

# REVITALIZING TALAKO AREA: UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION

Talako, Bhaktapur

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## ABSTRACT

Talako, popularly known as pottery square of Bhaktapur is known for its significant cultural vibrancy be it social, traditional and economical. The area is dedicated towards its traditional style of live pottery works and festivities throughout the year. But what used to be a vibrant and likeable area for its housing society and close human connection has fallen to a crumble of deteriorated houses and abandoned buildings and chowks with occupancy fallen to just 26% among the 58 private buildings. Spaces which used to be filled with sundried pottery works are not as functional as it used to be. The lack of functional use of the houses questions the legacy of the traditional pottery and the status of housing society of our traditional Newari settlement. Such a problem of creation of abandoned pockets of spaces is arising all over the traditional Newari settlement in Bhaktapur which is to be addressed.

Hence, this thesis explores the changing landscape of Talako area with its impact on aspects like housing, economy, communal settings before and after the earthquake. It explores the physical and social condition of the tole to devise a better approach to unlock its full potential through urban regeneration. The approach of urban regeneration helps to facilitate the traditional society with efficient spaces for the people to live conveniently. This project aims to make judicious use of the spaces available and leave no space unturned to miss out the vast economic potential the area possess.

The thesis also aims to restore important public buildings and spaces like Dhunge Dhara, Pati and Maths and replan temporary sheds into effective spaces for communal functions. The other public monuments and temples are conserved maintaining the cultural integrity.

In conclusion, this thesis identifies the existing problems in Talako and devises appropriate solutions to them with proposals of adaptive reuse, replanning, conservation and restoration at places required accordingly. The original fabric is preserved giving priority to Newari architecture whilst respecting the by laws.

## DECLARATION

I declare that this dissertation represents my own work/ investigation except where otherwise stated. I hereby give consent for my dissertation, if accepted, to be available for photocopying and understand that any reference to or quotation from my thesis will receive an acknowledgement.

Nistha Awal

May, 2025

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## CHAPTER 1: INTRODUCTION

### 1.1 Site Introduction

Dance The word “Talako” comes from “Tal Danpho” which means hill at top, previously known as Jyatha Tole. Talako is popularly known as “Pottery Square” or “Kuma Twoo”. The tole is located at the southwest of Taumadhi square on the way to Ram Mandir.

The majority of the population are from the “Prajapati or Kuma” caste. The Prajapati's refer to potters clan and hence the tole is filled with pottery works, pottery shops, fire kilns, clay storage, wells and houses that resonate with the occupation. On a daily basis the open spaces are filled with sundried pots and pottery waiting to be fired. The potters are seen actively kneading the clay, shaping the clay into pots, stamping the pots and painting them.

The pottery works look so visually pleasing for any locals and tourists that it draws national and international tourists towards it. The whole works are activities oriented, and hence the tourists are drawn towards the ancient craft of pottery and they can be actively involved in learning the pottery works.

Along with the pottery works, there are other local crafts shops including handicrafts, woodcrafts, traditional dress store by which tourism and local economy is flourished

The area also consists of culturally important monuments like Jetha Ganesh temple, Jetha Ganesh dyochhen, Ikhalachhi math, Dattatraya math, Akhandasheel bahi, Thagina ganesh temple and others. The main square leads branches to streets and nanis which form the basic framework of Talako.

## Revitalizing Talako area: unlocking its full potential through urban regeneration

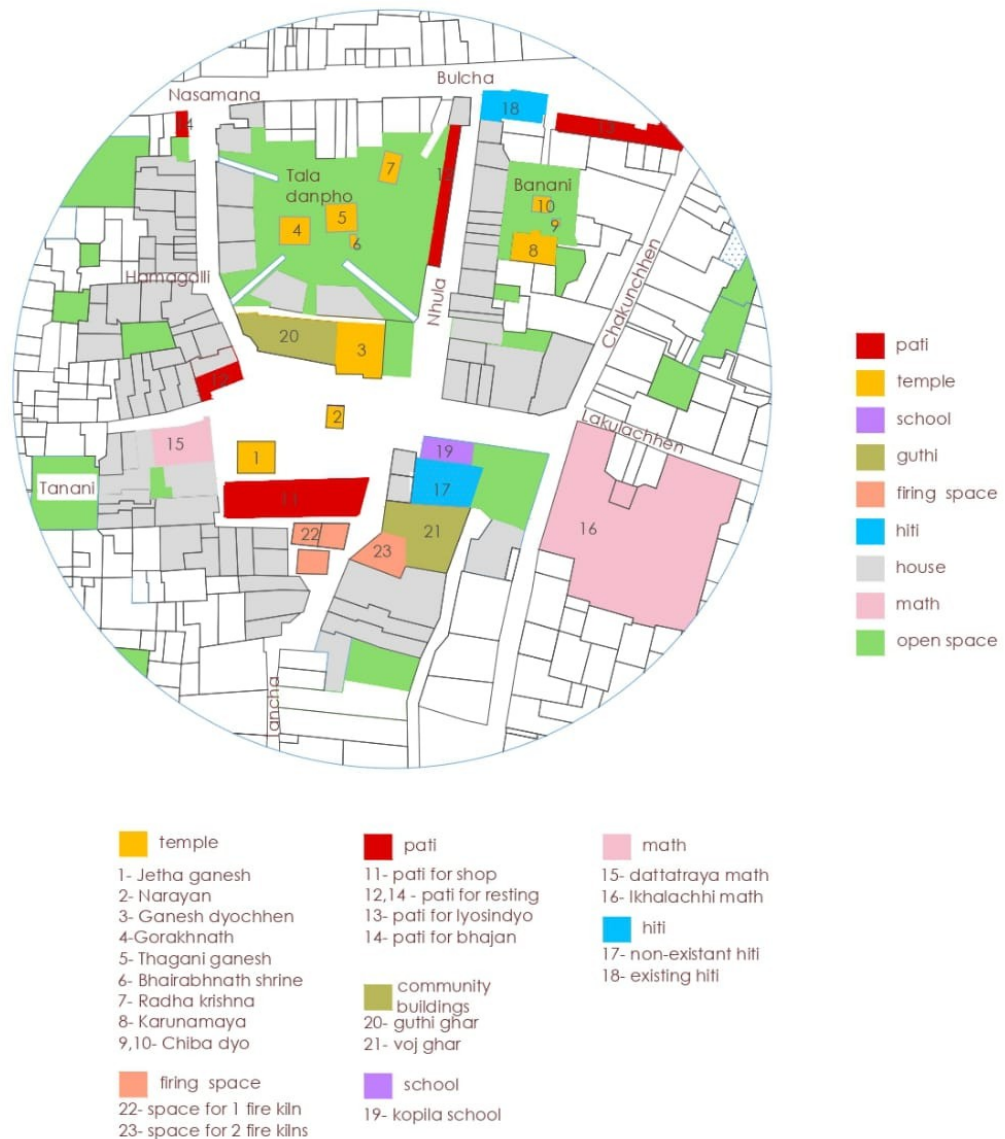


Figure 1: existing map of site

(Source: CAD drawing by author)



### **1.1.2 Talako, myths legend and tradition**

#### The legend of Talako and Tala Danpho

The word “Talako” comes from “Tal Danpho” which means hill at top, previously known as Jyatha Tole. Legend has it that a time came when bad omen was hovering around the area leading to strife and troubles. Upon the local’s inquiry to Jyotish, it was suggested to build a hillock in the tole to improve the Vaastu of the tole. Hence, the locals collected mud from the rivers and compiled the river mud in a huge amount that a hill was created. At the top of the hill, they established “Thagina ganesh” temple, “Gorakhnath” temple and Bhairabhnath shrine. Hence the name of the tole has been re-reestablished since then. “Thagina ganesh” refers to the hindu god “Ganesh” worshipped by the locals of that specific tole before any ritual or ceremony for good luck. The Bhairabhnath stone is placed at a depression in front of the Thagina ganesh temple. It is said that during the times of no rainfall during monsoon, the locals fill the depression with water and bath themselves with the water and chant “Har Har Mahadev”. Neighbors throw water at them from their terraces resembling Holi. This ceremonial act is said to invite rainfall.

#### Talako and Jyatha ganesh

Talako tole is also known as Jyatha tole, as the area is home to the “Jetha ganesh” or Jyatha ganesh, meaning “The senior ganesh” or “The ganesh to be worshipped before beginning any work”. There is also a dyochhen for the tole ganesh. The locals worship the god as their major deity everyday and before starting any rituals, new works, birthdays, festivals and ceremonies.

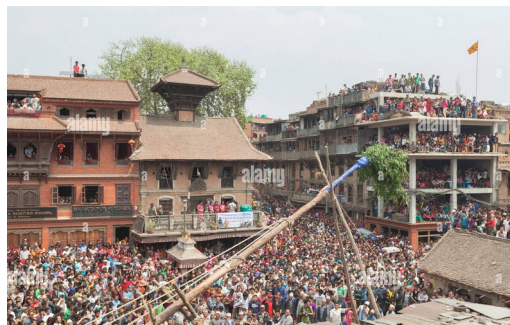
#### Talako and Bisket jatra

The Jetha Ganesh is considered as a higher form of Ganesh, which is why the deity is worshipped by the high priests and jyotish of the Taleju temple. Only after the ganesh is worshipped, the rituals of Bisket jatra can proceed.

Bisket jatra is celebrated greatly at this tole. The “lyosindyo”, a symbolic pole that is raised and grounded at this tole every year to mark the end and beginning of the new year. Talako raises its own “Haat nabhayeko lyosindyo” on the last day of chaitra and grounds it on the 5<sup>th</sup> of Baisakh. It is said that this practice is much older than the jatra of “Haat bhayeko lyosindo” at Lesinkhel, Bhaktapur.

There are other cultural events too, such as the Tipa jatra, To-chahileu jatra happening in Bisket. On 2<sup>nd</sup> of baisakh, To-chahileu jatra (meaning, to orbit the tole) is performed. The chariots of Jetha ganesh and of Bhairabh of a nearby tole; Bulcha are orbitted around the tole and striked together.

On the 3<sup>rd</sup> of Baisakh, the Jetha ganesh is welcomed to “Tanani”, a nearby chowk of the square through procession followed by dhime baja and the locals carrying “ti”, a tiny bamboo incense stick. The same process is followed to bring the deity back to its origin on the next day.



*Figure 2: Lyosindyo jatra*

(Source: <https://www.alamy.com/stock-photo-erection-of-the-pole-in-pottery-square-part-children-version-of-the-104618158.html>)



*Figure 3: To- chahileu*

(Source: by author)

### Talako and Banani

Banani / Akhambahal / Akhandasheel bihar is located the northeastern side of Talako with “Chibadyo” and a temple dedicated to “Karunamaya” deity. It is located in the north-eastern part of the square.

Moreover, it is conjectured that it was first built by the Lichhabi King Narendra deva. He built this Baha for his younger son, who went to become a monk. Also, before the commencement of the Machhindranatha jatra, a set of puja is offered from this Baha.

The baha has a very important cultural significance in Nawadurga culture. Every year, On the day of “Gathamangal” in the month of Shrawan, the Nawadurga, along with the priests arrive at the nani. They perform puja and rituals to collect clay from the nani to prepare new mukundo to use for the following year.



Figure 4: Banani/ Akkhandasheel bihar

(Source: by author)

### Talako and Bel Bibaha

It is a tradition in Bhaktapur to collect traditional pottery (Sallappa, kalash, dewa etc) from the local potters (Prajapati) of Talako square before the ceremony of “Ihi” / “Bel Bibaha”. Bel Bibaha is a Newari tradition of marrying a young girl to Bishnu in the presence of Bel. These pottery pots (Sallappa) are sacred as they are used to carry the Bel fruit during the ceremony. Before collecting the pottery, a puja is performed at the ganesh temple

(Source: Prajapati, J. et al. (2025))

## 1.2 Project Introduction

Since Talako area is a well-established, socially viable, culturally vibrant, economically functional zone of Bhaktapur, this region possesses massive potential towards tourism attraction, mixed use housing, market and community-based facilities. Hence there can be multiple proposals for community enhancement projects.

However, there has been poor management towards regeneration, preservation and restoration works which are to be addressed for the houses, patis, monuments, shops and community facilities. The major problem is the shifting of the families from Talako to other places due to unsafe housing situations and the negative concept of traditional Newari housing to be unfavorable and uncomfortable in comparison to the modern housing situations.

This project aims to unlock the full potential of Talako area in terms of housing, community facilities, economic growth and cultural tourism.

## 1.3 Project Justification

Talako has undergone many such transformation since the passing of earthquake in 2072 BS. The major transformation being the shifting of local residents leaving the deteriorated houses abandoned and unchecked. The monuments and public spaces area also poorly executed for their functions.

Neglect of historic urban centers represent forgone opportunity for economic growth. -Steinberg, F. (2008). *Revitalization of historic inner-city areas in Asia: The potential for urban renewal in Ha Noi, Jakarta, and Manila*. Asian Development Bank. Therefore, it is important to make use of valuable resource of such culturally, socially and religiously important site for a long run. Although there are economic activities running in the area, this is barely enough to sustain an entire community where occupancy is lagging behind. For better regulation of the community, there has to be occupancy in an efficient way. Investment in regeneration fields is a true way of creating a sustainable way of living.

Restoration and conservation of the public monuments and buildings improves the quality of life of the community and maintain the legacy that has been passed by generations.

Therefore, the project proposes to fully unlock its potential which is rather wasted today.

#### **1.4. Project Objectives**

The objectives of the project are:

- To study the present social, economical and physical condition and explore the prospects and potentials of the Talako.
- To identify various problems of the area and address appropriate solutions.
- To maximize the economic possibilities and improve the pottery situation.
- To utilize the unused spaces in public and private zones.
- To preserve the traditional outlook and public monuments.
- To rehabilitate residents in the houses with accommodation of economic opportunities.

#### **1.5 Scope and Limitation**

The project is limited to the particular area of Talako with the area demarcation done within the boundary maintained by the immediate streets that branch out of the main square with its public and private buildings lying at the streets. The site comprises of many such spaces contributing to local and international welfare to flourish tourism. Since it has short distance to Taumadhi and Bhaktapur Durbar Square, it acts as an easy location for tourists to visit to and fro.

#### **1.6 Methodology**

- Primary data collection
  - Questionnaire survey
  - Site survey
  - Documentation
  - Site analysis

- Secondary data collection
  - Literature review
  - Case studies

### 1.6.1 Questionnaire survey

1. House number-
2. House owner name-
3. Type of building: traditional \_\_\_\_ modern \_\_\_\_ mixed \_\_\_\_
4. Number of storey:
5. Structure: load bearing \_\_\_\_ frame \_\_\_\_ mixed \_\_\_\_
6. House usage: Residential \_\_\_\_ commercial \_\_\_\_ office \_\_\_\_ store \_\_\_\_ industrial \_\_\_\_
7. Number of family units:
8. Number of family members:
9. Family members and occupation:
10. House division system (if any): vertical division \_\_\_\_ flat division \_\_\_\_
11. Occupants' classification: local \_\_\_\_ migrant \_\_\_\_ tenant \_\_\_\_

## CHAPTER 2: LITERATURE REVIEW \

### 2.1 Urban Regeneration

#### 2.1.1 Introduction

Urban regeneration is the process of revitalizing and improving urban areas that have experienced economic decline, social issues, or environmental degradation. It involves a combination of redevelopment, economic stimulation, and social transformation to enhance the quality of life, infrastructure, and overall sustainability of a city or neighborhood.

- Redevelopment of old buildings and infrastructure
- Improving public spaces and transportation
- Enhancing economic opportunities through business investment
- Addressing social issues like housing, employment, and crime
- Promoting sustainability and environmental improvements

#### 2.1.2 Areas Of Regeneration

- **Economic regeneration**, as the name implies, focuses on supporting business growth in a community, through initiatives that - among others - aim to promote startups, employment, skills development and earnings growth.
- **Social/cultural regeneration** places the focus squarely on promoting arts and culture, health and wellbeing, education and skills development and families.
- **Environmental regeneration** projects put the focus on land renewal through recovery of derelict land and environmental improvement.

### 2.2 Conservation, Rehabilitation And Redevelopment In Urban Regeneration

These three approaches are essential strategies in urban regeneration, each serving a different purpose in transforming cities and communities.

#### 2.2.1 Conservation

**Definition:** Conservation refers to the protection, maintenance, and management of historical, cultural, or natural assets to ensure their longevity and heritage value.

**Key Aspects:**

- Preserving historic buildings, monuments, and landmarks.
- Maintaining the architectural integrity of heritage sites

### 2.2.2 Rehabilitation

**Definition:** Rehabilitation involves restoring and improving buildings or areas that are in poor condition while retaining their original structure and purpose.

**Key Aspects:**

- Upgrading old buildings to meet modern living or business standards.
- Improving public spaces and infrastructure while keeping the existing urban fabric.
- Ensuring minimal displacement of residents or businesses.

### 2.2.3. Redevelopment

**Definition:** Redevelopment involves demolishing and reconstructing buildings or entire urban areas to create new, modern infrastructure.

**Key Aspects:**

- Replacing outdated or unsafe structures with modern developments.
- Designing new urban layouts to improve functionality and efficiency.

## 2.3 Neighborhood Unit

An area within which residents share the community facilities, engage in social activity as a unit. The immediate physical and social environment around the dwelling units also comprise the neighborhood.

### 2.3.1. Neighborhood character

- Defined Boundaries



- Walkability
- Community Facilities
- Residential Focus Road Hierarchy
- Green Spaces & Public Areas
- Self-Sufficiency

## 2.4 Pottery

**Definition:** Pottery is the process and the products of forming vessels and other objects with clay and other raw materials, which are fired at high temperatures to give them a hard and durable form. Pottery is one of the oldest crafts known to humanity, playing a crucial role in traditional societies across the world. It involves shaping clay into various objects, which are then fired at high temperatures to create durable vessels and artifacts.

### 2.4.1. Process Of Pottery

- Storage of clay
- Clay preparation
- Clay kneading
- Shaping the pottery
- Drying
- Decorating
- Firing
- Cooling and storage
- Storage and display

Storage of clay – Storing in a temperature-controlled environment between 60–80°F. Avoid storing clay in places with extreme temperatures and damp basement. The raw clay should be broken down to smaller particles after mechanical kneading

Clay preparation – The dried clay is soaked with water to make it moist and made into a slurry. It is then poured through a screen and the water off the top is poured. The clay is allowed to dry.

Clay kneading- Clay is repeatedly cut, folded, and pressed to remove air bubbles, achieve a uniform consistency manually or by a machine. Kneading is very important as it helps to make the clay soft.

### Shaping the pottery

- Wheel throwing is a traditional method and it involves pinching technique; (a technique where the potter uses their fingers to squeeze and shape the clay into desired shapes)
- Coiling - Coiling involves creating a coil of clay and then manipulating it into desired shapes.
- Slip Casting - A liquid clay mixture "slip" is poured into a plaster mold, allowing the mold to absorb water from the slip and leaving a solid ceramic layer on the inside of the mold. Then the mold is removed

Drying – Drying pottery piece on a flat surface in a well-ventilated area, away from direct sunlight and drafts is necessary to avoid cracks. Also, regularly rotating the piece to ensure even drying and prevent warping in the sun

- Drying is completed in three stages-
- Plastic stage: The clay is wet and fully workable.
- Leather hard stage: Clay is partially dry, firm enough to handle and carve.
- Bone dry stage: Clay is completely air-dried and ready for kiln firing.

### Decorating

- Slip decoration: Applying a colored clay slip (liquid clay) to the surface with a brush to create designs or patterns.
- Slip trailing: Using a tool to carefully "trail" liquid slip onto the clay, creating lines and intricate details.
- Carving: Cutting into the clay surface to create designs or textures.

- Sgraffito: Scratching through a layer of colored slip to reveal the underlying clay body, creating a contrasting design.
- Stamping: Pressing a textured object into the clay to create repeating patterns.
- Impressing: Using a tool to press designs into the clay while it's still soft.
- Inlaying: Embedding small pieces of colored clay into the surface of the clay body
- Glazing: Applying a glassy coating that melts during firing, adding color and a smooth finish to the pottery.

### Firing

- Traditional open fire - Traditionally, the clay ready to be fired is piled up in layers of wheat husks, rice straw and covered with ashes of fire residue. Holes are provided for smoke flow, and the system is fired with the help of wood. The whole firing process is closely supervised by the potters and the fire is regulated well.
- Intermittent / continuous Fire kiln – The clay is placed inside the Thermal kilns in layers till the maximum capacity and the fuel and wood are provided for firing. The firing could be continuous or intermittent depending upon the type of kiln.
- Electrical fire kiln – electric fire kilns are modern kilns, also called oxidation kilns, usually used in pottery schools or low scale pottery works because of their low capacity and smaller size.

Cooling and storage - When cooling clay after firing in pottery, it's crucial to let the kiln cool down slowly and gradually to prevent cracks or "denting" due to rapid temperature changes; by following the kiln's pre-set cooling schedule, which may vary depending on the clay type and glaze used.

Storage and display – Displaying the pottery is a crucial step for highlighting the craftsmanship and luring the customers. They can be displayed on shelves, hutch displays, well mounted shelves, tabletop displays.

## 2.5 Homestay

**Homestay** is a form of [hospitality](#) and [lodging](#) whereby visitors share a residence with a local of the area (host) to which they are traveling. The length of stay can vary from one night to over a year. Homestays are used by travelers; students who study abroad or participate in student exchange programs; and au pairs, who provide childcare assistance and light household duties. They can be arranged via certain social networking services, online marketplaces, or academic institutions.

Ownership - commonly owned and managed by individuals or families who reside on the premises. The hosts usually live in the same house or nearby, fostering a welcoming and familial ambiance.

Size and scale- Homestays tend to be smaller, featuring a limited number of guest rooms. This intimate setting allows personalized attention and ample opportunities to interact with the hosts

Services and facilities- The facilities can include bed and breakfast, internet, housekeeping with personalized touch of hospitality. The hosts are typically friendly and attentive, offering recommendations for local attractions, dining choices, and activities. They strive to ensure guests have a comfortable and enjoyable stay, often going the extra mile.

Ambience and Decor- homestays exude a cozy and charming ambiance, with distinctive decor and a personal touch. Their objective is to offer a warm and inviting atmosphere, providing guests with a sense of staying in a home away from home.

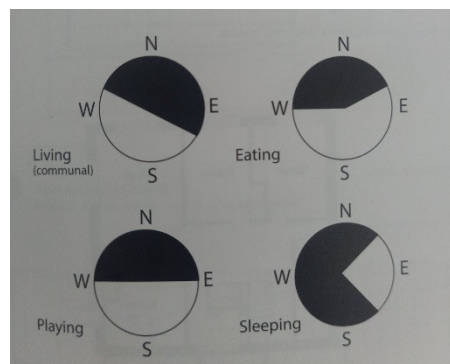


Figure 5:Favorable Room orientation

## Revitalizing Talako area: unlocking its full potential through urban regeneration

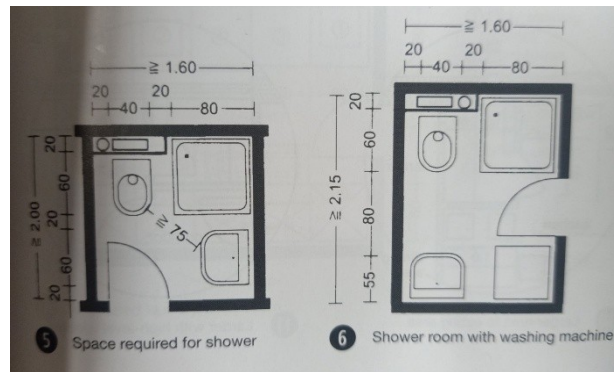


Figure 6: Washroom layout

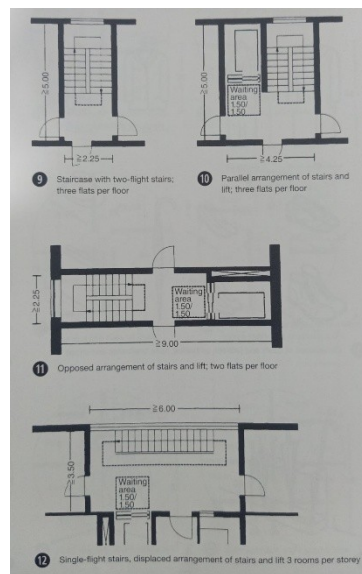


Figure 7: Staircase arrangement

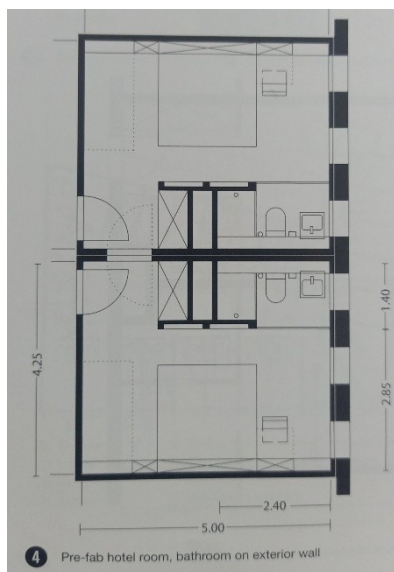


Figure 8: Standard double room dimension

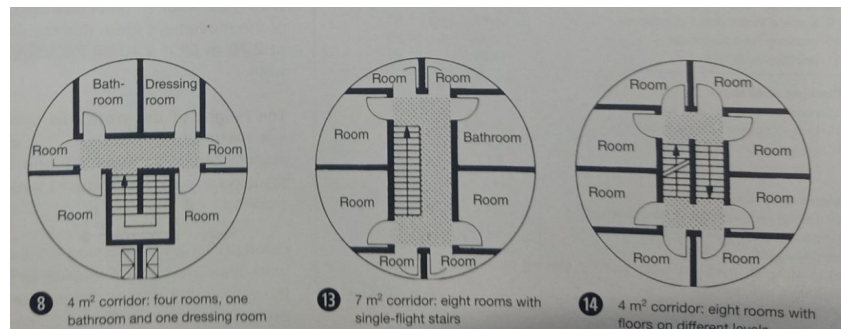


Figure 9: horizontal circulation from staircase to rooms

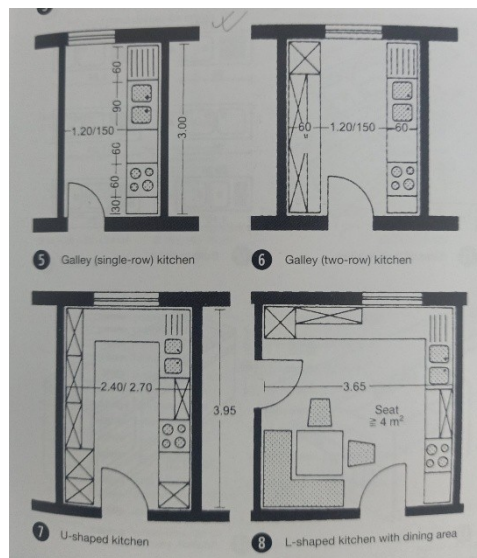


Figure 10: Kitchen layout plan

Source: Neufert, E. (2019). *Architects' data* (5th ed.). Wiley-Blackwell

## 2.6. Art Gallery

**Definition-** An **art gallery** is a space where artworks—such as paintings, sculptures, photographs, and installations—are displayed for public viewing, sale, or exhibition. Galleries can be commercial (selling art), nonprofit, or museum based. There are several cases of adaptive reuse of turning old maths into art galleries and museums. In the case of Pottery square, the gallery can be an exhibitor space for displaying the local culture, pottery artworks, local lifestyle, jatras, festivals, historical photographs, thangka paintings and many more.

### 2.6.1 Spaces Required in an Art Gallery

The layout of an art gallery depends on its purpose, but common spaces include:

## Revitalizing Talako area: unlocking its full potential through urban regeneration

1. **Exhibition Area** – The main space where artworks are displayed. It should have good lighting, neutral walls, and ample space for movement.
2. **Reception/Entrance Area** – A welcoming space where visitors check in, receive information, or purchase tickets.
3. **Storage Room** – A secure area for storing artworks before or after exhibitions.
4. **Office Space** – Used for administrative work, curatorial tasks, and meetings.
5. **Lighting and Display System** – Proper lighting enhances the visual appeal of artworks.
6. **Viewing/Seating Area** – Some galleries include seating for visitors to relax and appreciate the art.
7. **Workshop/Studio (Optional)** – Some galleries have spaces for artists to create or conduct workshops.
8. **Security System** – Essential for protecting valuable artworks.
9. **Café or Gift Shop (Optional)** – Some galleries include a café or a shop selling art-related merchandise.

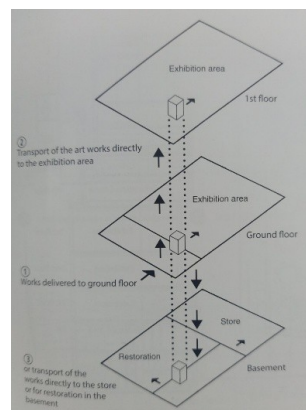


Figure 11: vertical circulation

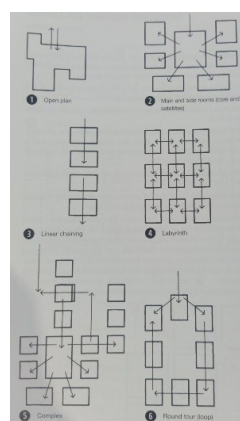


Figure 12: horizontal circulation



## Revitalizing Talako area: unlocking its full potential through urban regeneration

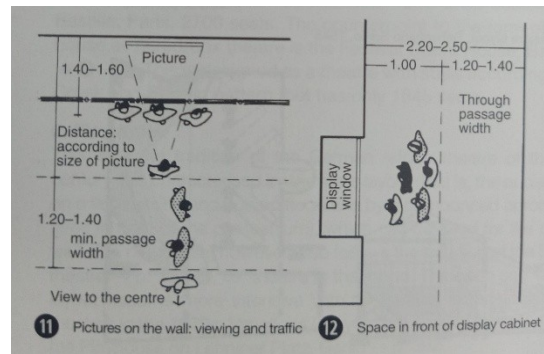


Figure 13: viewing and traffic flow

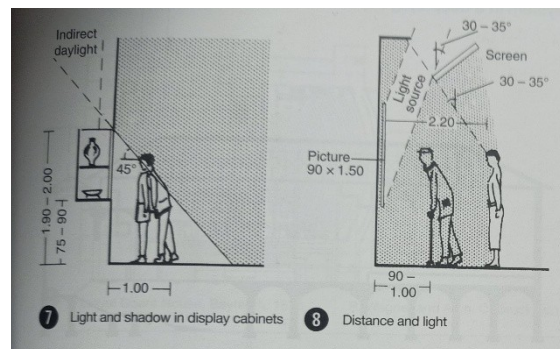


Figure 14: light and shadow arrangement

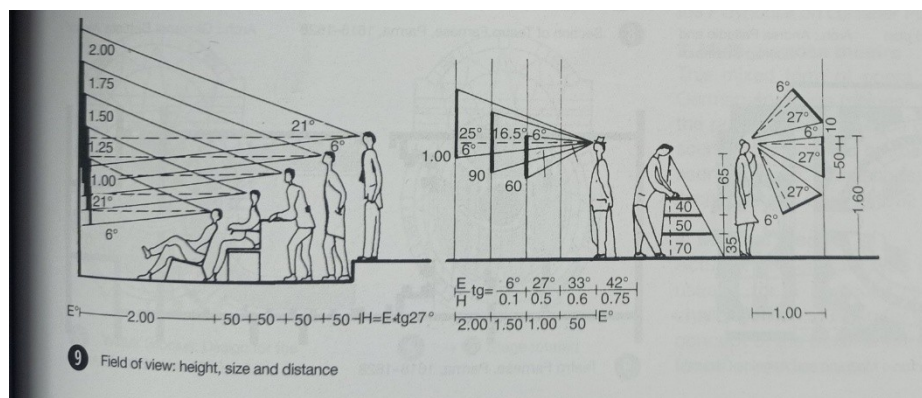


Figure 15: field of view, height and distance

Source: Neufert, E. (2019). *Architects' data* (5th ed.). Wiley-Blackwell



## **CHAPTER 3: CASE STUDIES**

### **3.1 Urban Renewal Of Golmadhi**

#### **3.1.1 Introduction**

This is a thesis project by Ar. Neeru Shilpakar, batch 067 of Khwopa engineering college, affiliated by Purbanchal University. The thesis is on the study of the existing situation of the traditional residential quarter of Golmadi, Bhaktapur, prioritizing the damaged buildings from earthquake and poor living condition from insufficient space, vertical and horizontal divisions. It proposes a solution to enhance the quality of the living environment through urban regeneration.

