.

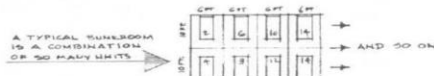


Fig. 9 A typical bunk room is a combination of many units.

COMMON ROOM

Room Area

A minimum of 15 sq ft per person is required. For combination dining and common room, 22 sq ft per person should be allowed. (See Table 1 and Fig. 3.)

TABLE 1. Room area chart*

Number of people	Common room, min. sq ft	Dining and common room, min. sq ft
10	150	220
15	225	330
20	300	440
25	375	550
30	450	660
35	525	770
40	600	880

*These are minimum room sizes. More space is always desirable.

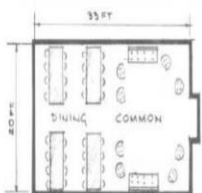


Fig. 3 Dining-common room. Typical layout for 30 people.

DINING ROOM

Room Area

A minimum of 12 sq ft per person for dining room is required. For a combination dining and recreation room, minimum of 20 sq ft per person should be allowed. (See Table 2.)

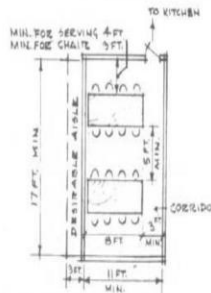
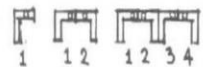


Fig. 4 Typical dining area for 16 people.

KITCHEN

* Add units together to form larger kitchens



- Should have door to outside handy for garbage or food deliveries
- Should try to line up sinks for economical plumbing
- Should have window or electrical fan for range ventilation

TABLE 3 Schedule of Kitchen Fixtures (Minimum)

Number of people	Sinks	Range burners	Refrig., 9 cu ft	Ovens
10	1	3	1	1
15	2	4	2	1
20	2	4	2	1
25	2	5	2	2
30	3	6	2	2
35	3	7	3	2
40	3	8	3	2

BUNK ROOMS

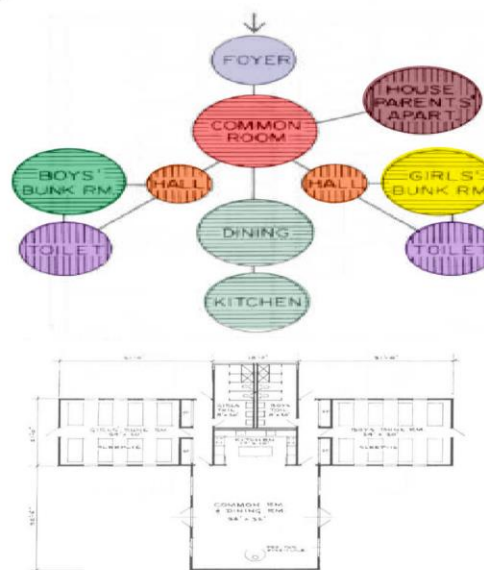


TABLE 2 Dining room (only) room area chart*

Number of people	Area needed, min. sq ft	Window area, min. sq ft
8	100	8
10	120	10
12	144	12
16	192	16
20	240	20
24	288	24
28	336	28
30	360	30

*These are minimum room sizes. More space is always desirable.

ROOM AREA

TABLE 4 Room Area Chart

Number of double bunks	Number of people	Min. area needed, sq ft	Min. window area desired, sq ft
2	4	120	15
4	8	240	30
6	12	360	45
8	16	480	60
10	20	600	75
12	24	720	90
14	28	840	105
16	32	960	120

Must include extra space for blanket and mattress storage in closet.
Minimum ceiling height is to be 8 ft.

Figure 6.4: Standard for Dormitory. (Source: Timesaver standards for building types)

DINING

Square Feet of Kitchen Space per Meal for Food Facilities of Different Type and Size

Type of facility	Estimated maximum meals per hour				
	200 or less	200-400	400-800	800-1,300	1,300-7,500
Cafeteria	7.5-5.0	5.0-4.0	4.0-3.5	3.5-3.0	3.0-1.8
Hospitals	1.80-4.0	12.0-4.5	11.0-4.5	10.0-4.0	8.0-4.0
Luncheonettes	7.5-2.0	2.0-1.5			

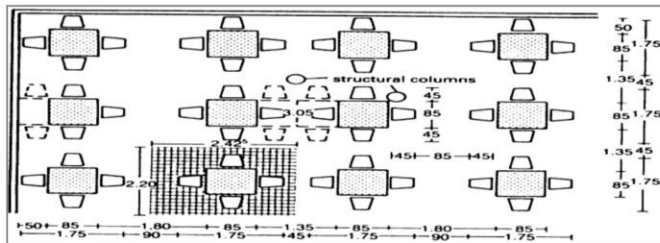


Fig: Parallel table arrangement

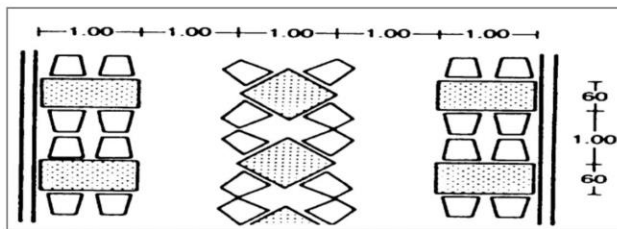


Fig: Minimal seating layout

Variation to Numbers Served in Space Needs in Relation

Type of operation	Square feet per
Cafeteria, commercial	18-18
Table service, restaurant	15-18
Benquet, minimum	10-11

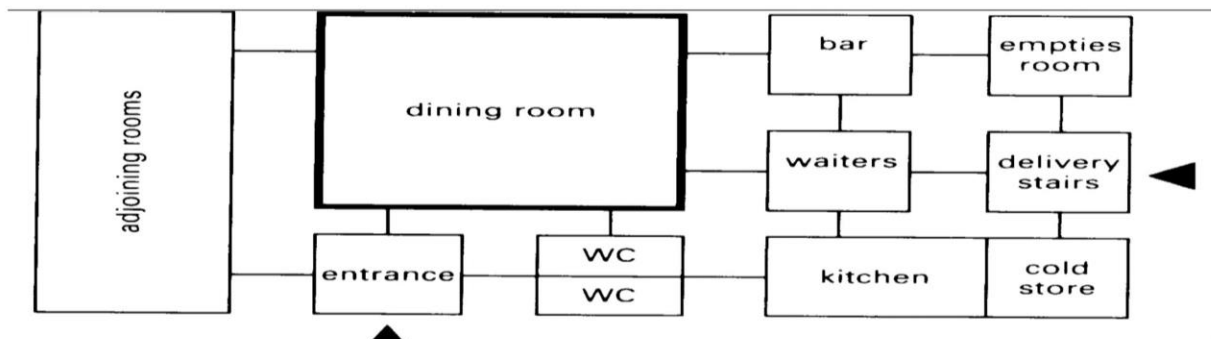


Fig: Functional layout for small restaurant

Figure 6.5: Standard for Dining. (Source: Timesaver standards for building types)

DINING

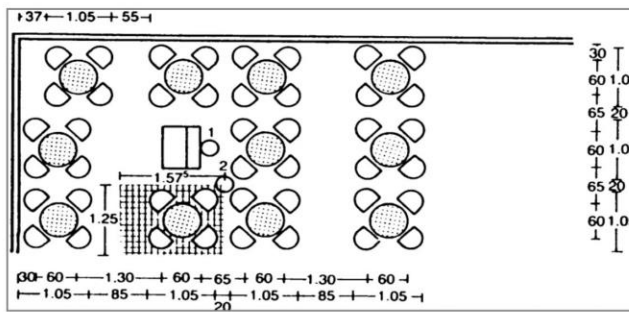


Fig: Minimal space arrangement

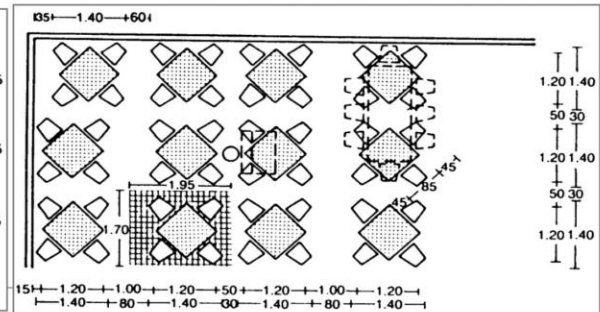


Fig: Diagonal table arrangement

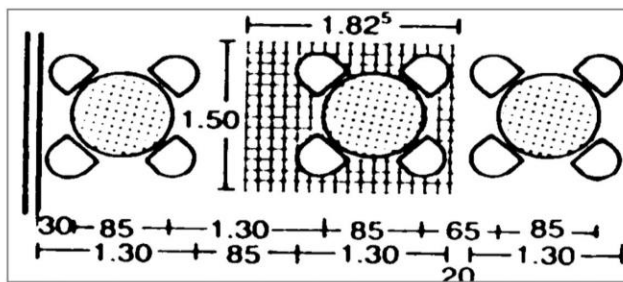
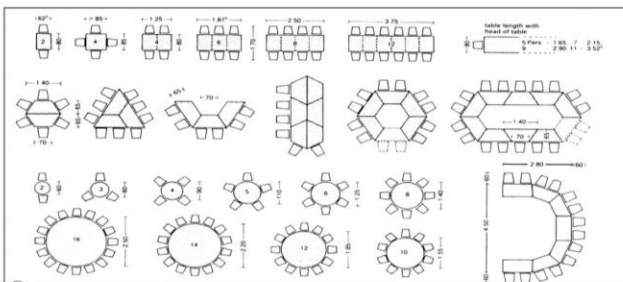


Fig: Minimal space arrangement



Table/seating

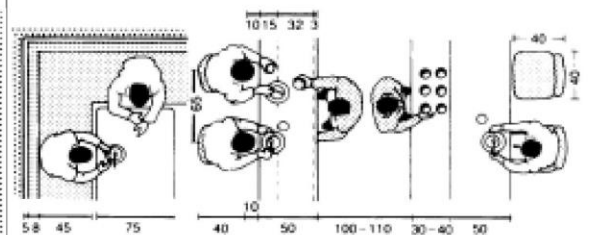
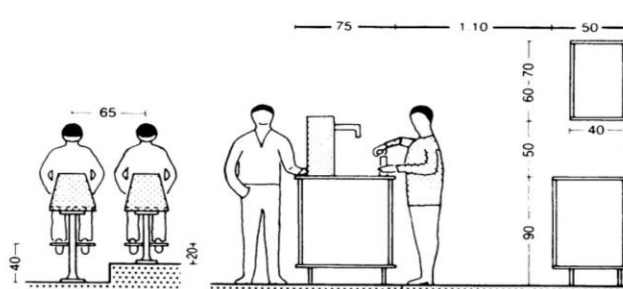
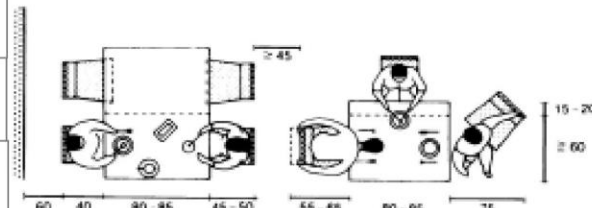
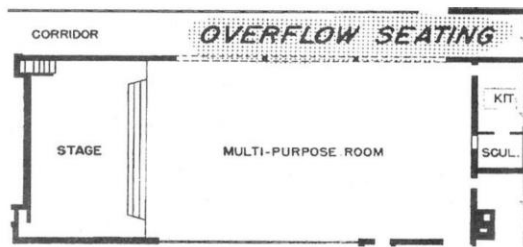


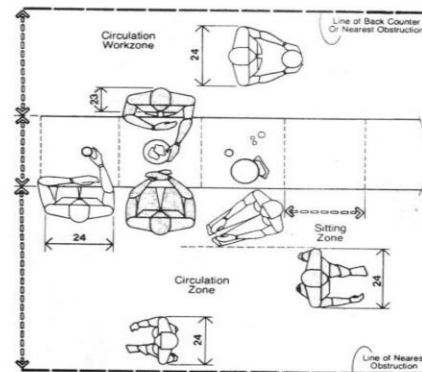
Fig: Space requirement for serve

Figure 6.6: Standard Dining layout. (Source: Timesaver standards for building types)

MULTIPURPOSE HALL & CAFETERIA



- OVER FLOW SEATING CAN BE ARRANGED IN THE CORRIDOR.
- THERE IS A STAGE IN THE ROOM.
- SEATING ARRANGEMENTS SHOULD BE 10' FAR ATLEAST FROM THE STAGE.
- THERE CAN BE A KITCHEN, A STORE AND A LOBBY FOR THE HALL.



CIRCULATION

Estimated Production Space for Food Facilities

Type of facility	Space per seat	
	ft ²	m ²
Table service	8-12	0.74-1.11
Counter service	4-6	0.37-0.56
Booth service	6-10	0.56-0.93
Cafeteria service	8-12	0.74-1.11

Functional areas	Space allowed (%)
Receiving	5
Food storage	20
Preparation	14
Cooking	8
Baking	10
Warewashing	5
Traffic aisles	16
Trash storage	5
Employee facilities	15
Miscellaneous	2

ESTIMATED PERCENTAG
OF PRODUCTION AREA

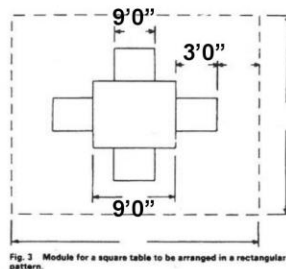
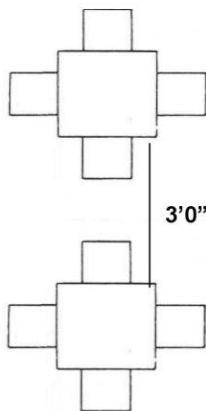


Fig. 3. Module for a square table to be arranged in a rectangular pattern.

