

# **Paving the Path Ahead: Innovations and Opportunities for Panvel City's Market Yard**

**'TRANSFORMING DEPLETED MARKET'  
SHUBHAM KALSE**

**A REPORT**

Submitted in partial fulfillment of the  
requirements for the degree of  
Bachelor of Architecture.




**University of Mumbai**

2023

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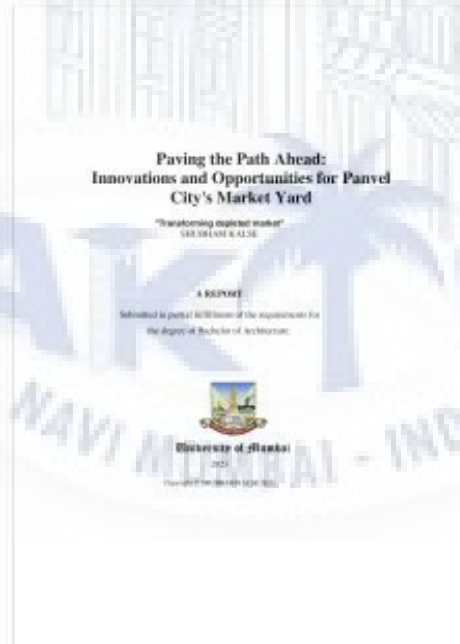


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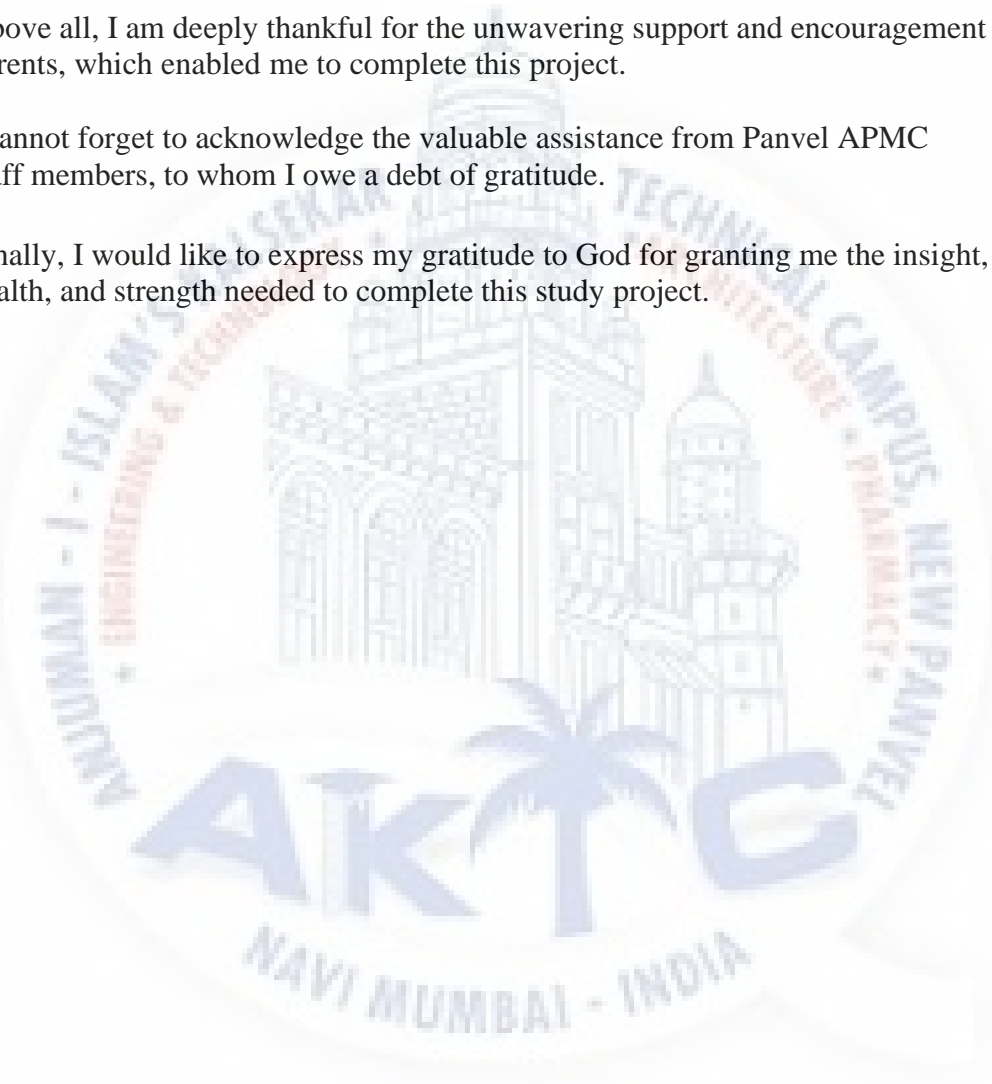
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## 0. ABSTRACT

This document provides a comprehensive overview of the Panvel market yard, a century-old marketplace in India primarily focused on vegetable sales, serving as a central hub for vegetables from 196 villages to meet the demands of both local and regional markets. It also highlights the role of hawkers, temporary vendors, and the logistical aspects of goods transportation. Despite its historical significance, the market faces challenges such as congested loading areas, inadequate sanitation, and unorganized infrastructure, impacting both sellers and buyers and resulting in significant waste generation. Additionally, the document underscores the urgent need for community schools and facilities to accommodate the growing local population. Looking ahead, a 25-year development plan takes environmental regulations and land allocation into account, aiming to address current inefficiencies, optimize land usage, and enhance facilities to support the region's farmers and traders. These initiatives are geared towards improving the market's competitiveness, transparency, and overall efficiency, ultimately benefiting the broader community and bolstering the local and regional agricultural economy.



## 1. INTRODUCTION

In the heart of Panvel city, there is an old market that was established on October 31, 1957. Over the years, this market has transformed from a small market into a vast market yard that serves 196 villages and covers a sprawling 99-acre campus. This place operates with licensed processes, and it's home to 1150 members. Farmers from states like Madhya Pradesh, Gujarat, and Karnataka bring various types of vegetables to this market to sell and export them to these regions.

The Panvel market yard is like a bustling web of activity, involving consumers, truckers, vendors, and laborers. It's a very crowded place, and there isn't much space for loading and unloading goods, so you can often see a long line of trucks waiting, causing traffic and chaos.

But the Panvel market yard didn't start out this way. It began as a few small shacks and gradually grew into the influential market it is today. Let's take a journey into the history of this market to understand how it all happened.

Many years ago, Panvel's market was a modest place with just a few small stalls or shacks. People from nearby villages came here to sell their agricultural products. As time passed, the market's reputation grew, and more and more farmers and vendors started coming here to do business. This attracted traders and buyers from other states like Madhya Pradesh, Gujarat, and Karnataka, as they realized the potential of this market.