#### **3.1.2 Site brief**

- Location- Golmadi-07, Bhaktapur
- Zoning- Purano Nagar chhetra
- Site area- 6593.36 sq.m. (12-15-1-1.8)
- Number of dwellings- 104t
- Total population- 905
- Built up area- 50.78%
- Open space- 49.22%

#### **3.1.3 Problems faced in the urban block**

- Physical damage to buildings after earthquake 32% completely damaged, 46% partial damaged
- Lack of occupancy – 50.965 vacant homes
- Unsafe living scenario from physically and structurally Vulnerable buildings, streets and chowks.
- Insufficient lighting and ventilation from congested planning and addition of floors.
- Inadequate frontage and ground coverage area; 70 % houses having frontage<2.4m and area <32 sq.m.

### 3.1.4. Objectives

- Explore the historical and cultural importance of the site and explore the potential of redevelopment
- Revitalize proper built form for residential area, so that socio-cultural value as well as the historical background will be maintained.
- Maintain community spaces and townscape of the area.

### 3.1.5 Concept development

Conservational aspects:

- Preservation – physical elements; temple pati dyochhen, jatra route, courtyard
- Facade restoration - limiting the skyline, restoring the original facade
- Remodeling of dwellings –remodeling some backyard, kiba, saga
- Redevelopment – plot readjustment
- Adaptive reuse - reusing houses as guest houses, community spaces,

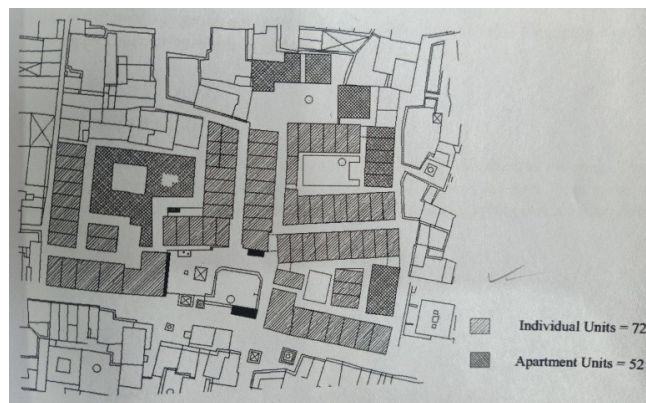
### 3.1.6. Master plan features

- **Cluster features-** nani/pikhalakhi is maintained so that original residents are accommodated in the same cluster, just the resizing of the courtyard is done to admit direct sunlight
- **Commercial activities-** commercial activities at the ground floor of the buildings in the main street, addition of shops in first floor
- **Tourist route-** tourist pedestrian friendly route from Golmadhi to Yachhen with local market and carpentry
- **Emergency services-** widening of the existing lanes and interconnection between courtyards for alternate access points
- **Community services-**community center has been proposed at the chowk.
- **Zoning concept** – allocation of zones for: residential area, production area, commercial area, pedestrian friendly area

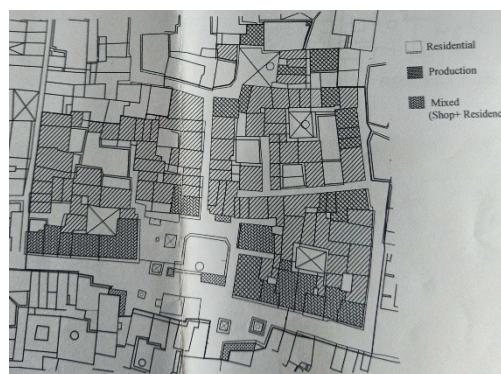
### 3.1.7. Outcomes



*Figure 16: Existing community cluster*

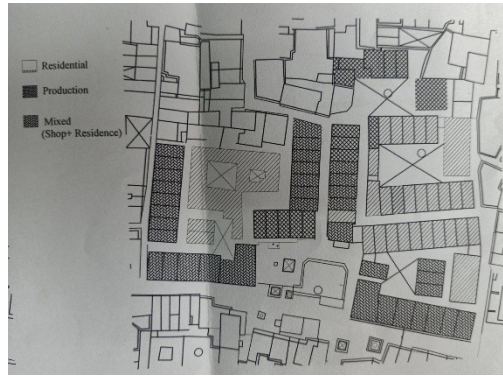


*Figure 17: Renewal plan building footprint*

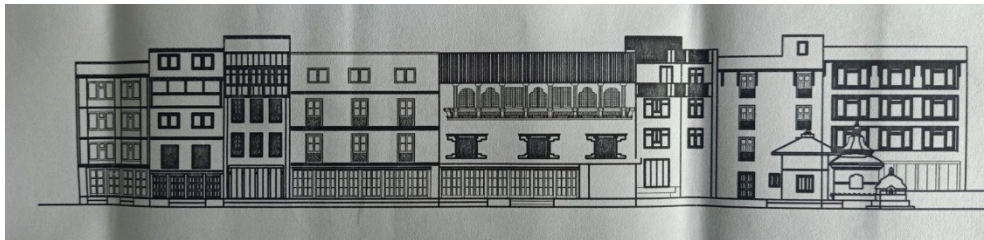


*Figure 18: Existing building use*

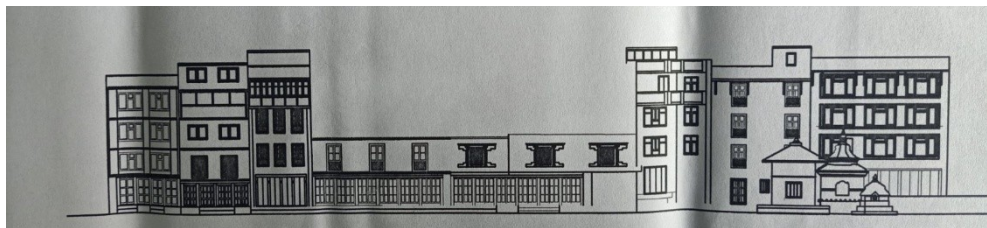
## Revitalizing Talako area: unlocking its full potential through urban regeneration



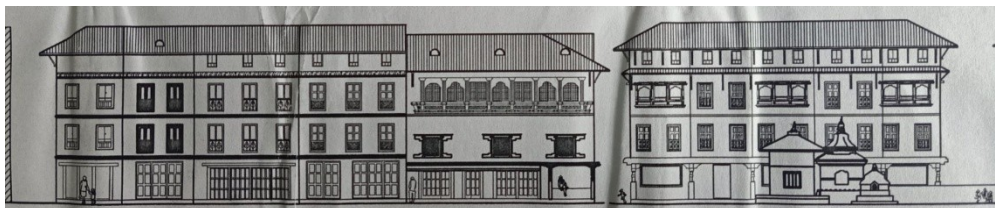
*Figure 19:Proposed building use*



*Figure 20:Street elevation before earthquake*



*Figure 21:..Street elevation after earthquake*



*Figure 22. Proposed Street elevation*

## Revitalizing Talako area: unlocking its full potential through urban regeneration

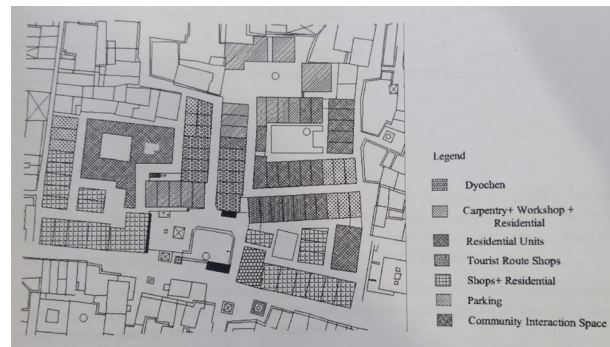


Figure 23: Proposed Zoning of Golmadhi

### 3.1.8. Comparative Study

Table 1: Built up, ground coverage and open area

	existing	proposed
Ground coverage	3347 sq.m.	3224 sq.m.
Open space	3245 sq.m.	3368 sq.m.
Total built up area	15065 sq.m.	12899 sq.m.
Total livable area		6621.31 sq.m.

Table 2: Family unit and population

	existing	proposed
No. of dwelling units	104	124
No. Of family units	104	
Total population	914	

Table 3: Services and accommodation

Services	existing	proposed
Residence	6856 sq.m.	7977 sq.m.
Shops	490 sq.m.	1050 sq.m.
Offices	22.51 sq.m.	57 sq.m.
Parking		294 sq.m.
Production area		389 sq.m.
Community hall		97 sq.m.
Library		23 sq.m.

Source: Shilpakar, N. (2016). Urban renewal of Golmadhi (Unpublished bachelor's thesis). Purbanchal University

## 3.2 Conservation And Redevelopment Of Asan

### 3.2.1 Introduction

Thesis project by Ar. Sushamna Shrestha, batch 066 of Khwopa engineering college, affiliated by Purbanchal University. The thesis aims to redevelop the ancient Ason, by catering to the aspect of modernization and functionality while still retaining the cultural integrity of the area to create a thriving, livable, breathable and friendly space. Conservation of the rich culture, the sentiments of the Nepalese people and architecture of the area of Asan while fulfilling the modern needs of the residents to make Asan an example of functionality and cultural essence packaged in one area.

### **3.2.2 Site brief**

- Location- Asan chowk, Kathmandu-27,30
- Zoning- Preserved cultural heritage subzone , mixed old residential subzone
- Site area- 7.4 ropani
- Number of plots- 102
- Number of buildings- 75
- Total number of household – 43
- Total number of residents- 186
- Built up area- 3.68 ropani
- Open space- 3.84 ropanis

### **3.2.3. Problems faced in the urban block**

- Haphazardly placed vendor stalls, mismanagement and clash of different activities
- Crowded pedestrian street and traffic
- Overbearing tall buildings transforming from the traditional newari architecture that ignore by laws.
- Problems of sunlight and ventilation in inner courtyards





Figure 24: Existing open space usage

### 3.2.4 Objectives

Study the present state of Asan chowk and its immediate surroundings.

- Identify various services available and the problems of the area.
- Lessen the traffic and service overload of main chowk by utilizing the surrounding courtyards
- Follow the traditional newari outlook and preserve the original fabric.

### 3.2.5 Concept development:

Conservational aspects:

- Conservation- preserve structures of religious, social values such as temples, chaityas, dabalis and sattal
- Rehabilitation of residents- adjust the existing commercial activities into the proposed development plan, accommodate the family units living there at present.
- Redevelopment- redevelopment of surrounding buildings to provide appropriate solutions to existing problems in the area.

### 3.2.6 Master plan features

- **Cluster features-** redesigning the chowks and houses by following the bylaws with height restriction to 45'
- **Commercial activities-** commercial activities at the ground floor of the buildings in the main street facing the inner courtyards which can minimize the crowd at the main street
- **Emergency services-** widening of the existing lanes and interconnection between courtyards for alternate access points
- **Community services-**ground floor portion of some of the blocks facing the main street to house patis, bhajan areas, information centers and police booth.
- **Zoning concept** – street shops moved to certain courtyards specifically such that market space for vegetables and utensil or clothes or others are segregated.

### 3.2.7 Outcomes



*Figure 25:Proposed basement plan use*



*Figure 26:Proposed ground floor plan use*



## Revitalizing Talako area: unlocking its full potential through urban regeneration

Table 4: floor usage with number of spaces

Basement floor usage	Number	Ground floor usage	Number
store	120	grocery	15
Bike parking	120	puja	11
		oil	16
		tea/spice/seeds	13
		utensils	14
		sweets	3
		cosmetics	7
		Vegetable stalls	36
		Fruit stalls	24
		ATM	2

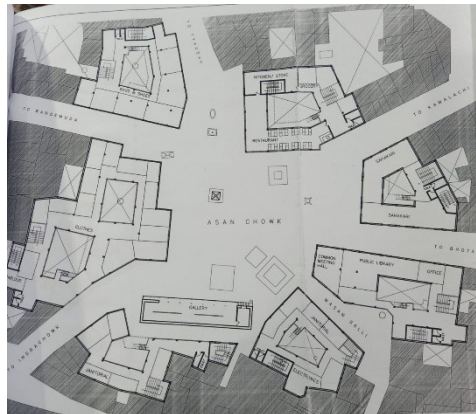


Figure 27: Proposed first floor plan use



Figure 28: Proposed second & third floor plan use

Table 5: floor usage with number of spaces

first floor usage	Number	second & third floor usage	Number
Electronic shops	2	1 BHK	10

## Revitalizing Talako area: unlocking its full potential through urban regeneration

Janitorial shops	9	2 BHK	12
Parlour	2	3 BHK	22
Clothes shop	14	4 BHK	4
Bags & shoes shop	8	Total	48
Grocery shop	3		
Gallery	1		
sahakari	2		
Meeting hall	1		
Public library	1		
Management office	2		

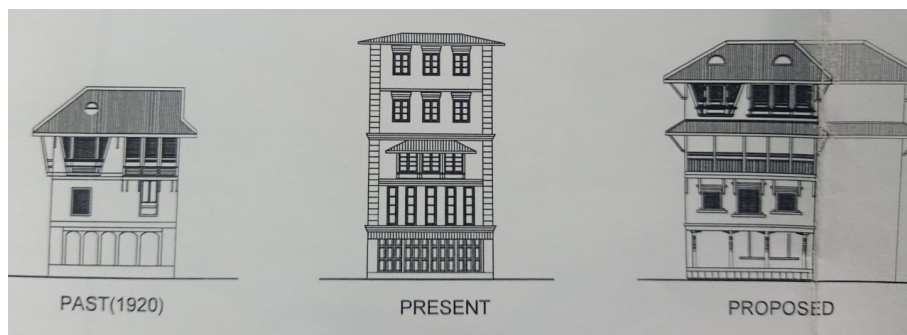
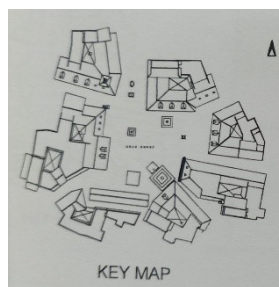


Figure 29: Facade portion between Bhotahiti and Masan Galli



Figure 30: Facade portion between Tyudaha and Kamalakshi

### 3.2.8 Comparative study

Table 6: Built up, ground coverage and open area

	<b>existing</b>	<b>proposed</b>
Ground coverage	1849 sq.m.	1660 sq.m.
Open space	1934 sq.m.	2115 sq.m.
Total built up area	8873.31 sq.m.	7225 sq.m.’
Total site area	3784.33 sq.m	3784.33 sq.m

Table 7: residents and percentage

<b>residents</b>	<b>units</b>	<b>percentage</b>
owner	33	76.75%
rented	10	23.25%
total	43	100%

Table 8: Family distribution chart

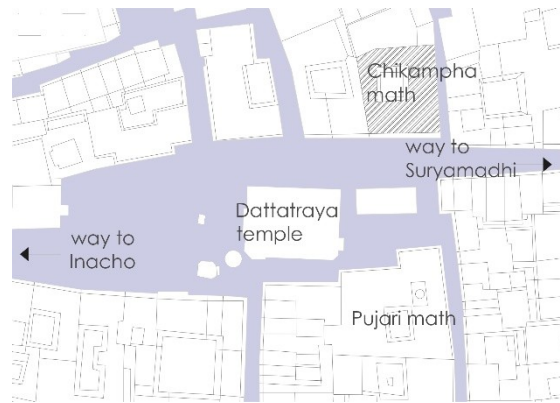
<b>Units</b>	<b>existing</b>			<b>proposed</b>		
	<b>Number of units</b>	<b>Family members</b>	<b>Population</b>	<b>Number of units</b>	<b>Family members</b>	<b>Population</b>
1 BHK	9	1-2	14	10	2	20
2 BHK	10	3-4	37	12	4	48
3 BHK	20	5-6	103	22	6	132
4 BHK	4	7-8	32	4	8	32
Total	43		186	48		232

Source: Shresth, S. (2015). Conservation and Redevelopment of Asan(Unpublished bachelor’s thesis).  
Purbanchal University

## 3.3 Chikampha Math

### 3.3.1 Introduction

Chikampha math, also known as “The museum of brass and bronze”. It is located at Tachapal tole/ Dattatraya square, Bhaktapur, and is situated opposite to the Pujari math. The math, turned to museum is filled with ancient exemplars just like the other museum is. But, it significantly has preserved the traditional utensils of different eras including the ceremonial lamps as well as the ritual vessels, which meant to make it one unique museum from others.



*Figure 31: Location map*



*Figure 32. Chikampha math*

*(Source: by author)*

### 3.3.2 Contents

It is also known as Nepal's statueless art museum. There are no statues but rather this section showcases brass and bronze metal ware that were extensively used by nobility and their Newar subjects in the previous century and early 20th century. Objects used for religious purposes such as kalash and incense stands are noteworthy. Of much interest are the spittoons used by kings and other noblemen. Religious and ritual objects of the Newar community make up the bulk of the exhibition here.

## Revitalizing Talako area: unlocking its full potential through urban regeneration



Figure 33:Inkpot / masi bhado



Figure 34:Hukka



Figure 35:matathala / kerosene lamp

*(Source: by author)*

### 3.3.3 Plan

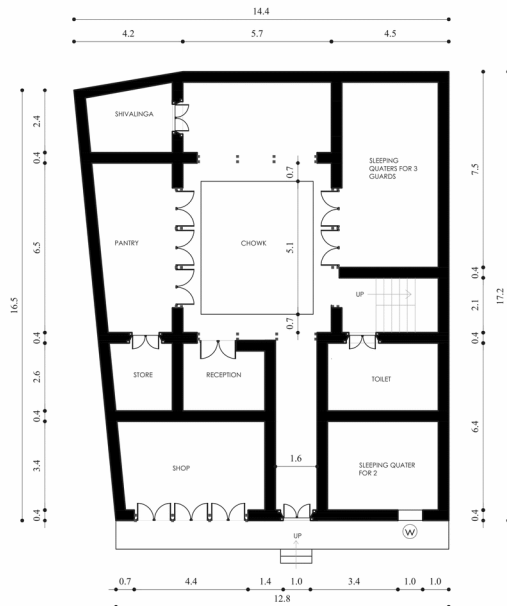


Figure 37: first floor plan

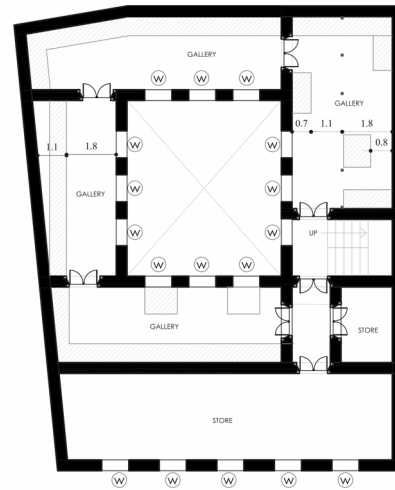


Figure 36: Ground floor plan of math

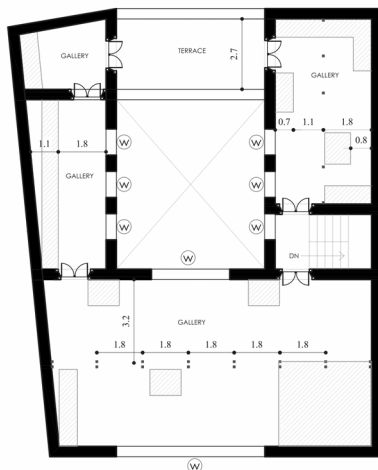


Figure 39: second floor plan

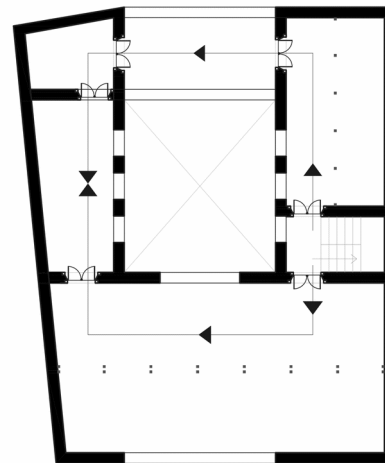


Figure 38: tour loop layout

(Source: by author)



### 3.4 Pottery Training Center, Bhaktapur

#### 3.4.1 Introduction

The pottery training center is a family run pottery workshop and showroom located at Pottery square, Bhaktapur. It is run by potters Sajan Prajapati and his brother with 6 other staff who belong to the same Tole. The training center is an example for local business to maintain public relations through exposure from its showroom and expands its business approach through a segregated and vast training studios.

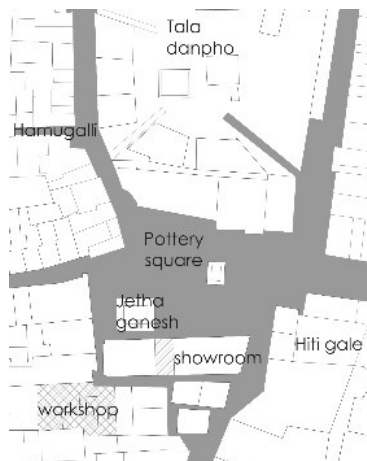


Figure 40: Map showing the showroom and workshop of the training center

(Source: CAD drawing by author)

#### 3.4.2 The showroom

The training center is divided into two parts; The main showroom is located at the pasal/ pati at the south of Jetha ganesh temple and the workshop is located behind the pati, at Sajan's own residence. However, the showroom at the pati has one wheel for pottery making. This invites short-term customers for an hour or two. This is where tourists or local tourists can come and engage in pottery works. They can also buy pottery works from the showroom. They can also inquire about training classes and photoshoots.



Figure 41: pottery training center

(Source: by author)

### 3.4.3 The workshop

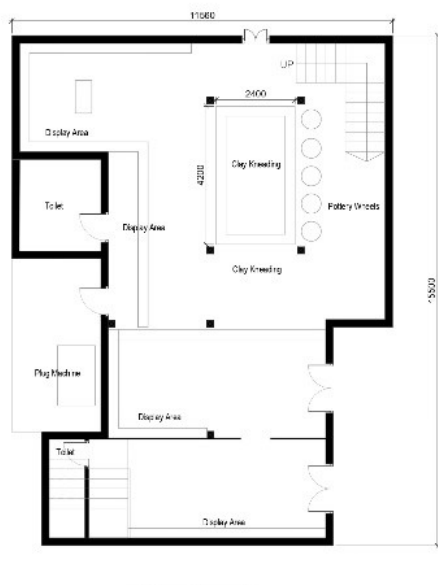


Figure 43: ground floor plan of workshop

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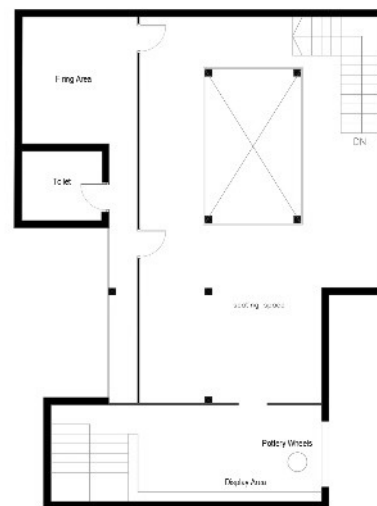


Figure 42:: first floor plan of workshop

drawing by author)

## 3.5 Swotha & The inn

### 3.5.1 Introduction

Although separate entities, Swotha & The Inn are two boutique hotels close to each other at the same location, both being built from adaptive reuse and designed by a common conservation architect, Ar. Rohit Ranjitkar. They are located at Swotha galli ,Patan . This complex presents an analysis of the conservation and adaptive reuse of two private houses in Swotha, Patan.



### **3.5.2 Project Overview**

The renovation of the two buildings, which began in November 2011, retains their historical aesthetics while adapting them for modern use. The external facades are conserved, with cement plaster removed to expose the indigenous brickwork. The back walls retain their original mud plaster, while the internal partitions have been redesigned to optimize space for new functions. Although cement mortar is used for structural integrity, the walls will be finished with traditional mud-based plaster to maintain authenticity.

### **3.5.3 Functional Transformation**

The renovation project converts the buildings into a guesthouse, merging operationally with the adjacent Traditional Homes-Swotha. While the ownership of these two buildings remains distinct, the three structures will share a courtyard and common facilities, reducing operational costs while enhancing service capacity. The new facility functions as a boutique apartment hotel, preserving its identity as a heritage property despite its commercial use.

The east wing under renovation accommodate two rooms per floor, with a suite on the top floor featuring a private balcony. Modern materials are used discreetly for waterproofing, accommodating essential utilities such as water tanks and solar heaters.

## **3.6 Homestays in Talako of Bhaktapur**

Homestays in Talako of Bhaktapur are built from repurposing of their old traditional houses with some changes done to them to accommodate washrooms, kitchen, restaurants and lobby spaces. They offer cozy rooms, internet access, breakfast, food, often cooked by the family members and hotel staff. At any local festival, guests are welcome to join the family and community. The guests are advised to experience the pottery, local culture, jatra, and food of the community during their stay. Many guests arrive at the homestays specifically to learn pottery and handicraft works in the community.

For data collection, homestays of Talako were studied, namely; **Subha Guest House, Cozy Hotel and Hotel Rupakot** were visited. Upon my study at these three of the homestays at Talako, Bhaktapur, I have collected the given data:

*Table 9: Homestays at Talako*

<b>Homestay</b>	<b>Owner</b>	<b>No. of staffs</b>	<b>No. of guest rooms</b>	<b>Occupancy during season</b>	<b>Ground floor use</b>
Subha Guest house	Mohan Prajapati	1 Receptionist 1 Chef 1 housekeeping	9	80%	Handicraft shop, storage, reception, staffroom
Cozy hotel	Binod Prajapati	1 service 2 barista 1 receptionist 2 chef 2 housekeeping	18	70%	Cafe, pashmina shop, reception
Hotel Rupakot	Roshan Moktan	2 waiter 2 chefs 1 receptionist 1 housekeeping	10	90-100%	Restaurant, kitchen, reception

### **3.7. Kota Tua, Jakarta**

Kota Tua, Jakarta's historic district, features colonial-era heritage sites that support tourism and the economy. However, poor infrastructure has led to its decline. To address this, the city government launched a development plan to restore its vibrancy, improve living standards, and boost economic growth.

#### **3.7.1 Background**

Kota Tua, originally a key trading port in the 14th century, became a major center under Portuguese and later Dutch rule, evolving into Batavia, the capital of the Dutch East Indies. By the 19th century, Batavia declined, leading to the development of a new city center, Weltevreden. After World War II, Jakarta became Indonesia's capital, but Kota Tua continued to deteriorate due to neglect, illegal structures, and poor infrastructure. Revitalization efforts began in 1974, focusing on heritage preservation and tourism, but challenges persisted. In 2014, the city government

introduced the Kota Tua master plan to restore and develop the area as a cultural heritage site.

### 3.7.2 Implementation

- **Revitalization Initiated (2005)** – The city government launched a program to restore Kota Tua.
- **Tourism Boost (2011)** – Declared a national tourism destination by the Ministry of Tourism.
- **Master Plan Implementation (2014)** – Conservation and revitalization efforts intensified.
- **Public Space Transformation**
  - **Kalijodo Redevelopment** – Former red-light district converted into a family-friendly park with a skate park, playground, mosque, and food court.
  - **Inclusive Approach** – Local residents were engaged, and affected individuals received housing compensation and vocational training.
- **Improved Accessibility**
  - **Fatahillah Square Pedestrianization** – Cars and motorcycles banned, making it tourist-friendly.
  - **Unresolved Challenges** – Illegal parking, street vendors, and pedestrian connectivity issues persist.
- **Infrastructure Improvements** – Focus on traffic management, water supply, and waste management.

#### 2.6.3 Result

The revitalization of Kota Tua has led to the refurbishment of historic buildings and active cultural preservation. Infrastructure improvements and inclusive public spaces, like Kalijodo, have increased resident and visitor satisfaction. Tourism is growing, with more visitors and new businesses opening. The application for UNESCO World Heritage status reflects broad recognition of its cultural significance.

### 3.7.3 Challenges

- Heritage Buildings at Risk – 281 registered heritage buildings, many in poor condition.
- Ownership Split – 50% publicly owned (Jakarta city: 2%, Indonesian state/state-owned: 48%), 50% privately owned.
- Funding Constraints – The city lacks sufficient financial resources for conservation
- Limited Private Investment – Preservation orders and poor infrastructure deter investors.