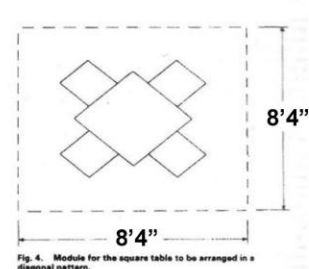
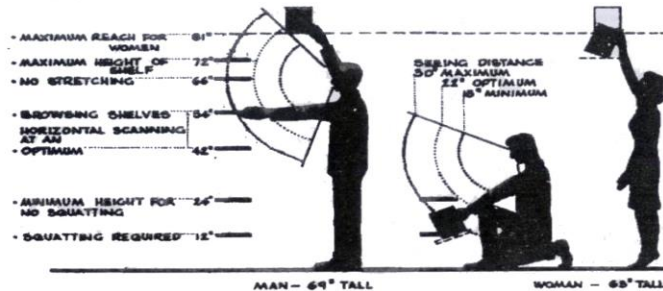


Fig. 4. Module for the square table to be arranged in a diagonal pattern.

Figure 6.7: Standard for Multipurpose hall and Cafeteria. (Source: Timesaver standards for building types)

LIBRARY



•TOTAL SPACE MAY BE DIVIDED IN CATEGORIES ; BOOKS ,READERS , STAFF

•IT SHOULD BE PROVIDED WITH THE ADEQUATE NUMBER OF SEATS FOR READERS

•MINIMUM SPACE FOR ADULT 30 SQFT

•SINGLE STAFF SPACE IS 100 SQFT

•THERE SHOULD BE A SINGLE PUBLIC ENTRANCE

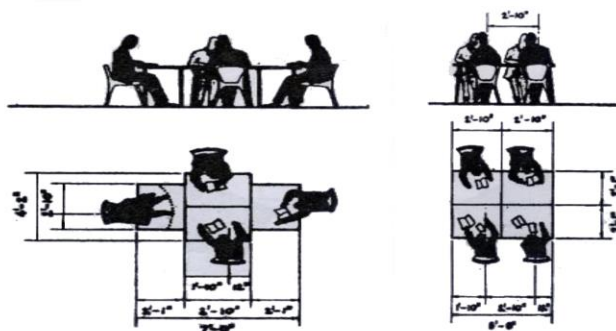
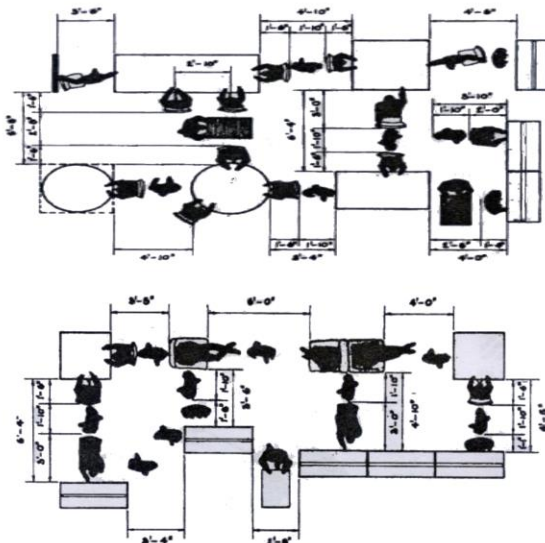
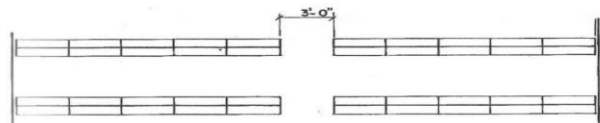


TABLE SPACE REQUIREMENTS FOR READERS

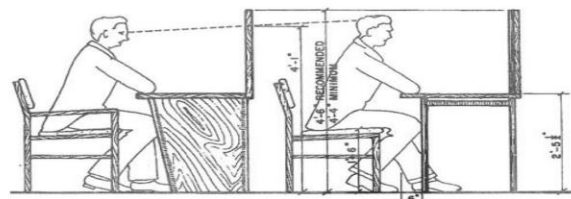


MINIMUM CLEARANCES FOR PEOPLE AND EQUIPMENTS IN READING ROOM

OPTIMUM SERVING CONDITIONS



SHELF TO SHELF DISTANCE



DESIRABLE HIGHT OF PARTITIONS TO IGNORE UNWANTED DISTURBANCE

Figure 6.8: Standard for Library. (Source: Timesaver standards for building types)

6.4 Program Analysis

Program analysis refers to the required functional evaluation including square feet or certain area. Moreover, it is a fulfillment of programs which may not be proposed but are essential necessity for certain community or design. The program analysis for SOS Children's village is a requirement from the SOS Foundation including conceptual breakdown. It is simplified by illustration below:

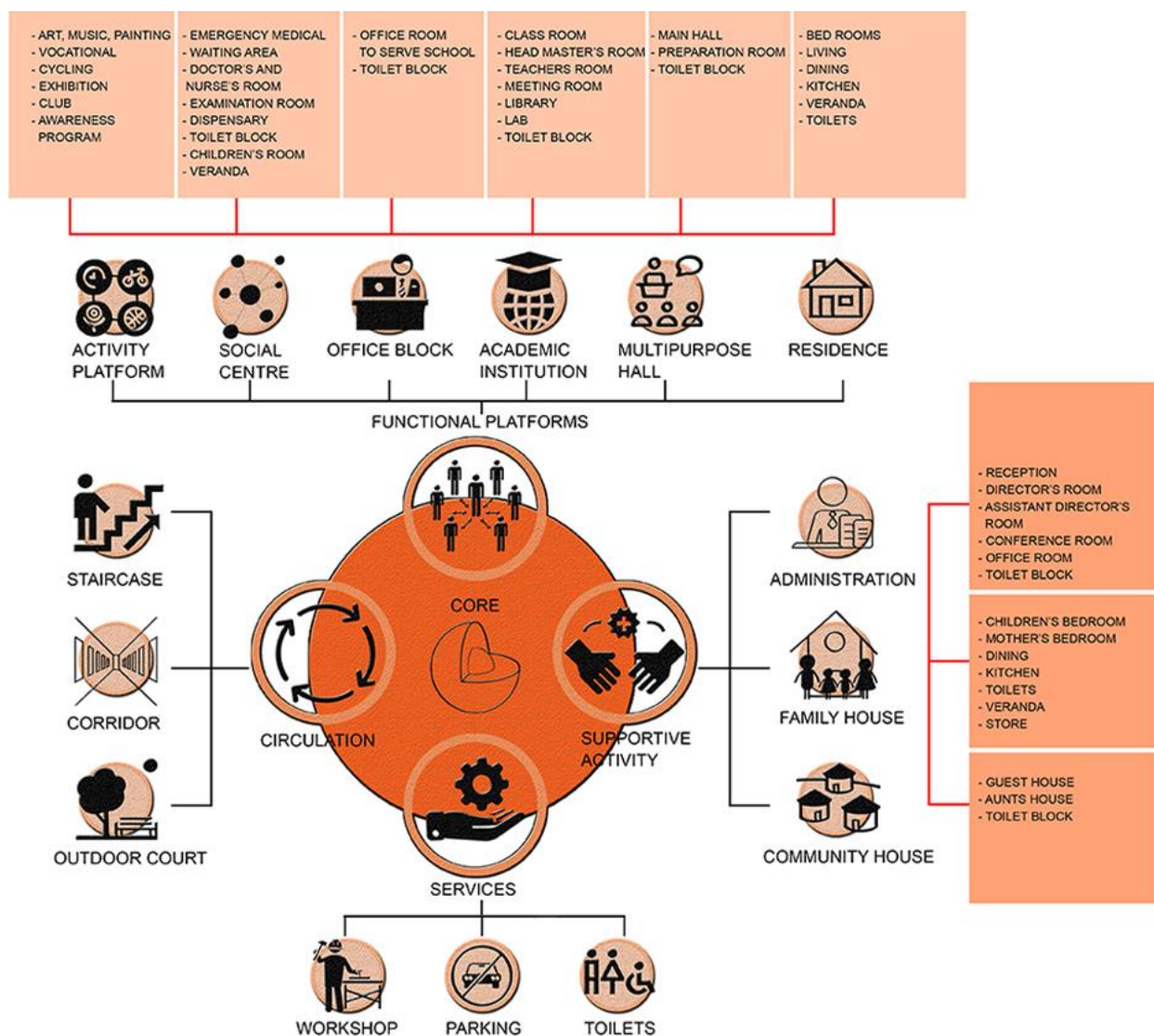


Diagram 6.4: Demonstration of Program Analysis for the community. (Source: Author)

PROGRAM ANALYSIS:

ZONE	FUNCTIONAL ACTIVITY IN BLOCK	TOTAL AREA SQ-FT
Office Block (1)	• Reception • Director's Room • Assistant Director's Room • Conference Room • Office Room • Toilet Block - 01	1,374 sq-ft
Social Centre (1)	• Emergency Medical Centre • Waiting Area • Doctor's and Nurse's Room • Examination Room • Dispensary • Toilet Block - 02 for Day Care • Children's Room • Veranda • Toilet Block - 03	1,364 sq-ft
Primary School	• Class Room • Head Master's Room • Teachers Room • Meeting Room • Library • Lab • Toilet Block - 04	5,712 sq-ft
Community House	• Guest House • Aunts House • Toilet Block - 05	2,340 sq-ft
Multipurpose Hall (1)	• Main Hall • Toilet Block - 06 • Preparation Room	3,300 sq-ft

ZONE	FUNCTIONAL ACTIVITY IN BLOCK	TOTAL AREA SQ-FT
Assistant Director's Residence (1)	• Bedrooms • Living • Dining • Kitchen • Veranda • Toilets	950 sq-ft
Directors Residence (1)	• Bedrooms • Living • Dining • Kitchen • Veranda • Toilets	1,148 sq-ft
Family House (14)	• Children's bedroom • Mother's bedroom • Dining • Kitchen • Toilets • Veranda • store	2,500 sq-ft

Table6.1: Program Analysis Chart. (Source: Client's Overview)

CONCEPTUAL REQUIREMENTS:

Office Block / Administrative Block :			
Type of Use	Area Required Per Room sq-ft	Number of Room	Total Room Area (approximate) sq-ft
Directors Room	160	1	160
Assistant Director's Room	150	1	150
Conference Room	255	1	255
Office Room	150	2	300
Kitchenette			80
Toilets			200
Total			1,145
Circulation			229
Total :			1,374 sq-ft

Social Centre :

Day Clinic :			
Type of Use	Area Required Per Room sq-ft	Number of Room	Total Room Area (approximate) sq-ft
Waiting Room and Dispensary	176	1	176
Doctors Room	100	1	100
Nurse Station	150	1	150
Examination Room	180	1	180
Toilet			70
Total			676
Circulation			136
Total :			812 sq-ft

Primary School :			
Type of Use	Area Required Per Room sq-ft	Number of Room	Total Room Area (approximate) sq-ft
Class Rooms	300	8	2,400
Head-Masters Room + Toilet	150	1	150
Teachers Room + Toilet	320	1	320
Meeting Room	620	1	620
Library		1	600
Computer Lab		1	320
Toilet			350
Total			4,760
Circulation			952
Total :			5,712 sq-ft

Multipurpose Hall :			
Type of Use	Area Required Per Room sq-ft	Number of Room	Total Room Area (approximate) sq-ft
Main Hall	1550	1	1,550
Waiting	300	1	300
Preparation Room	580	1	580
Toilet	320	1	320
Total			2,750
Circulation			550
Total :			3,300 sq-ft

Day Care :			
Type of Use	Area Required Per Room sq-ft	Number of Room	Total Room Area (approximate) sq-ft
Day care	181	2	362
Toilets	98	1	98
Total			460
Circulation			92
Total :			552 sq-ft

Community House :			
Type of Use	Area Required Per Room sq-ft	Number of Room	Total Room Area (approximate) sq-ft
Guest Room	580	2	580
Aunt's Room	134	3	402
Staff Room	290	2	580
Old Mothers Room	125	2	250
Toilets	70	2	140
Total			1,952
Circulation			390
Total :			2,342 sq-ft

Assistant Director's Residence :			
Type of Use	Area Required Per Room sq-ft	Number of Room	Total Room Area (approximate) sq-ft
Living + Dining	310	1	310
Children's Beds	100	1	100
Master Bed	120	1	120
Kitchen + Store	80	1	80
Toilets	70	2	140
Verandah	40	3	120
Total			790
Circulation			158
Total :			950 sq-ft

Director's Residence :			
Type of Use	Area Required Per Room sq-ft	Number of Room	Total Room Area (approximate) sq-ft
Living + Dining	472	1	472
Children's Beds	120	1	120
Master Bed	140	1	140
Kitchen + Store	80	1	80
Toilets	84	2	168
Verandah	60	3	180
Total			956
Circulation			192
Total :			1,148 sq-ft

Family House :			
Type of Use	Number of Users	Number of Room	Total Room Area (approximate) sq-ft
Living + Dining	10	1	300
Children's Beds	8	2	450
Mother's Bed	1	1	200
Kitchen + Store		1	140
Study	4	2	200
Toilets		2	140
Verandah and Store		2	160
Total			1,610
Circulation			483
Total :			2,500 sq-ft

Family House: (14 x 2,500) sq-ft = **35,000 sq-ft**

Total Area:

1,374 sq-ft + 812 sq-ft + 552 sq-ft + 2,342 sq-ft + 5,712 sq-ft + 3,300 sq-ft + 950 sq-ft + 1,148 sq-ft + 35,000 sq-ft = 51,190 sq-ft

Others :		
Functional Activity	Number of People	Total Room Area (approximate) sq-ft
Reception		1,000
Lobby and Waiting		1,500
Special Outdoor Spaces for Activities and Life-skill Training		4,000

Others :		
Functional Activity	Number of People	Total Room Area (approximate) sq-ft
Semi- outdoor reading area		2,000
Indoor Games Room	100	10,000
Walk Through Gallery		5,000
Trainer's Room	5	1,500
Art, Music and Painting		2,000
Club Activity	20-25	1,000
Exhibition Court		3,000
Service Block + Store		3,000
Shops		2,000
Finance and IT Sector		1,500
Open Platform for Awareness Programs		1,000
Bird Sanctuary		5,000
Total		43,500 sq-ft

Total:

51,190 sq-ft + 43,500 sq-ft = 94,690 sq-ft

Area: 10 Acre or, 435,600 sq-ft

Total Built Area = 94,690 sq-ft

Circulation Area = $(94,690 \times 30) / 100 = 28,407$ sq-ft (30% of Total Built Area)

In Total = 120,097 sq-ft Area

Table6.2: Conceptual Requirement of Program Chart. (Source: Author)

6.5 Functional Flow

A functional flow diagram is a sequence and step by step flow diagram of a systematic program course or trail. It helps to fix functions knowing the logical approaches with definite control, accessibility, permeability, privacy and ensures zoning. The method highlights functional blocks, directions, path ways, connections, functional numbering, references and possibilities.