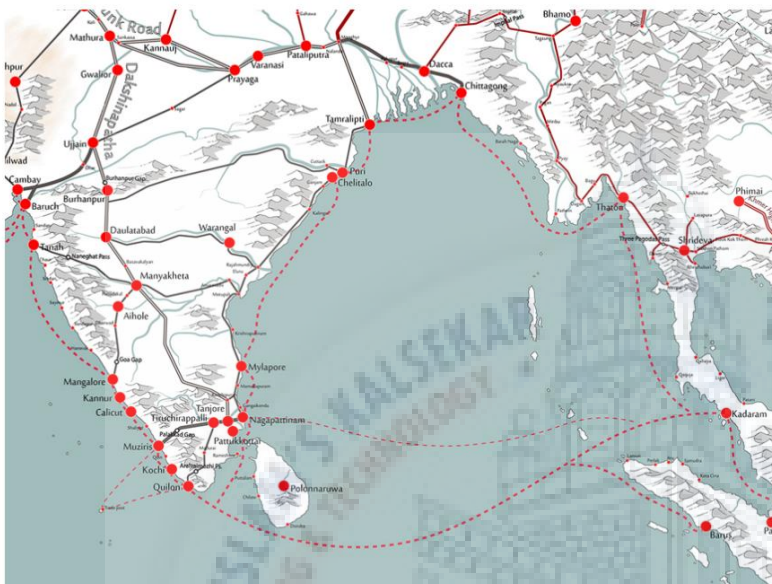
The market's growth was also facilitated by the establishment of a proper infrastructure, like storage facilities and better transportation links. This made it easier for goods to be brought to the market and distributed to various places.

The market's success and influence on people can be attributed to its central location and the opportunities it provided to farmers and traders. It became a hub for agricultural trade in the region, and as a result, it attracted more people and investments.

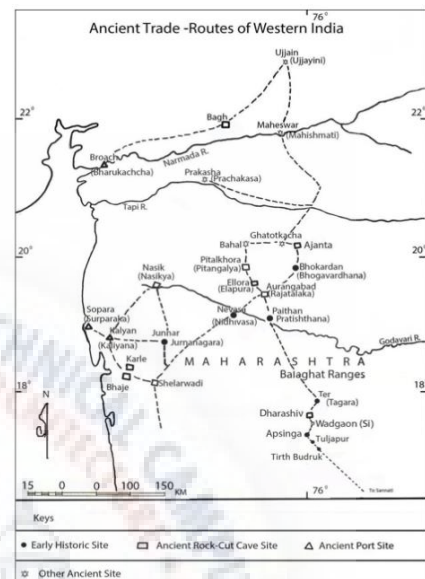
Today, the Panvel market yard is not just a place for buying and selling goods; it's a vital part of the local economy, connecting farmers, traders, and consumers from different regions. Its history showcases how a small market can evolve and grow, creating a significant impact on the lives of many people.

## 2.1.a. BACKGROUND STUDY: HISTORY OF PANVEL

Panvel is a town with at least 3 centuries' worth of history, it developed around trade routes that used to go through both land and sea. Below are 2 examples of trade routes one in ancient india when trade used to happen between baruch port in modern-day gujrat and then the big financial capital of central india prathisthanpur (paithan).



Courtesy : sockrotation-wordpress.com



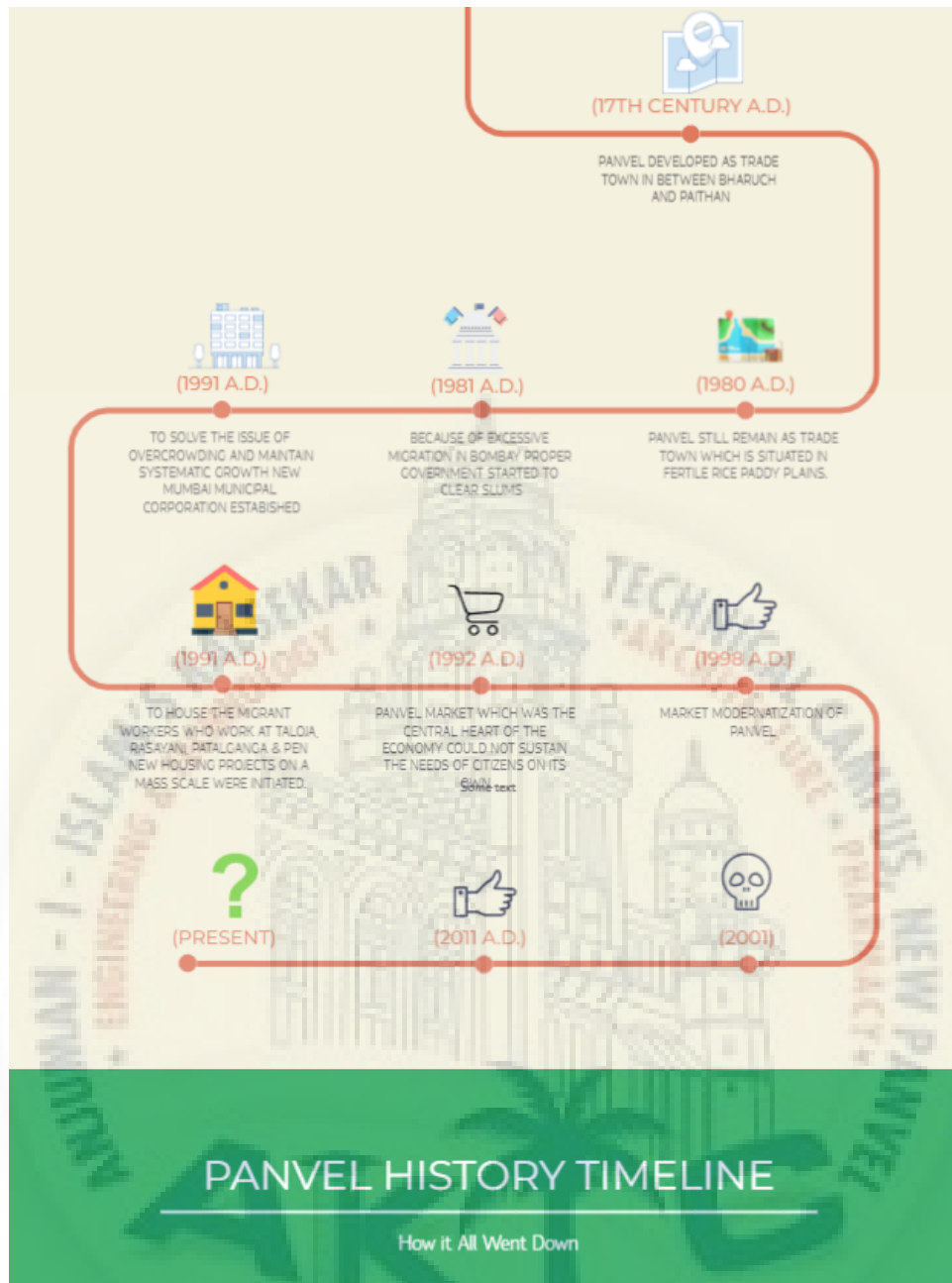
Courtesy : researchgate

FIGURE:1 MEDIVAL ROUTES OF TRADE

Panvel is said to have been established somewhere in times of maratha rule on land that is very fertile ground for rice crops. During the 1980s, panvel which was known as a marshy land and rice paddy had turned into a developing city in maharashtra. The city was once a rural, underdeveloped region set beside a creek and mangrove forests and was distant from the developmental initiative going on in mumbai. Mumbai was then a very populous city with hundreds of people migrating from all over india. Owing to the importance of the financial city of india, mumbai was getting congested with residential and commercial developments, causing a dearth of required spaces to expand. Thus, there was a need to resort to other options which led to the outline of the twin city of mumbai, namely navi mumbai. The new city comprised several regions from the thane and raigad districts. The regions from thane are now completely developed and sustained while the cities in the raigad district are currently booming with several developments. Panvel is the most preferred spot for residential and commercial opportunities among modern homebuyers. ( PANVECORPORATION,2016)

Thus, farmers around the panvel started selling their land at higher prices and migrated to other places which made the area full of farmlands into the jungle of concrete. Local farms were unable to sustain the food requirements of ever growing population of panvel. So, vendors from ulwe and vashi took the lead and provided perishable food items to the masses. Thus, the market of panvel started to transform as per the needs of residents.