## CHAPTER 4: SITE ANALYSIS

### 4.1 Site Introduction

The site is in Talako “तालाको”, Bhaktapur — popularly known as 'Pottery Square' and locally referred to as 'Jetha Ganesh Tole', named after the temple of Jetha Ganesh, the most senior form of Lord Ganesh in Bhaktapur. The site is classified as part of the 'Purano Nagar Chhetra' category. The spatial extent of the site is as follows:

Total site area = 6180.73 sq.m (12-2-1-2.3)

Open space area= 2541.24 sq.m

Total built up area= 3629.49 sq.m

Site surrounding= Taumadhi square to its Northeast

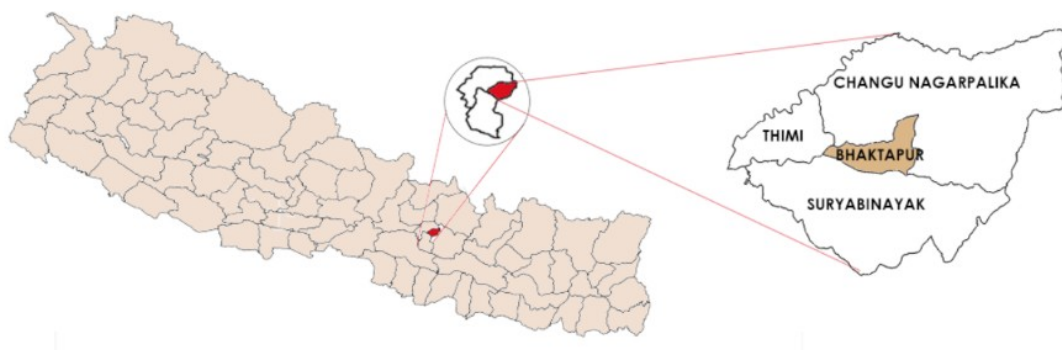
Nasamana to its Northwest,

Ram Mandir to its South,

Mangalachhen to its West

Bulcha to its North

### 4.2 Location Map



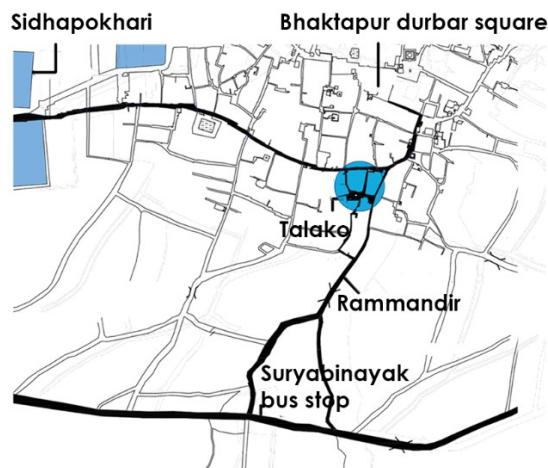


Figure 44: access route to Talako

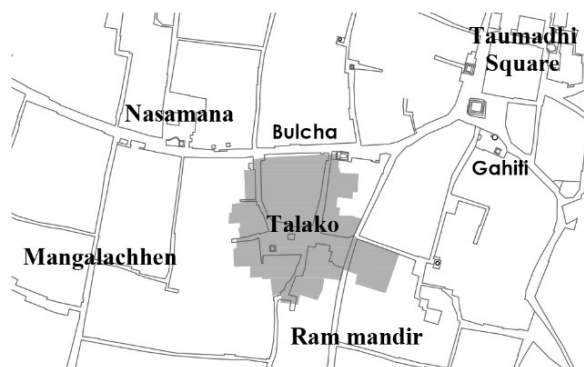


Figure 45: Neighboring places of Talako

(Source: CAD drawing by author)

### 4.3 Access

Talako is accessible by both vehicular and pedestrian routes. It is located near Taumadhi Square, a popular tourist hub home to the iconic Nyatapola Temple and Bhairabnath Temple. The site is just a 2–3 minute walk southwest of Taumadhi Square and approximately a 5-minute walk from Bhaktapur Durbar Square.

Key direct vehicular access routes include:

- From Suryabinayak Bus Stop to Talako
- From Siddhapokhari Bus Stop to Talako

With multiple access points, the site is easily reachable for both local and international tourists. It also serves as a convenient starting point for visitors to explore nearby attractions such as Bhaktapur Durbar Square and Taumadhi Square.

#### 4.4 Physical structure of site

Total number of documented private houses = 58



■ Documented public buildings    ■ Documented private houses

Figure 46: Map Showing documented buildings



■ Open space    ■ Built form    ■ Street    ■ Drainage

Figure 47: Street map of site



Figure 48: Map Showing vehicular access route at site



Figure 49: Map Showing Jatra route at site



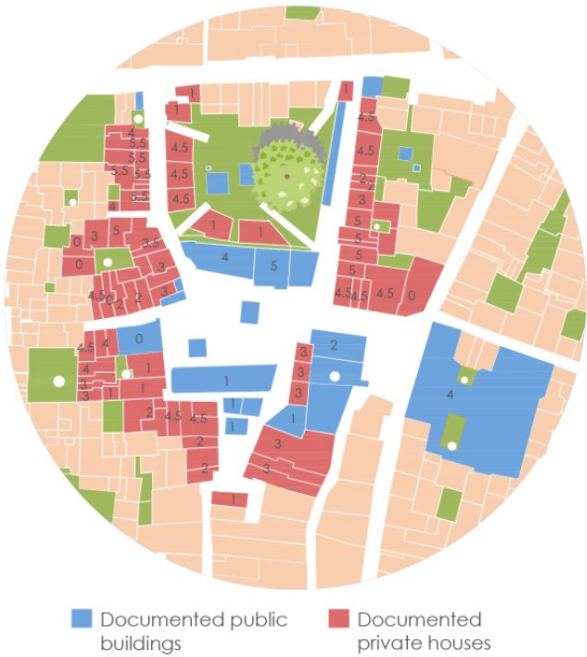


Figure 50: Map Showing number of storey of buildings at site

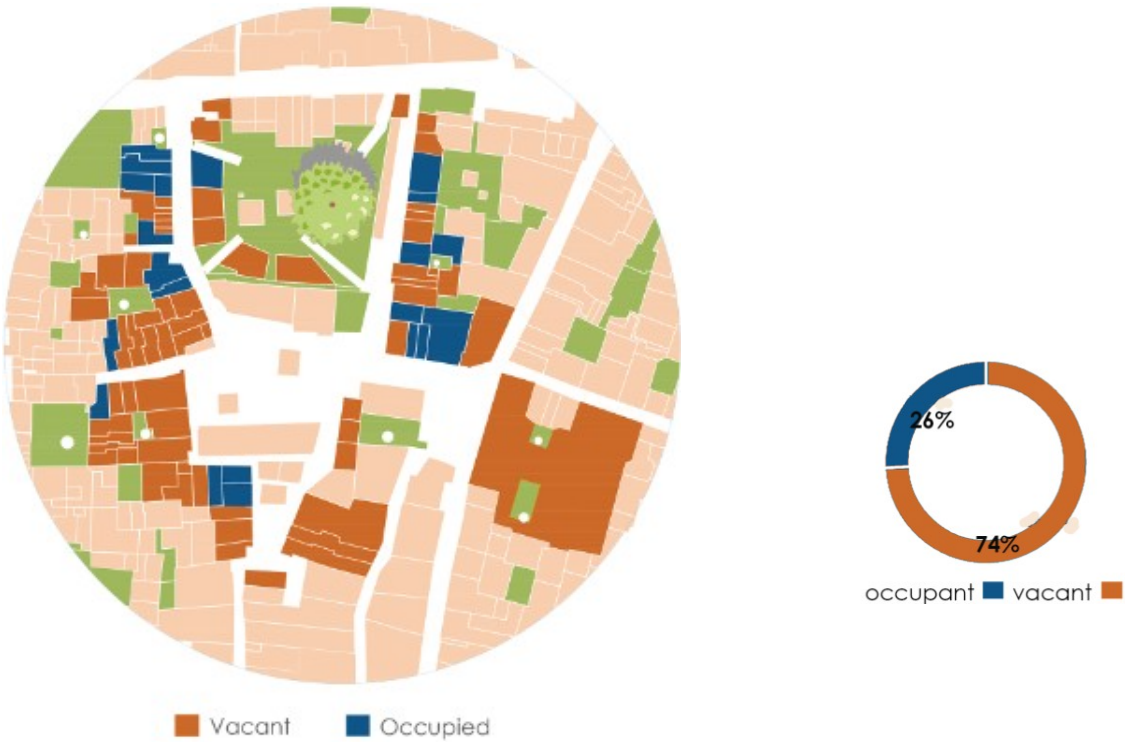


Figure 51: Map showing Occupancy of buildings





Figure 52:Map showing style of buildings at site



Figure 53:Map Showing building use at site

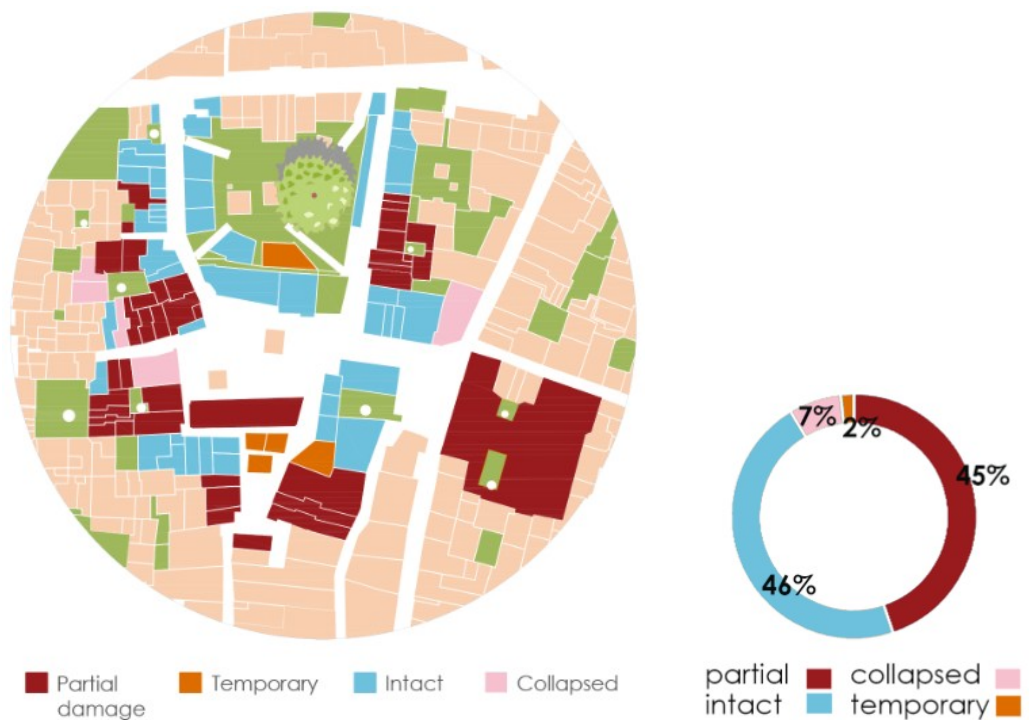


Figure 54: Map Showing state of buildings at site

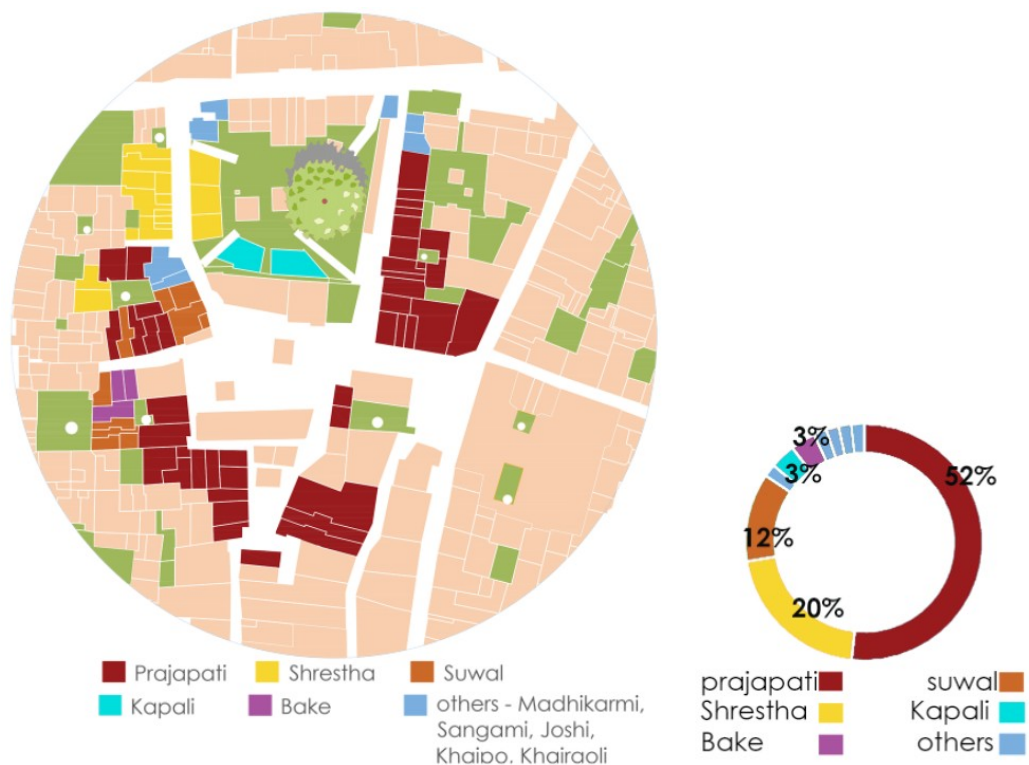


Figure 55: Map Showing caste of residents at site



Figure 56: Map Showing ground floor use of buildings at site

#### 4.5 Weather analysis of site

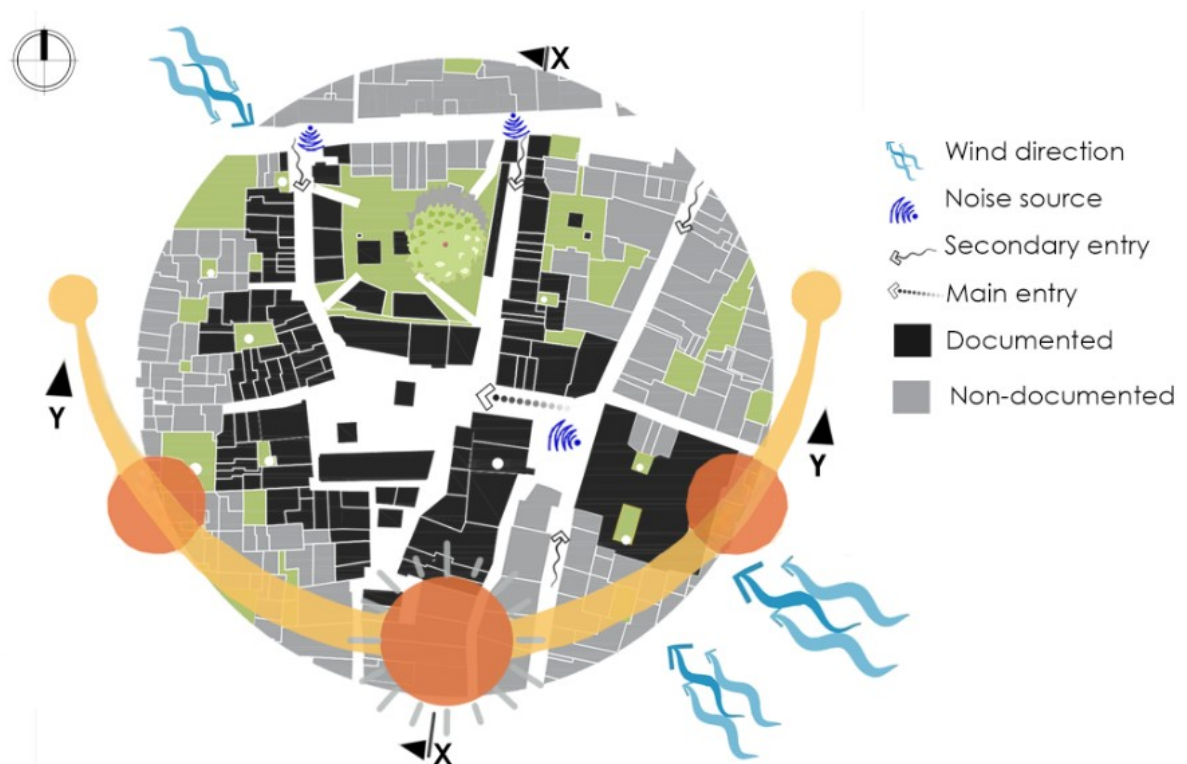


Figure 57: sunpath and wind path diagram of site

## Revitalizing Talako area: unlocking its full potential through urban regeneration

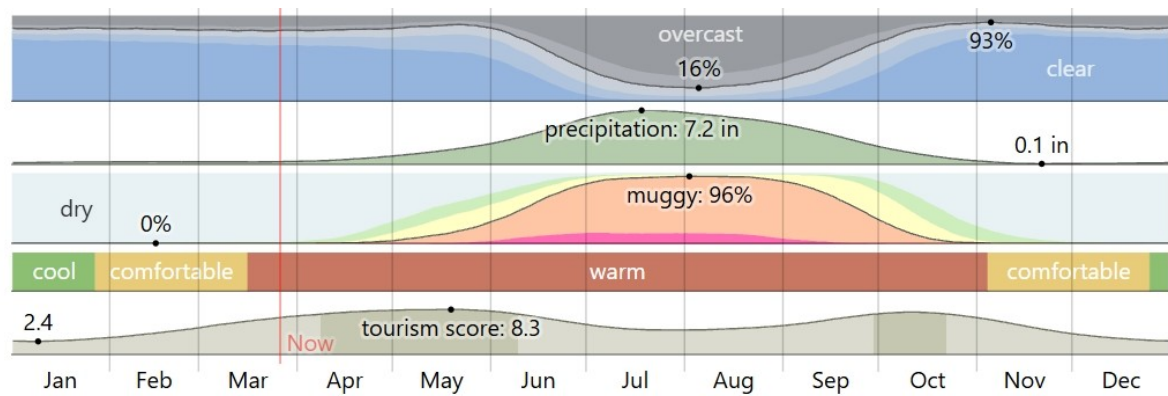
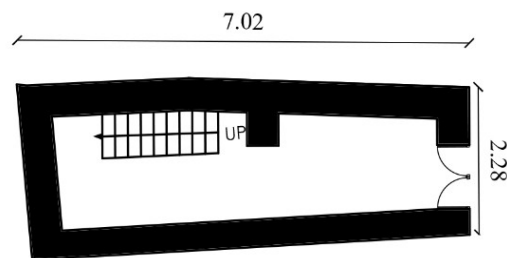
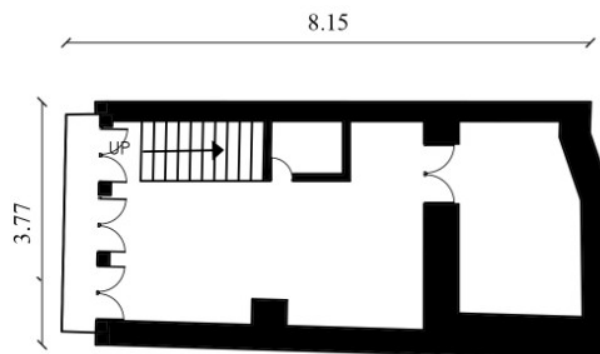


Figure 58: Overall weather chart of site

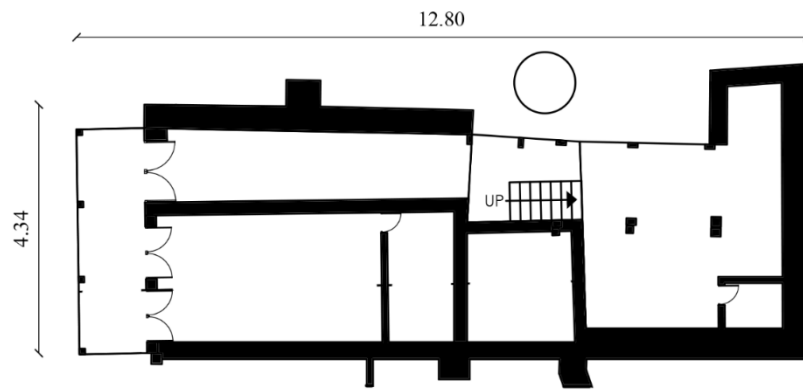
### 4.6 Physical Condition Of The Buildings



House 21, Frontage= 2.28 m, Area= 17 sq.m.



House 8, Frontage= 3.77 m, Area= 29.5 sq.m.



House 7, Frontage= 4.34 m, Area= 56 sq.m.

#### 4.7 Data from survey

##### TOTAL POPULATION

Before earthquake	After earthquake
288	64

##### PLOT SIZE FRONTAGE

Plot frontage	Number of dwellings	In percentage
<2.4m	4	7%
2.4-5m	31	53%
5m	23	40%

##### PLOT SIZE AREA

Plot area	Number of dwellings	in percentage
>32 sq.m	22	37%
<32 sq.m	36	63%

##### PLOT SIZE AREA & FRONTAGE

Minimum plot frontage and area	Number of dwellings	in percentage
<2.4m	4	7%
2.4-5m (<32 sq. m)	29	50%
2.4-5m (>32 sq. m)	2	3%
>5m (<32 sq.m)	5	9%

>5m (>32 sq.m)

18

31%

## **4.8 SWOT analysis**

### **4.8.1 STRENGTH**

- strong community of traditional newari society
- rich historical and cultural background
- tourist attraction center
- living traditions and culture
- presence of nanis, chowks for light and ventilation
- active functional use of wells, patis, fire kiln
- active guthi system for renovating Dyochhen, guthi ghar and temples

### **4.8.2 WEAKNESS**

- long term exposure to smoke from fire kilns
- lack of occupancy as residency
- high amount of abandoned houses due to physical damage
- shared wall system hinders in reconstruction works

### **4.8.3 OPPORTUNITY**

- reconstruction and rehabilitation of damaged buildings
- redevelopment of the damaged houses as mixed use buildings.
- emerge spaces for tourist hospitality
- create oportunities for expanding pottery business
- improvement of firing system in the community
- repurpose of Maths into public / semi public spaces
- reconstruction of school into pati

Revitalizing Talako area: unlocking its full potential through urban regeneration

-provision of community buildings for co-operatives and finance,community office

-restoration of patis

-improvement of Taal danpho as park

#### **4.8.4 THREAT**

-physically damaged buildings and patis possess huge risk of collapse from future earthquakes

-possibilities of further vertical division, which has been a huge cause of unoccupancy in the buildings

-growth of pockets of abandoned chowks and buildings

#### **4.9 By laws**

##### **Ground coverage**

For area  $\leq 0-2-2-0$ , 90% ground coverage

For area  $> 0-2-2-0$ , 80% ground coverage

For reconstruction, 100% ground coverage

##### **Setback**

For new construction, setback of building from road= 1m

Setback for openings= 1.5 m

##### **Plinth**

Maximum plinth height= 1'-1'6''

##### **Floor height**

Maximum floor height for ground floor = 9'

Maximum floor height for upper floors = 8'6''

Maximum floor height for slope roof = 8'

### **Peti**

Maximum Height = 0.5-0.6

Maximum Width = 0.6m

In case of a sloped street, the height is measured from the mid- center of the peti and its should not exceed the given value.

### **Staircase**

Maximum slope =  $45^{\circ}$

Maximum Width = 0.8m

### **Cornice**

6'' cornice level is allowed to level with neighbors' buildings

### **Balcony**

For road facing facade, maximum width of balcony = 0.8 m starting from third floor only.

For streets having less than 3 m with, balconies are not allowed at the street facing facade.

For chowk facing facades, balconies can be placed from second floor with width 8m.

For a 8' X 8' chowk or more, balcony projection is allowed without any setback

### **Cantilever**

Cantilevers are not allowed.

### **Door windows**

Wooden frame door windows are allowed with odd number of openings. A single opening window is only allowed in the ground floor

### **Total height**

maximum height for the building = 35' with an additional 8' height for staircase cover.



## **Roof**

Slope angle = 25°-30°

Parapet height = 1m

## **CHAPTER 5: PROGRAM FORMULATION**

### Existing area calculation

Total site area= 6358.438 sq. m. (12-7-3-3.5)

Total open area= 2638.75 sq. m. (41.510%)

Total ground coverage area= 3723.5 sq.m. (58.56 %)

Math area= 570.4 sq.m.

School= 74 sq.m

Pati cum pasal area= 131.5 sq.m.

Fire kiln area=97 sq.m

Lyosindyo pati area= 45 sq.m.

Dyochhen area= 63.4 sq.m

Taal danpho area=792 sq.m

Hiti gale area= 55.85 sq.m

Parking area= 73 sq.m

### New area calculation

Total site area= 6358.438 sq. m. (12-7-3-3.5)

Total open area= 2638.75 sq. m. (41.510%)

Total ground coverage area= 3723.5 sq.m. (58.56 %)

### Private buildings

Total ground coverage area = 1923.205 SQ.M

Commercial & workshops floor area = 1107.25 sq.m

Store area = 157.84 sq.m

Pottery school area = 379.94 sq.m

Bread & Breakfast Hotel area = 278.17

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(The ground floor of the private residences will be used as commercials, stores, pottery school accordingly. The upper floors will be used as residence. Meanwhile a cluster will be entirely developed as B & B hotel.)

$$\begin{aligned}\text{Total built up area for residence} &= 3 \times \text{total ground coverage area} - \text{B\&B area} \\ &= 3 \times 1923.205 - 278.17 = 5491.445 \text{ sq.m}\end{aligned}$$

Total population before earthquake = 288

Average floor area per person = 11 sq.m

Total usable area =  $11 \times 288 = 3168$

Circulation area =  $0.2 \times \text{total usable area} = 633.6$

Total residential area =  $3168 + 633.6 = 3801.6 \text{ sq.m}$

#### Ikhilachi Math

Total ground coverage area = 570.4 sq.m

Toilet = 13 sq.m

Bhajan = 10 sq.m

Staff room = 15 sq.m

Circulation =  $0.4 \times 570.4 = 228.16$

Commercial space = 254.4 sq.m

Reception area = 20 sq.m

Meeting area = 30 sq.m

Gallery =  $570.4 \times 2 = 1140.8 \text{ sq.m}$

#### B&B Hotel

Total ground coverage area = 278.17 sq.m

Reception = 20 sq.m

Kitchen = 30 sq.m

Store = 10 sq.m

Laundry space = 12 sq.m

Staff room = 15 sq.m

Living room = 15 sq.m

Guest room (2 bed) = 24 sq.m

## Revitalizing Talako area: unlocking its full potential through urban regeneration

Guest room (3 bed) = 28 sq.m

Circulation =  $0.4 \times 278.17 = 111.268$  sq.m.

Dining space= 64.8 sq.m

### Pottery school

Total ground coverage area= 101.47 sq.m

Storage= 25 sq.m

Kneading = 15 sq.m

Wheel throwing 100 sq.m

Drying = 20 sq.m

Firing= 30 sq.m

Reception= 15 sq.m.

Restroom= 15 sq.m

Circulation = 159.94

### Guthi ghar

Total ground coverage area= 94.19 sq.m

Workshop=94.19 sq.m

Finance= 94.19 sq.m

Cafe=  $2 \times 94.19$  sq.m= 188.38 sq.m

### Community hall

Total ground coverage area= 101.47 sq.m

Storage= 10 sq.m

Kitchen = 18 sq.m

Clay storage= 40 sq.m

Firewood storage= 10sq.m

Akhachhen= 89.9

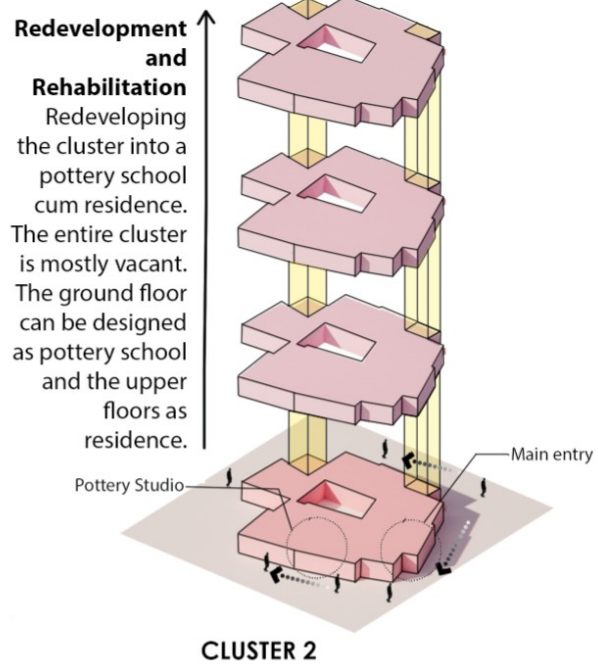
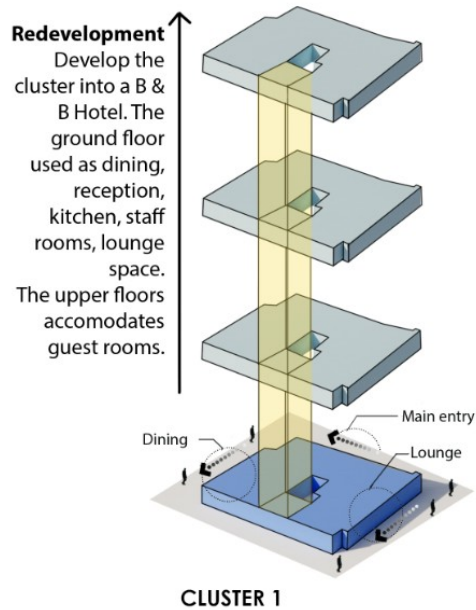
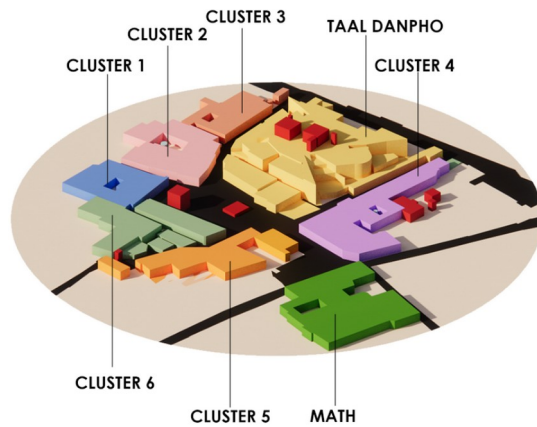
Dining space=  $2 \times 89.9$  sq.m = 179.8 sq.m

### Pati/ Pasa

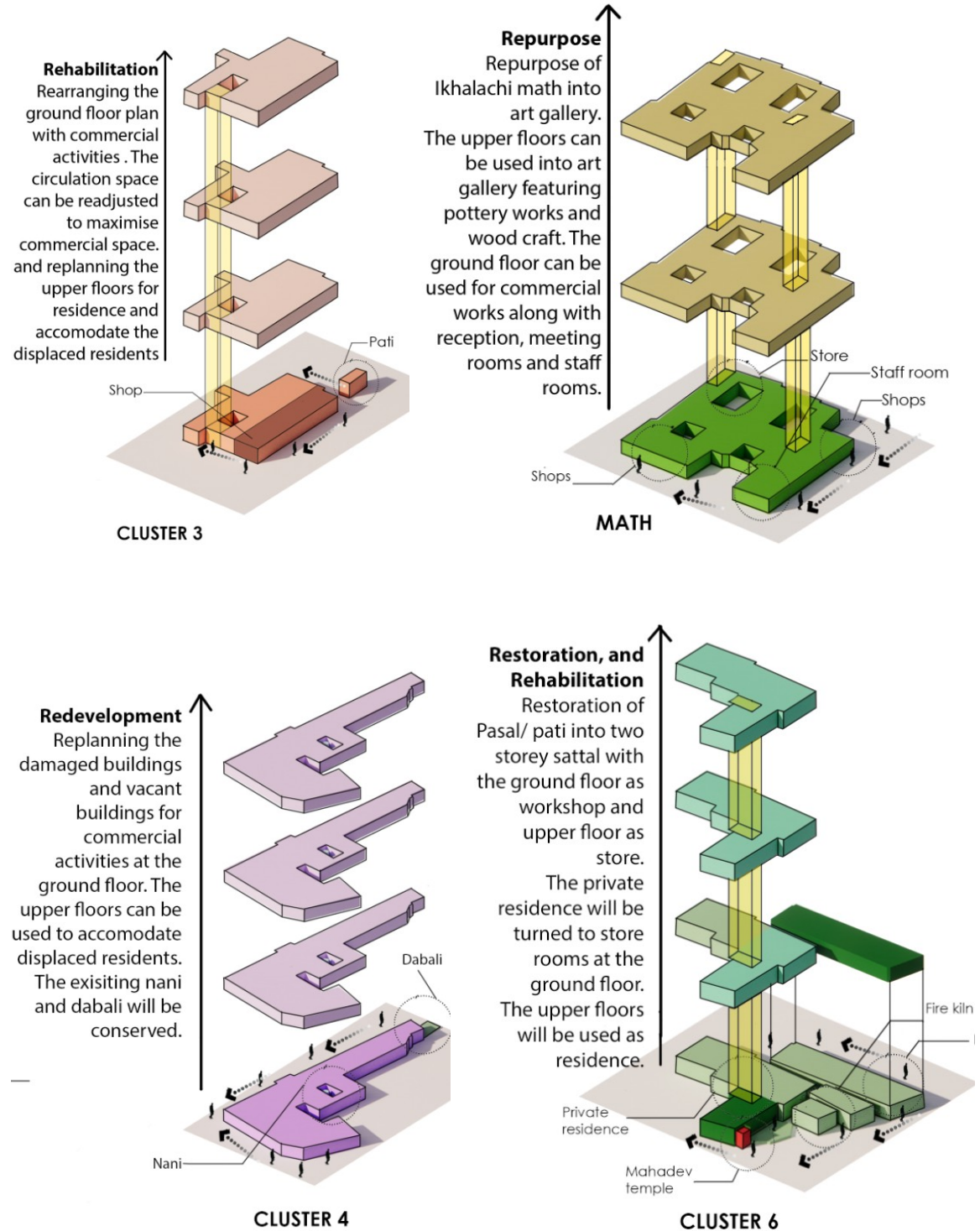
Commercial = 131.5 sq.m

Store= 131.5 sq.m

## CHAPTER 6: DESIGN CONCEPT



# Revitalizing Talako area: unlocking its full potential through urban regeneration



## **CHAPTER 7: MASTERPLAN FEATURES**

### **7.1 Cluster Features**

The streets and nanis are preserved whilst devising additional open spaces wherever necessary for sunlight and ventilation. The original fabric is maintained with adjustments in the internal wall positions.