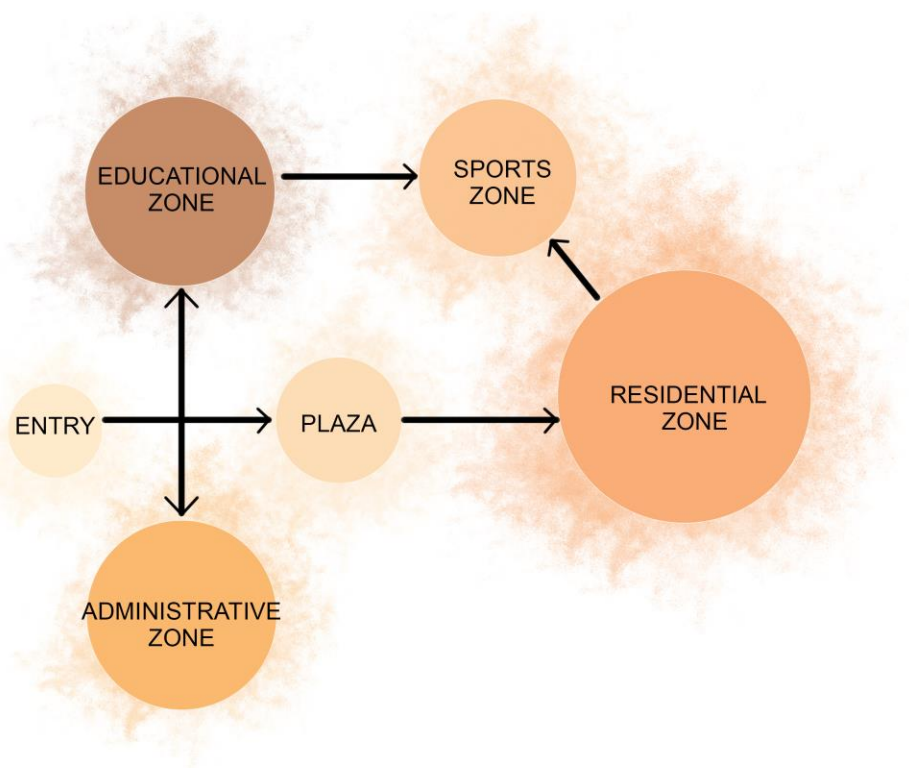


Diagram6.5: Primary zoning layout. (Source: Author)

From the zoning analysis, it is more dominant that, as the educational block and the administrative sector are more public zone; hence, these functions are located near the entrance of the area, directly or indirectly attached to the primary and secondary road networks. Furthermore, the recreational sports block is located such a way that it cannot

be accessed directly from the main entrance. It has an access from school block and another access from residential zone. The sports block can be identified as a semi-public zone. Moreover, the residential area is completely isolated from the public zone and illustrated as private zone along with internal courtyard.

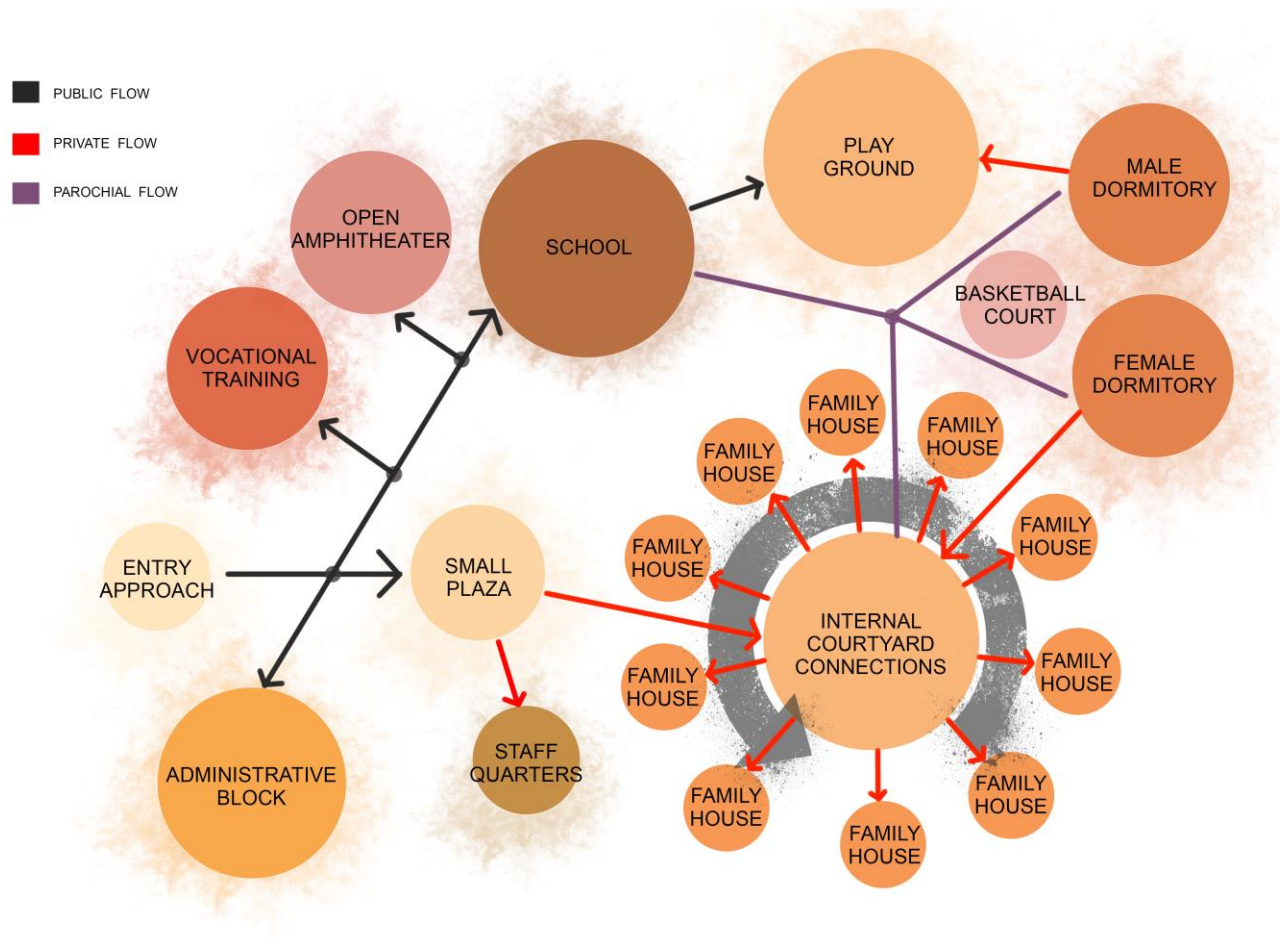


Diagram6.6: Functional flow chart and connectivity. (Source: Author)

Conclusion: The chapter discusses about, essential standards for the programs of SOS Children's village, necessary function development and probable functional zoning including flow chart of connectivity. The idea of proportion and scale of the certain area of land can be gathered from it to create primary objectives.



প্রত্যাশার মাঁচা SOS CHILDREN'S VILLAGE, BARISAL

CHAPTER 7

CONCEPTUAL STAGE AND DESIGN DEVELOPMENT

7.1 Introduction

7.2 Form Development , Schematic Arrangement and Programmatic Layout

7.3 Concept Development

7.4 Final Design Drawings

7.5 3-Dimensional Visuals

7.6 Final Images of Model

7.7 Conclusion

CHAPTER 7: CONCEPTUAL STAGE AND DESIGN DEVELOPMENT

7.1 Introduction

The chapter elaborates conceptual development, different design phases, detail drawings of necessary plans, elevations, sections, perspective views, interpretation of spaces through sketches and model images.

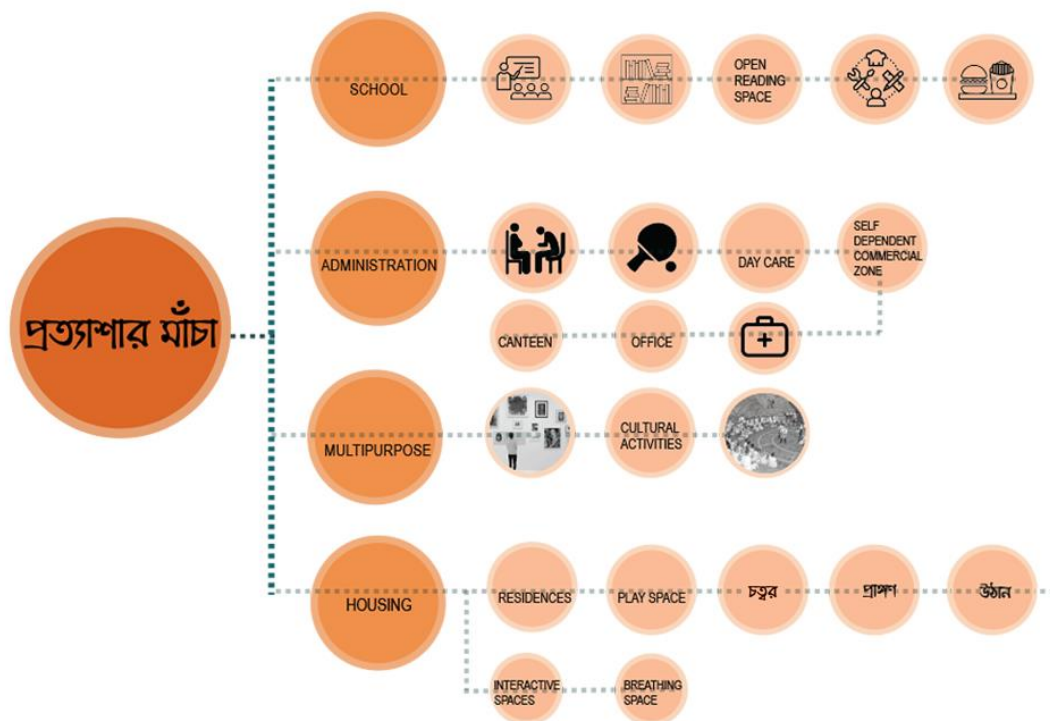


Diagram 7.1: Aim of the institutional complex. (Source: Author)

The project is necessary in the context of the site, as there are few “madrassa” which only fulfills religious needs. Here, SOS Children’s Village an international organization can satisfy all the needs such as education that can help them to grow up and serve the society in return. Children no longer can think they are burden to the society, when they can give and do for the society and increase their acceptance as orphans.

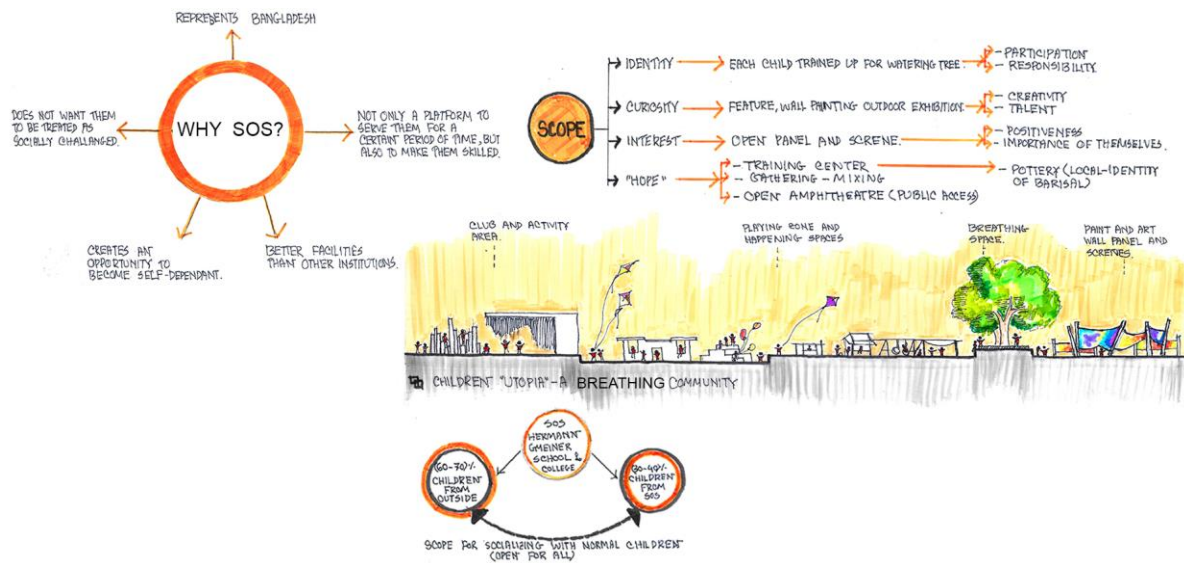


Diagram7.2: Necessity and Contribution of the project. (Source: Author)

From Erikson's child psychology, it is essential to match that up with what a child requires and how does they grow up that can be interpreted through spaces and design.