The market of panvel has started growing from shacks to vendors of different commodities ranging from fish, meat, vegetables, and fruits to spices. Then government bodies of panvel provided them with durable infrastructure yet, crampiness, unhygienic, and many other problems were left unanswered.



**FIGURE 2 TIMELINE OF PANVEL**  
(COURTESY: AUTHOR)

## 2.1.b BACKGROUND STUDY: HISTORY OF MARKETS

The history of markets is a long and fascinating journey that spans centuries and civilizations. Markets have been crucial to human societies as places where goods, services, and ideas are exchanged.

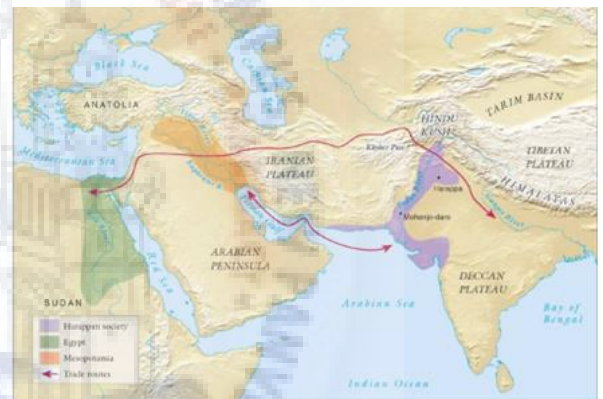
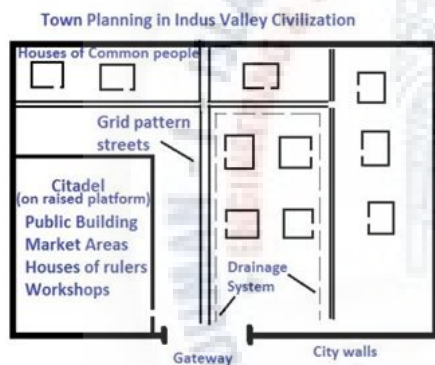
**ANCIENT MARKETS:** the origins of markets can be traced back to ancient civilizations such as mesopotamia, egypt, and the indus valley. These early markets were often centered around agricultural produce and were places where local farmers and traders gathered to exchange their goods.

### MARKETPLACES AND BAZAARS:

- Archaeological evidence points to the existence of marketplaces or bazaars within these urban centers. Streets were laid out in a way that suggested designated areas for trade and commerce.
- Houses were often built around courtyards, and some buildings may have served as shops or stalls for artisans and traders.

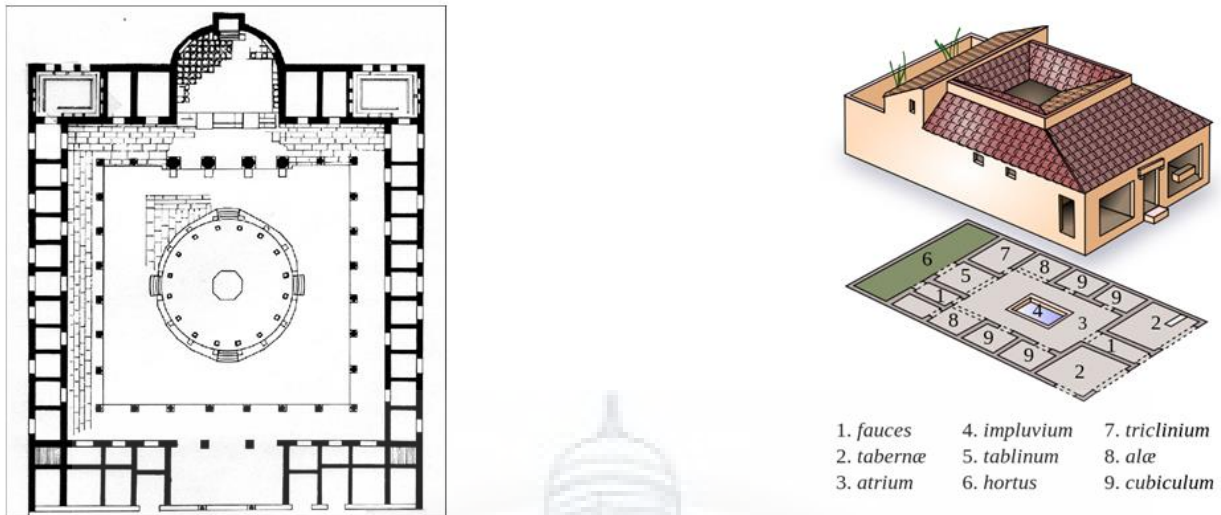
### TRADE AND EXCHANGE:

- The indus valley civilization engaged in long-distance trade, evidenced by the presence of materials like carnelian beads from the persian gulf, lapis lazuli from afghanistan, and ivory from africa.
- Seals with inscriptions and depictions of animals have been found, indicating administrative and trade-related activities. These seals may have been used to mark and authenticate goods.



**FIGURE 3**  
**SHOPS IN ANCIENT INDIA**  
(SOURCE: STUDENTS OF HISTORY)

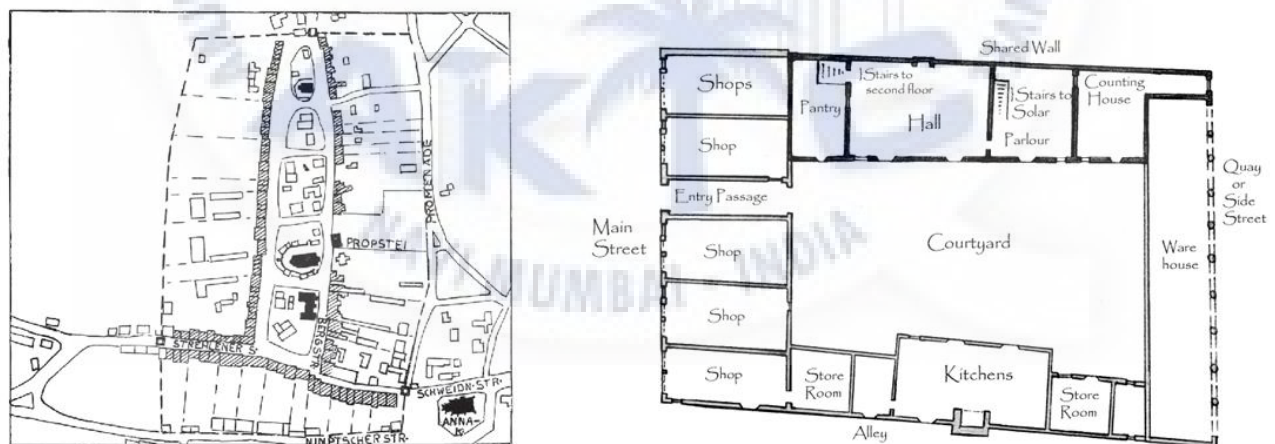
**GREEK AND ROMAN MARKETS:** in ancient greece and rome, markets evolved into more organized spaces, often located near city centers. These markets facilitated the exchange of a wide variety of goods, including food, clothing, and luxury items. The roman forum, for example, was a bustling marketplace in ancient rome. Roman markets, like those of ancient greece, were dynamic and integral to the social, economic, and cultural fabric of roman society. Over time, these markets evolved to accommodate changing circumstances and influences. With the expansion of the roman republic and the establishment of the roman empire, urbanization increased, leading to the growth of cities and the demand for more sophisticated marketplaces. The roman forum evolved to include markets like the macellum (food market) and the tabernae (shops) where various goods were sold.