### **7.2 Commercial Activities**

The ground floor of the buildings are used as commercial activities with spaces provided for pottery works and local crafts. The pasal / pati is still used as pottery works. Clusters are used as pottery school and B & B hotel.

### **7.3 Fire Kiln**

The fire kilns are rearranged at a single location, reducing the current back and forth positioning for firing the pottery. The use of electric fire kiln replacing the intermittent fire kilns reduces waste of space

### **7.4 Storage**

The essential aspect in pottery would be the availability of space to store the dried pots. Hence the houses around the fire kiln, would be used as storage space at their ground floors.

### **7.5 Restoration Work**

Restoration of the dhunge dhara and pati at Hiti gale

### **7.6 Replanning of Taal Danpho**

Taal danpho has an abundant open space which can be replanned as a park for public use. However the structure cannot be changed as it carries historical and cultural significance.

Revitalizing Talako area: unlocking its full potential through urban regeneration

### **7.7 Repurpose of Math**

Ikhalachi math is to be repurposed and extended to use as museum. Dattatraya math is repurposed as a part of pottery school.

## ANNEX



ENHANCING THE VITALITY OF TALAKO:  
UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION

Talako, Bhaktapur.

By:

NISTHA AWAL

760123

A thesis submitted in partial fulfillment  
of the requirements for the  
Degree of Bachelor of Architecture



Purbanchal University  
KHWOPA ENGINEERING COLLEGE  
DEPARTMENT OF ARCHITECTURE

Libali, Bhaktapur, Nepal

AUGUST 2025



PAN No. 201382918

An Undertaking of Bhaktapur Municipality

# KHWOPA ENGINEERING COLLEGE

(Affiliated to Purbanchal University)

Estd. 2001

## CERTIFICATE

This is to certify that the thesis entitled **ENHANCING THE VITALITY OF TALAKO, BHAKTAPUR – Unlocking its full potential through Urban Regeneration** submitted to the Department of Architecture of Khwopa Engineering College by **Ms. Nistha Awal** of Class Roll No. 23/ B.Arch./076 has been declared successful for the partial fulfillment of the academic requirement towards the completion of the degree of Bachelor of Architecture of Purbanchal University.

Ar. Dil Bhakta Jayana  
Supervisor

Ar. Rashish Lal Shrestha  
Thesis Coordinator

Ar. Deepak Pant  
(External Juror)

Ar. Archana Bade Shrestha  
Head of Department of Architecture



# REVITALIZING TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION

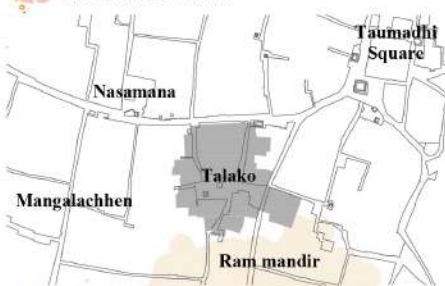


## SITE BRIEF

LOCATION: Pottery square, Bhaktapur,  
SITE SURROUNDING : Taumadhi square to its Northeast  
Nasamana to its Northwest,  
Ram Mandir to its South,  
Mangalachhen to its West  
INHABITANTS CASTE- Prajapati (major), Suwal  
SITE AREA: 6358.438 sq. m. (12-7-3-3.5)  
TOTAL BUILT UP AREA= 3723.5 sq.m. (58.56 %)  
OPEN SPACE =2638.75 sq. m. (41.510%)



## LOCATION MAP



## IMPORTANT LANDMARKS



Thagina ganesh at taal danpho



Taal danpho

Talako tale is also known as Jyatha tale, as the area is home to the "Jetha ganesh" or Jyatha ganesh, meaning "The senior ganesh" and "The ganesh to be worshipped before beginning any work. This ganesh temple is located at the chowk of the tale. There is also a dyochhen for the tale ganesh. The Tipa jatra, To chahileu jatra, are related to these temples.



Jetha Ganesh temple



Jetha Ganesh dyochhen



Jetha Ganesh temple



Akhandasheel bahal

The baha has a very important cultural significance in Nawadurga culture. Every year, On the day of "Gathamangal" in the month of Shrawan, the Nawadurga, along with the priests arrive at the nani. They perform puja and rituals to collect clay from the nani to prepare new mukundo to use for the following year. It is conjectured that it was first built by the Lichhavi King Narendra deva. He built this Baha for his younger son, who went to become a monk. Also, before the commencement of the Machhindranatha jatra, a set of puja is offered from this Baha.



Hiti gale

The word "Talako" comes from "Tal Danpho" which means hill at top. Legend has it that a time came when bad omen was hovering around the area leading to strife and troubles. Upon the local's inquiry to Jyotish, it was suggested to build a hillock in the tole. Hence, the locals collected mud from the rivers and compiled the river mud in a huge amount that a hill was created. At the top of the hill, they established "Thagina ganesh" temple, "Gorakhnath" temple and Bhairabnath shrine.

It is said that during the times of no rainfall during monsoon, the locals fill the depression with water and bath themselves with the water and chant "Har Har Mahadev". Neighbors throw water at them from their terraces resembling Holi. This ceremonial act is said to invite rainfall.

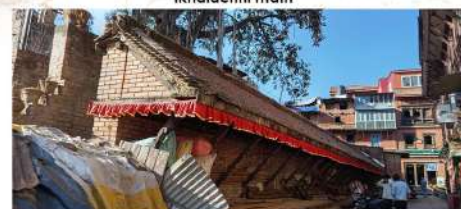
### temple

- 1- Jetha ganesh
- 2- Narayan
- 3- Ganesh dyochhen
- 4- Gorakhnath
- 5- Thagani ganesh
- 6- Bhairabnath shrine
- 7- Radha krishna
- 8- Karunamaya
- 9,10- Chiba dyo

## MATHS & PATIS



Ikhalachhi math

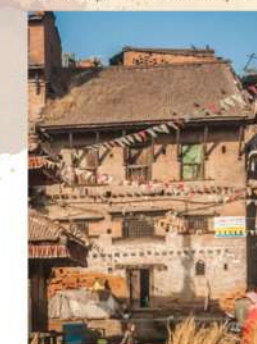


Pati used to shelter lyosindyo after Bisket



Pati used as pottery shops

The math is used as ward office number - 4 of Bhaktapur. It has two courtyards and a kiba. The backside part of math is under construction. Dattatraya math has collapsed after earthquake 2072 and is not in use.



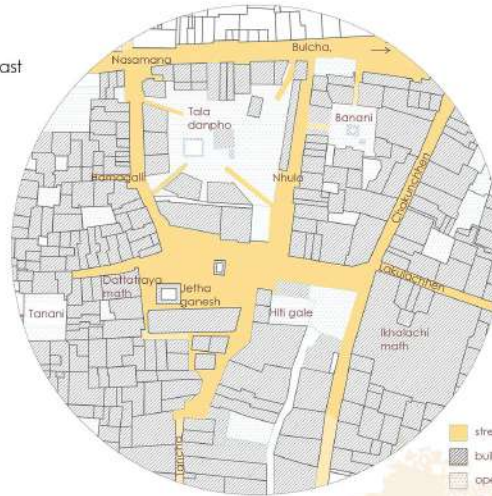
Dattatraya math



Guthi ghar



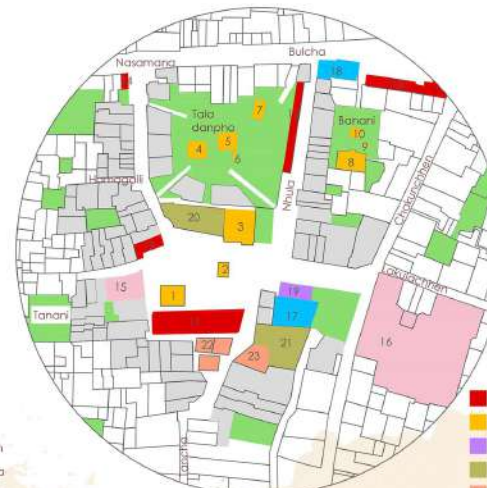
Kopila school, previously a pati



- street
- built form
- open spa



## Existing map with street network



- pati
- temple
- school
- guthi
- firing space
- hiti
- house
- math
- open space



## Existing map with built form and open space



- collapsed
- commercial use only
- housing
- commercial & housing
- empty houses
- houses with ground floor use only



## Existing map with street network

Total number of houses= 60  
Completely collapsed buildings= 10  
Buildings used for commercial purpose only = 12  
Buildings used as residence only = 12  
Buildings used as residence and commercial = 9  
Unoccupied/ unused buildings = 11  
Buildings with ground floor used as commercial space and upper floors vacant= 6



# REVITALIZING TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION



## URBAN TRANSFORMATION IN TALAKO



- pati
- temple
- school
- guthi
- firing space
- hiti
- house
- math
- open space

## Transformation of pati



Tile roof in pati 1959 - Joel Martin



Thatched roof in pati 1971 - Perry Letson



Pati used as shops today

## Transformation of pati to Kopila school



Pati at Hiti gale in 1971 - Perry Letson



Pati at Hiti gale collapsed about 45 years ago



pati at Hiti gale collapsed



Kopila school today

## Transformation of pati to Kopila school

## Transformation of firing process in Talako



Traditional pottery firing



Thermal fire kiln today



Dyochhen and guthi ghar before



Dyochhen and guthi ghar today

## Transformation of private residence in the square



private residence and hiti gale entrance before



private residence used as shops today

## Transformation of private residence in Hiti Gale



private residence in 1966 AD-Suzanne Ukiyama



private residence today at Hiti gale

## Program formulation

Ikhalachi math area= 644.67 sq.m.  
 Dattatraya math area= 64.7 sq.m.  
 Chowk pati = 116.4 sq.m.  
 Kopila school = 29.3 sq.m.  
 Hiti gale area= 73.7 sq.m.  
 Cluster at west of Jetha ganesh= 302.5 sq.m.  
 Cluster at hamu galli= 401.2 sq.m.  
 Fire kiln area= 54.88 sq.m.  
 Pati for lyosindyo area= 45.6 sq.m.  
 Row housing area= 1171.25 sq.m.  
 Banani chowk area = 249.3 sq.m.



# REVITALIZING TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION

## URBAN REGENERATION

process of revitalizing and improving urban areas

### Areas of regeneration



### Conservation, Rehabilitation and Redevelopment in Urban regeneration

Approach	Purpose	Key Focus	Example Projects
Conservation	Protect cultural or historical heritage	Preservation & maintenance	Conservation of Nyatapola temple
Rehabilitation	Improve existing structures without major changes	Restoration & modernization	Rehabilitation of Cage Harati
Redevelopment	Transform outdated or deteriorated areas	Demolition & rebuilding	Harishankar temple redevelopment

### Types of architectural conservation

#### Preservation

Maintaining and protecting buildings in their original state.

#### Restoration

Returning a building to its original form by removing later additions or reconstructing missing parts.

#### Rehabilitation

Adapting a historical building for modern use while preserving key architectural elements.

#### Reconstruction

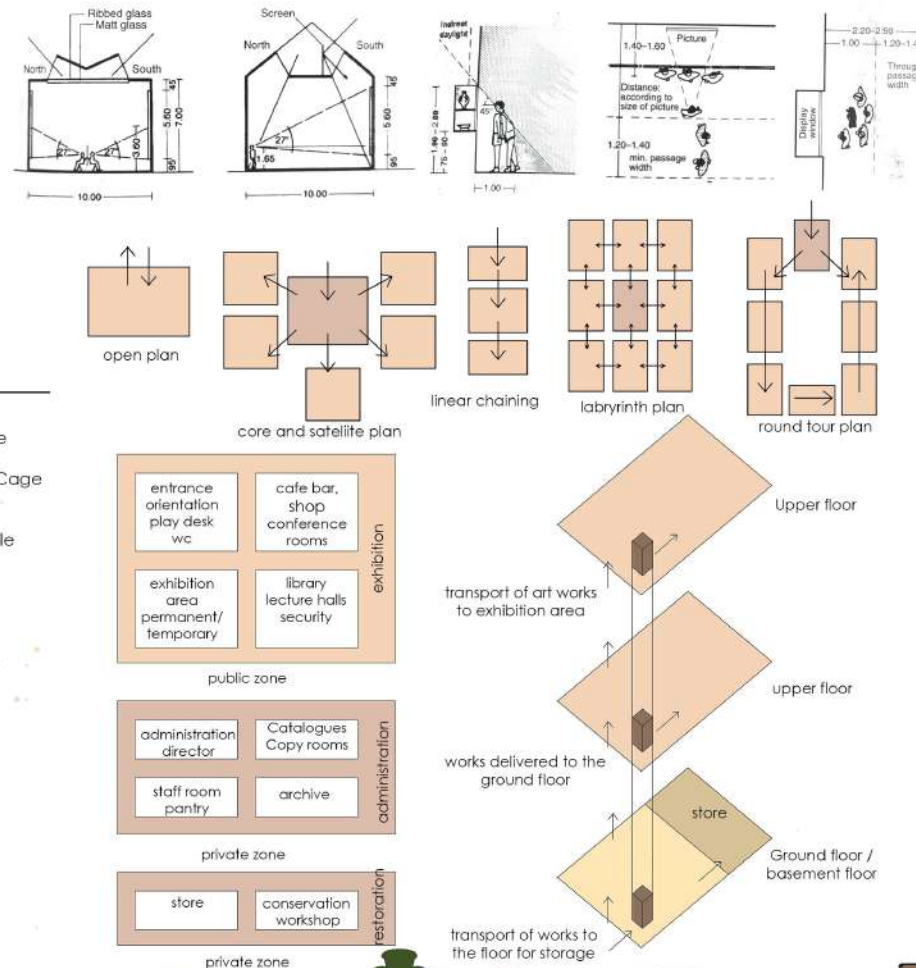
Rebuilding structures that were destroyed due to natural disasters or neglect.

## ART GALLERY

a space where artworks—such as paintings, sculptures, photographs, and installations—are displayed for public viewing, sale, or exhibition In the case of Pottery square,

### Spaces required

Exhibition Area  
Reception/Entrance Area  
Storage Room  
Office Space  
Lighting and Display System  
Viewing/Seating Area  
Workshop/Studio (Optional)  
Security System  
Café or Gift Shop (Optional)



## LITERATURE REVIEW

### HOMESTAY

a form of hospitality and lodging whereby visitors share a residence with a local of the area (host) to which they are traveling

### Characteristics

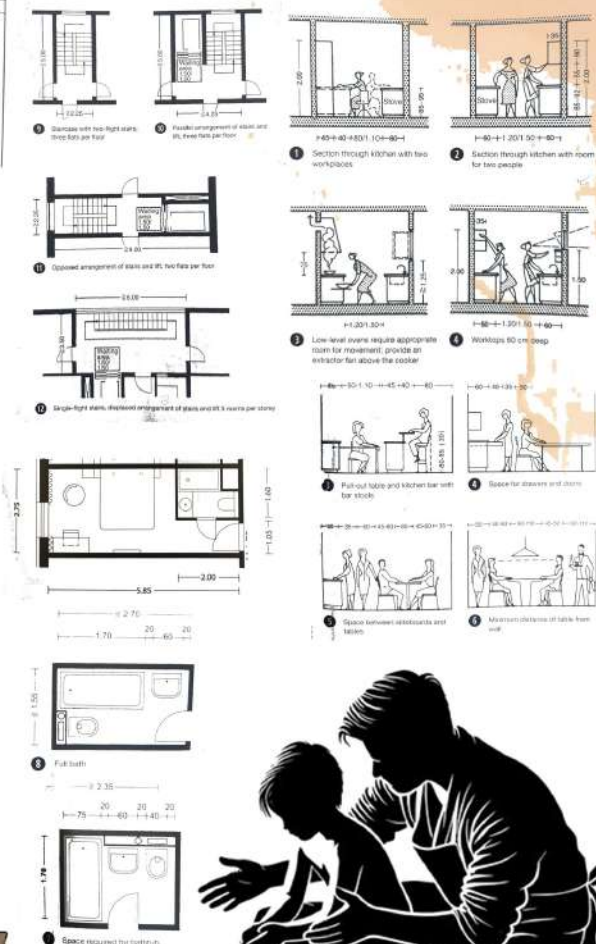
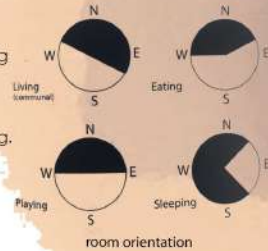
**Ownership:** Family-run, with hosts living on-site.

**Size:** Small-scale with limited rooms.

**Services:** Personalized hospitality, breakfast, internet, and housekeeping.

**Ambience:** Cozy, charming, and home-like.

**Experience:** Warm, welcoming, and enriched with local insights.





# REVITALIZING TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION

## BANDIPUR

### BACKGROUND

Bandipur is a historic trading village in Nepal, situated 8 km uphill from a major highway connecting Kathmandu (135 km away) and Pokhara (80 km away). Located at an altitude of 1,000m above sea level, Bandipur has experienced a cycle of economic rise, decline, and revival since its establishment. (boom-bust-boom)  
Protected cultural sub-zone

### DEVELOPMENT PHASE

The chronological development of Bandipur could be divided into four general phases:

#### -Prosperity stage (before 1968)

originally a Magar village, transformed into a key trading center in the early 19th century due to the arrival of Newar traders from Bhaktapur. Positioned on the India-Tibet trade route

#### Decline (1968-1980)

Two major events led to Bandipur's decline: the relocation of the district headquarters to Damauli in 1968 and the construction of the Prithvi Highway, which bypassed Bandipur.

#### Revitalization (1980-2007)

Efforts to revive Bandipur focused on tourism, education, and limited industries like slate mining. The 2005-2007 Bandipur Eco-Cultural Tourism Project (BECTP)

#### Integration (2007-Present)

The 2015 Municipal Transport Master Plan (MIMP)

### VILLAGE ARCHITECTURE

#### Early Magar Settlements:

scattered clusters around the hill.  
Houses made of wood, poles, and stone with thatched roofs.  
Simple, single or double-story structures with small windows and low doors.  
Focused on agriculture and animal husbandry

#### Newar Influence and Urbanization:

compact row housing along the main bazaar.  
Three-to-four-story brick houses with carved wooden windows and doors.  
Houses followed the ridge's natural curves without major land excavation.  
Public spaces at intersections used for religious, social, and cultural activities.

#### Main Bazaar and Public Spaces:

The bazaar is pedestrianized with stone-paved streets lined with traditional buildings.  
Shops on the ground floor, living spaces above, and kitchens in the attic.  
A covered passageway on the southern side provides shade and cooling effects.  
Tundikhel, a former parade ground, offers scenic views of the Himalayas and valley, modern needs.



newari settlement of row housing with street paving that is slowly deteriorated with gradual facade changes in the past

old settlement renovated with improved balcony lines and restoration of traditional facade

#### Significant changes

##### Economic

Increased job opportunities in tourism (guides, waiters, cooks, receptionists, porters).  
Growth of homestays, eco-lodges, and hotels run by locals.  
Extra income for locals through private shops, handicrafts, and tourism services.

##### Environmental

Stricter wood-cutting regulations and reduced firewood use.  
Cleaner environment due to traffic bans and waste management initiatives.  
Concerns over deforestation and water overuse by hotels and resorts.

##### Socio-cultural

Infrastructure improvements (roads, water, communication, hospitals, schools).  
Promotion and conservation of cultural heritage.  
Emergence of modernization in buildings, clothing, and food.

##### psychological

Training programs for locals in hotel management, guiding, and handicrafts.  
Special focus on empowering women and marginalized communities.  
Some locals leaving their professions to switch to tourism businesses.



Magar settlement



loaction



loaction

## CASE STUDY



### Driving factors

#### Tourism as an Economic Driver

Tourism has revitalized Bandipur's local economy, leading to employment growth and population increases. The Main Bazaar has become a focal point for preservation due to its architectural and historical significance. Special bylaws have successfully preserved the traditional buildings within a limited zone.

#### Impact of Conservation Policies

Inside the Bazaar, there is increased awareness of heritage conservation.

Outside the protected zone, rapid and unregulated modern construction is taking place.

New buildings in the periphery use concrete, metal shutters, and bright colors, contrasting with traditional architecture.

#### Economic and Investment Trends

Many returning migrants are investing in tourism-related businesses, especially guesthouses and restaurants.

Concerns exist that Bandipur may turn into another Sauraha, a highly commercialized tourist destination.

Business interests are concentrated in the Bazaar, while the periphery lacks development control.



### Bandipur bazar

**Tranquil Atmosphere** – Provides a peaceful retreat from the chaos of Kathmandu, with quiet streets and no heavy traffic.

**Rich Vernacular Architecture** – Features beautifully preserved traditional houses and a unique settlement pattern along the hill crest.

**Perfect for Walking Enthusiasts** – Offers winding streets, alleys, and a historic bazaar that make for a great walking experience.

**Relaxing Stop for Trekkers** – Serves as a rest destination before or after trekking, allowing visitors to explore at a leisurely pace.



: Increasing building activities in non-conforming style the periphery – photo by Jharana Joshi, 2016



-Bill hanson, 1965



-Bill hanson, 1965

Past and repeat photographs showing cultivated terraces and increased greenery



- photo by Jharana Joshi, 2016  
Past and repeat photographs showing Bazar



# REVITALIZING TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION

## CONSERVATION AND REDEVELOPMENT OF ASAN

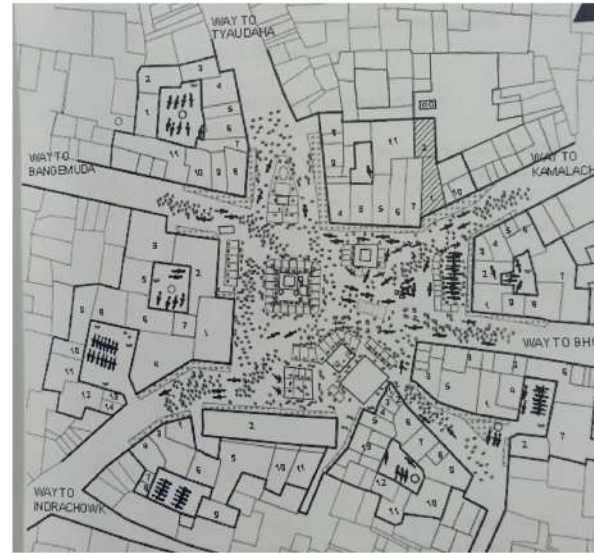
## CASE STUDY



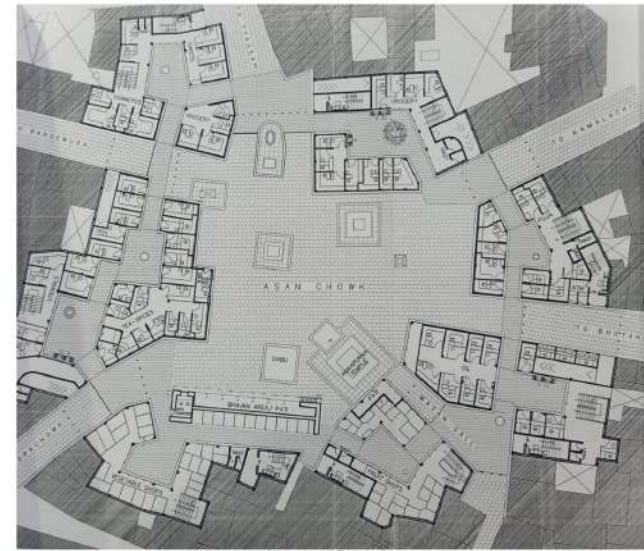
Thesis project by Ar. Sushamna Shrestha, batch 066 of Khwopa engineering college, affiliated by Purbanchal University. The thesis aims to redevelop the ancient Asan, by catering to the aspect of modernization and functionality while still retaining the cultural integrity of the area to create a thriving,

### Site brief

**Location-** Asan chowk, Kathmandu-27,30  
**Zoning-** Preserved cultural heritage subzone , mixed old residential subzone  
**Site area-** 7.4 ropani  
**Number of plots-** 102  
**Number of buildings-** 75  
**Total number of household –** 43  
**Total number of residents-** 186  
**Built up area-** 3.68 ropani  
**Open space-** 3.84 ropani



existing building footprint



Proposed Ground floor plan use

### Comparative study

	existing	proposed		existing	proposed
Ground coverage	1849 sq.m.	1660 sq.m.	residence	4537.55 sq.m.	4013.4 sq.m.
Open space	1934 sq.m.	2115 sq.m.	shops	1788.57 sq.m.	2255.6 sq.m.
Total built up area	8873.31 sq.m.	7225 sq.m.	veg & fruit stalls	open space	355.15 sq.m.
Total site area	3784.33 sq.m.	3784.33 sq.m.	offices	234.45 sq.m.	436.8 sq.m.
owner	33		store	1549.10	1088.35 sq.m.
rented	10		bike parking	open space	552.45 sq.m.
total	43	48			

### Master plan features

**Cluster features-** redesigning the chowks and houses by following the bylaws with height restriction to 45'

**Commercial activities-** commercial activities at the ground floor of the buildings in the main street facing the inner courtyards which can minimize the crowd at the main street

**Emergency services-** widening of the existing lanes and interconnection between courtyards for alternate access points

**Community services-** ground floor portion of some of the blocks facing the main street to house patis, bhajan areas, information centers and police booth.

**Zoning concept –** street shops moved to certain courtyards specifically such that market space for vegetables and utensil or clothes or others are segregated.

### Problems faced in the urban block

**Mismanagement of shops-** Haphazardly placed vendor stalls, and clash of different activities

**Street crowd-** Crowded pedestrian street and traffic

**Violation of by laws-** Overbearing tall buildings transforming from the traditional newari architecture that ignore by laws. 41.33 % buildings exceed five storey

**Physical condition-** Those under the limit are in poor physical or structural condition

**Escape routes-** inner courtyards have turned to traps due to insufficient escape route.

**Sunlight & ventilation-** Problems of sunlight and ventilation in inner courtyards

### Objectives

Identify various services available and the problems of the area.

Lessen the traffic and service overload of main chowk by utilizing the surrounding courtyards

Follow the traditional newari outlook and preserve the original fabric.

### Concept development

**Conservation-** preserve structures of religious, social values such as temples, chailyas, dabalas and sattal

**Rehabilitation of residents-** adjust the existing commercial activities into the proposed development plan, accommodate the family units living there at present.

**Redevelopment-** redevelopment of surrounding buildings to provide appropriate solutions to existing problems in the area.



Facade portion between Tyudaha and Kamalakhshi (past)



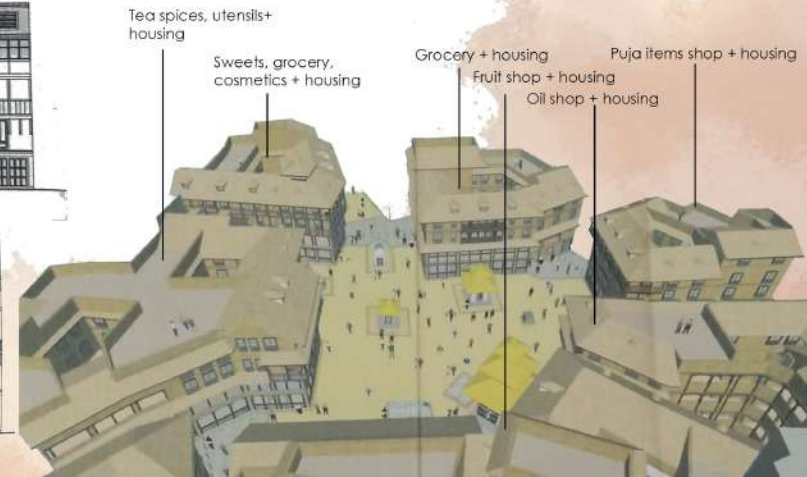
Facade portion between Tyudaha and Kamalakhshi (present)



KEY MAP



Proposed facade portion





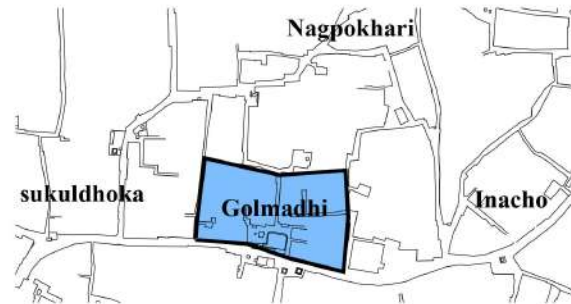
# REVITALIZING TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION

## URBAN RENEWAL OF GOLMADHI

This project by Ar. Neeru Shilpakar, batch 067 of Khwopa engineering college, affiliated by Purbanchal University on the study of the existing situation of the traditional residential quarter of Golmadi, Bhaktapur

### Site brief

**Location-** Golmadi-07, Bhaktapur  
**Zoning-** Purano Nagar chhetra  
**Site area-** 6593.36 sq.m. (12-15-1-1.8)  
**Number of dwellings-** 104  
**Total population-** 905  
**Built up area-** 50.78%  
**Open space-** 49.22%



### Problems faced in the urban block

**Physical damage** to buildings after earthquake 32% completely damaged, 46% partial damaged  
**Lack of occupancy** – 50.965 vacant homes  
**Unsafe living scenario** from physically and structurally Vulnerable buildings, streets and chowks.  
**Insufficient lighting and ventilation** from congested planning and addition of floors.  
**Inadequate frontage and ground coverage area:** 70 % houses having frontage<2.4m and area <32 sq.m.