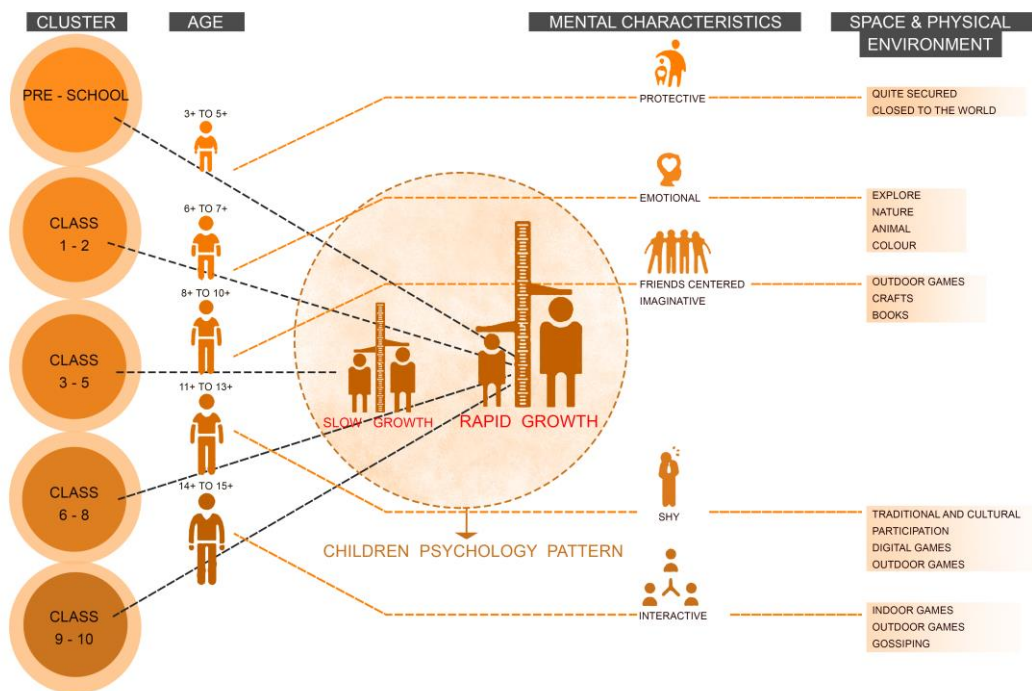


Diagram7.3: Pattern of Children Psychology for orphans. (Source: Author)

According to children psychology pattern, it is more helpful to incorporate the issue for the orphans. “SOS Children’s Village” intends to give these orphans the platform where they can receive education and at the same time help their society by doing some productive works. It is hoped that in future these children will be educated and simultaneously they will become self-dependent.



Diagram7.4: Findings from the existing site. (Source: Author)

7.2 Form Development , Schematic Arrangement and Programmatic Layout



Image7.1: Understanding site with programmatic layout. (Source: Author)

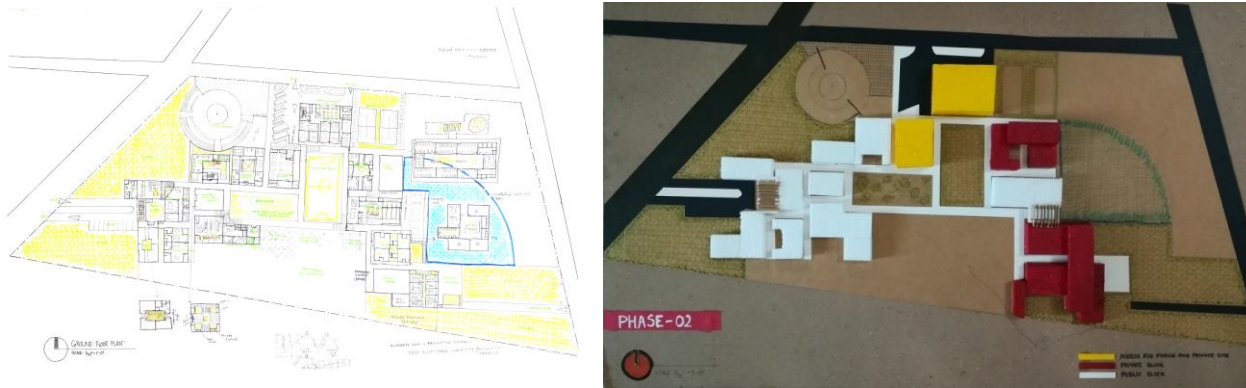


Image7.2: Schematic arrangement Phase-01. (Source: Author)

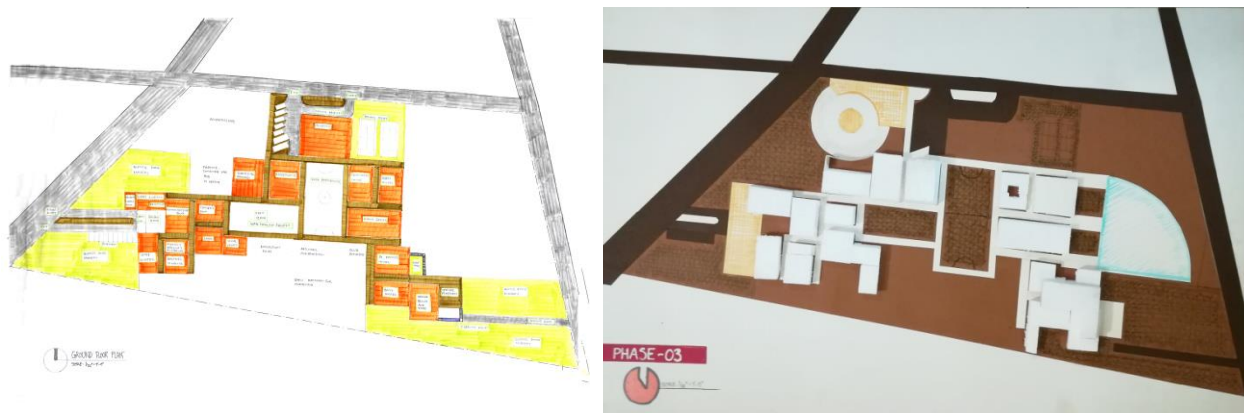


Image7.3: Schematic arrangement Phase-02. (Source: Author)



Image7.4: Schematic arrangement Phase-03 and 04. (Source: Author)



Image7.5: Schematic arrangement Phase-05 and 06. (Source: Author)



Image7.6: Schematic arrangement and form development Phase-07. (Source: Author)

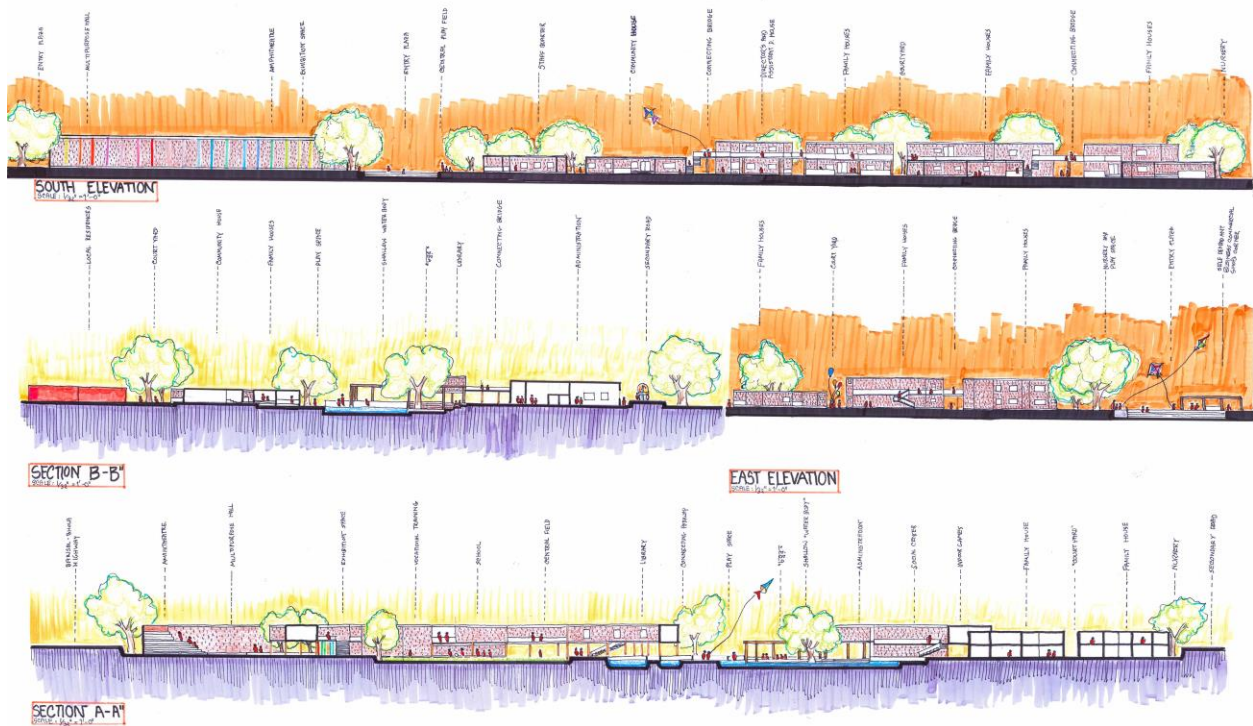


Image7.7: Sectional arrangement and space derivation Phase-07. (Source: Author)



Image7.8: Schematic arrangement and form development Phase-08. (Source: Author)



Image7.9: Schematic arrangement and form development Phase-09. (Source: Author)



Image7.10: Schematic arrangement and form development Phase-10 and 11. (Source: Author)



Image7.11: Schematic arrangement and form development Phase-12. (Source: Author)

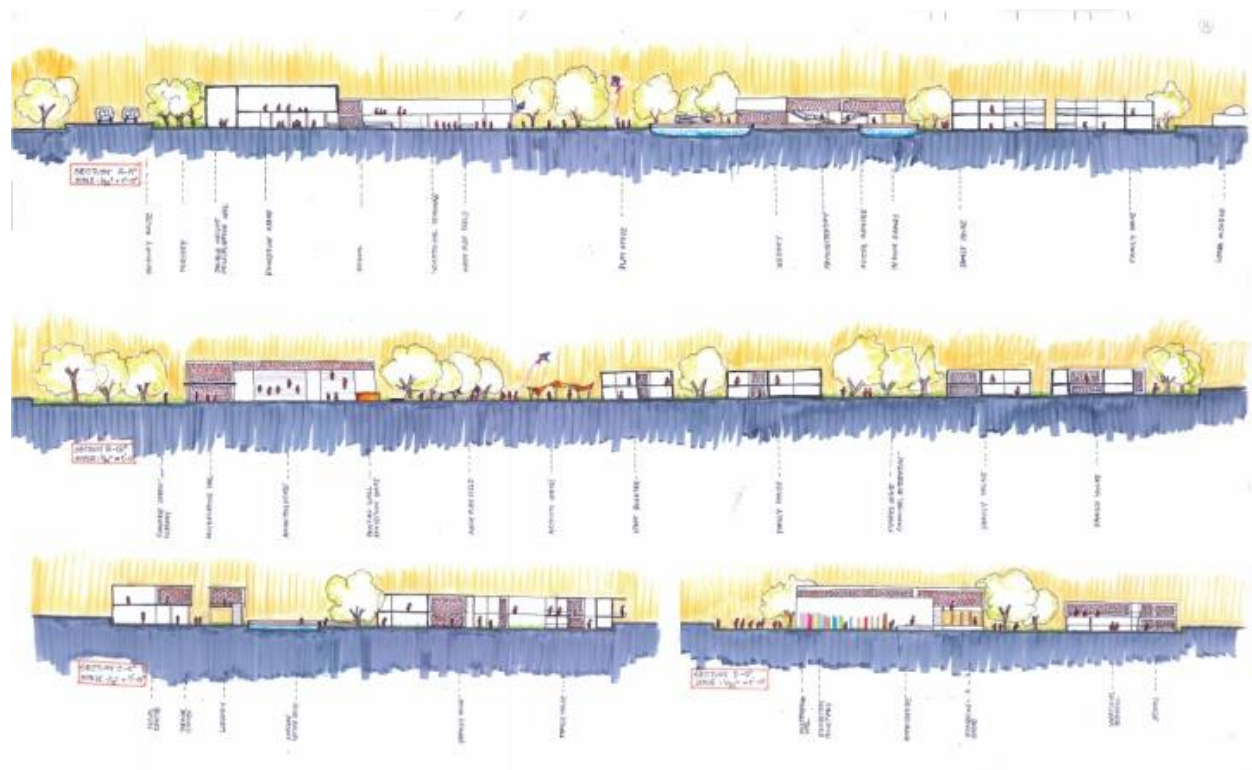


Image7.12: Sectional arrangement and space derivation Phase-12. (Source: Author)



Image7.13: Study Blow-up modules of residential housing zone Phase-12. (Source: Author)

7.3 Concept Development

The core concept derives from, additional to providing a family and a society the project adds blending with the entire neighborhood. It demands openness rather than boundary

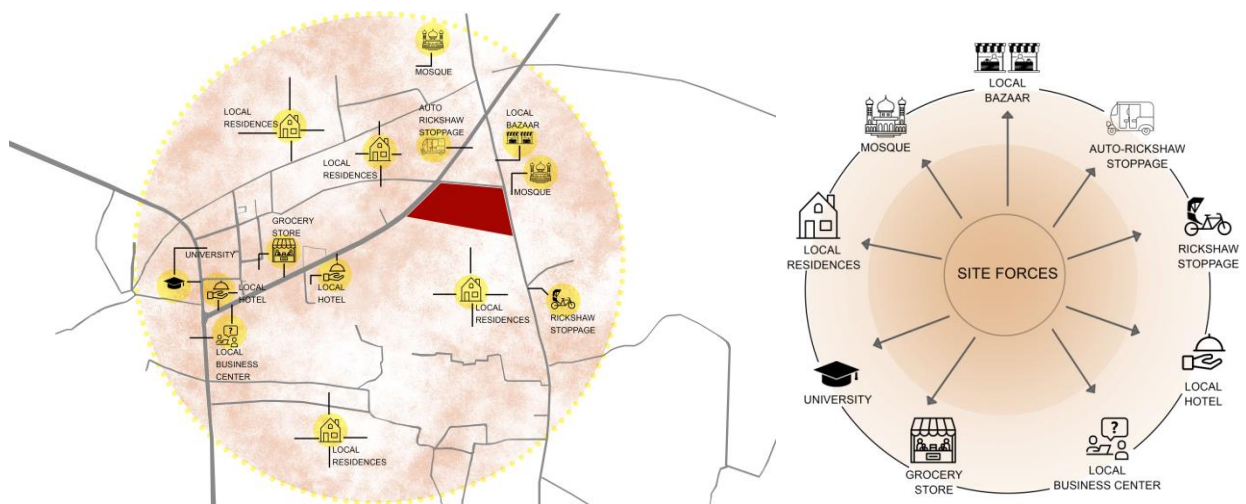


Diagram7.5: Site forces for concept development. (Source: Author)

walls. In rural areas, local people know each other more or less. Why these orphan children would lead a different life? Moreover, at a certain stage, these orphan children have to face the reality when they no longer can live to the village from age 18. If the village won't support them to learn how to become self dependant, future would become a threat to them. This is the challenge how the design concept worked for these issues. Through the design connections, local neighborhoods are invited inside the SOS children's village, by which the acceptance of orphans are increased and treated equally as a normal child. These orphans are treated in the same manner; how the local children are treated. Additionally, these orphans find hope by growing up in this SOS Children's village. No one expects a sudden reality that would create fear among them. This is the platform where they get an opportunity to learn gradually how to become self dependant and become ready to face the reality in future. Here, the central play field or “পাঁড়ার মাঠ” is open for all so that when the 70% children from Barisal city would come to school, they can openly play with the orphans and create a mixing and blended environment.