**FIGURE 4**  
**AGORA ANCIENT ROMAN SHOP COMPLEX**  
 (SOURCE: agora.io)

**MEDIEVAL MARKETS:** during the middle ages, markets continued to thrive in europe. Towns and cities developed marketplaces where merchants and artisans would gather to sell their products. These markets often had specific days of the week when they were held, contributing to the development of regular trading patterns.

**MARKET TOWNS:** the primary purpose of a market town is the provision of goods and services to the surrounding locality. Although market towns were known in antiquity, their number increased rapidly from the 12th century. Market towns across europe flourished with an improved economy, a more urbanized society, and the widespread introduction of a cash-based economy.  
 (SOURCE: THE MARKET IN HISTORY: A.J.H.LATHAM, B.L.ANDERSON)



**FIGURE 5**  
**MARKET TOWN**  
 (SOURCE: research gate)

## 2.2. HYPOTHESIS

**HYPOTHESIS:** the redevelopment and modernization of the panvel city market yard, historically rooted in the agricultural trade, will lead to improved economic opportunities, enhanced hygiene conditions, increased social interactions, and greater overall community well-being.

This hypothesis suggests that the proposed redevelopment project for the panvel city marketyard will have a positive impact on various aspects of the community, including its economy, hygiene, social interactions, and overall quality of life. It implies that the transformation of the market yard will address longstanding issues and contribute to the growth and development of the area.





## 2.3. AIM, OBJECTIVE, SCOPE

### AIM:

To find out concerns related to panvel market yard with its functioning & scope.  
To find out the most concerning issues.

### OBJECTIVE:

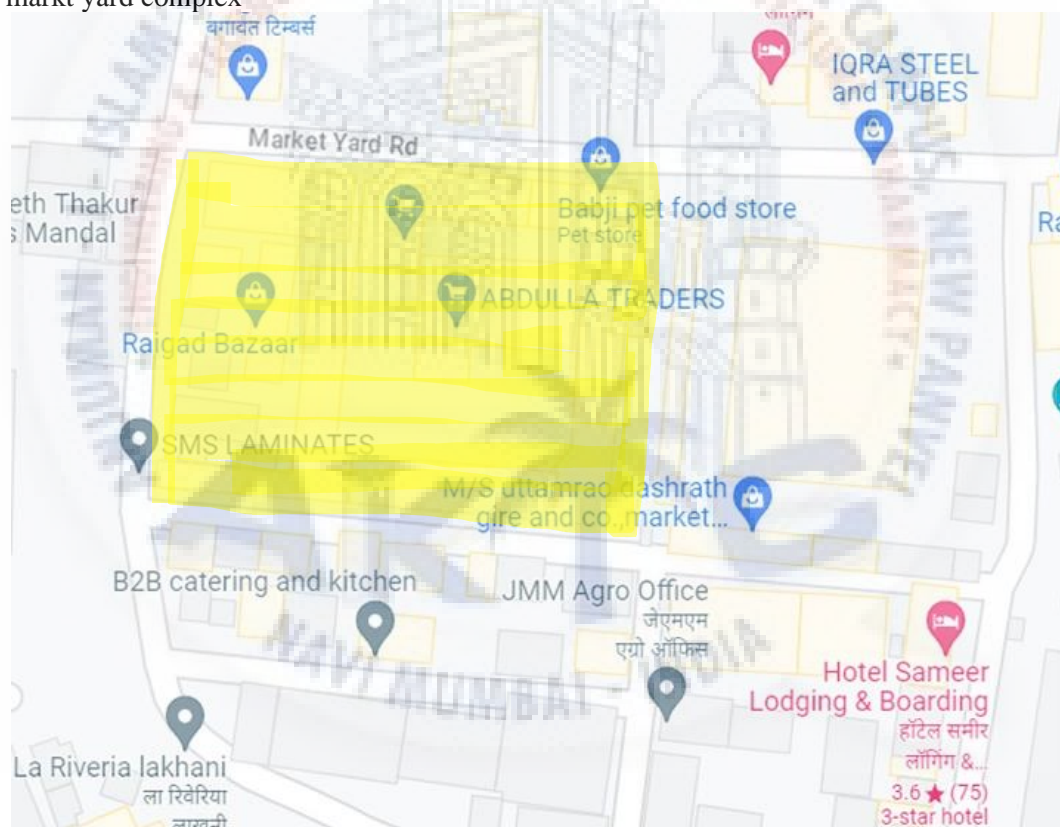
1. Study functioning & history of the market
2. Take interviews & gather information of concerned parties
3. Study connections to larger market connectivity & impact on peoples lives
4. Study changing trends & future market scopes & development projects.

### SCOPE:

Providing proper and experiential spaces for services involve the planning, organizing, directing, and handling of agricultural produce in such a way as to satisfy farmers, intermediaries and consumers.