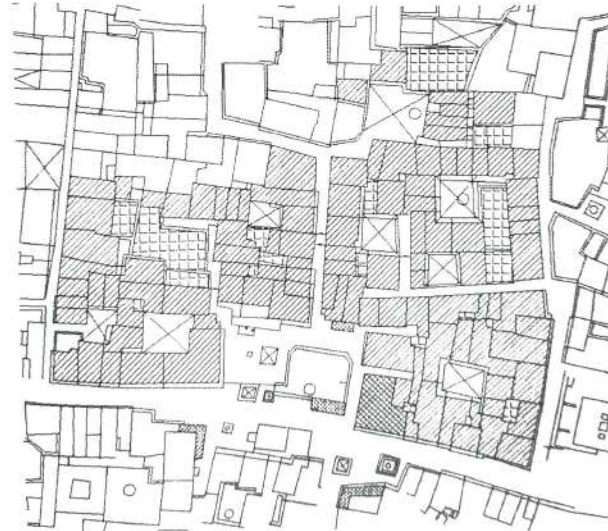
### Objectives

- Explore the historical and cultural importance of the site and explore the potential of redevelopment
- Revitalize proper built form for residential area, so that socio-cultural value as well as the historical background will be maintained.
- Maintain community spaces and townscape of the area.

### Concept development

#### Conservational aspects:

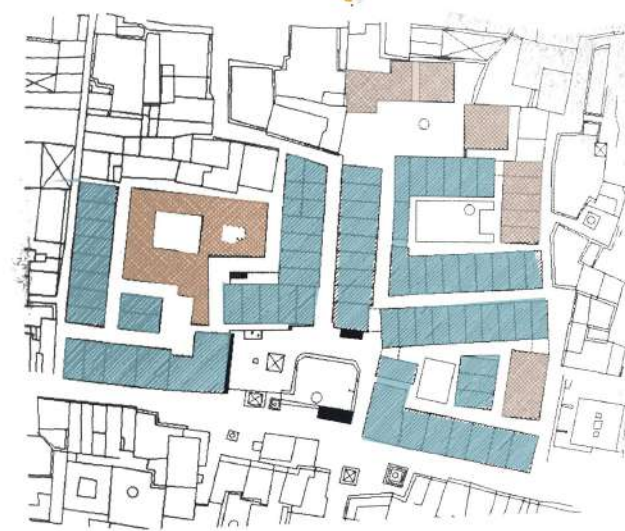
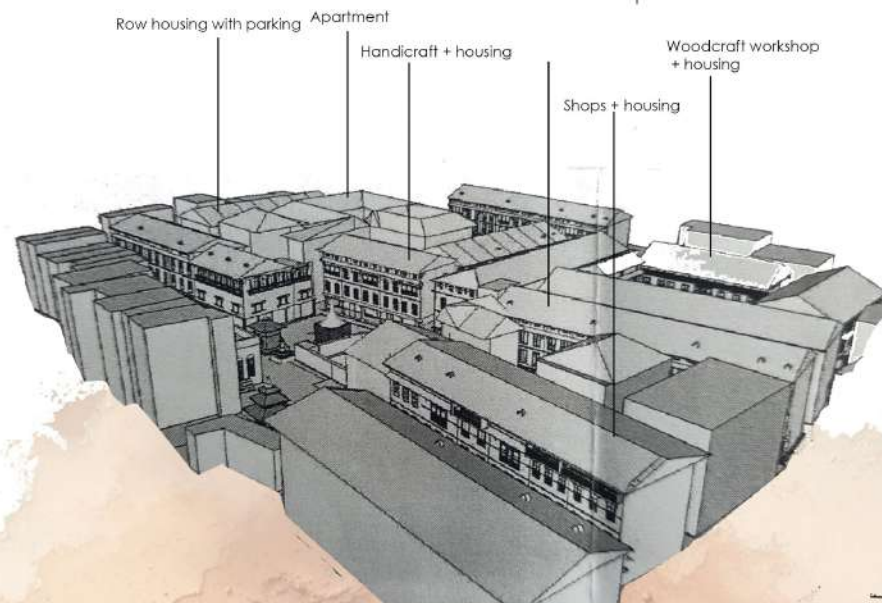
**Preservation** – physical elements; temple pati dyochhen, jatra route, courtyard  
**Facade restoration** - limiting the skyline, restoring the original facade  
**Remodeling of dwellings** – remodeling some backyard, kiba, saga  
**Redevelopment** – plot readjustment  
**Adaptive reuse** - reusing houses as guest houses, community spaces.



Existing building foot print

### Comparative study

	existing	proposed		existing	proposed
Ground coverage	3347 sq.m.	3224 sq.m.	residence	6856 sq.m.	7977 sq.m.
Open space	3245 sq.m.	3368 sq.m.	shops	490 sq.m.	1050 sq.m.
Total built up area	15065 sq.m.	12899 sq.m.	offices	22.51 sq.m.	57 sq.m.
Total livable area			parking		294 sq.m.
No. Of family units	104	6621.31 sq.m.	Production area		389 sq.m.
Total population	914	124	Community hall		97 sq.m.
			library		23 sq.m.



Proposed building foot print

### Master plan features

**Cluster features-** nani/pikhalakhi is maintained so that original residents are accommodated in the same cluster, just the resizing of the courtyard is done to admit direct sunlight  
**Commercial activities-** commercial activities at the ground floor of the buildings in the main street, addition of shops in first floor  
**Tourist route-** tourist pedestrian friendly route from Golmadi to Yachhen with local market and carpentry  
**Emergency services-** widening of the existing lanes and interconnection between courtyards for alternate access points  
**Community services-** community center has been proposed at the chowk.  
**Zoning concept** – allocation of zones for: residential area, production area, commercial area, pedestrian friendly area



North street elevation before earthquake



North street elevation after earthquake



Proposed North street elevation

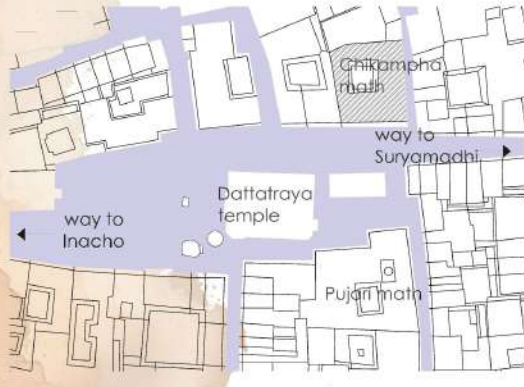




# REVITALIZING TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION

## CHIKAMPHA MATH

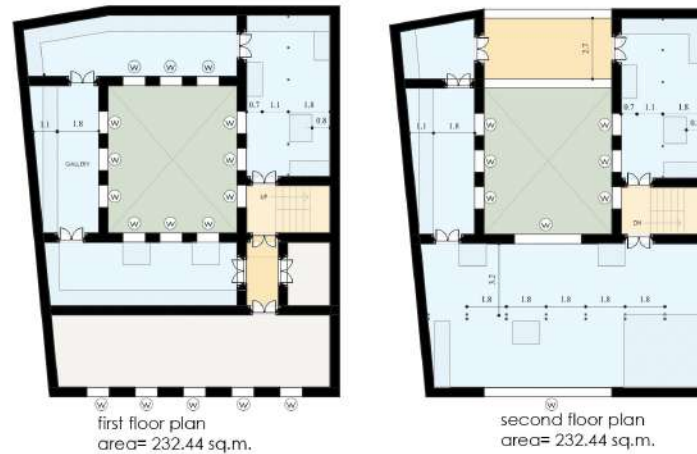
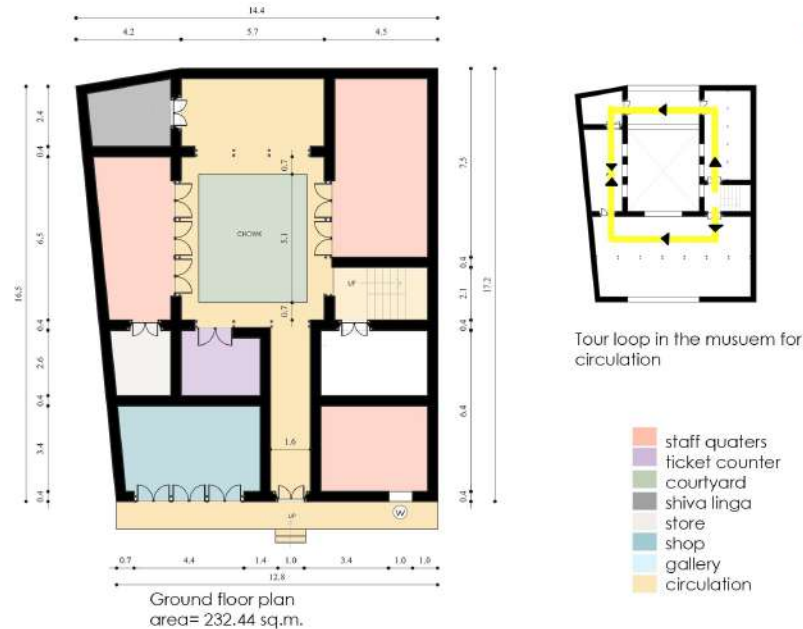
Chikampha math, also known as "The museum of brass and bronze". It is located at Tachapal fole/ Dattatraya square, Bhaktapur, and is situated opposite to the Pujari math. The math, turned to museum is filled with ancient exemplars just like the other m useum is. But, it significantly has preserved the traditional utensils of different eras including the ceremonial lamps as well as the ritual vessels, which meant to make it one unique museum from others.



Pujari Math, Chikampha Math, and National art gallery in Bhaktapur have been adaptively reused as museums, preserving and showcasing Nepal's rich artistic heritage. These three museums are integral parts of each other, and a single ticket grants access to all of them.

## Contents of the art gallery

Known as Nepal's only statueless art museum. Displays brass and bronze metalware used by nobility and Newar subjects in the past. Features religious objects like kalash (sacred pots) and incense stands. Spittoons used by kings and noblemen are a unique highlight. Majority of exhibits consist of Newar religious and ritual objects.



## CASE STUDY



Math front facade



South elevation from chowk



North elevation from chowk



Baiga view



East elevation from chowk

## Display of art



hutch display



hutch display



table top display

## Inferences

- Tour loop circulation reduces traffic.
- congested circulation at some rooms, min. passage width = 0.8
- Disproportionate exhibition space for the arts as the displays are in -hutch display systems whereas the display items are very small- it creates negative space
- co-operative space for math as well as museum
- wastage of the opportunity to use southern rooms on first floor as -exhibition space as it is used for storage.
- different styles of architecture are seen.
- second chowk at the north is not used to its full extent. as of today, there is a temporary shelter for storage by the mahantas
- lighting system can be greatly enhanced with warm colours and light angles.

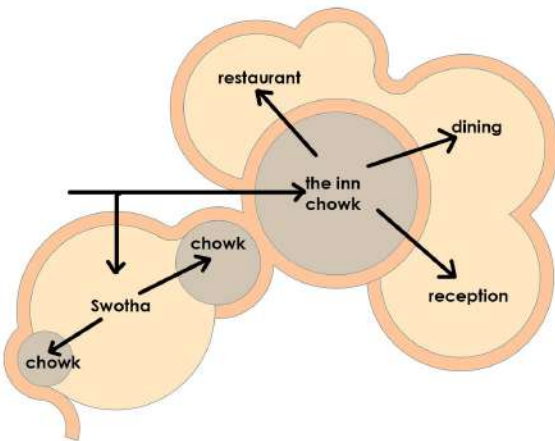


# REVITALIZING TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION

## CASE STUDY

### SWOTHA & THE INN

Swottha & The Inn are two boutique hotels close to each other at the same location, both being built from adaptive reuse and designed by a common conservation architect, Ar. Rohit Ranjitkar. They are located at Swottha gali, Patan Location - Swottha gali, Patan.



#### Objective

Analyzes the conservation and adaptive reuse of two private houses in Swottha, Patan.

#### Project Overview

Renovation began in November 2011.  
Preserves external aesthetics by removing cement plaster.  
Internal partitions redesigned for modern use; traditional mud-based plaster used for authenticity.

#### Functional Transformation

Converted into a guesthouse, integrated with Traditional Homes-Swottha.  
Ownership remains separate  
Maintains heritage identity while serving commercial purposes.

#### Structural and Economic Considerations

East wing to accommodate two rooms per floor; suite on top floor with a private balcony.  
Modern materials discreetly used for waterproofing and essential utilities.  
Renovation spans 450 sq. meters, costing approximately NRs. 9 million.



Swottha



The inn



The inn entrance



Swottha chowk



The inn chowk



Swottha entrance



Window door at balconies preserved as liminal space



Pre reconstruction stage of The Inn



Rooms in traditional setting



Pre reconstruction stage of The Inn



Post construction staircase

### KOTA TUA, JAKARTA, INDONESIA

Kota Tua, Jakarta's historic district, features colonial-era buildings and canals that serve as cultural and economic assets. However, the area had declined due to poor infrastructure. To address this, the city government launched a redevelopment plan to restore its vibrancy, enhance living standards, and boost the local economy.

#### Background

Kota Tua, once a major trading port, became the center of Dutch colonial rule as Batavia. It declined in the 19th century and further deteriorated after World War II due to neglect and poor infrastructure. Revitalization efforts began in 1974. In 2014, the city government launched a master plan to restore Kota Tua as a cultural heritage site.

#### Implementation

**Revitalization Initiated (2005)** – The city government launched a program to restore Kota Tua.  
**Tourism Boost (2011)** – Declared a national tourism destination by the Ministry of Tourism.

**Master Plan Implementation (2014)** – Conservation and revitalization efforts intensified.  
**Public Space Transformation**

**Kalijodo Redevelopment** – Former red-light district converted into a family-friendly park with a skate park, playground, mosque, and food court.

**Inclusive Approach** – Local residents were engaged, and affected individuals received housing compensation and vocational training.

**Improved Accessibility** – Cars and motorcycles banned, making it tourist-friendly.



Kalijodo area demonstrate the progress achieved in creating new and inclusive public spaces. The benefit of including stakeholders and local residents in the process of revitalization is reflected in the high satisfaction of residents and visitors with the implemented projects.

slums or red light area of Kalijodo demolished to rebuild riverfront with park

#### Challenges

**Heritage Buildings at Risk** – 281 registered heritage buildings, many in poor condition.

**Ownership Split** – 50% publicly owned (Jakarta city: 2%, Indonesian state/state-owned: 48%), 50% privately owned.

**Funding Constraints** – The city lacks sufficient financial resources for conservation

**Limited Private Investment** – Preservation orders and poor infrastructure deter investors.



# REVITALIZING TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION

## LITERATURE

### POTTERY

process and the products of forming vessels and other objects with clay and other raw materials, which are fired at high temperatures to give them a hard and durable form

#### Storage of clay

-Storage: Keep clay in a temperature-controlled space (60-80°F), avoid extreme conditions, and break down raw clay after kneading. Keep away from direct sunlight. Hence, the houses are planned in Pottery square with storage spaces at ground floor.

#### Clay preparation

Dry clay is soaked, turned into a slurry, screened, and dried. Today most clay are readily available from the market, hence reducing the process.

#### Clay Kneading

Repeated cutting, folding, and pressing remove air bubbles and improve consistency. This can be done manually or by pugging machines.

#### Shaping the pottery

Pinching: Squeezing clay with fingers in wheel throwing. Coiling: Layering clay coils into shape. Slip Casting: Pouring liquid clay into molds.

#### Drying

Plastic stage - Fully workable clay.  
Leather hard stage - Partially dry, firm for carving.  
Bone dry stage - Fully air-dried, ready for firing.

#### Decoration

Slip decoration: Brushing colored slip onto clay.  
Slip trailing: Creating raised patterns with liquid slip.  
Carving & Sgraffito: Cutting or scratching into clay for designs.  
Stamping: Pressing a textured object into the clay to create repeating patterns.

Impressing: Using a tool to press designs into the clay while it's still soft.

Inlaying: Embedding small pieces of colored clay into the surface of the clay body

#### Firing Methods:

Traditional open fire: Clay is layered with organic materials and fired with wood.  
Kiln firing: Uses thermal or electric kilns for controlled firing.

#### Storage

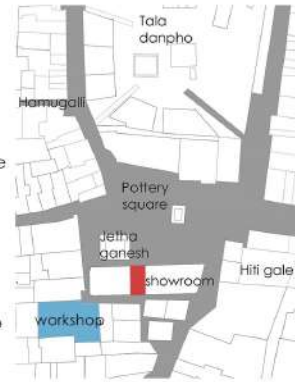
highlighting the craftsmanship and luring the customers. They can be displayed on shelves, hutch displays, well mounted shelves, tabletop displays.



## CASE STUDY

### POTTERY TRAINING CENTER

A family run pottery workshop and showroom located at Pottery square, Bhaktapur. It is run by potters Sajan Prajapati and his brother with 6 other staff who belong to the same Tole. The training center is an example for **local business to maintain public relations through exposure from its showroom and expands its business approach through a segregated and vast training studios.**



#### Customers and visitors

Regulars= 5 tourists, 10 Nepalese  
Occasional = 50-60 at a busy day (60% Nepalese) and 10-15 at non busy day

**The showroom** -17.4 sq.m  
**Pottery Wheel Experience:** Visitors can use the single pottery wheel for short-term sessions (1-2 hours).

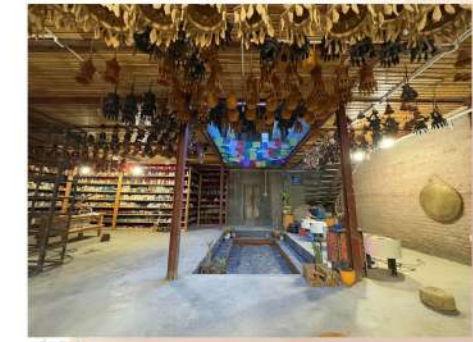
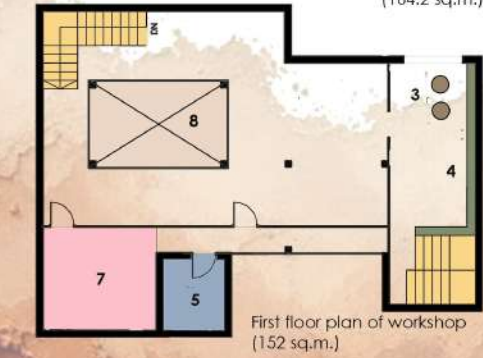
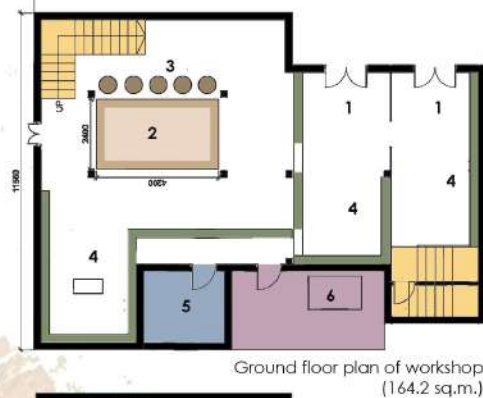
**Tourist Attraction:** Open to both tourists and local visitors for hands-on pottery making.  
**Showroom Sales:** Pottery works are available for purchase.  
**Inquiries:** Visitors can ask about pottery training classes and photoshoots.

**The workshop** -164.2sq.m  
**For Long-Term Learners:** Welcomes dedicated pottery students.

**Group-Friendly:** Suitable for tourist and friend groups spending a full day or evening.

**Architect:** Designed by Ar. Chandra Hakumila Prajapati.

**Sunken plaza with lightwell** -A spacious, recessed open area with a vertical space open to the sky, allowing light and air into a building.



- 1- entrance
- 2- clay kneading area
- 3- wheels
- 4- display area
- 5- w/c
- 6- pugmill & storage
- 7- drying & firing
- 8- skylight





# REVITALIZING TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION

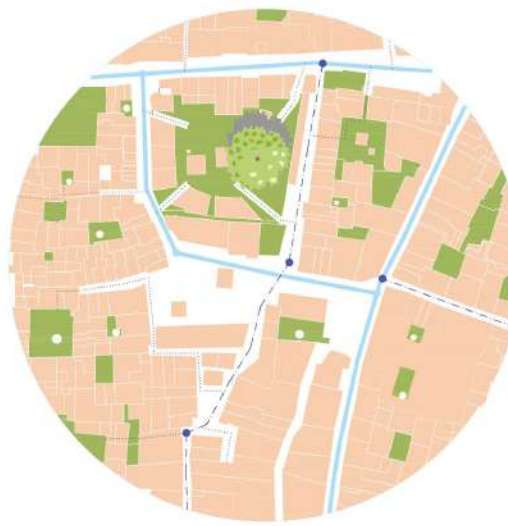
## SITE ANALYSIS



Open space Built form Street Drainage



Street map



Two wheeler access Four wheeler access Pedestrian road



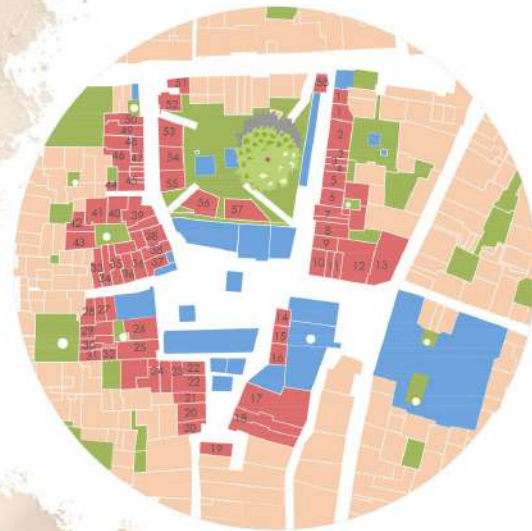
Vehicular flow



Gai jatra & Pulu kisi To chahileu jatra Tipa jatra  
Lyosindyo at Bisket jatra Nga lwakegu jatra Bhaila pyakha route  
Bhailakha route



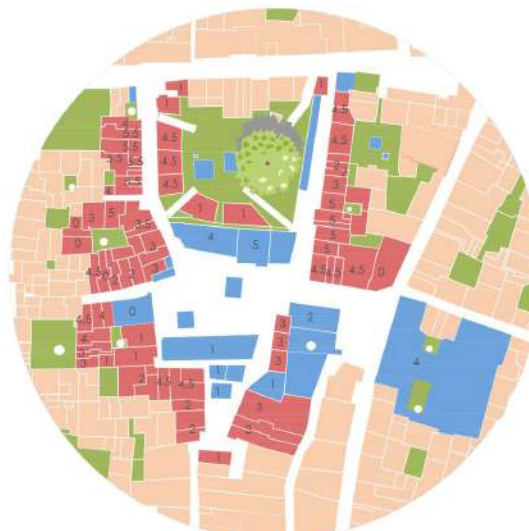
Jatra route



Documented public buildings Documented private houses



Private house number



Documented public buildings Documented private houses



Number of storey



View of Pottery square





# REVITALIZING TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION

## SITE ANALYSIS



Vacant Occupied

Occupancy



Traditional buildings Modern buildings Mixed buildings Temporary shed

Style of buildings



Residence Commercial Collapsed Mixed - Residential & commercial Store

Building use



Partial damage Temporary Intact Collapsed

State of buildings



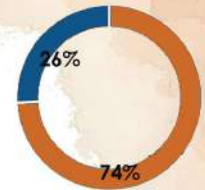
Prajapati Shrestha Suwal Kapali Bake others - Madhikami, Sangami, Joshi, Khaioo, Khairali

State of buildings



Shop Pottery Workshop Storage Collapsed Store Community works

Ground floor use



occupant vacant



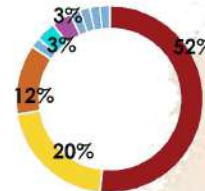
modern traditional mixed temporary



residential commercial mixed store collapsed



partial intact collapsed temporary



prajapati Shrestha Suwal Kapali Bake others



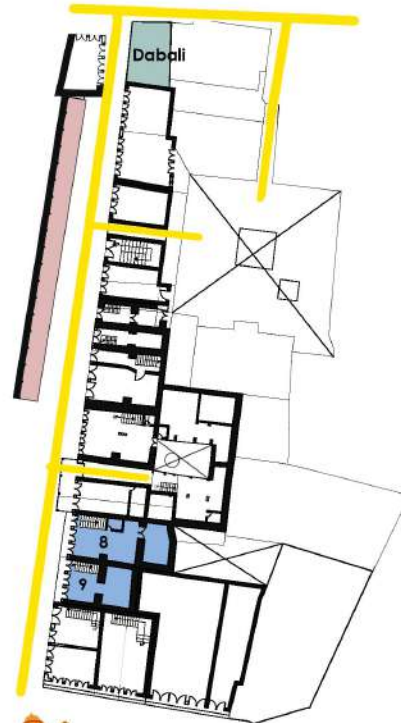


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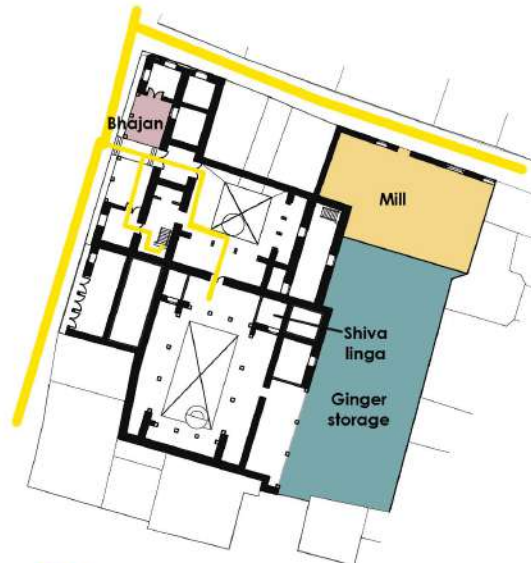
## SITE ANALYSIS



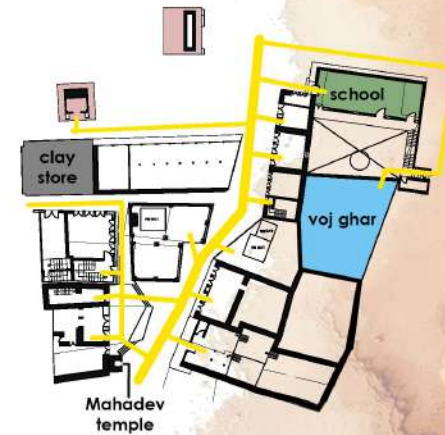
Key plan  
Not in scale



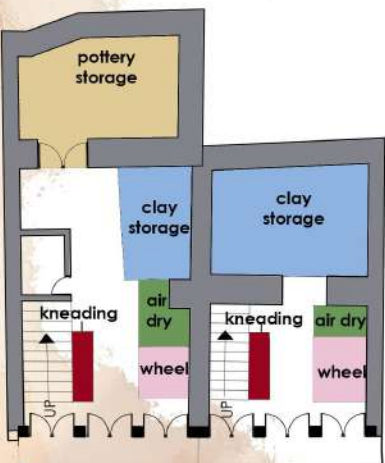
Ground floor plan at A  
Scale= 1:200



Ground floor plan at B  
Scale= 1:200



Ground floor plan at C  
Scale= 1:200



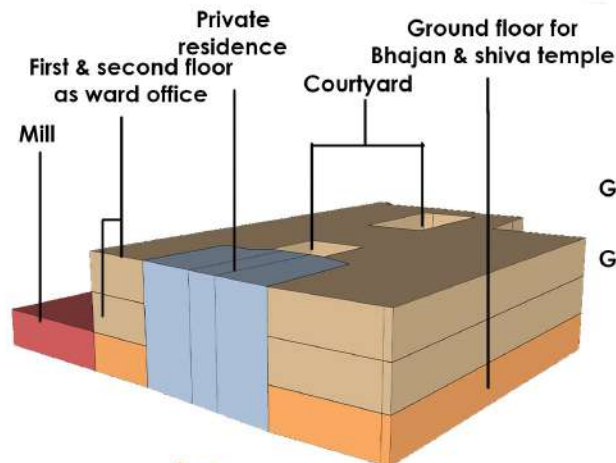
Ground floor plan house 8 & 9  
Scale= 1:50



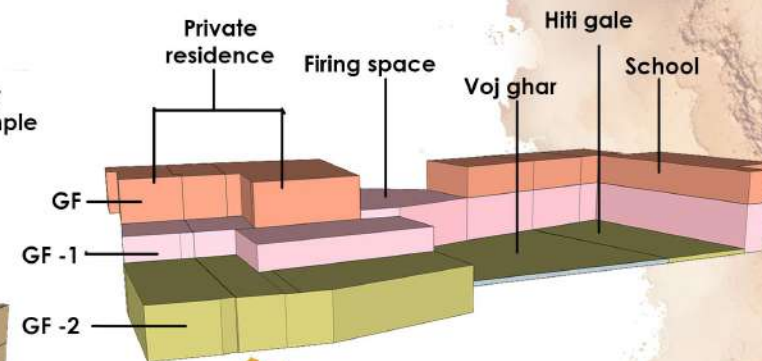
Clay storage



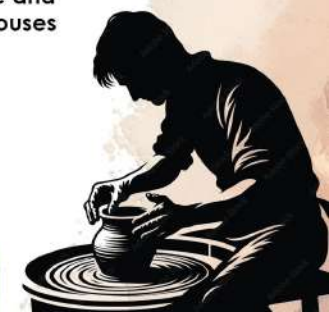
Workshop



View of Ikhalachi Math



View of Hiti gale and neighbouring houses



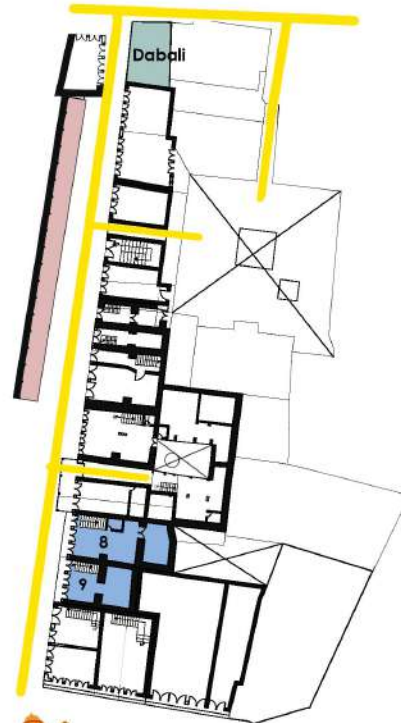


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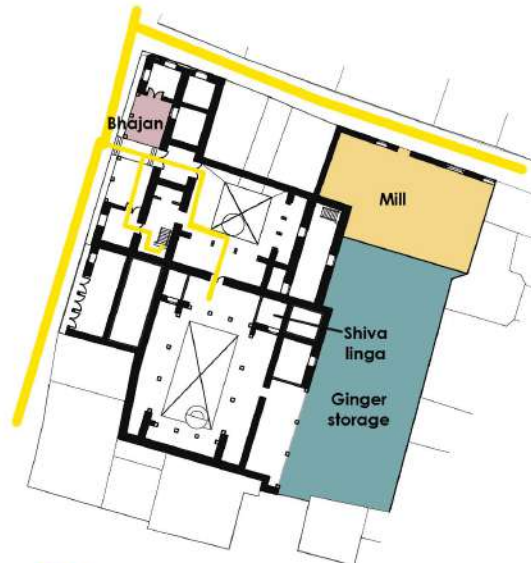
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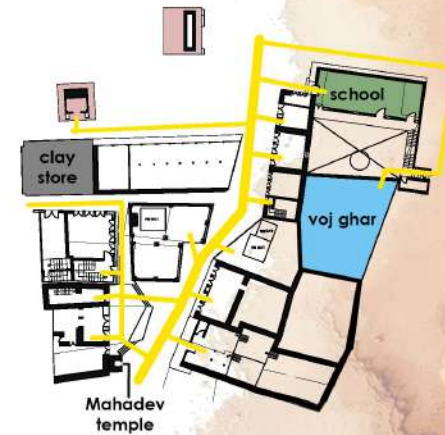
Key plan  
Not in scale