In a short, it is not a prison for orphans rather it is their home, a shelter and a village to live in. A breathing square, where they can breathe, build up themselves with proper education, guidance, fulfilling needs and memorize their early childhood with good memories, care and love.

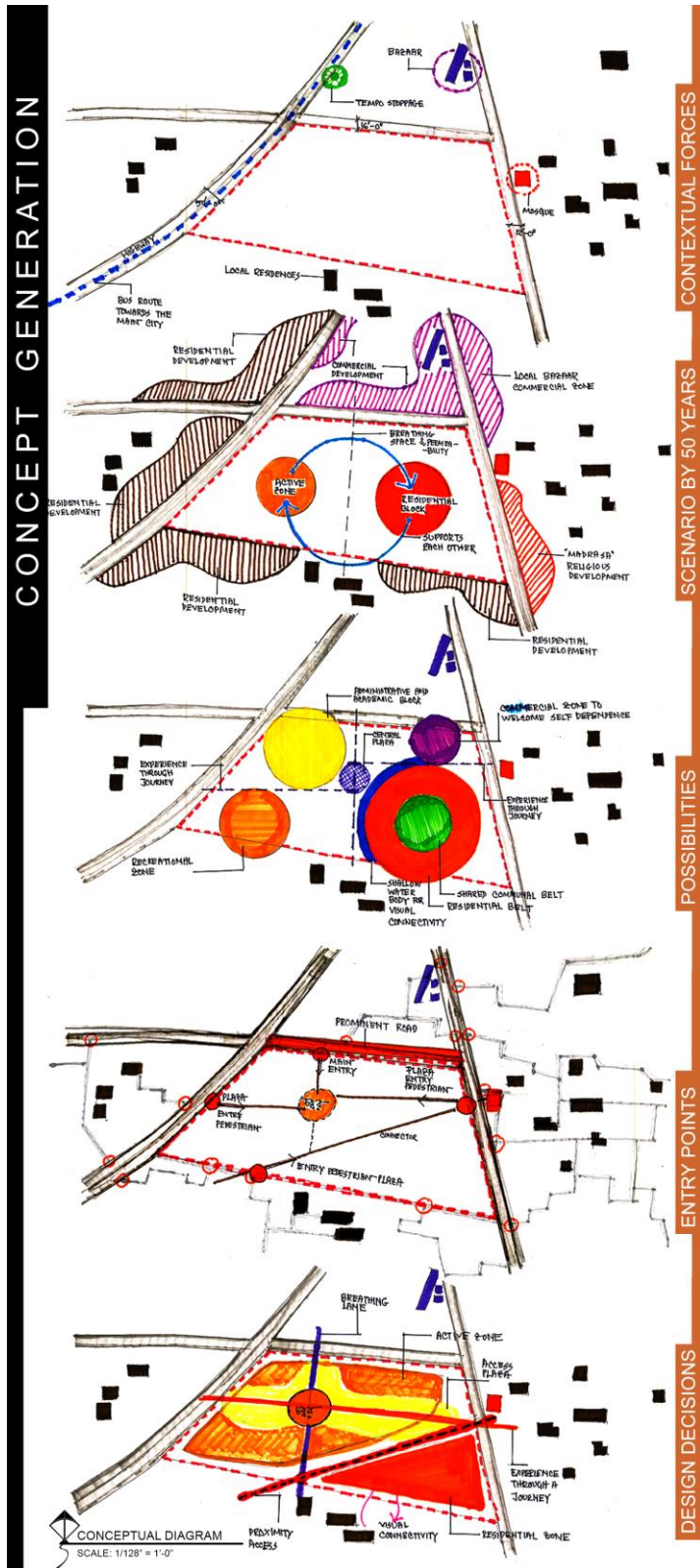


Diagram7.6: Concept Generation. (Source: Author)

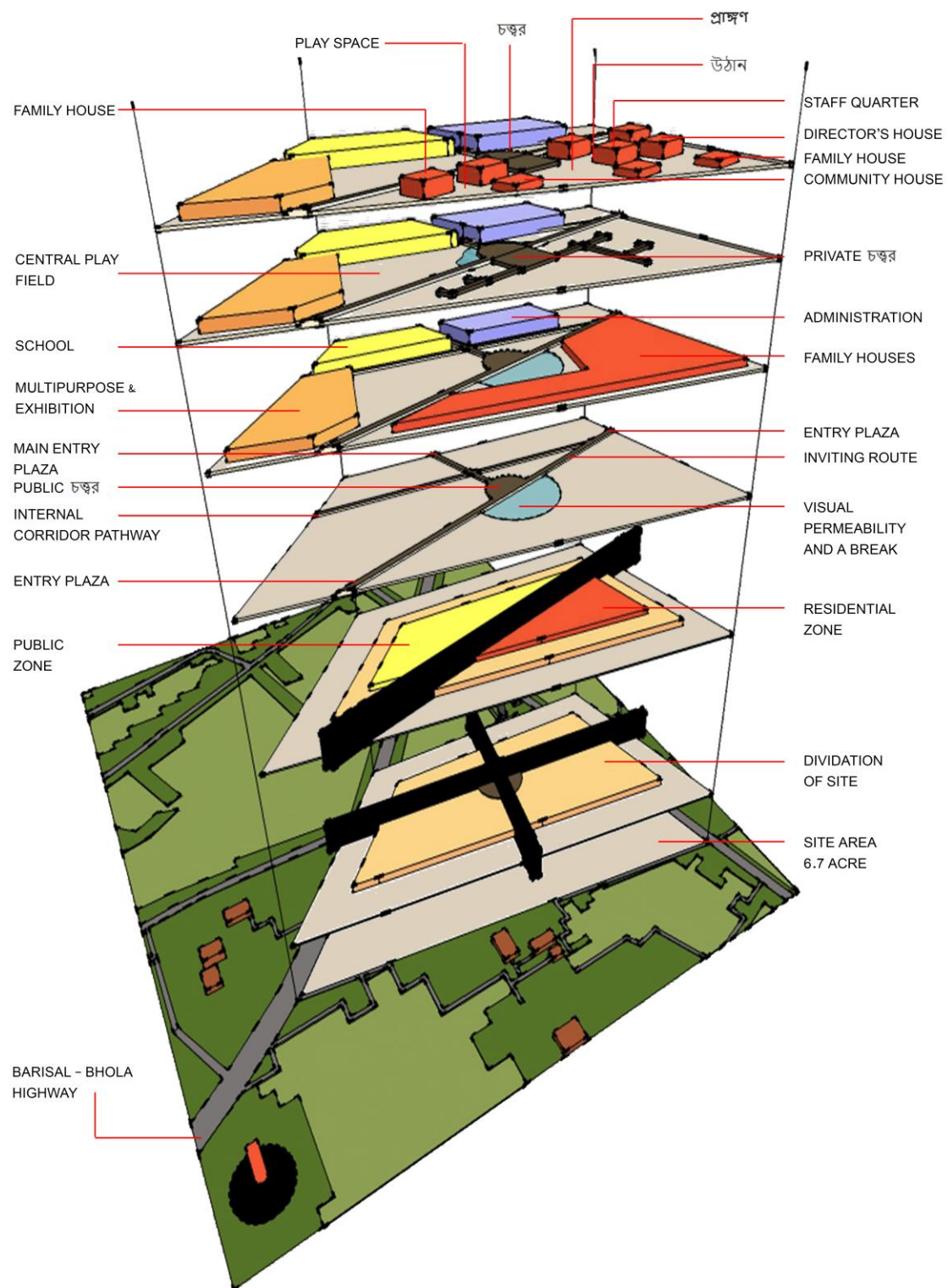


Diagram7.7: Axonometric analysis. (Source: Author)

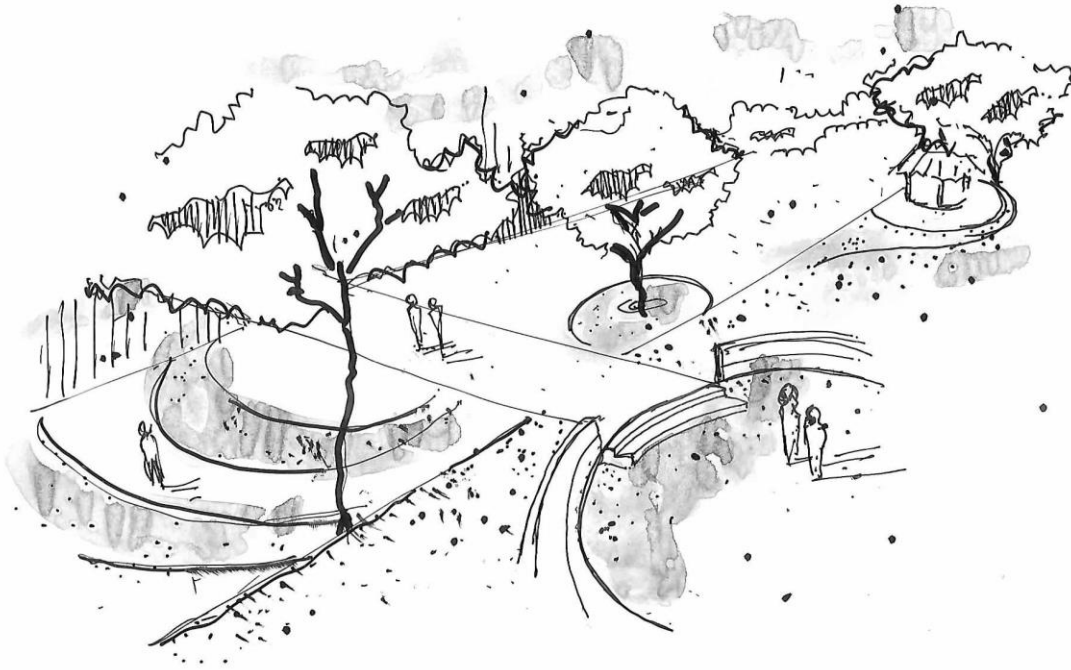


Figure7.1: Conceptual space derivation – “চত্বর” as landmark. (Source: Author)

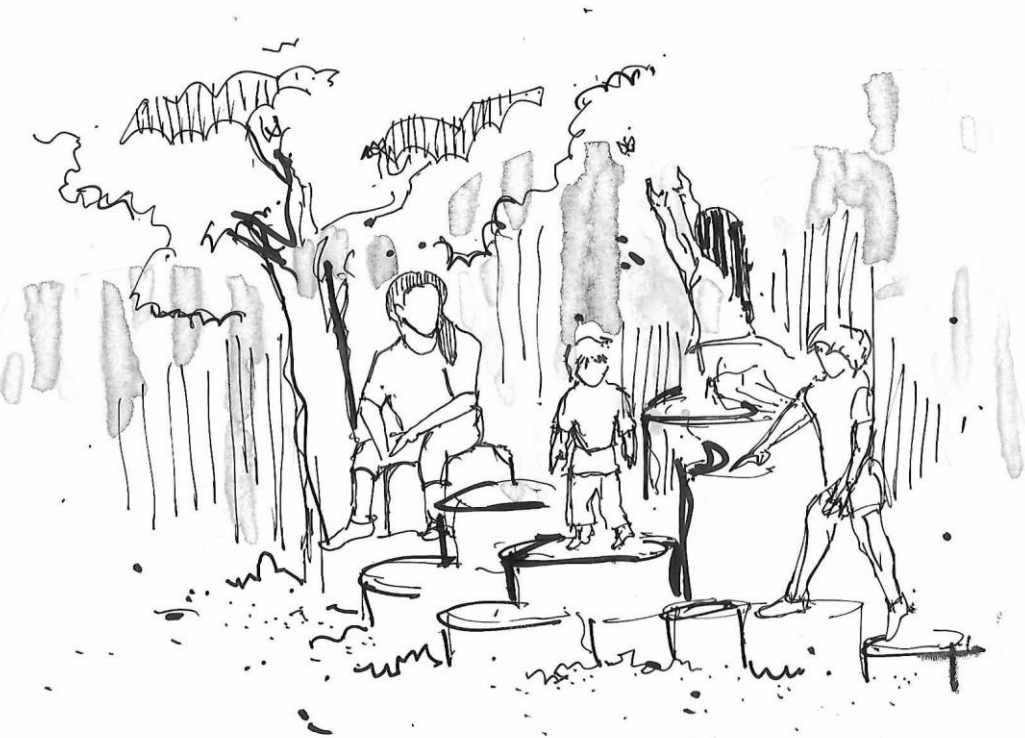


Figure7.2: Conceptual space derivation – play space. (Source: Author)