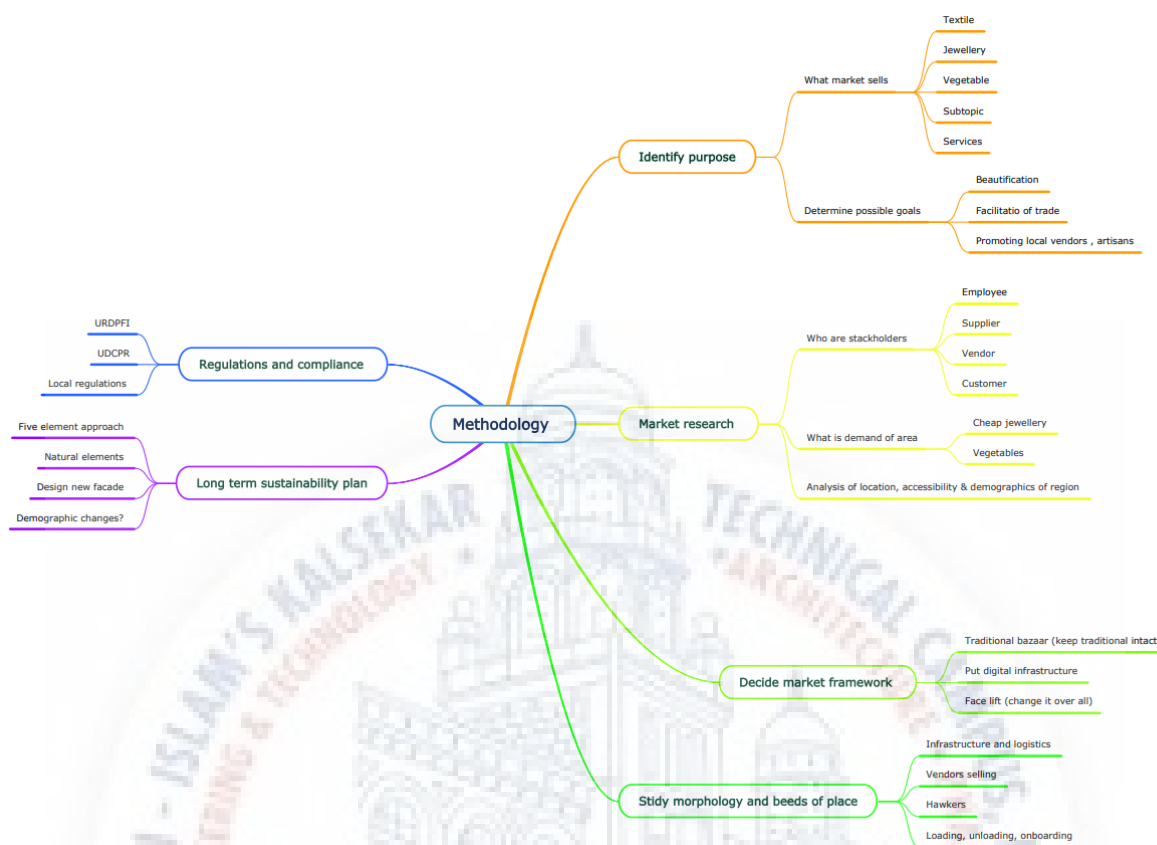
### LIMITATION:

Panvel market yard complex



**FIGURE 6**  
**MARKET YARD SITE**  
(SOURCE:GOOGLE MAPS)

### 3. RESEARCH METHODOLOGY



**FIGURE 7**  
**METHODOLOGY MAP**  
 (SOURCE: AUTHOR)

#### 1. IDENTIFYING PURPOSE:

Identifying the purpose of your research is the foundational step in any research project. This involves clarifying the specific goals and objectives you aim to achieve. For instance, your purpose might be to understand consumer behavior in a particular market segment, evaluate the potential for a new product or service, or analyze the competitive landscape of a specific industry. Additionally, it's essential to define the scope of your research, including the geographic area or market segment you will focus on and the time frame for your study. Your research purpose sets the direction for the entire project, guiding the choice of research methods, data sources, and analysis technique.

#### 2. MARKET RESEARCH:

Market research is a comprehensive process of gathering, analyzing, and interpreting data related to your research purpose. This stage involves both primary and secondary research methods. Primary research entails collecting firsthand data directly from sources, such as surveys, interviews, focus groups, or observations. You'll need to design research instruments, select your sample, and collect data systematically.

Secondary research involves the review and analysis of existing data and information, including industry reports, market studies, academic literature, and government publications. It helps provide context and background information for your study.

### **3. DECIDING MARKET FRAMEWORK:**

Selecting an appropriate market framework or analysis model is a critical decision. It defines the theoretical lens through which you'll examine your research data.

Different frameworks offer distinct perspectives on market dynamics. For instance, porter's five forces can help assess industry competitiveness, while swot analysis focuses on internal strengths and weaknesses and external opportunities and threats.

Your choice of framework should align with your research purpose and the specific aspects of the market you aim to investigate. It guides your analytical approach and provides a structured method for evaluating market conditions.

### **4. STUDYING MORPHOLOGY:**

The study of morphology in the context of market research involves a detailed examination of the physical and structural aspects of the market.

This could include assessing the layout and organization of physical marketplaces, such as shopping malls, open-air markets, or online platforms. Understanding how consumers navigate these spaces and how products are displayed can reveal insights into consumer behavior.

Additionally, studying the morphology of market participants can involve analyzing the composition of the market, including the types of businesses or vendors present, their market share, and their roles in the supply chain.

Investigating the evolution of market structures over time can provide historical context and reveal patterns or trends that influence current market dynamics.

### 4.1 SITE LOCATION

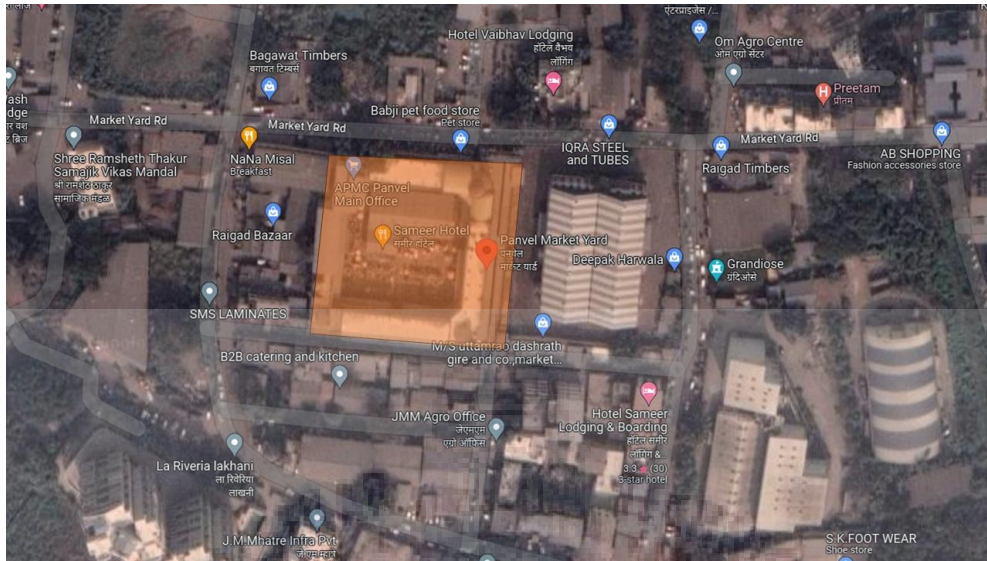


IMAGE 1  
SITE OF PANVEL MARKET YARD  
(SOURCE: Google Maps)

### 4.2 REGIONAL BOUNDARY



FIGURE 8  
REGIONAL BOUNDARY OF MARKET YARD PROXIMITY  
(SOURCE: Panvel Nagarpalika)

## 5. MARKET IN INDIAN CONTEXT

### MARKET IN INDIAN CONTEXT

"In the Indian context, the buying and selling activities are discovered within the side and open or closed areas wherein there's an opportunity of human beings passing with the help of using on everyday bases. Chowks, marginal areas on the roads, city squares, and so on are very not unusual place areas for markets to take vicinity. Many times, the brink areas are related with every different to shape a marketplace in lots of Indian cities. The features of such markets are very casual in nature. The marketplace area is one of the public areas, which offer the massive means to the vicinity with the help of using the range of social interaction."