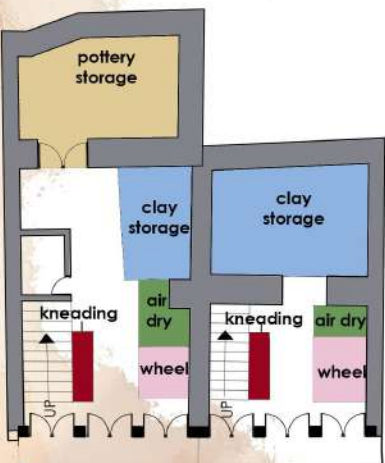
Ground floor plan at A  
Scale= 1:200



Ground floor plan at B  
Scale= 1:200



Ground floor plan at C  
Scale= 1:200



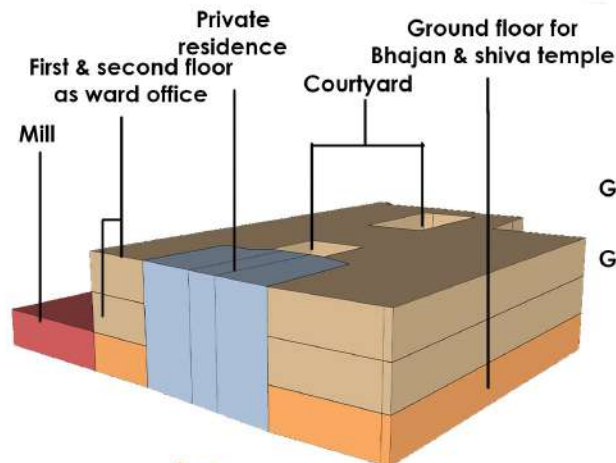
Ground floor plan house 8 & 9  
Scale= 1:50



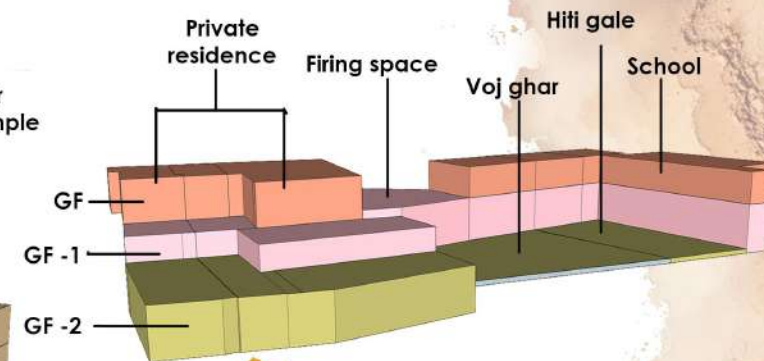
Clay storage



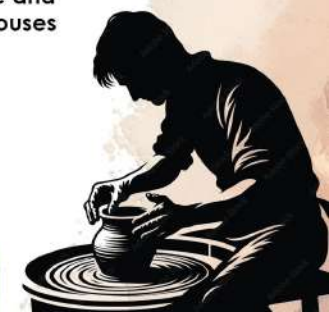
Workshop



View of Ikhalachi Math



View of Hiti gale and neighbouring houses





# REVITALIZING TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION

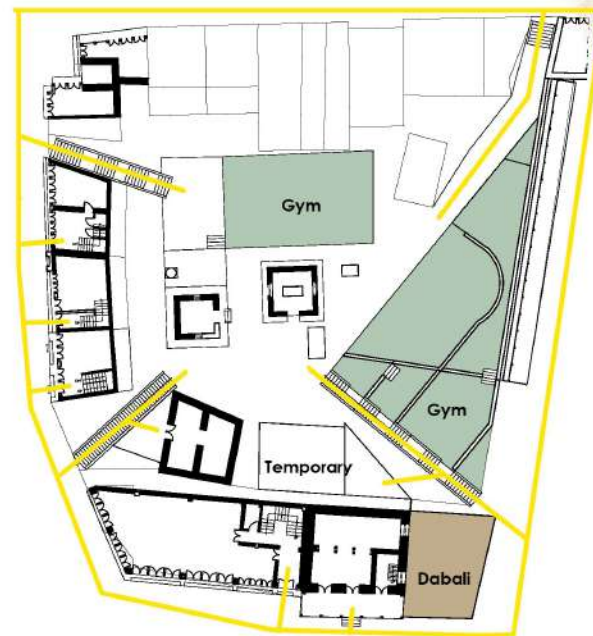
## SITE ANALYSIS



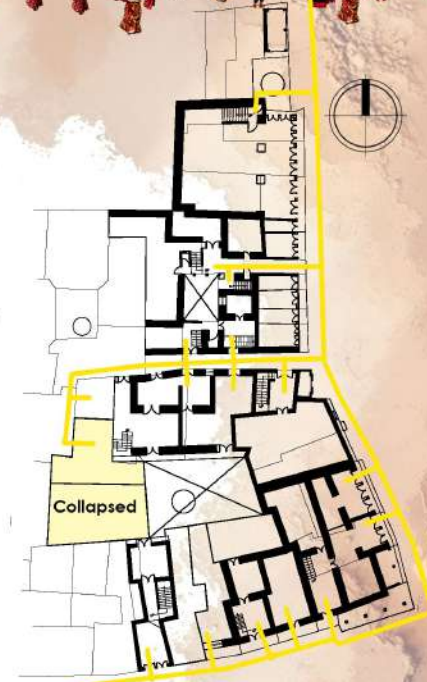
KEY PLAN  
Not in scale



Ground floor plan at A  
Scale= 1:200



Ground floor plan at B  
Scale= 1:200



Ground floor plan at C  
Scale= 1:200



View of cluster at A



Thagina ganesh



House 20,21



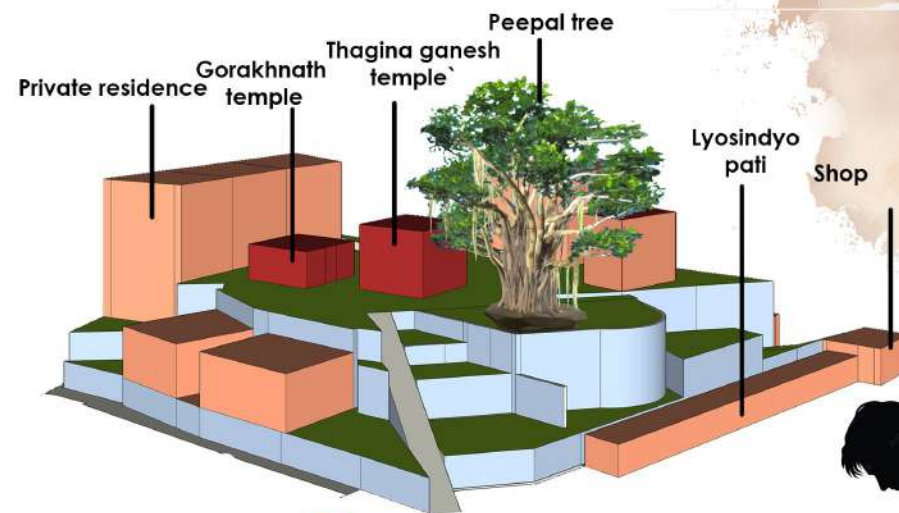
View of cluster at C



House 45-50



House 53-55



View of Taal danpho





# REVITALIZING TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION

## SITE ANALYSIS

### PLOT SEGMENTATION

#### TOTAL POPULATION

Before earthquake	After earthquake
288	64

#### PLOT SIZE FRONTAGE

Plot frontage	Number of dwellings	in percentage
<2.4m	4	7%
2.4-5m	31	53%
5m	23	40%

#### PLOT SIZE AREA

Plot area	Number of dwellings	in percentage
>32 sq.m	22	37%
<32 sq.m	36	63%

#### PLOT SIZE AREA & FRONTAGE

Minimum plot frontage and area	Number of dwellings	in percentage
<2.4m	4	7%
2.4-5m (<32 sq. m)	29	50%
2.4-5m (>32 sq. m)	2	3%
>5m (<32 sq.m)	5	9%
>5m (>32 sq.m)	18	31%

### SWOT ANALYSIS

#### STRENGTH

- strong community of traditional newari society
- rich historical and cultural background
- tourist attraction center
- living traditions and culture
- presence of nanis, chowks for light and ventilation
- active functional use of wells, patis, fire kiln
- active guthi system for renovating Dyochhen, guthi ghar and temples

#### OPPORTUNITY

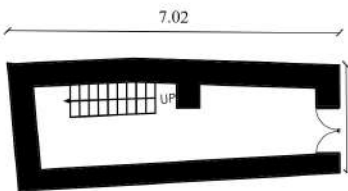
- reconstruction and rehabilitation of damaged buildings
- redevelopment of the damaged houses as mixed use buildings.
- emerge spaces for tourist hospitality
- create opportunities for expanding pottery business
- improvement of firing system in the community
- repurpose of Maths into public / semi public spaces
- reconstruction of school into pati
- provision of community buildings for co-operatives and finance, community office
- restoration of patis
- improvement of Taal danpho as park

#### WEAKNESS

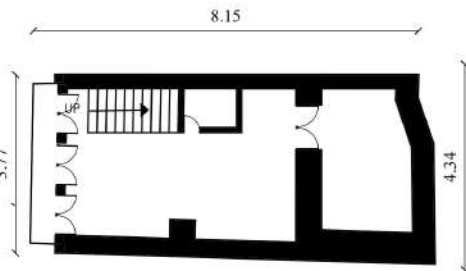
- long term exposure to smoke from fire kilns
- lack of occupancy as residency
- high amount of abandoned houses due to physical damage
- shared wall system hinders in reconstruction works

#### THREAT

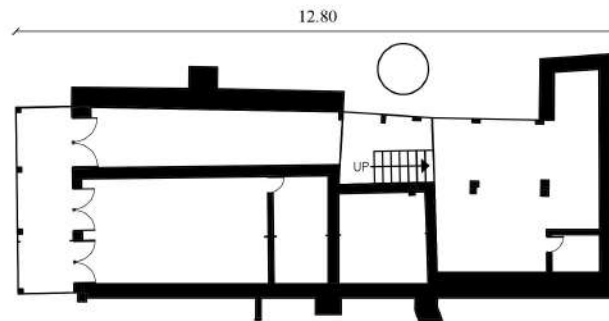
- physically damaged buildings and patis possess huge risk of collapse from future earthquakes
- possibilities of further vertical division, which has been a huge cause of unoccupancy in the buildings
- growth of pockets of abandoned chowks and buildings



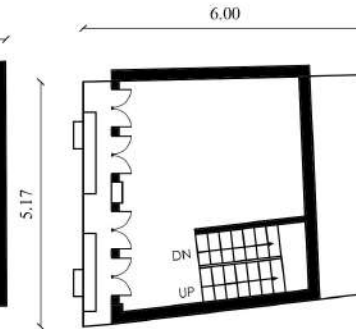
House 21  
Frontage= 2.28 m  
Area= 17 sq.m.



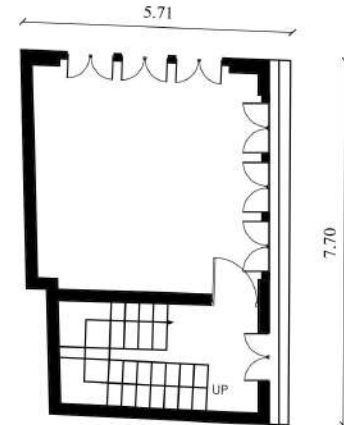
House 8  
Frontage= 3.77 m  
Area= 29.5 sq.m.



House 7  
Frontage= 4.34 m  
Area= 56 sq.m.



House 55  
Frontage= 5.17 m  
Area= 29 sq.m.



House 22  
Frontage= 7.7 m  
Area= 42 sq.m.



# REVITALIZING TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION



## SITE ANALYSIS



### BY LAWS

#### Ground coverage

For area  $\leq 0-2-2-0$ , 90% ground coverage  
For area  $> 0-2-2-0$ , 80% ground coverage  
For reconstruction, 100% ground coverage

#### Setback

For new construction, setback of building from road = 1m  
Setback for openings = 1.5 m

#### Plinth

Maximum plinth height = 1'-1'6"

#### Floor height

Maximum floor height for ground floor = 9'  
Maximum floor height for upper floors = 8'6"  
Maximum floor height for slope roof = 8'

#### Peti

Maximum Height = 0.5-0.6  
Maximum Width = 0.6m  
In case of a sloped street, the height is measured from the mid-center of the peti and it should not exceed the given value.

#### Staircase

Maximum slope = 45°  
Maximum Width = 0.8m

#### Cornice

6" cornice level is allowed to level with neighbors' buildings

#### Balcony

For road facing facade, maximum width of balcony = 0.8 m starting from third floor only.  
For streets having less than 3 m with, balconies are not allowed at the street facing facade.  
For chowk facing facades, balconies can be placed from second floor with width 8m.  
For a 8' X 8' chowk or more, balcony projection is allowed without any setback

#### Cantilever

Cantilevers are not allowed.

#### Door windows

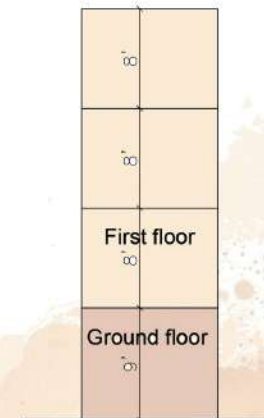
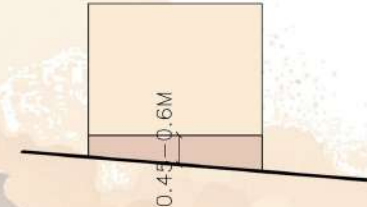
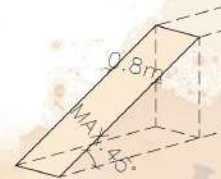
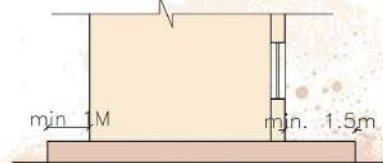
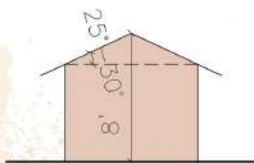
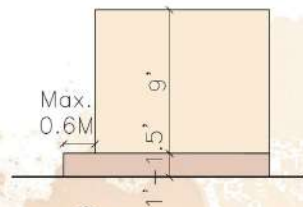
Wooden frame door windows are allowed with odd number of openings. A single opening window is only allowed in the ground floor

#### Total height

maximum height for the building = 35' with an additional 8' height for staircase cover.

#### Roof

Slope angle = 25°-30°  
Parapet height = 1m





# REVITALIZING TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION



## SITE ANALYSIS

House number	Owner Caste	Number of storey	State	Style	Occupancy	Building use	Occupants (Before earthquake)	Occupants (after earthquake)	Frontage (m)	Area (sq.m.)
1	Khaipo	4.5	Intact	Modern	Vacant	Commercial	6	0	7.45	33.22
2	Prajapati	4.5	Intact	Modern	Occupied	Mixed	6	4	9.5	62.3
3	Prajapati	2	Partial damaged	Traditional	Vacant	Residence	13	0	1.58	9.1
4	Prajapati	2	Partial damaged	Traditional	Vacant	Residence	2	0	1.69	9.4
5	Prajapati	3	Partial damaged	Traditional	Vacant	Mixed	12	0	4.2	23.8
6	Prajapati	5	Partial damaged	Traditional	Occupied	Residence	8	8	4.11	24
7	Prajapati	5	Partial damaged	Traditional	Vacant	Mixed	3	0	3.94	34
8	Prajapati	5	Partial damaged	Traditional	Vacant	Residence	11	0	3.37	29.5
9	Prajapati	5	Intact	Traditional	Occupied	Residence	5	5	3.46	20.58
10	Prajapati	4.5	Intact	Modern	Vacant	Commercial	0	0	3.89	24.7
11	Prajapati	4.5	Intact	Modern	Occupied	Mixed	7	7	3.86	25.9
12	Prajapati	4.5	Intact	Modern	Occupied	Mixed	4	4	6.43	78.5
13	Prajapati	0	Collapsed	Traditional	Vacant	Collapsed	5	0	11.25	79.8
14	Prajapati	3	Intact	Traditional	Vacant	Commercial	0	0	4.15	15.4
15	Prajapati	3	Intact	Traditional	Vacant	Commercial	0	0	4.33	16.5
16	Prajapati	3	Intact	Traditional	Vacant	Commercial	0	0	5.25	20
17	Prajapati	3	Partial damaged	Traditional	Vacant	Mixed	8	0	6.58	123
18	Prajapati	3	Partial damaged	Traditional	Vacant	Mixed	0	0	5.84	92.8
19	Prajapati	1	Partial damaged	Traditional	Vacant	Mixed	6	0	7.87	23.8
20	Prajapati	2	Partial damaged	Traditional	Vacant	Residence	12	0	7.32	62
21	Prajapati	2	Partial damaged	Traditional	Vacant	Residence	2	0	2.29	26
22	Prajapati	4.5	Intact	Modern	Occupied	Mixed	4	2	7.69	42
23	Prajapati	4.5	Intact	Modern	Occupied	Mixed	5	3	2.68	22
24	Prajapati	2	Intact	Modern	Vacant	Commercial		0	12.24	94.4
25	Prajapati	1	Partial damaged	Traditional	Vacant	Residence	14	0	4.54	45
26	Prajapati	1	Partial damaged	Traditional	Vacant	Residence	20	0	5.52	42
27	Bake	4	Partial damaged	Traditional	Vacant	Mixed	4	0	4.88	31
28	Suwal	4.5	Intact	Mixed	Occupied	Residence	4	3	2.46	19.9
29	Bake	4	Partial damaged	Traditional	Vacant	Residence	4	0	3.1	26.7
30	Suwal	3	Partial damaged	Traditional	Vacant	Residence	11	0	3.1	27
31	Suwal	3	Partial damaged	Traditional	Vacant	Residence	5	0	2.54	14.8
32	Suwal	1	Partial damaged	Traditional	Vacant	Residence	4	0	3.67	11
33	Prajapati	4.5	Intact	Modern	Occupied	Residence		6	2.2	22.7
34	Suwal	0	Collapsed	Traditional	Vacant	Residence	2	0	2.72	22.7
35	Prajapati	2	Partial damaged	Traditional	Vacant	Residence	10	0	2.67	22.5
36	Prajapati	2	Partial damaged	Traditional	Vacant	Residence	16	0	6	53.22
37	Suwal	3	Partial damaged	Traditional	Vacant	Mixed	2	0	5.77	23
38	Suwal	3	Partial damaged	Traditional	Vacant	Mixed	4	0	6.91	56
39	Joshi	3.5	Intact	Modern	Occupied	Commercial	5	0	5.1	52
40	Prajapati	5	Partial damaged	Traditional	Vacant	Store	4		4.94	28.6
41	Prajapati	3	Partial damaged	Traditional	Vacant	Store	4	0	5.46	35
42	Shrestha	0	Collapsed	Traditional	Vacant	Collapsed	6	0	4.93	22
43	Shrestha	0	Collapsed	Traditional	Vacant	Collapsed	0	0	4.63	24
44	Shrestha	4	Partial damaged	Traditional	Vacant	Residence	6	0	2.71	16
45	Shrestha	5.5	Intact	Traditional	Occupied	Mixed	8	8	4.68	31.1
46	Shrestha	5.5	Partial damaged	Traditional	Vacant	Mixed	16	0	4.21	25
47	Shrestha	5.5	Intact	Traditional	Vacant	Mixed		0	4.3	14.7
48	Shrestha	5.5	Intact	Traditional	Occupied	Mixed	8	8	4.12	36
49	Shrestha	5.5	Intact	Traditional	Occupied	Mixed			2.69	27.7
50	Shrestha	4	Intact	Traditional	Occupied	Mixed	5		2.47	23.28
51	Madhikarmi	1	Intact	Traditional	Vacant	Commercial	0	0	5.58	17.6
52	Sangami	1	Intact	Traditional	Vacant	Commercial	0	0	3.63	23.8
53	Shrestha	4.5	Intact	Modern	Occupied	Mixed	6	6	7.1	37.8
54	Shrestha	4.5	Intact	Modern	Vacant	Mixed	6	0	6.07	33.8
55	Shrestha	4.5	Intact	Modern	Vacant	Commercial	0	0	5.17	29.7
56	Kapali	1	Intact	Traditional	Vacant	Commercial	1	0	6.13	41
57	Kapali	1	Temporary	Temporary	Vacant	Store	6	0	5.07	45.6
58	Khairgoli	1	Intact	Modern	Vacant	Commercial	0	0	4.55	14.4



## PROGRAM FORMULATION



### Existing area calculation

Total site area= 6358.438 sq. m. (12-7-3-3.5)  
 Total open area= 2638.75 sq. m. (41.510%)  
 Total ground coverage area= 3723.5 sq.m. (58.56 %)  
 Math area= 570.4 sq.m.  
 School= 74 sq.m  
 Pati cum pasal area= 131.5 sq.m.  
 Fire kiln area=97 sq.m  
 Lyosindyo pati area= 45 sq.m.  
 Dyochhen area= 63.4 sq.m  
 Taal danpho area=792 sq.m  
 Hiti gale area= 55.85 sq.m  
 Parking area= 73 sq.m



### New area calculation

Total site area= 6358.438 sq. m. (12-7-3-3.5)  
 Total open area= 2638.75 sq. m. (41.510%)  
 Total ground coverage area= 3723.5 sq.m. (58.56 %)

Total ground coverage area = 1923.205 SQ.M  
 Commercial & workshops floor area = 1107.25 sq.m  
 Store area = 157.84 sq.m  
 Pottery school area = 379.94 sq.m  
 Bread & Breakfast Hotel area = 278.17  
 (The ground floor of the private residences will be used as commercials, store s, pottery school accordingly. The upper floors will be used as residence. Meanwhile a cluster will be entirely developed as B & B hotel.)

Total built up area for residence = 3 X total ground coverage area - B&B area  
 = 3X1923.205-278.17= 5491.445 sq.m

Total population before earthquake = 288  
 Average floor area per person = 11 sq.m  
 Total usable area= 11X 288 = 3168  
 Circulation area= 0.2X total usable area= 633.6  
 Total residential area = 3168+633.6 = 380.6 sq.m



### Pati/ Pasal

Commercial = 131.5 sq.m  
 Store= 131.5 sq.m



### Parking area

area= 104 sq.m



### Community hall

Total ground coverage area= 101.47 sq.m  
 Storage= 10 sq.m  
 Kitchen = 18 sq.m  
 Clay storage= 40 sq.m  
 Firewood storage= 10sq.m  
 Akhachhen= 89.9  
 Dining space= 2X89.9 sq.m = 179.8 sq.m



### Ikhilachi Math

Total ground coverage area = 570.4 sq.m  
 Toilet= 13 sq.m  
 Bhajan= 10 sq.m  
 Staff room= 15 sq.m  
 Circulation= 0.4 X 570.4= 228.16  
 Commercial space = 254.4 sq.m  
 Reception area= 20 sq.m  
 Meeting area= 30 sq.m  
 Gallery= 570.4 X 2= 1140.8 sq.m



### Pottery school

Total ground coverage area= 101.47 sq.m  
 Storage= 25 sq.m  
 Kneading = 15 sq.m  
 Wheel throwing 100 sq.m  
 Drying = 20 sq.m  
 Firing= 30 sq.m  
 Reception= 15 sq.m.  
 Restroom= 15 sq.m  
 Circulation = 159.94



### B&B Hotel

Total ground coverage area = 278.17 sq.m  
 Reception= 20 sq.m  
 Kitchen =30 sq.m  
 Store= 10 sq.m  
 Laundry space= 12 sq.m  
 Staff room= 15 sq.m  
 Living room = 15 sq.m  
 Guest room (2 bed) = 24 sq.m  
 Guest room (3 bed) = 28 sq.m  
 Circulation = 0.4 X 278.17= 111.268 sq.m.  
 Dining space= 64.8 sq.m



### Guthi ghar

Total ground coverage area= 94.19 sq.m  
 Workshop=94.19 sq.m  
 Finance= 94.19 sq.m  
 Cafe= 2 X 94.19 sq.m= 188.38 sq.m

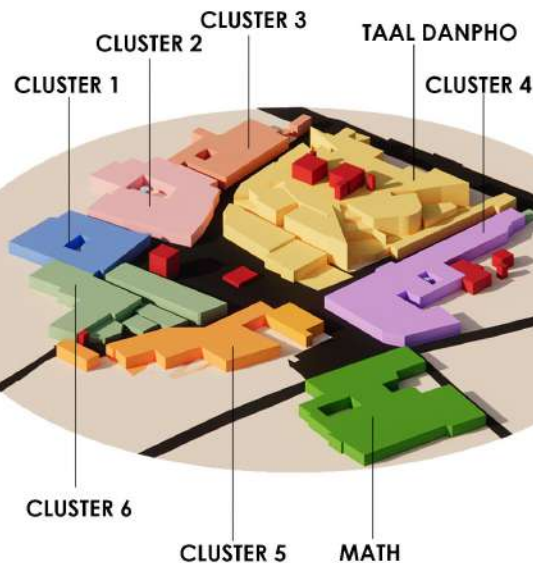




# REVITALIZING TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION

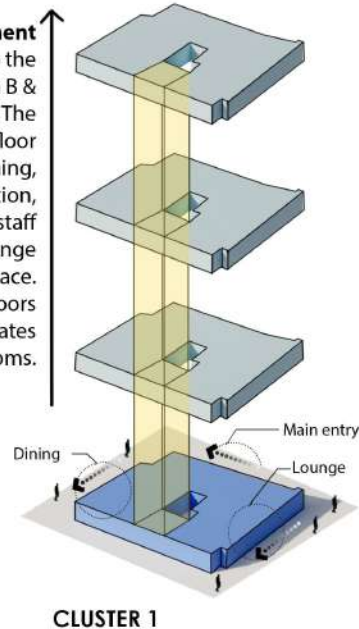
## CONCEPT

### GUIDING PRINCIPLES



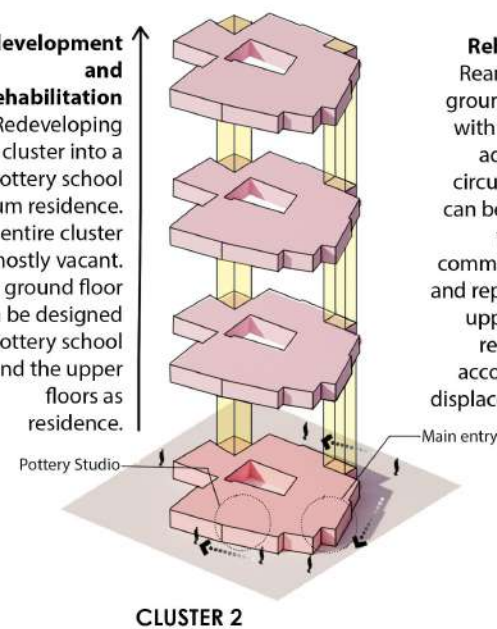
#### Redevelopment

Develop the cluster into a B & B Hotel. The ground floor used as dining, reception, kitchen, staff rooms, lounge space. The upper floors accomodate guest rooms.



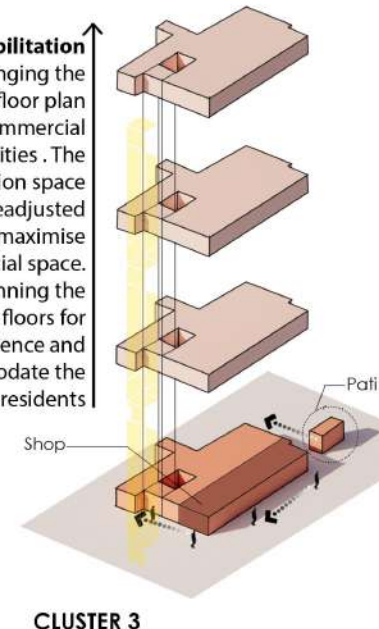
#### Redevelopment and Rehabilitation

Redeveloping the cluster into a pottery school cum residence. The entire cluster is mostly vacant. The ground floor can be designed as pottery school and the upper floors as residence.



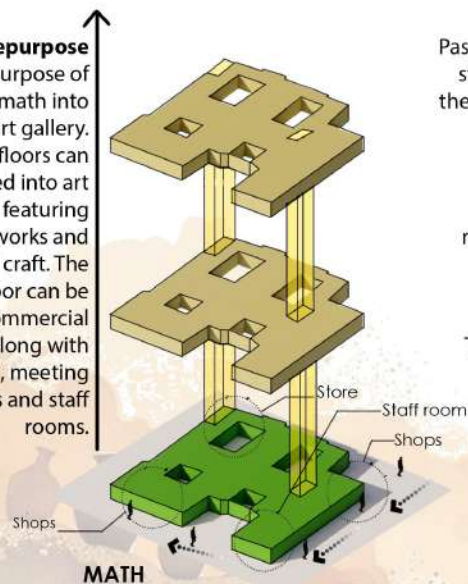
#### Rehabilitation

Rearranging the ground floor plan with commercial activities. The circulation space can be readjusted to maximise commercial space. and replanning the upper floors for residence and accomodate the displaced residents



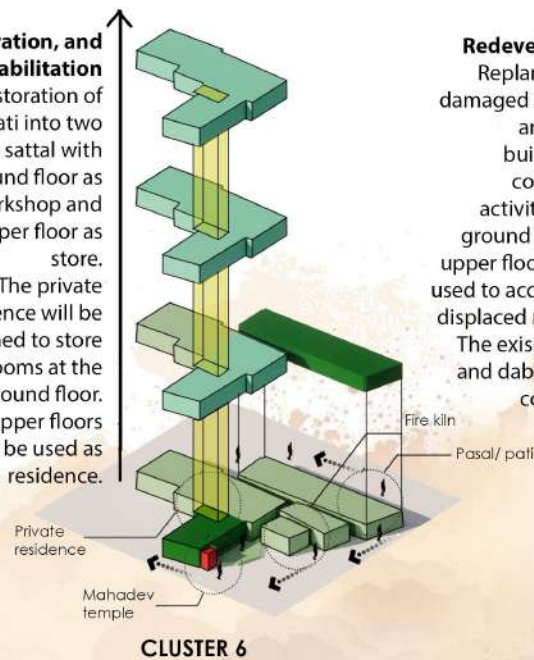
#### Repurpose

Repurpose of Ikhalachi math into art gallery. The upper floors can be used into art gallery featuring pottery works and wood craft. The ground floor can be used for commercial works along with reception, meeting rooms and staff rooms.