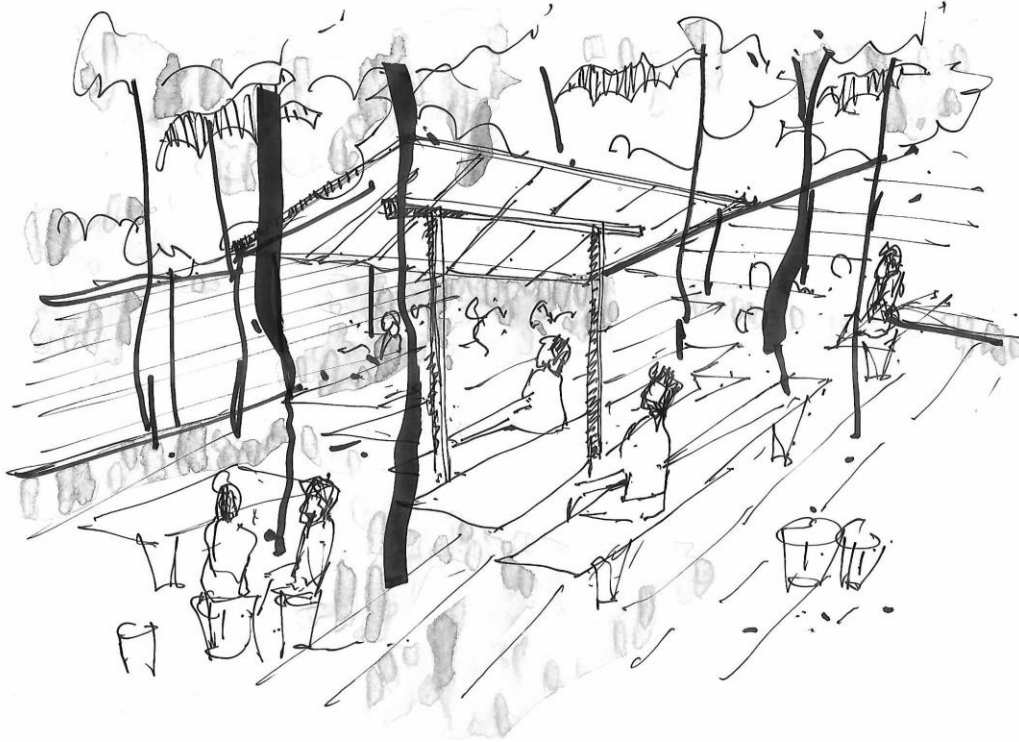


Figure7.3: Conceptual space derivation – Space for vendors. (Source: Author)



Figure7.4: Conceptual space derivation – Private “চত্বর” for play space. (Source: Author)

7.4 Final Design Drawings

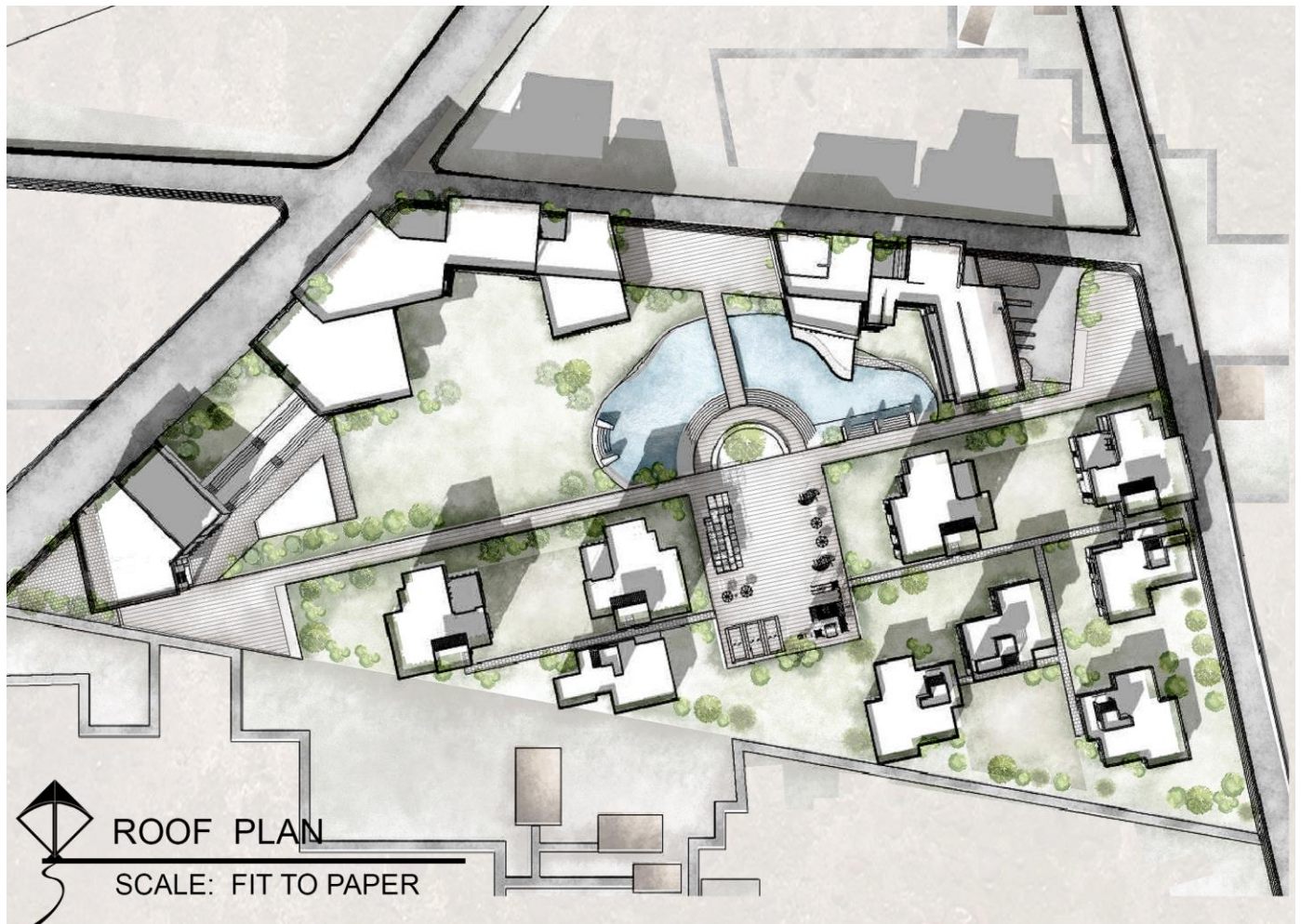


Figure7.5: Roof Plan. (Source: Author)

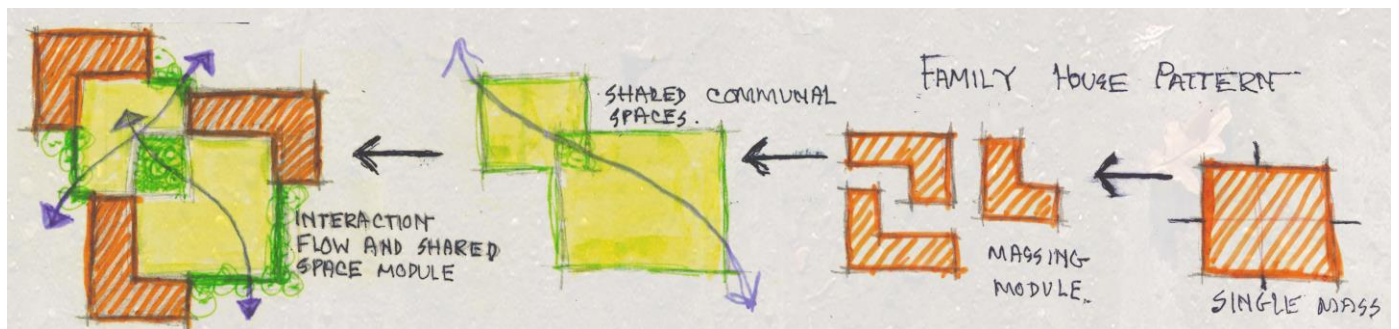


Figure7.6: Shared communal space module. (Source: Author)

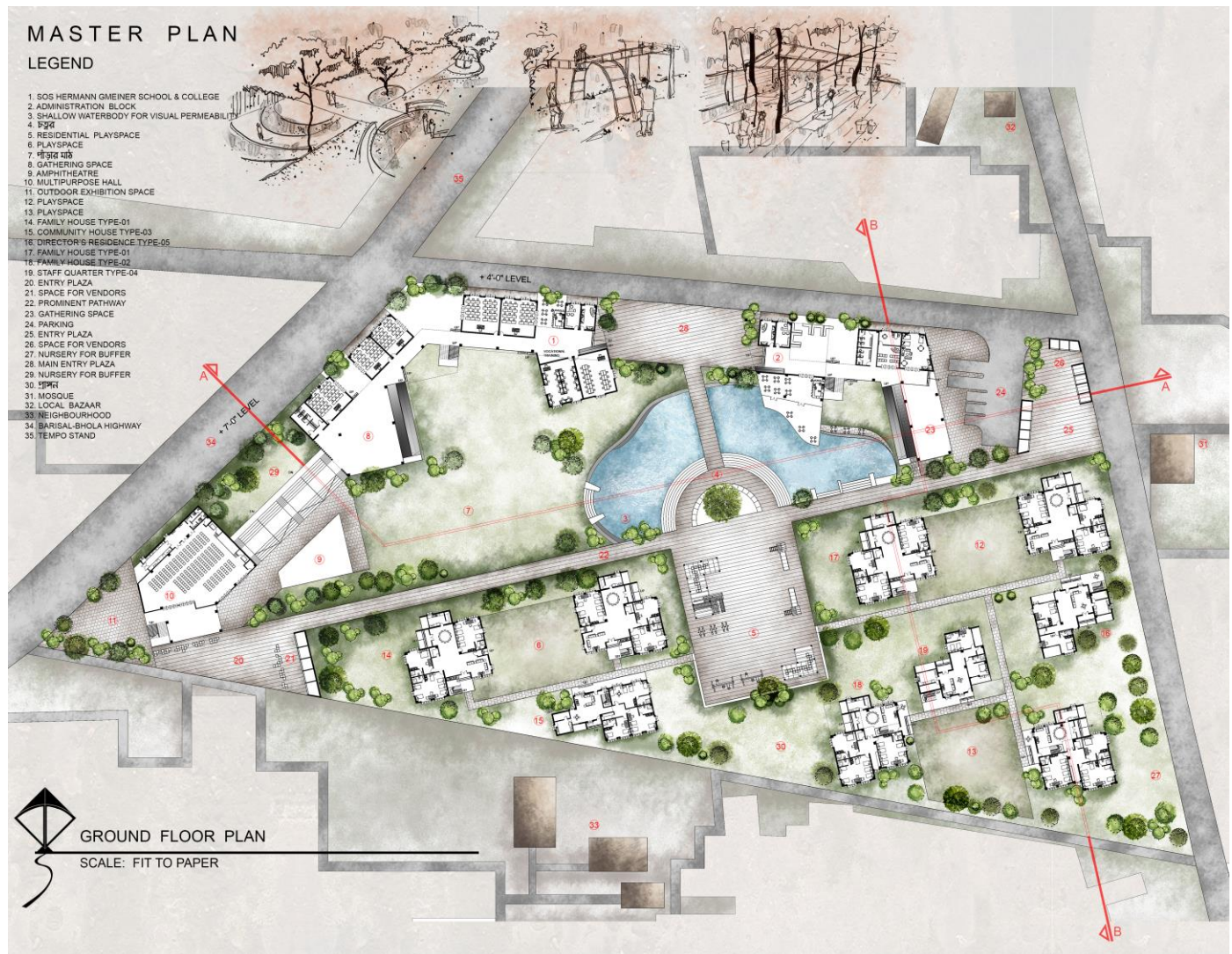


Figure7.7: Ground Floor Plan. (Source: Author)

There are three entry points, from the site forces and route connections. The main entry is from north side as the secondary road is more prominent and frequently used placed adjacent to bazaar area. Another reason is the highway on west side is risky for placing an entry. The entire village is preferred to be pedestrianised. The placement of the water body creates a break and visual permeability rather physical access with the active zone to the residential zone. The prominent pathway is the celebrating pathway

that gathers welcoming experience while going towards the local mosque and creates a branching network from the surrounding one function to another.

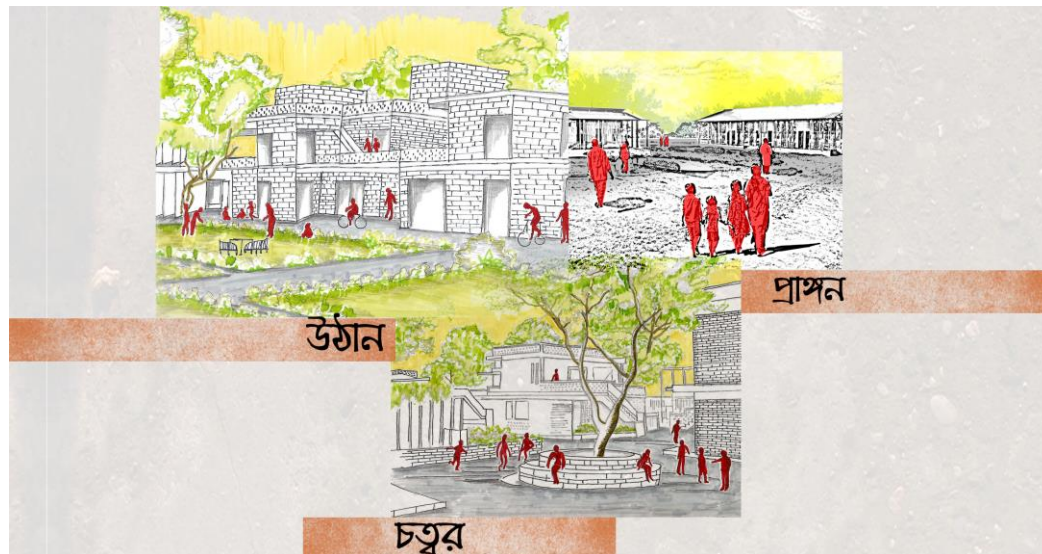


Figure 7.8: Rural story derivation of উঠান, চত্বর এবং প্রাঙ্গন। (Source: Author)

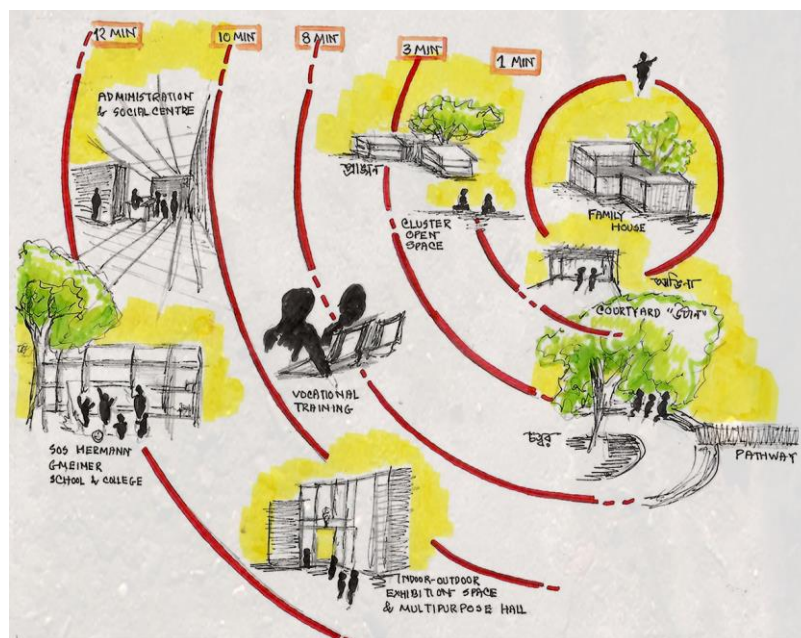


Figure 7.9: Space connection with one function to another through time distribution.