The market areas have no unique area within side the metropolis or a town. The lifestyles of many market areas have come about in conjunction with the bigger institutions, with the non-secular percentage or within side the open areas. These market areas are occupied because of the time development and growth of that area. In the cutting-edge cities, the marketplace areas are in the enclosed surroundings. It will be in the shape of a purchasing complex, mall areas, departmental showrooms, and branded shops. These markets serve a distinct sort of purchasing in closed surroundings as compared to the conventional markets.



IMAGE 1  
TYPICAL INDIAN MARKET  
(SOURCE: silver Kriss)

WHAT MAKES GOOD MARKET SPACE?

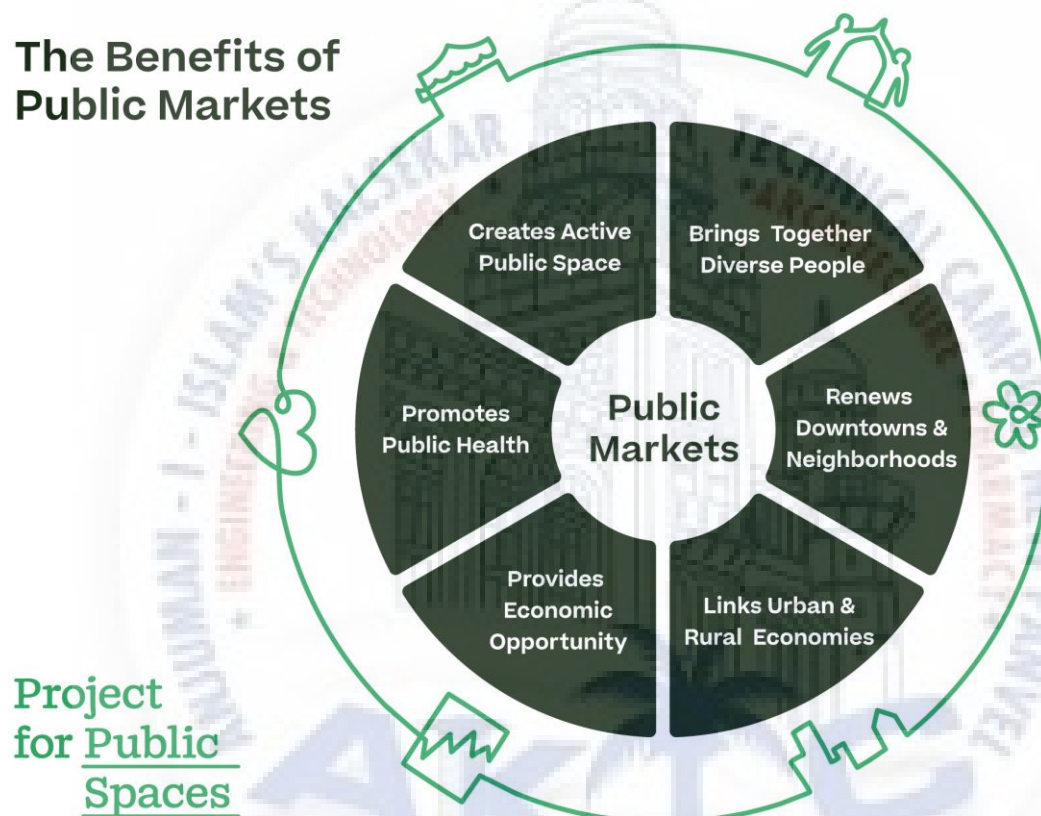
**ACCESS & LINKAGES**- a marketplace area is easy to access and has a varied variety of displays for different communities, it is seen from a distance and up close. A row of stores alongside an avenue is more thrilling and commonly safer to stroll via way of means than a clean wall.

**COMFORT & IMAGE**- comfort consists of perceptions approximately safety, cleanliness, and the provision of locations to take a seat down - the significance of giving humans the selection to take a seat down wherein they need is commonly underestimated.

**USES & ACTIVITIES**- activities are the primary building blocks of a location: they are the motives why humans go to within side of the location, and why they keep returning. They make an area unique.

**SOCIABILITY**- when humans see friends, meet and greet their neighbors, and experience snug interacting with strangers, they generally tend to experience a more potent feel of location or attachment to their community - and to the location that fosters those styles of social activities the benefits of public markets creates active public space brings together diverse people promotes public renews downtowns & public health markets neighborhoods provides economic opportunity links urban & rural economies. ( ENDLESS BOUNTY,2017)

## The Benefits of Public Markets



**FIGURE 11**  
**SIX ASPECTS OF PUBLIC MARKET**  
(SOURCE: endless bounty)

## EXPERIENTIAL RETAIL

"Experiential retail" refers to a retail strategy that focuses on providing customers with a unique and immersive shopping experience beyond just purchasing products. It aims to engage the senses, emotions, and interests of consumers, making shopping more memorable and enjoyable. This approach often involves creating in-store experiences, interactive displays, events, and other elements that go beyond the traditional transactional aspect of retail. The goal is to foster a deeper connection between the brand and the customer, encourage longer visits to the store, and ultimately drive customer loyalty and sales.



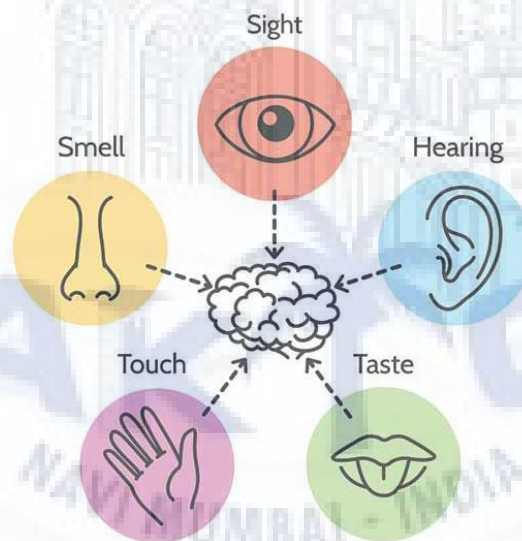
**FIGURE 12**  
**SIX ASPECTS OF EXPERIENTIAL RETAILING**  
 (SOURCE: Forbes)

1. creates an immersive and shareable experience
2. prioritizes customer engagement—not sales
3. helps nurture communities
4. inspires new approaches
5. stimulates your customers' senses
6. take an omnichannel approach
7. defies customer expectations
8. leverages in-store events and services
9. the store experience addresses consumer needs

physical spaces can bring people together in ways that websites or mobile apps can't. as a brick-and-mortar store, that's one of your most significant strengths.

as the name suggests, “retailtainment” is all about fusing retail and entertainment to enhance the shopping experience. in many cases, retailtainment involves spectacles or attractions to grab the attention of shoppers.

one thing that physical stores do better than any other channel is to engage all five senses. this means they're a great way to forge emotional connections with customers through personalized, engaging experiences. ( FORBES,2023)



**FIGURE 13**  
**FIVE SENSES**  
(SOURCE: Marcus Jackson)



## WORKING OF PANVEL APMC MARKET

Currently, the market yard is managed by 4 authorities

### 1. DISPUTE MANAGEMENT BODY

This body deals with disputes related to auctions and manages loading-unloading matters and buying-sorting-selling.

### 2. CONSTRUCTION MANAGEMENT BODY

This body deals with the management of overall infrastructure.