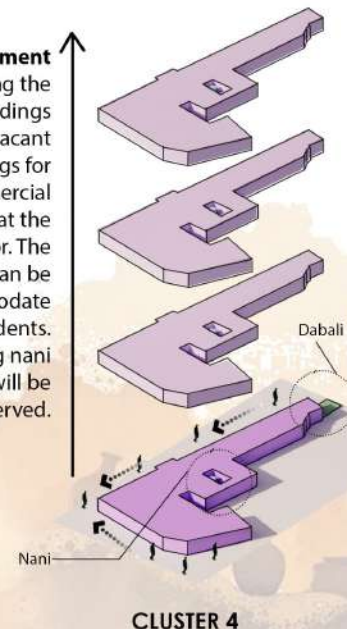
#### Restoration, and Rehabilitation

Restoration of Pasa/ pati into two storey sattal with the ground floor as workshop and upper floor as store. The private residence will be turned to store rooms at the ground floor. The upper floors will be used as residence.



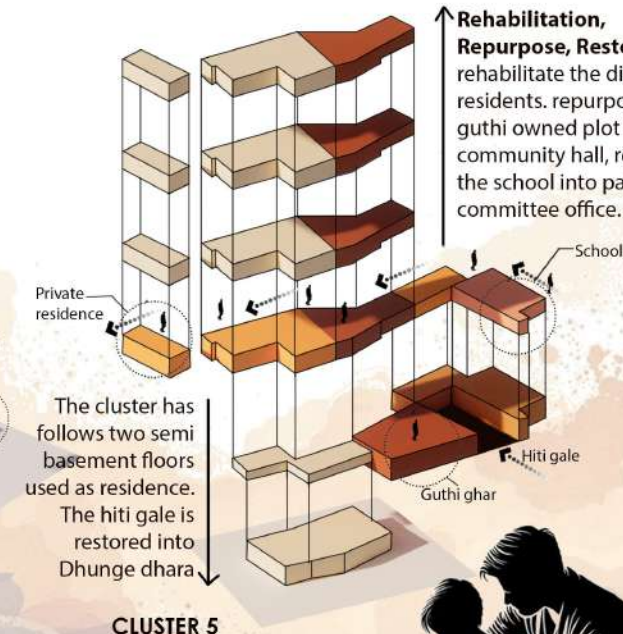
#### Redevelopment

Replanning the damaged buildings and vacant buildings for commercial activities at the ground floor. The upper floors can be used to accomodate displaced residents. The existing nani and dabali will be conserved.



#### Rehabilitation, Repurpose, Restoration

rehabilitate the displaced residents. repurpose guthi owned plot into community hall, restore the school into pati cum committee office.





# ENHANCING THE VITALITY OF TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION



PROPOSED MASTER PLAN (1:200)



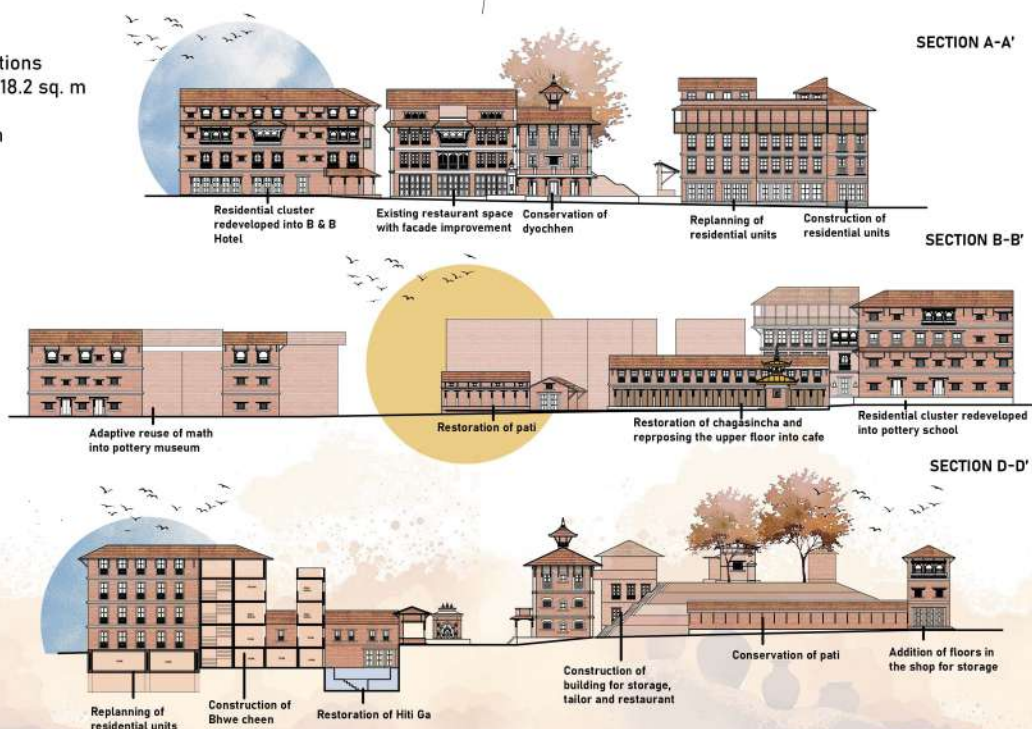
1. Ground coverage, open space  
Ground coverage= 3446.53 sq.m  
Open space=2734.42 sq.m  
Total site area= 6180.73 sq.m

2. Residential building unit typology  
Apartment = 3  
Individual = 24

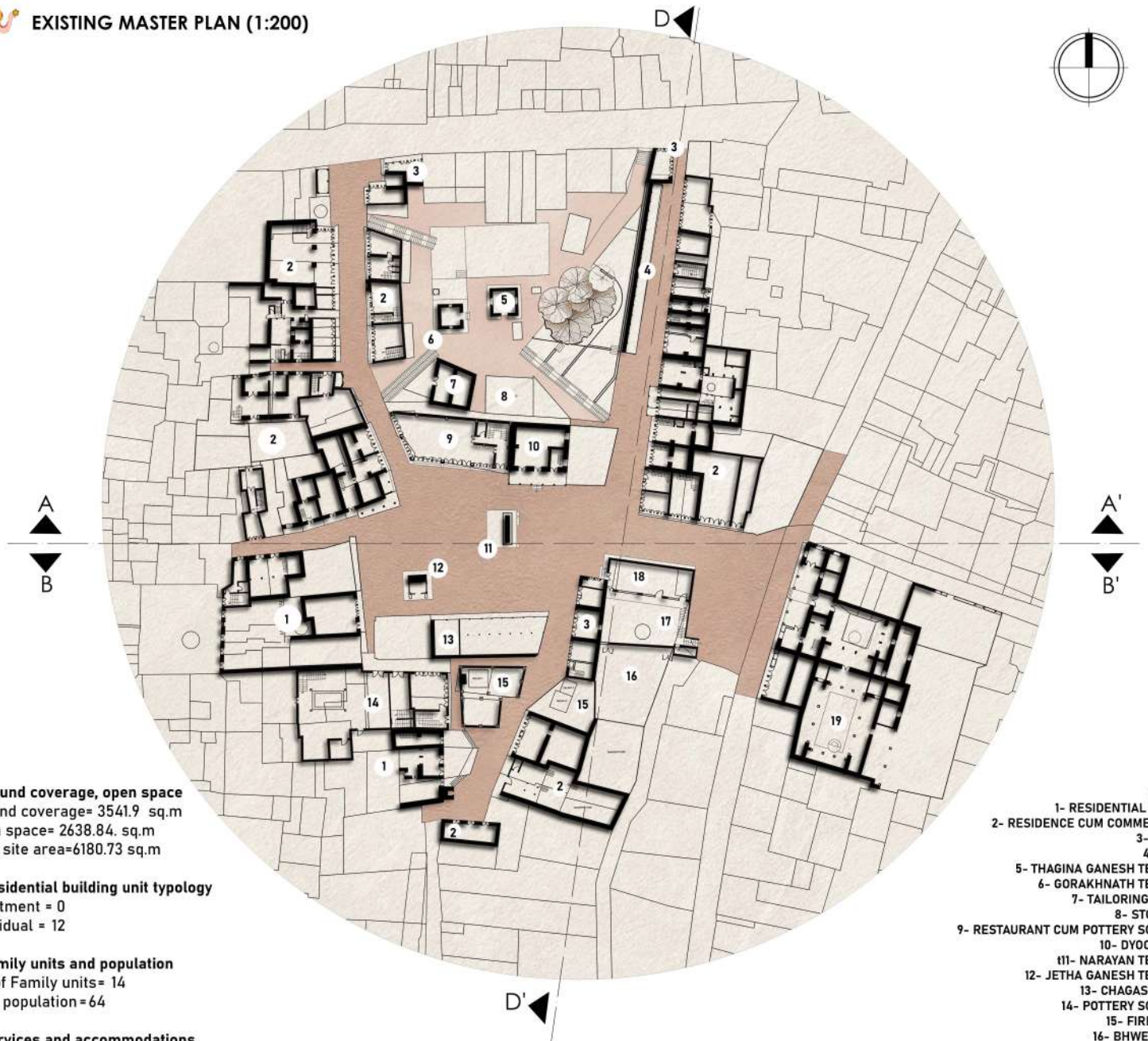
3. Family units and population  
No. of Family units = 33  
Total population = 151

4. Services and accommodations  
Residence + commercial=1318.2 sq. m  
Commercial=1051.8 sq. m  
Community hall= 137.9 sq. m  
Firing area = 59 sq. m.

- INDEX
- 1- POTTERY SCHOOL
  - 2- RESIDENCE CUM COM
  - 3- B & B HOTEL
  - 4- RESTAURANT
  - 5- DYCHHEN
  - 6- NARAYAN TEMPLE
  - 7- JETHA GANESH TEMPLE
  - 8- CHAGASINCHA
  - 9- FIRE KILN
  - 10- BHWE CHHEN
  - 11- HITI GA
  - 12- SHOP
  - 13- PATI
  - 14- IKHALACHI MATH
  - 15- RESTAURANT CUM TAILOR
  - 16- GORAKHNATH TEMPLE
  - 17- THAGINA GANESH TEMPLE
  - 18- TAAL DANPHO







### 1. Ground coverage, open space

Ground coverage= 3541.9 sq.m  
Open space= 2638.84. sq.m  
Total site area=6180.73 sq.m

### 2. Residential building unit typology

Apartment = 0  
Individual = 12

### 3. Family units and population

No. of Family units= 14  
Total population = 64

### 4. Services and accommodations

Residence= 489.95 sq.m  
Residence + commercial 776.15 sq.m  
Commercial=382 sq.m  
Community hall= 1156 sq.m  
Firing area =99 sq.m

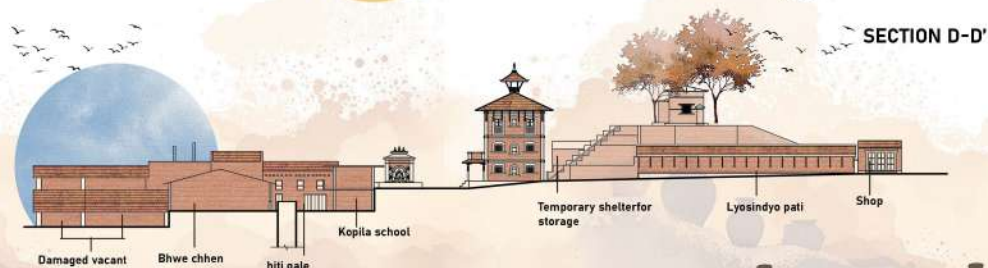
- INDEX**
- 1- RESIDENTIAL UNITS
  - 2- RESIDENCE CUM COMMERCIAL
  - 3- SHOP
  - 4- PATI
  - 5- THAGINA GANESH TEMPLE
  - 6- GORAKHNATH TEMPLE
  - 7- TAILORING SHOP
  - 8- STORAGE
  - 9- RESTAURANT CUM POTTERY SCHOOL
  - 10- DYOCHHEN
  - 11- NARAYAN TEMPLE
  - 12- JETHA GANESH TEMPLE
  - 13- CHAGASINCHA
  - 14- POTTERY SCHOOL
  - 15- FIRE KILN
  - 16- BHWE CHHE
  - 17- HITI GALE
  - 18- KOPILA SCHOOL
  - 19- IKHALACHHI MATH



SECTION A-A'



SECTION B-B'



SECTION D-D'

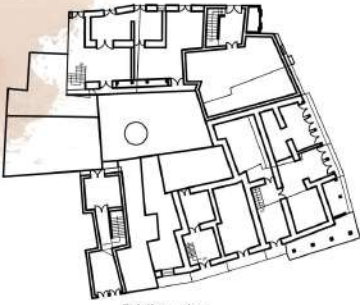




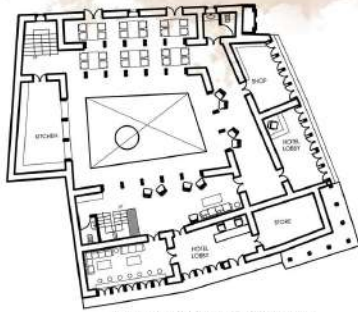
# ENHANCING THE VITALITY OF TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION

## TRANSFORMING CLUSTER 2 INTO B&B HOTEL

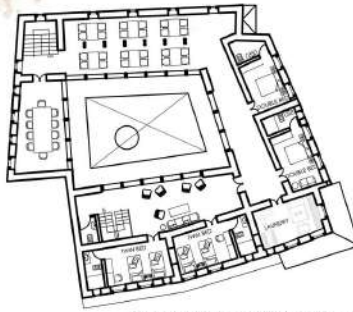
### Floor plans



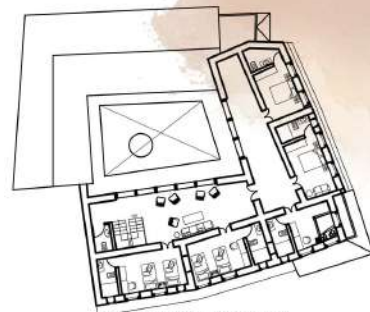
Existing plan



Proposed ground floor plan



Proposed first and second floor plan



Proposed third floor plan

### Cluster 2 brief

This cluster includes 13 private properties numbered 33-43. With just one newly built house, the cluster has a series of abandoned and destructed buildings which provides us an opportunity to develop the entire cluster into a closed building. The residing family can be shifted in other private houses instead. The chowk, pati and Hamadyo can be well preserved and the buildings can be reconstructed and repurposed into a B & B hotel. Traditional malla architecture is pursued for the structure and decorative elements

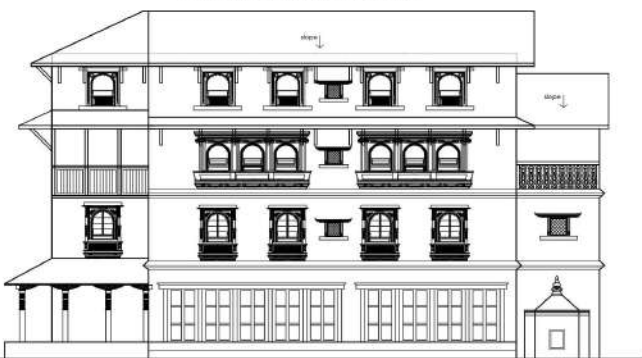
Existing South street elevation



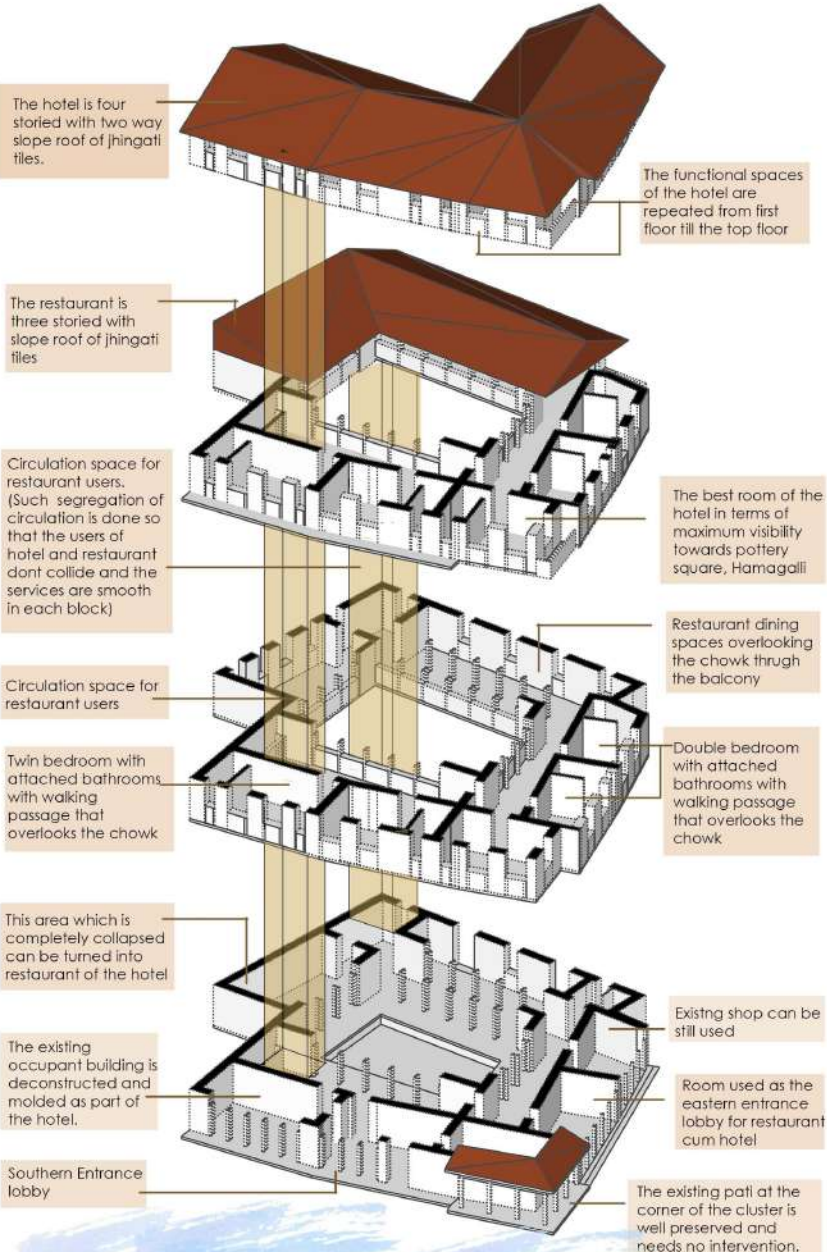
Existing building photos of cluster 2



Proposed south street elevation



Proposed east street elevation





ENHANCING THE VITALITY OF TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION

COMPARATIVE ANALYSIS

Private house number

Building use

Ground floor use

Existing



Documented public buildings  
Documented private houses

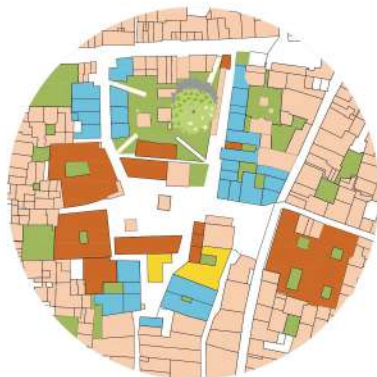


Residence  
Commercial  
Collapsed  
Mixed - Residential & commercial  
Store

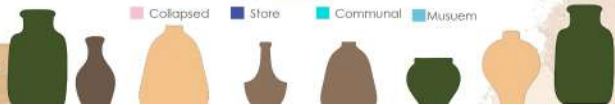


Shop  
Pottery Workshop  
Storage  
Collapsed  
Store  
Community works

Proposed



Collapsed  
Store  
Communal  
Museum



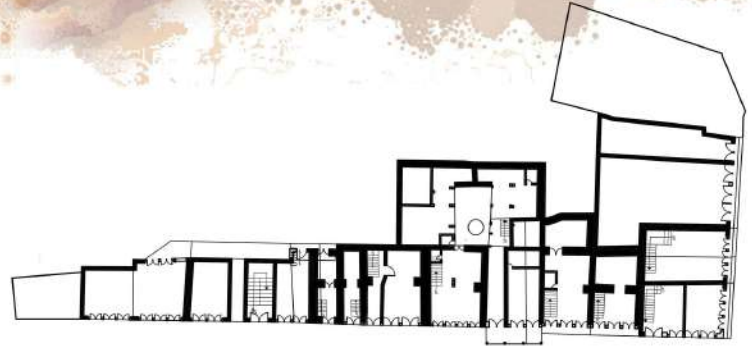


# ENHANCING THE VITALITY OF TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION

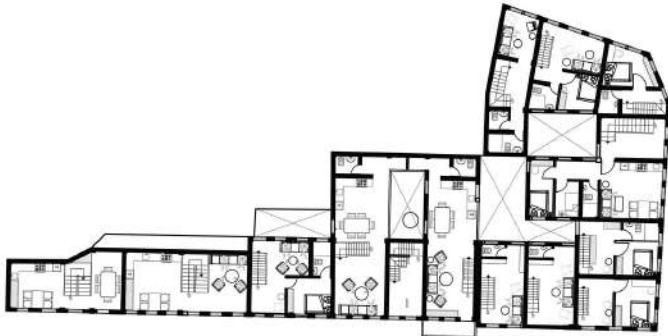
## CLUSTER 4



PROPOSED GROUND FLOOR PLAN



EXISTING GROUND FLOOR PLAN



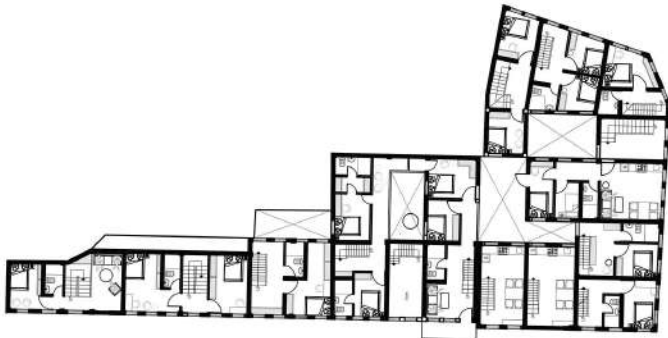
PROPOSED FIRST FLOOR PLAN



EXISTING WEST ELEVATION



PROPOSED WEST ELEVATION



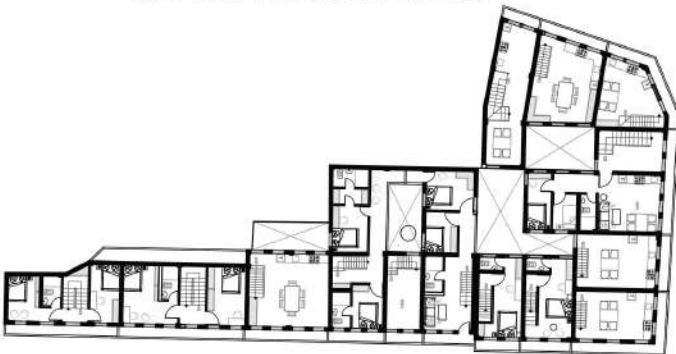
PROPOSED SECOND FLOOR PLAN



EXISTING SOUTH ELEVATION



PROPOSED SOUTH ELEVATION



PROPOSED THIRD FLOOR PLAN

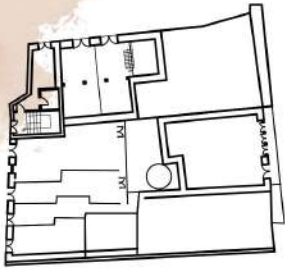




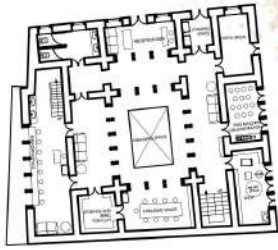
# ENHANCING THE VITALITY OF TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION

## TRANSFORMING CLUSTER 1 INTO POTTERY SCHOOL

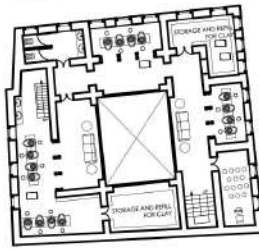
### Floor plans



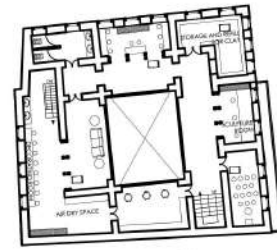
Existing plan



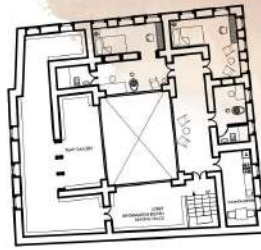
Proposed ground floor plan



Proposed first floor plan



Proposed second floor plan



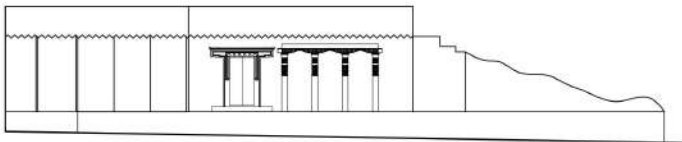
Proposed third floor plan

### Cluster 1 brief

This cluster includes 6 private properties numbered 25-31 along with Dattatraya math. With just one newly built house, the cluster has a series of abandoned and destructed buildings which provides us an opportunity to develop the entire cluster into a closed building. The residing family can be shifted in other private houses instead. The chowk can be well preserved and the buildings can be reconstructed and repurposed into a pottery school. With access to its own nani, pottery square and Tanani, this cluster provides ample light for the learners in pottery training studio. The facility of artist in residency is also



Existing building photos of cluster 1



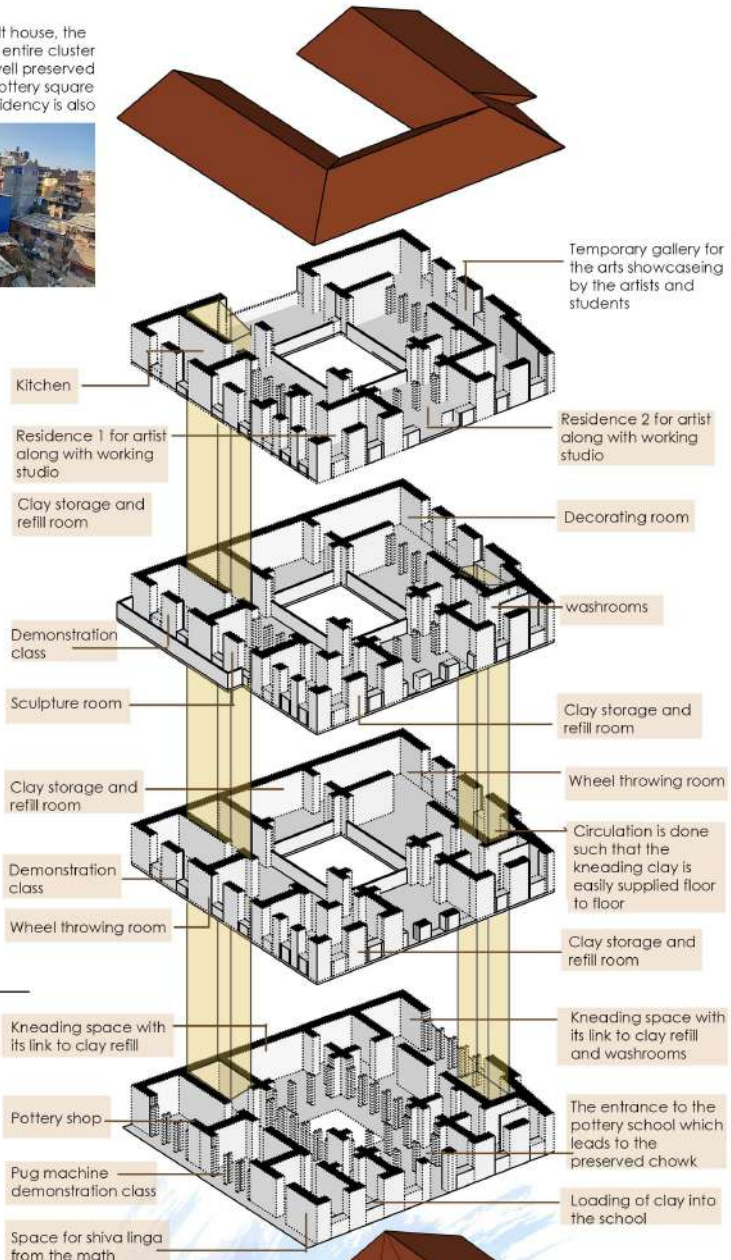
Existing east street elevation



Proposed east street elevation



Proposed north street elevation

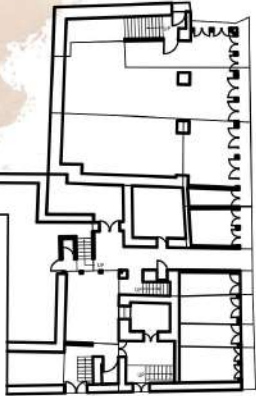




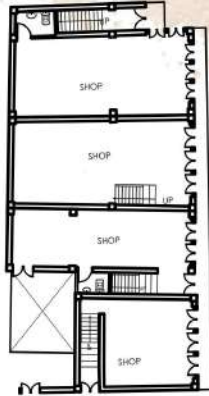
# ENHANCING THE VITALITY OF TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION

## TRANSFORMING CLUSTER 3 INTO MIXED USE RESIDENCE

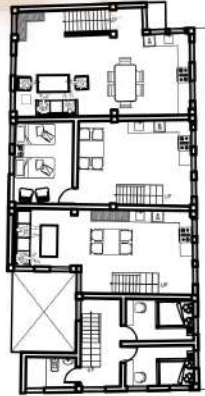
### Floor plans



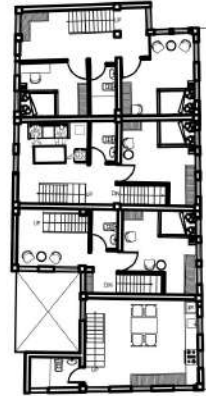
Existing plan



Proposed ground floor plan



Proposed first floor plan



Proposed second floor plan



Proposed third floor plan

### Cluster 3 brief

This cluster includes 7 private properties numbered 44-50. The cluster is owned by the Shrestha community mostly. Although in a row housing format, these houses possess different architecture style. The houses appear to be extremely divided vertically and even the ground floor is divided among family members for commercial use. The cluster also has a tiny nari for ventilation and light where necessary, whilst other houses have direct access to chowks and streets. Among these houses, only one is used as occupancy while others are used as shops. Now we can redesign the block into 4 mixed used residential units and expand the usable floor area through house pooling schemes. The building storey is also corrected as they are currently over 5 storeys exceeding the limit.