(Source: Author)

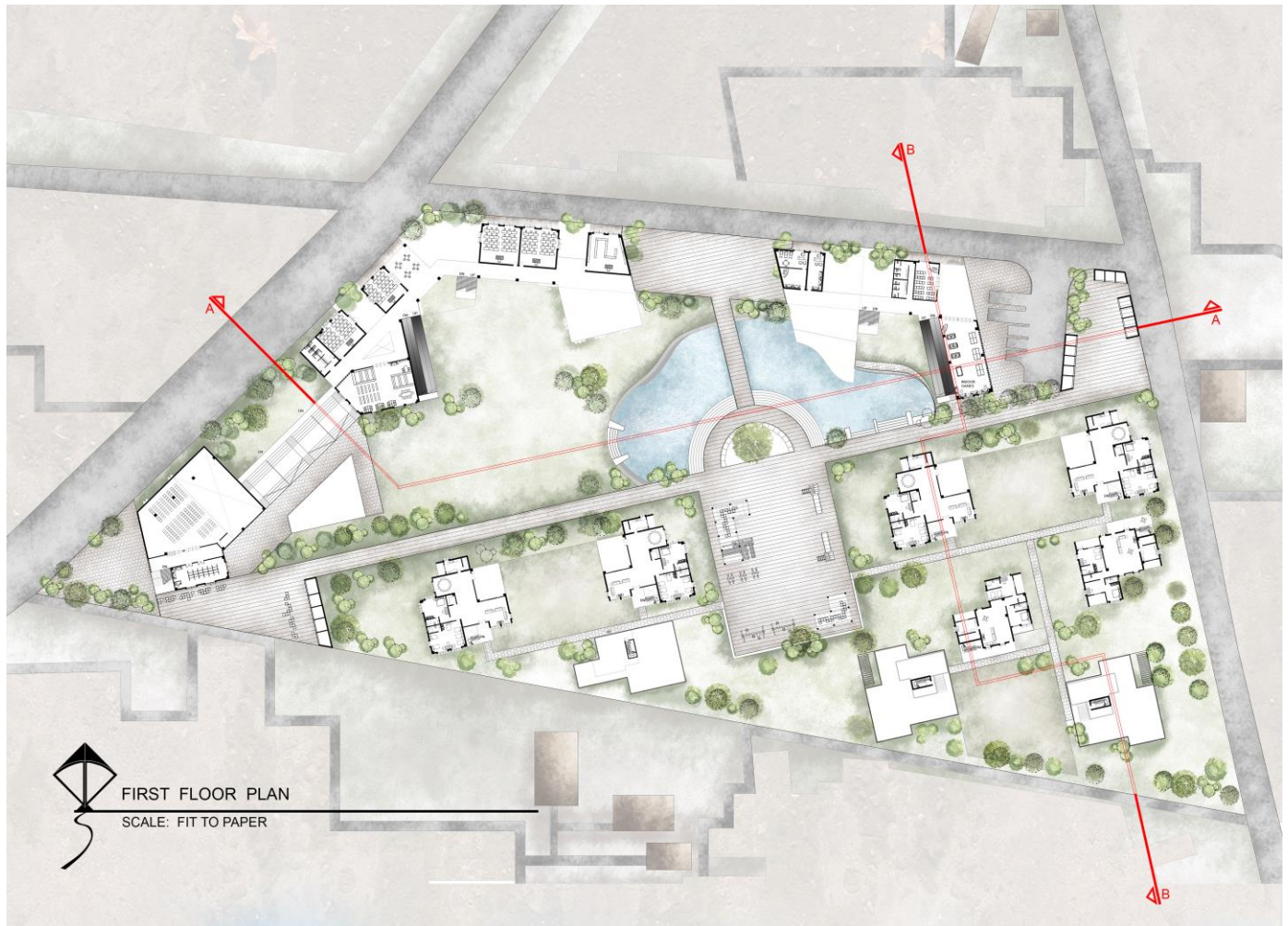


Figure7.10: First Floor Plan. (Source: Author)

The central “চত্বর” leads as a landmark, so that children can identify houses (e.g.) 2nd house from the landmark. Furthermore, the housing pattern and placement derived in the aspect of climatic issue. As it is tropical climate in Barisal, surrounding a play space or courtyard, houses are placed, which is a local tradition of rural context that has been revived. Moreover, from south to north the building heights gradually increased. The essence of mixing has been revived through house placement, (e.g.) family houses are placed nearby community house.



Figure7.11: Spot sketches. (Source: Author)



Figure7.12: Family house type-01. (Source: Author)

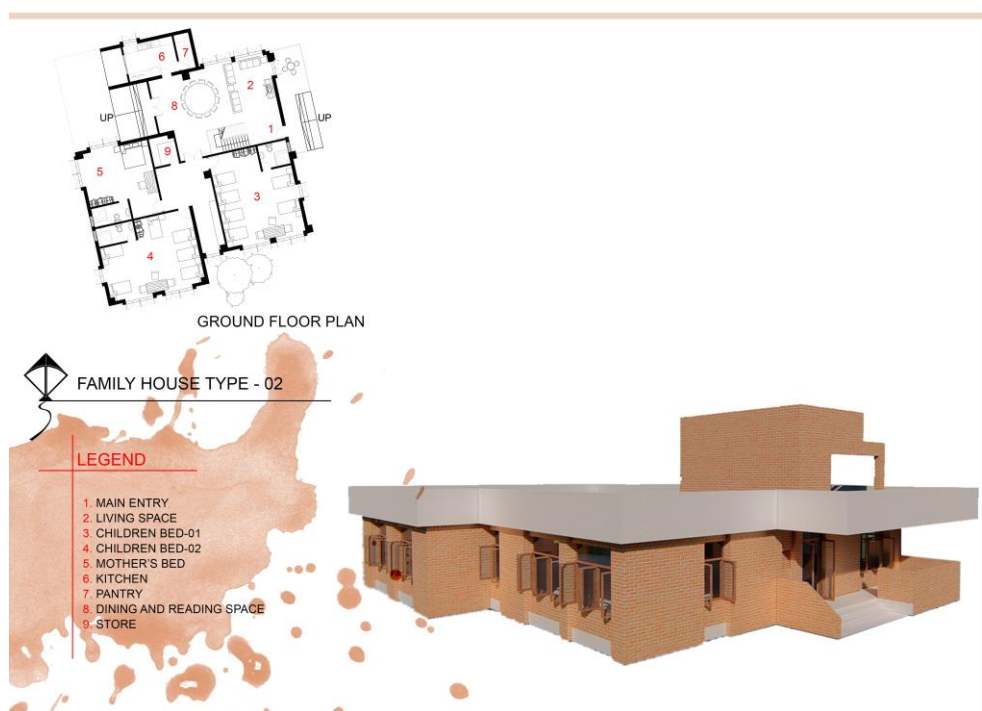


Figure7.13: Family house type-02. (Source: Author)

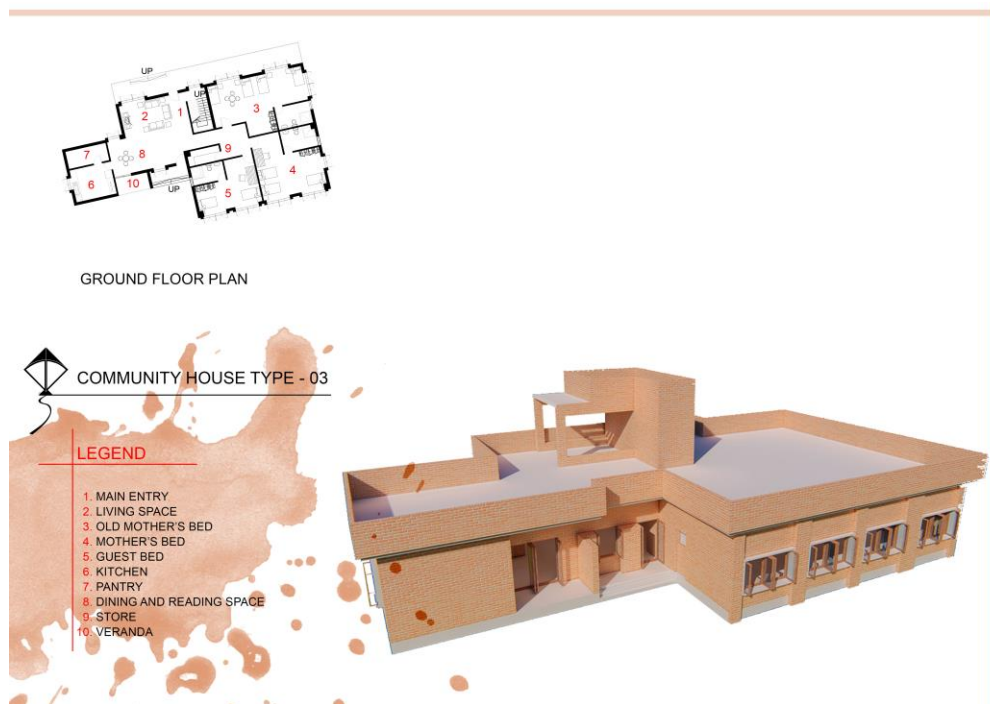


Figure7.14: Community house type-03. (Source: Author)

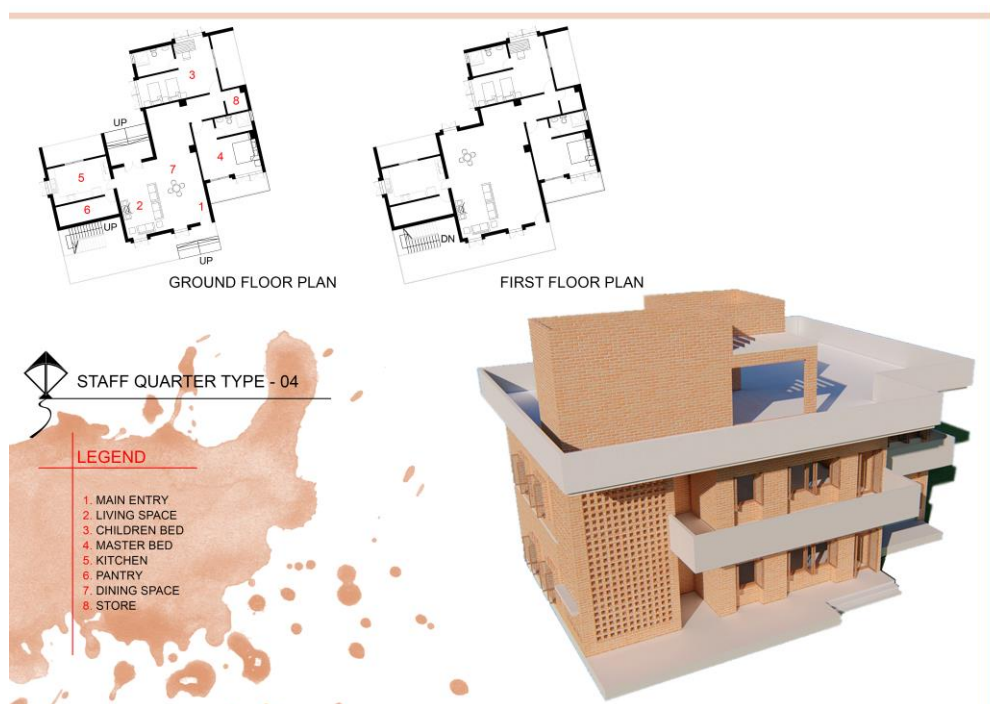


Figure7.15: Staff quarter type-04. (Source: Author)



Figure7.16: Director's residence type-05. (Source: Author)

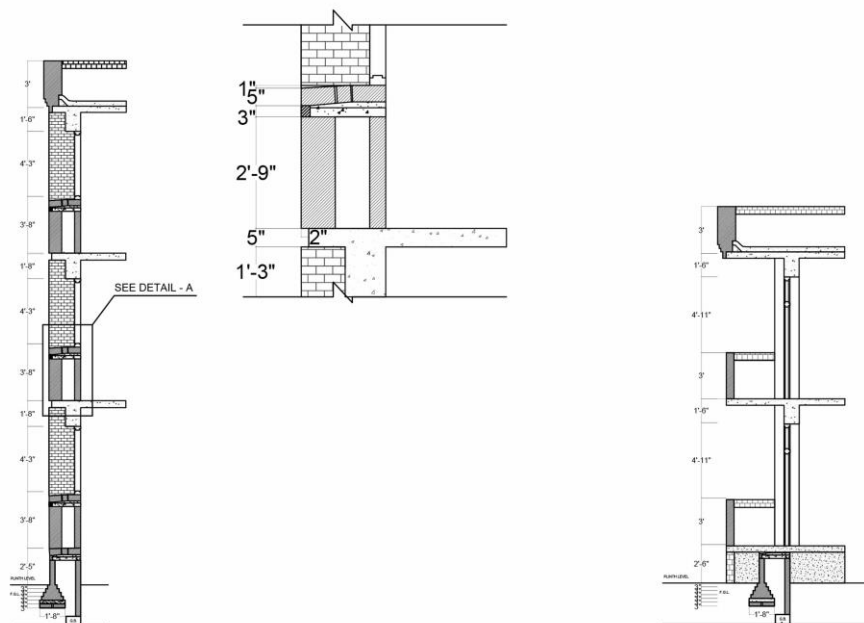


Figure7.17: Window detail blow-up of family house type-01 and Veranda detail of staff quarter. (Source: Author)