### 3. STAFF MANAGEMENT BODY

This body deals with all kinds of stakeholders related to the market.

### 4. REGULATORY BODY

This body deals with licensing and connection with other markets.

(source: author)

SR.NO	NAME	GENDER & AGE	OTHER OCCUPATION	COMMUTES FROM	TIME IN & OUT
1	MOHAMMAD	M	NO	CHIKLA	4.00 TO 11.00 AM
2	ARADHYA	F	NO	KOAN	4.00 TO 11.00 AM
3	ASHWIN	M (43)	NO	SAME AREA	4.00 TO 11.00 AM
4	ATHARVA	M(22)	NO	NANGAON	4.00 TO 11.00 AM
5	ATIF	M	NO	TALOJA	5.00 TO TILL STOCK ENDS
6	RESHMA	F	NO	PANVEL	4.00 TO 11.00 AM
7	SANIYA	F	NO	NANDGAON	4.00 TO 11.00 AM
8	KUSUM	F(52)	VENDOR IN OTHER AREA	KHARPADA	7.00 TO TILL STOCK ENDS
9	PALLU GUPTA	F	FARMER	VALVA	5.00 TO TILL STOCK ENDS
10	SANGEETA	F	FARMER	BHOKARPADA	5.00 TO TILL STOCK ENDS
11	JANABAI	F	NO	PALASPA	4.00 TO 11.00 AM
12	ISHA PARAMAR	F	NO	BELVADI	4.00 TO 11.00 AM
13	TEHAL VAZE	F	NO	SAYLA	4.00 TO 11.00 AM
14	YASHODA PHADKE	F	NO	NEW PANVEL	4.00 TO 11.00 AM
15	BHAGYASHRI GHARAT	F	NO	SHDUNG	4.00 TO 11.00 AM
16	ASHA	F	NO	BELVADI	4.00 TO 11.00 AM
17	CHAYA	F	NO	KHARPADA	4.00 TO 11.00 AM
18	KAISER	F	NO	SHEDUNG	4.00 TO 11.00 AM
19	AFFAN	M	NO	PANVEL	4.00 TO 11.00 AM
20	AMJAD	M	NO	BELVADI	4.00 TO 11.00 AM
21	MAYERA	M	NO	GIRAVLA	4.00 TO 11.00 AM
22	SHEETAL	F	NO	GIRAVLA	4.00 TO 11.00 AM
23	SADIYA	F	FARMER	GIRAVLA	4.00 TO 11.00 AM
24	RITU	F	VENDOR IN OTHER AREA	KUDAVA	7.00 TO TILL STOCK ENDS
25	SIDDHI	F	VENDOR IN OTHER AREA	PANVEL	5.00 TO TILL STOCK ENDS
26	MAYA	F	VENDOR IN OTHER AREA	KARANJA	7.00 TO TILL STOCK ENDS
27	MEGHA	F	NO	SHIRDON	4.00 TO 11.00 AM

**TABLE 1**  
(SOURCE: AUTHOR INTERVIEW)

## ABOUT APMC MARKETS

During the british raj, raw cotton was the first farm produce to attract the attention of the government due to the anxiety of british rulers to make available supplies of pure cotton at reasonable prices to the textile mills of manchester (uk). Consequently, to regulate the market they introduced legislation the berar cotton and grain market act of 1887, which empowered british residents to declare any place in the assigned district a market for the sale and purchase of agricultural produce and constituted a committee to supervise the regulated markets. (wikipedia)

this legislation became base of all the future advancements that helped local farmers and vendors in great part. The agricultural (apmc) was AN ENDEAVOR TO PUT, ORGANIZED AGRICULTURAL MARKETING CAME INTO EXISTENCE THROUGH REGULATED MARKETS.

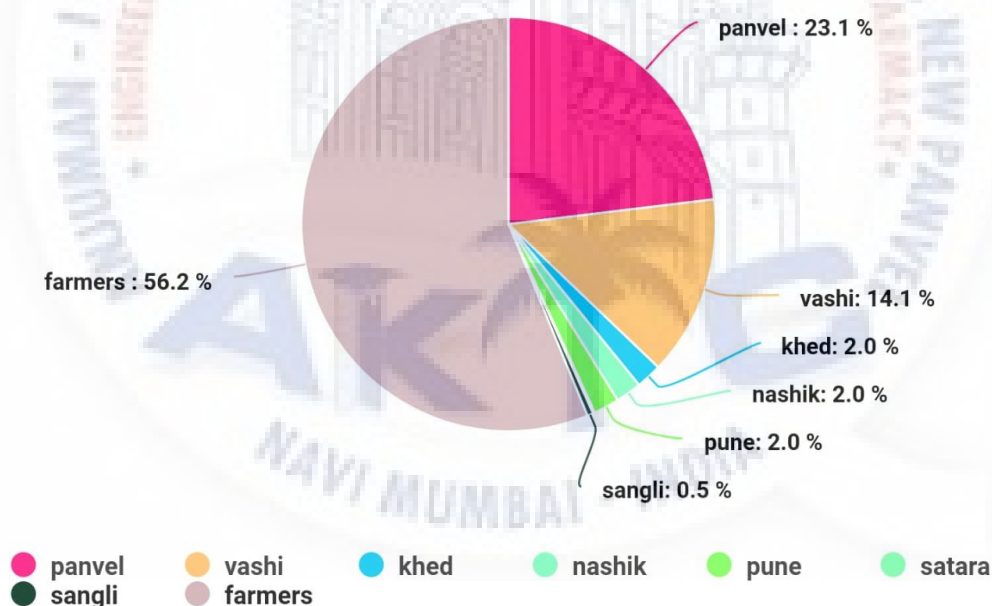
Apmc freed the farmers from exploitation and eliminated malpractices. However, with time the apmcs lost their growth and market facilities. But, still, apmc markets are the backbone of the food economy.(APMC)

## DATA ABOUT PANVEL APMC MARKET FUNCTIONS

On august 25th, the apmc authorities granted admission for an interview with the author. As a result of this interview, the following information was conveyed:

\*the data was last updated in july 2016.

\*the data had been collected for redevelopment purposes, but there have been no developments or actions taken since that time.



**FIGURE 14**  
**APMC license holder**  
 (SOURCE: PANVEL MARKET YARD)

Over time, the panvel apmc (agricultural produce market committee) market has seen the issuance of a substantial number of licenses, reaching a total of 1190 licenses. These licenses have been granted to various traders, vendors, and individuals involved in the trade of agricultural produce within the market's jurisdiction.