Existing building photos of cluster 1



Houses with elongated width are provided with balconies and stair cover which is a better way to observe the ongoing festivals at the street

The houses are redesigned with house pooling and discarded the cramped spaces as the problem of light and ventilation currently arises in some houses. The nari is well preserved and balconies are provided to the houses facing the chowk at nasamana

The upper floors can be used as living and dining spaces or used as bedrooms. For efficiency and comfort, the provision of at least two washrooms in each house is allocated. The ground floor also has access to the washroom at the same floor for their convenience.

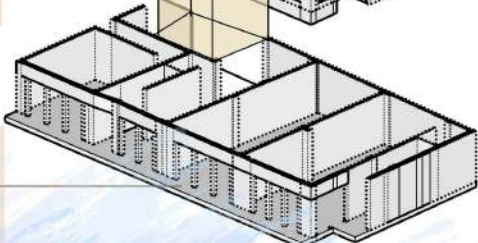
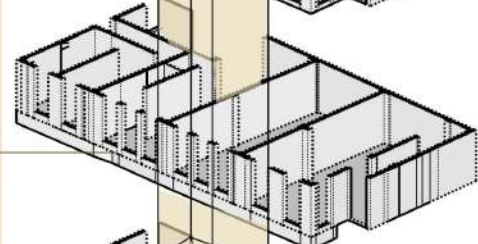
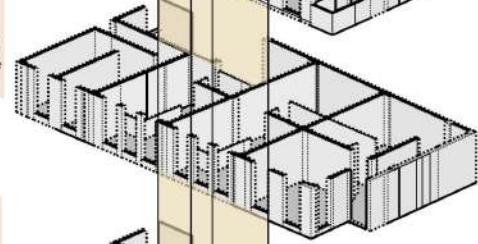
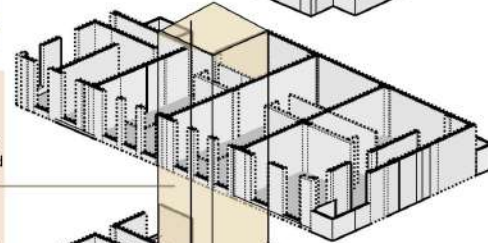
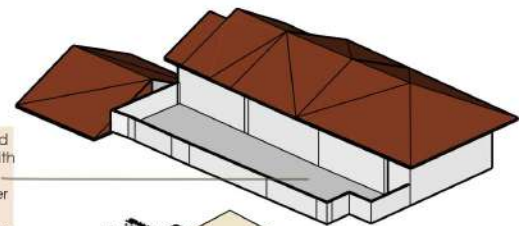
The ground floor is used as shops and commercial use as it is the street that links up Durbar square to the pottery square directly and has a high tourist approach rate



Proposed east street elevation



Proposed north street elevation





## ENHANCING THE VITALITY OF TALAKO AREA: UNLCOKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION



West view of main square showing Chagasincha



South West view of main square showing B & B hotel



North view of main square showing dyochhen and restaurant



Elevational view cluster 4 as seen from Taal darpho



View of Hamgalli as seen from Nasamana



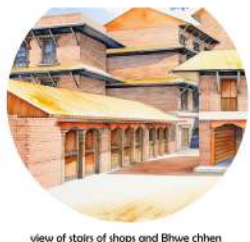
View of Dhune dhara and poti



view of Taal darpho with newly added poti



view of stairs of Taal darpho used for drying pottery



view of stairs of shops and Bhawe chhen



View of math and poti as seen from the square



### PROPOSED VIEWS







# ENHANCING THE VITALITY OF TALAKO, BHAKTAPUR : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION

## URBAN REGENERATION

process of revitalizing and improving urban areas

## Areas of regeneration



economic

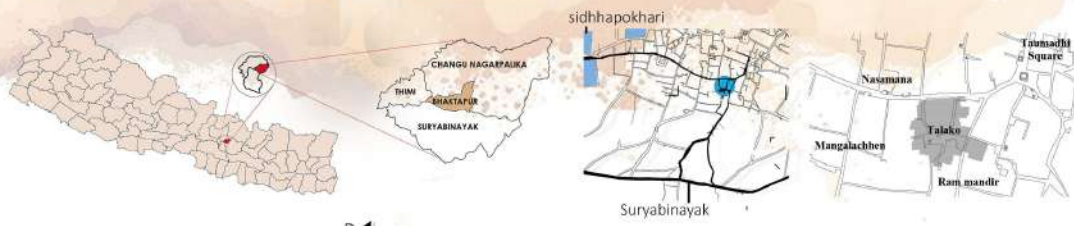


environmental



social / cultural

Site location - Talako/ Pottery Square, Bhaktapur



## Site analysis



Open space Built form Street



Documented public buildings

Documented private houses



Vacant Occupied

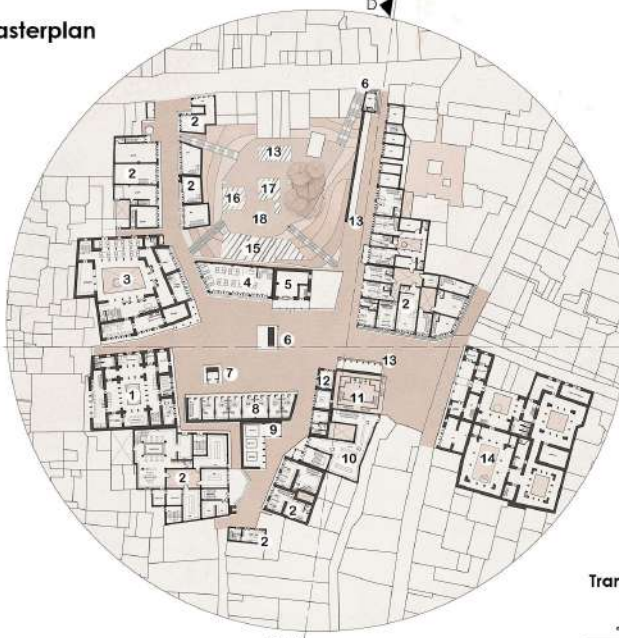


Partial damage Temporary Intact Collapsed



Restoration of pati and dhunge dhara

## Masterplan



## Project Description

This project aims to unlock the full potential of Talako enhancing housing conditions, strengthening community facilities, promoting sustainable economic growth, and fostering cultural tourism while preserving the unique heritage and identity of the area, underlying the traditional business of pottery

### Comparative analysis : Existing / Proposed

**1. Ground coverage, open space**  
Ground coverage= 3541.9 sq.m / 3446.53 sq.m  
Open space= 2638.84 sq.m / 2734.42 sq.m  
Total site area= 6180.73 sq.m / 6180.73 sq.m

### 2. Residential building unit typology

Apartment = 0 / 3  
Individual = 12 / 24

### 3. Family units and population

No. of Family units= 14 / 33  
Total population= 64 / 151

## Transformation of buildings facade at Nhula

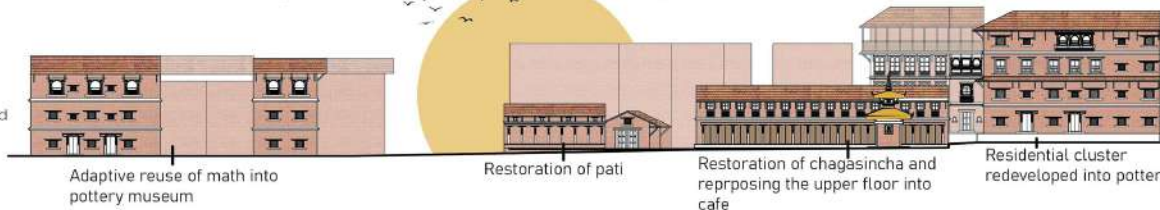


Existing elevation



Proposed elevation

## Section D-D'



Adaptive reuse of math into pottery museum

Restoration of pati

Restoration of chagasincha and reposing the upper floor into cafe

Residential cluster redeveloped into pottery



Addition of resthouses at Taal danpho



Restoration of Chagasincha



Redevelopment of residences

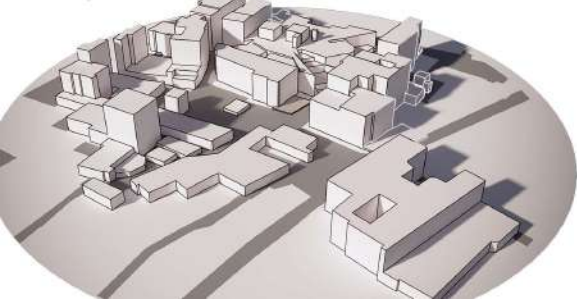


Conservation of public monuments



Commercialisation of spaces

## Existing site model



## Proposed site model

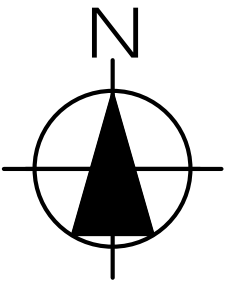


"A place needs a witness to life. Regeneration helps bring back this life by reconnecting the place with the community, making good use of resources, and keeping a healthy balance between daily life and the local economy."

- Nistha Awal / 760123  
Khwopa Engineering College  
Department of Architecture



ENHANCING THE VITALITY OF TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION



PROBLEMS IN EXISTING SITE

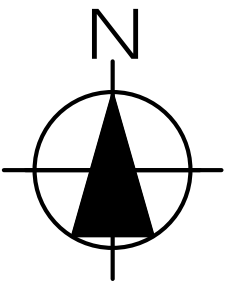
- ABANDONED HOUSES
- DETERIORATED HOUSES AND PUBLIC BUILDINGS
- TEMPORARY SHEDS BUILT OVER DAMAGED BUILDINGS FOR FIRING, STORAGE
- DECREASED HABITATION LEVEL AFTER EARTHQUAKE
- UNUSED VACANT SPACES DUE TO DAMAGE
- LOSS OF ECONOMIC OPPORTUNITIES DUE TO UNUTILIZED SPACES
- LACK OF LIGHT AND VENTILATION IN SOME AREAS
- UNUTILIZED SPACES AT TAAL DANPHO
- LACK OF STORAGE SPACES FOR POTTERY

PROPOSED SOLUTIONS

- CONSERVATION OF PUBLIC MONUMENTS; PATI, TEMPLES
- RECONSTRUCTION AND REDEVELOPMENT OF HOUSES INTO COMMERCIAL AD RESIDENTIAL USE
- PROPER ZONING OF THE HOUSES FOR INCREASED FUNCTIONALITY
- PROVISION OF HABITATION, ENTERTAINMENT, INSTITUTION, AND CULTURAL ASPECTS
- RESTORATION OF IMPORTANT PUBLIC BUILDINGS; CHAGASINCHA
- ADDITION OF STOREYS IN EXISTING ONE STOREY SHOPS
- LANDSCAPE IMPROVEMENT AT TAAL DANPHO FOR POTTERY DRYING AND OPEN SPACE

EXISTING GROUND FLOOR PLAN

ENHANCING THE VITALITY OF TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION



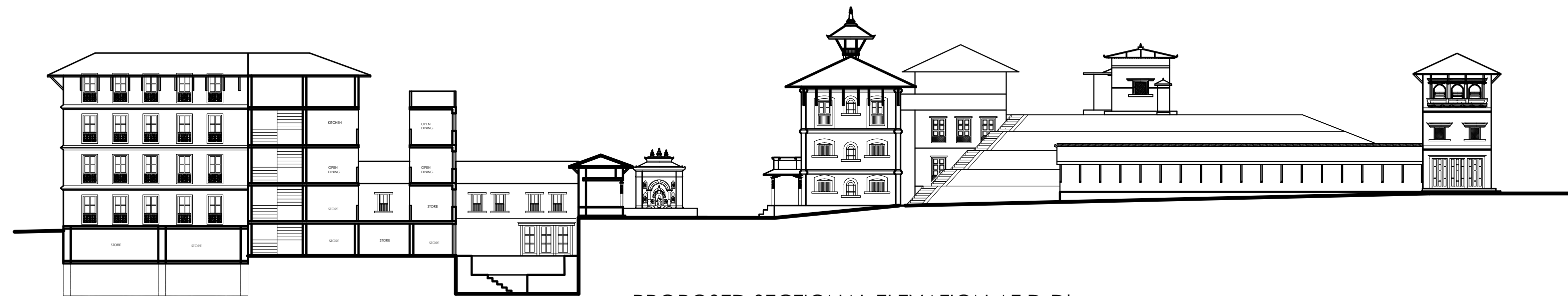
PROPOSED GROUND FLOOR PLAN



# ENHANCING THE VITALITY OF TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION



EXISTING SECTIONAL ELEVATION AT D-D'

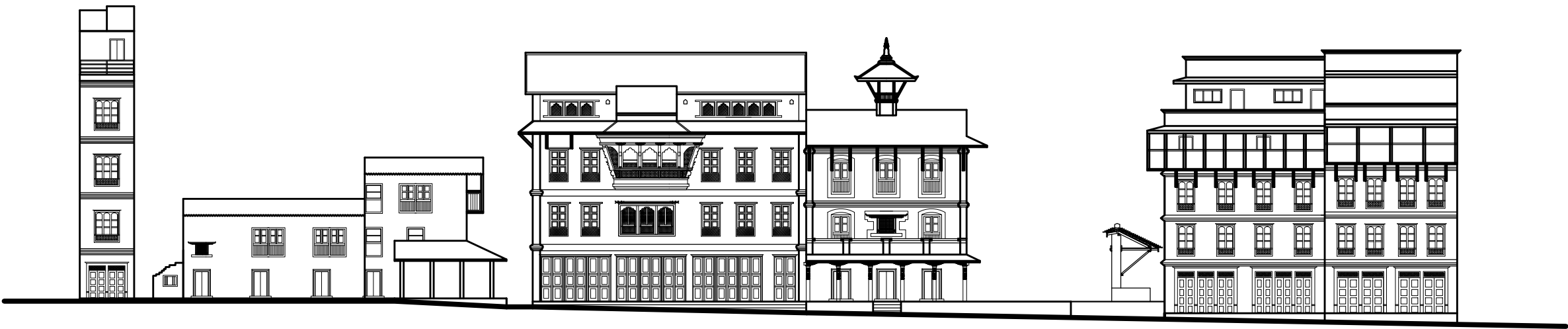


PROPOSED SECTIONAL ELEVATION AT D-D'

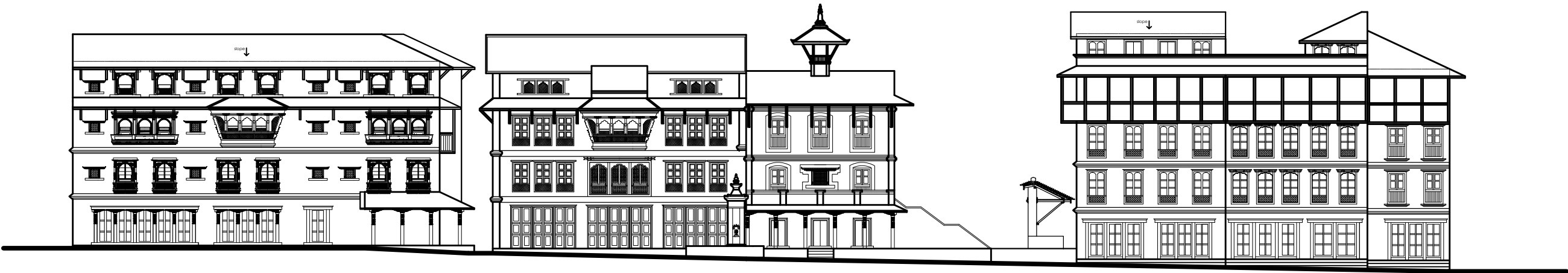


PROPOSED SECTIONAL ELEVATION AT C-C'

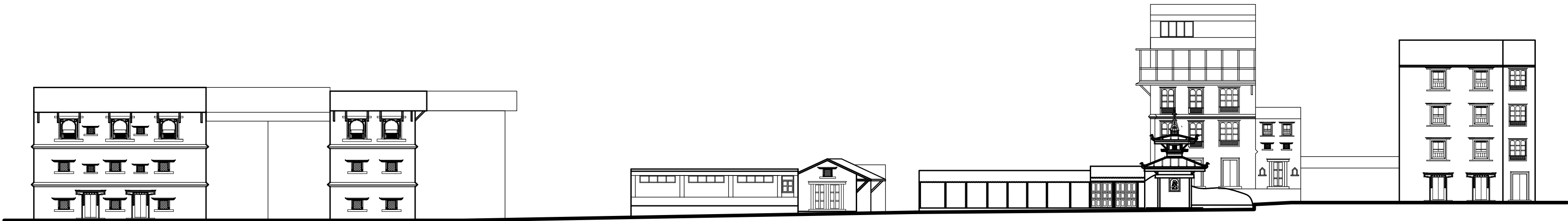
ENHANCING THE VITALITY OF TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION



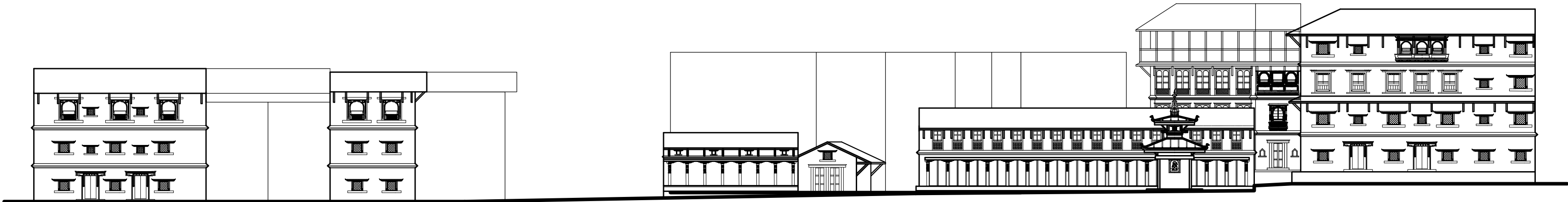
EXISTING SECTIONAL ELEVATION AT A-A'



PROPOSED SECTIONAL ELEVATION AT A-A'

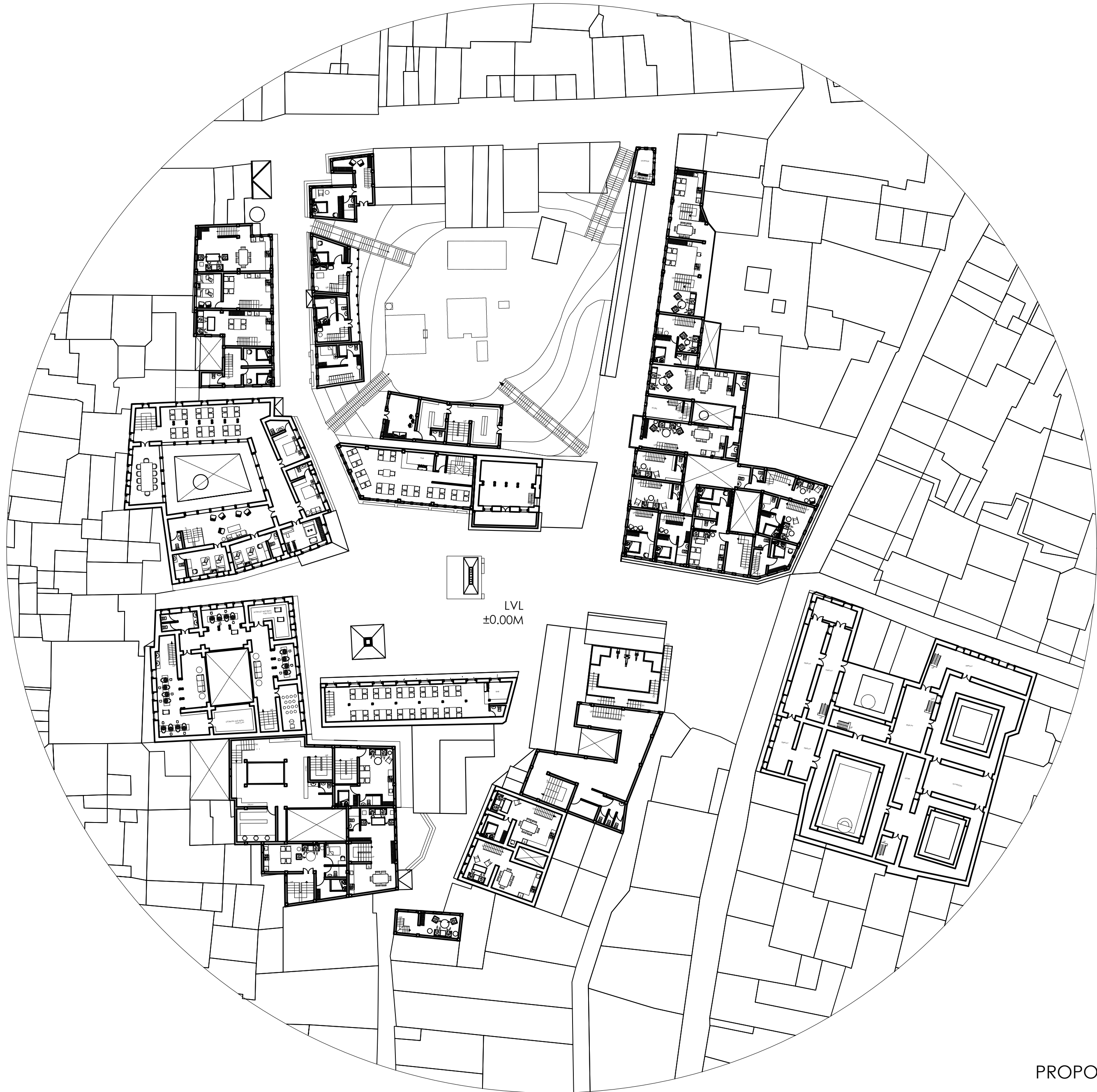
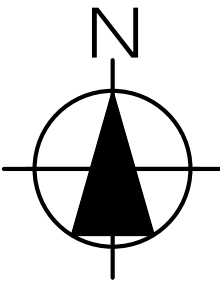


EXISTING SECTIONAL ELEVATION AT B-B'



PROPOSED SECTIONAL ELEVATION AT B-B'

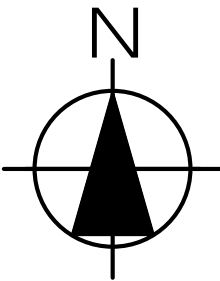
ENHANCING THE VITALITY OF TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION



PROPOSED FIRST FLOOR PLAN

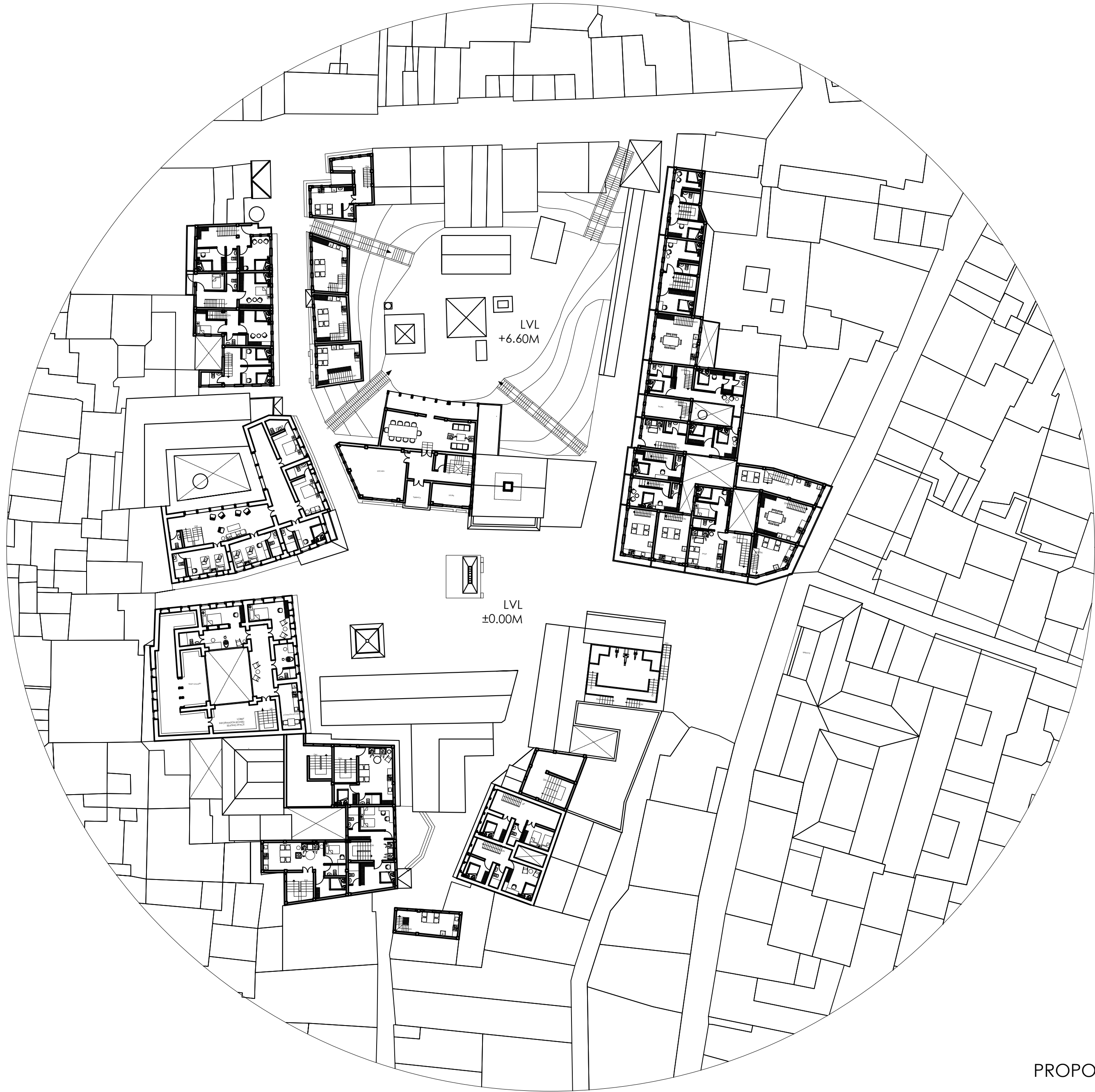
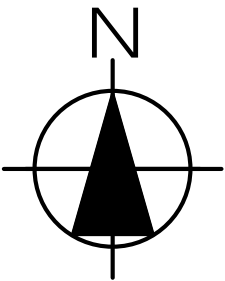


ENHANCING THE VITALITY OF TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION



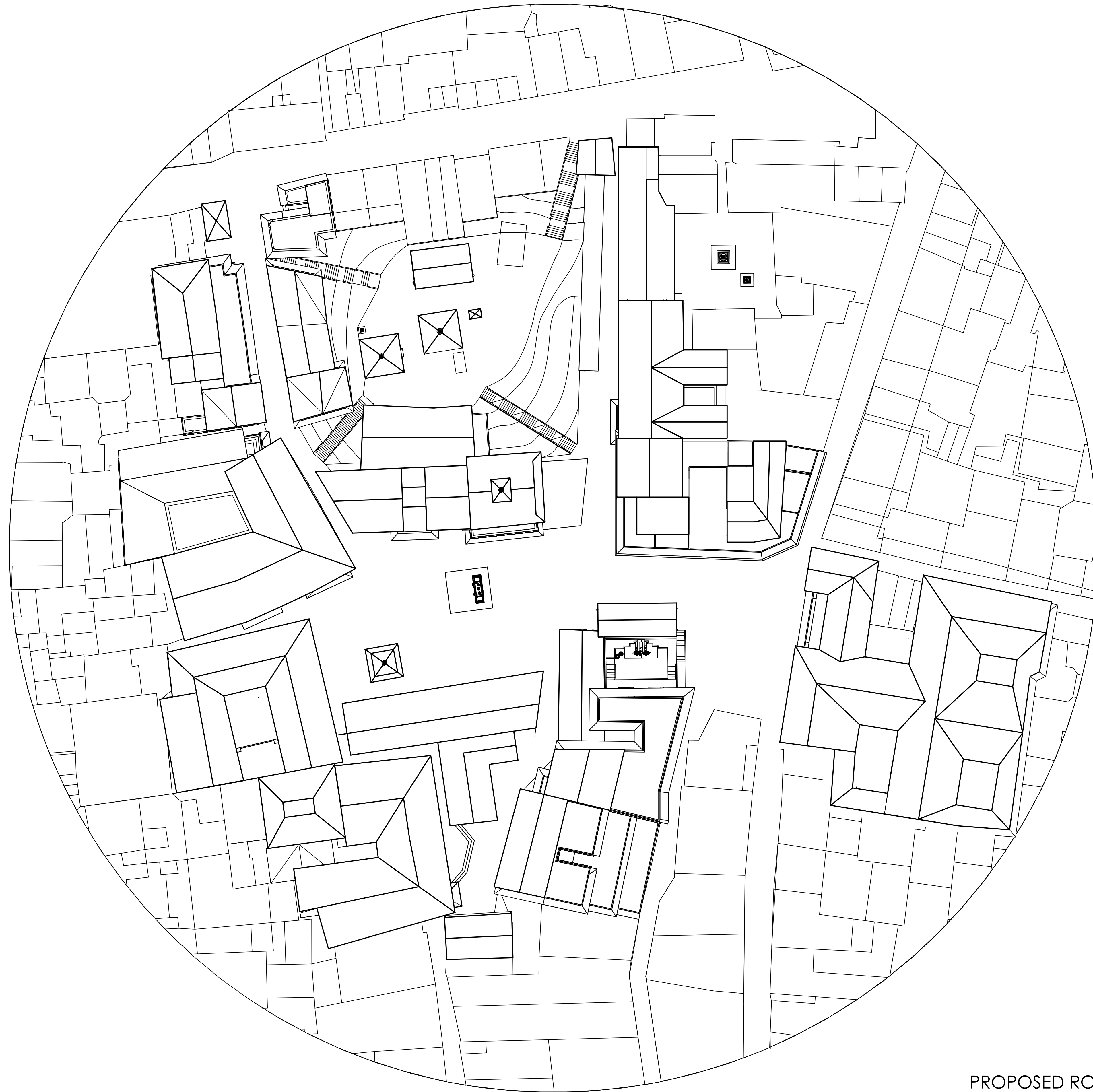
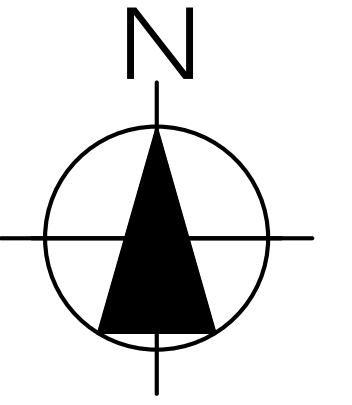
PROPOSED SECOND FLOOR PLAN

ENHANCING THE VITALITY OF TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION



PROPOSED THIRD FLOOR PLAN

ENHANCING THE VITALITY OF TALAKO AREA : UNLOCKING ITS FULL POTENTIAL THROUGH URBAN REGENERATION



PROPOSED ROOF PLAN