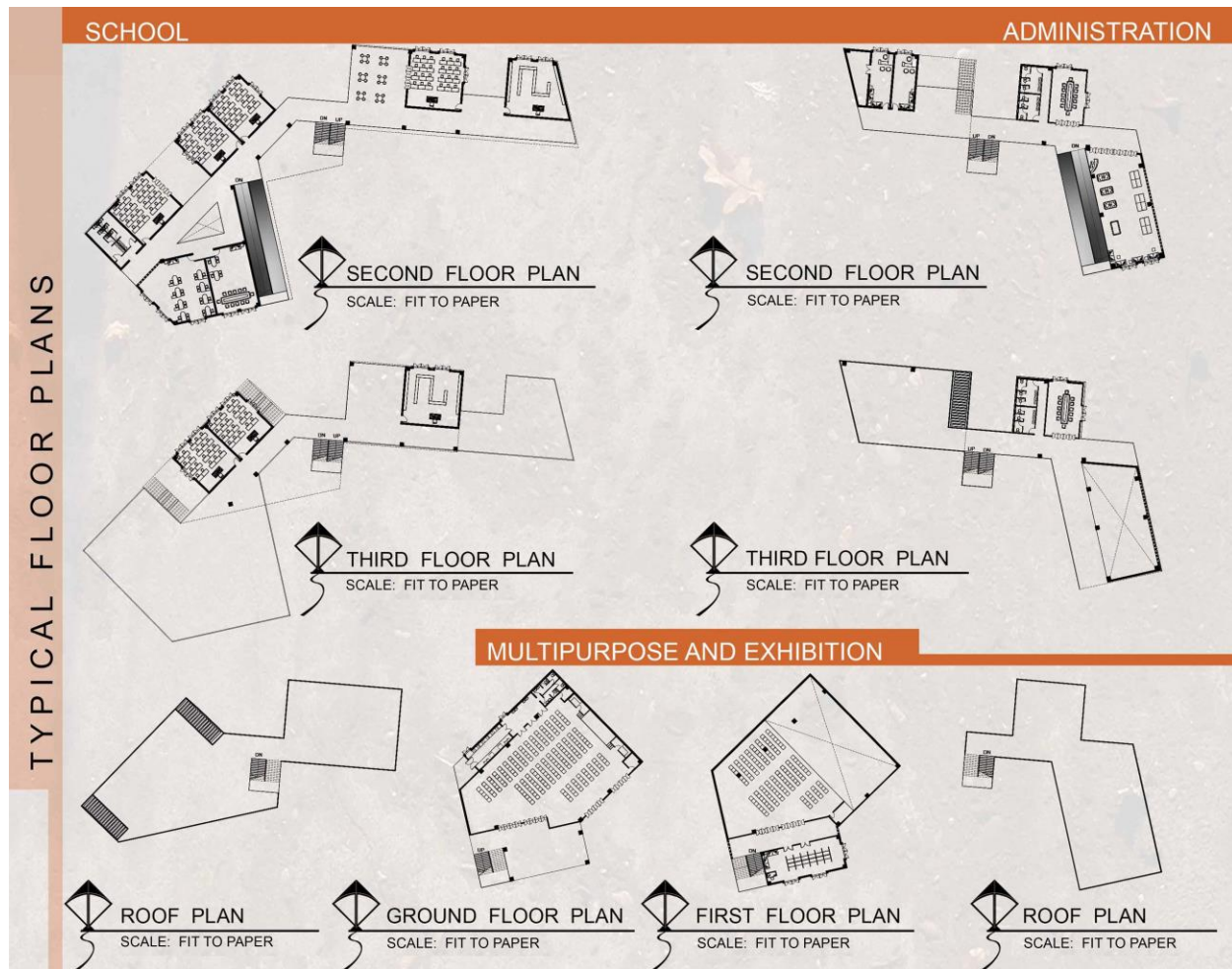


Figure7.18: Typical floor plans. (Source: Author)

A subtle design which would create space, encourage “activity” and the “memories” is more emphasized issue here. As a whole the master plan and typical floor plans try to conceive the cert may help to generate the sense of real rural tying up all intimate and interactive shared spaces for all.

Furthermore, to creates hierarchy and connections of spaces which the families together can enjoy through and activities as well as the neighborhood attachments are ensured.

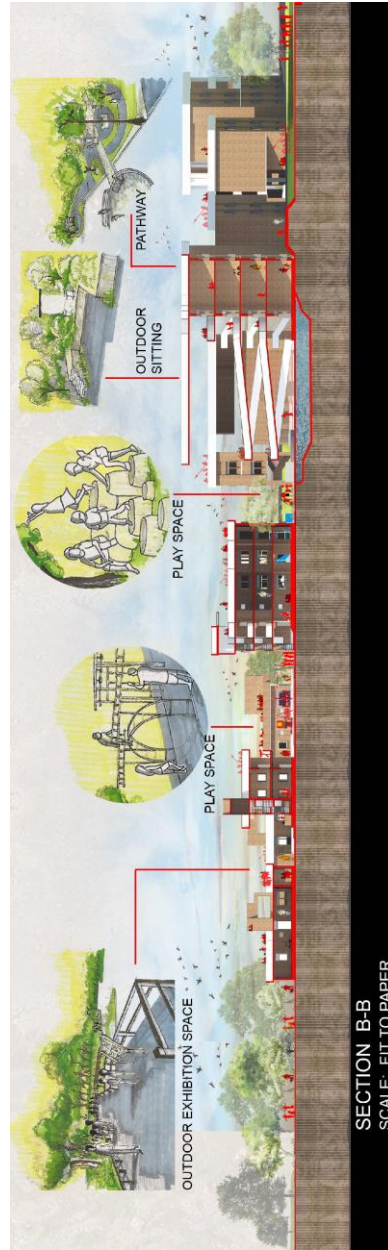
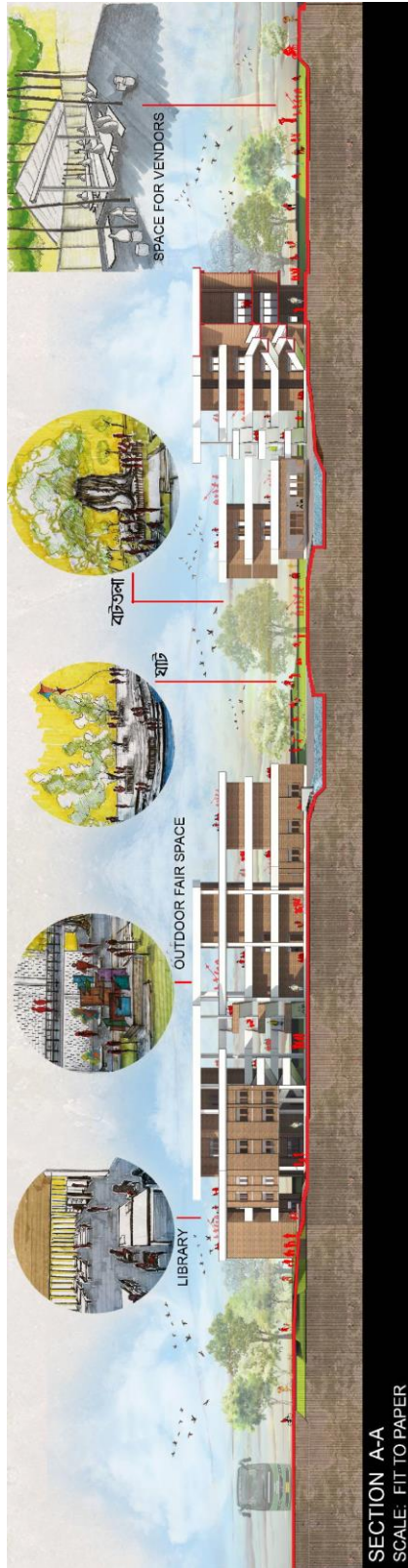


Figure7.20: Sections. (Source: Author)

7.53-Dimensional Visuals



Figure7.21: Perspective view from “চত্বর” | (Source: Author)

Focusing the local context, the rural essence has been respected and also facilitated with children activity spaces. Through this rendered image, the openness is welcomed and ensured how children will respond to different open spaces provided here. The open green spaces (i.e.) the shared spaces for children help to interact and grow up together as one big community.



Figure7.22: Perspective view from residential shared space. (Source: Author)



Figure7.23: Perspective view from the prominent pathway. (Source: Author)

7.6 Final Images of Model



Figure7.24: Site model image. (Source: Author)

The site model reflects how the entire site area talks with the site surrounding so that it would blend with the entire locality and play a vital role to serve the location of Barisal. Moreover, it also highlights the network pattern at a glance, connecting to the site and how it serves.



Figure7.25: Model Image – 01. (Source: Author)



Figure7.26: Model Image – 02. (Source: Author)

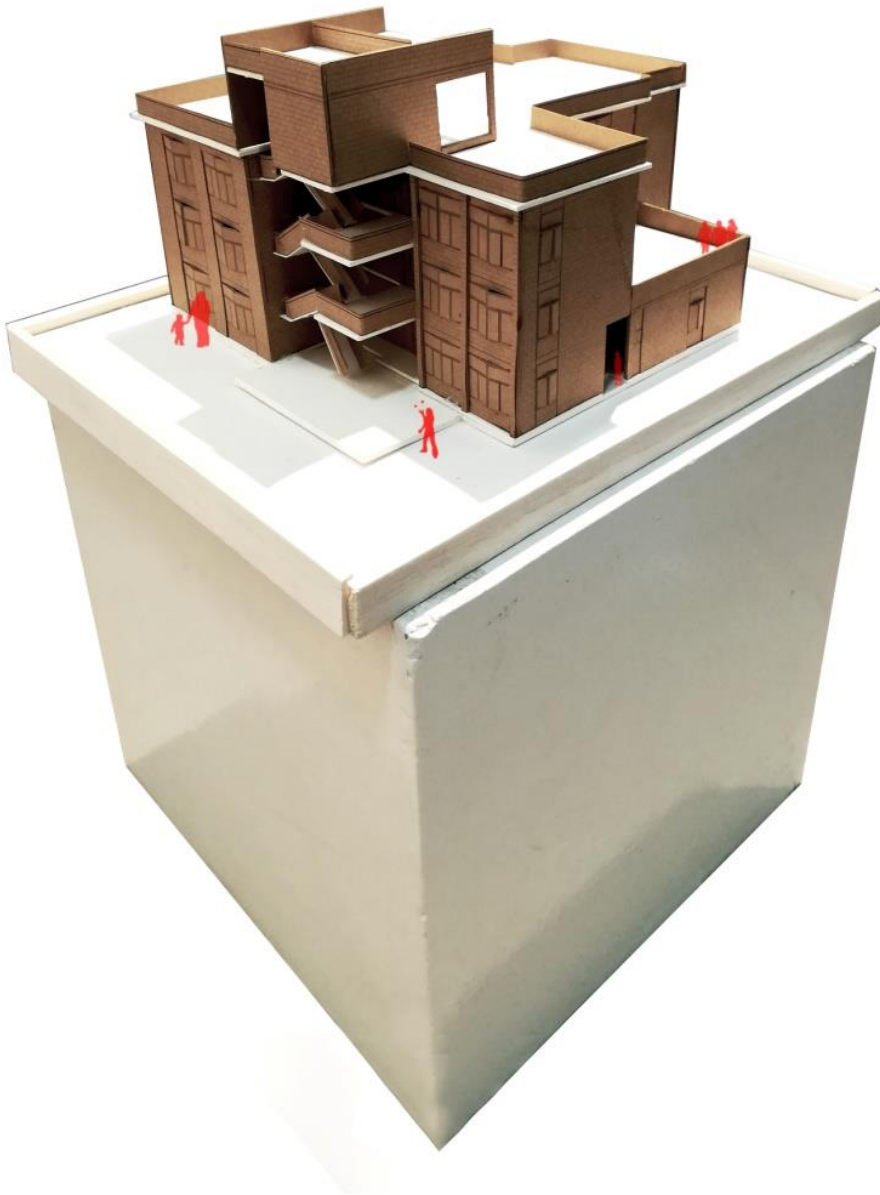


Figure7.27: Blow-up model image of Family house type – 01. (Source: Author)

7.7 Conclusion

To conclude, the chapter covers up with the most important part of the design aspects, concept generation, phases of development and lastly, the final phase of design with detail particulars.

CHAPTER 8

CONCLUSION

In the long journey of five years of academic architectural life, it was quite challenging term of my life. With lots of ups and downs within these years, we have learnt not only architectural education but also learnt how to face practical life. As I always had an interest to work for society development issues; hence, as my thesis topic I preferred to work with orphan children for the betterment of orphans and our society. Furthermore, children are the future asset of our country. A large portion of the population is orphan in our country. Therefore, it is high time to take care of them and should help them to grow up in a secure and friendly environment. I think as an Architect it's our duty to be sensible about them. We have to facilitate them to that extend which is possible for us. If only we can support them to grow up well, only then they can serve our country well.

The project SOS Children's village is a very sensitive topic to work with. Initially I had to put a lot of effort to understand the project and its requirement as it dealt with kids and their innocent childhood. Even the site Barisal was a very conservative area for me to work in. But the uniqueness of the site encouraged me to work in a continuous process.

Last but not least, this paper reflects a process of solution of the project which deals with orphan children. It highlights what would be an acceptable environment for the people who are in need of special care and creating an opportunity to provide them a better space within a space to embrace their life with own identity and hope. Because I believe if these orphan children are nurtured properly and given opportunities, they can be a true asset for the development of our country.

CHAPTER 9

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CHAPTER 10

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