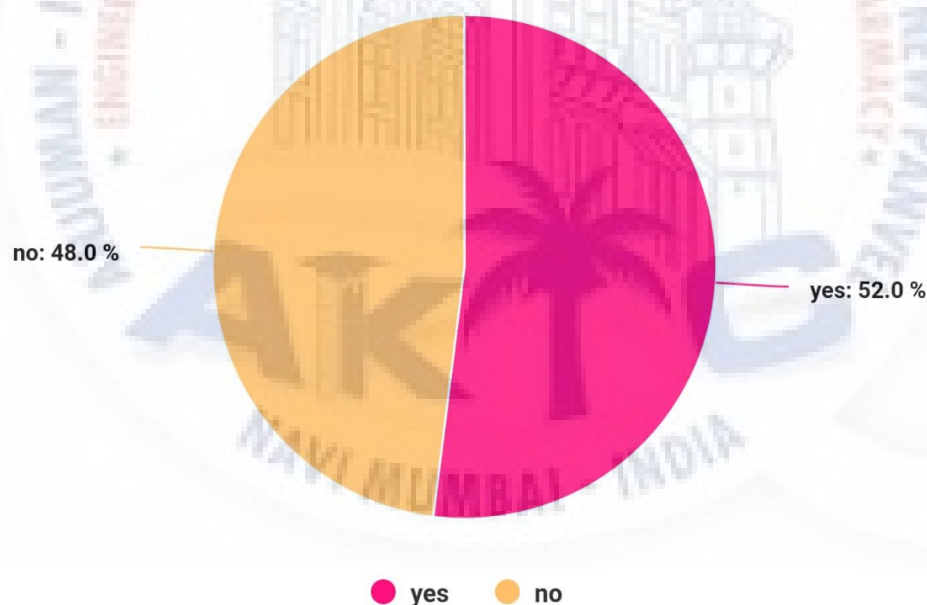
Each license represents an authorization to participate in the market's activities, which include the buying and selling of agricultural goods.

However, despite the issuance of a significant number of licenses, a noteworthy aspect of the panvel apmc market is the presence of numerous unlicensed vendors. These vendors operate in a unique and transient manner within the market environment. Unlike licensed traders who maintain a consistent and long-term presence, these unlicensed vendors typically appear for short durations, often limited to just 2-3 days.

These short-term vendors are often small-scale farmers or producers who come to the market with their fresh produce for brief periods when they have surplus goods to sell. They may not hold formal licenses but are permitted to engage in trade during their short stay. This practice adds an element of dynamism to the market, as it allows for the influx of a variety of agricultural products from different sources, contributing to the market's diversity and vibrancy.

While the majority of the market's activities are overseen by licensed traders who operate year-round, the presence of these temporary vendors underscores the flexibility and inclusivity of the panvel apmc market. It provides an avenue for smaller producers to access the market and reach consumers directly, albeit for shorter intervals.

In essence, the market's landscape is shaped by the coexistence of both licensed, long-term traders and these unlicensed, short-term vendors, creating a unique blend of market dynamics that cater to the diverse needs of producers, traders, and consumers in the region.



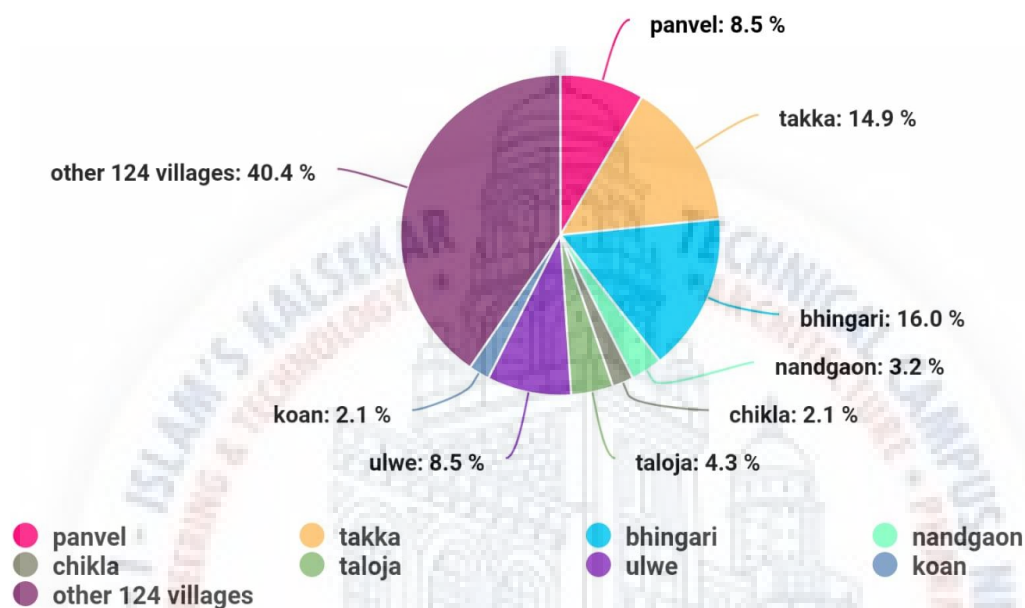
**FIGURE 15**  
**LINCSENCES**  
(SOURCE: PANVEL MARKET YARD)

The panvel market serves as a significant hub for the trade of vegetables, attracting produce from a vast geographical area. Specifically, it receives a constant influx of vegetables originating from as many as 196 villages and farmlands.

Among these sources, a substantial 130 of them are reliable year-round suppliers, contributing to the market's consistent availability of fresh produce.

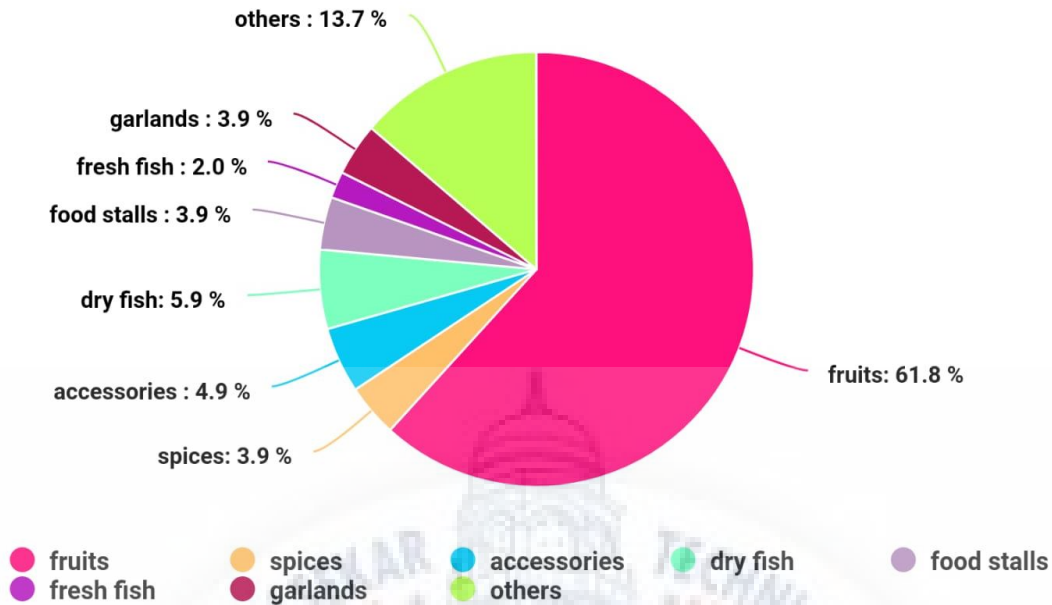
Interestingly, the vegetables from the panvel market don't just stay within its immediate vicinity. Instead, they find their way to various destinations through well-established trade channels. One key route is the connection to the vashi market, facilitated by prominent traders.

This connection allows for the distribution of panvel's vegetables to the wider mumbai metropolitan area, ensuring a steady supply to one of the region's major markets.



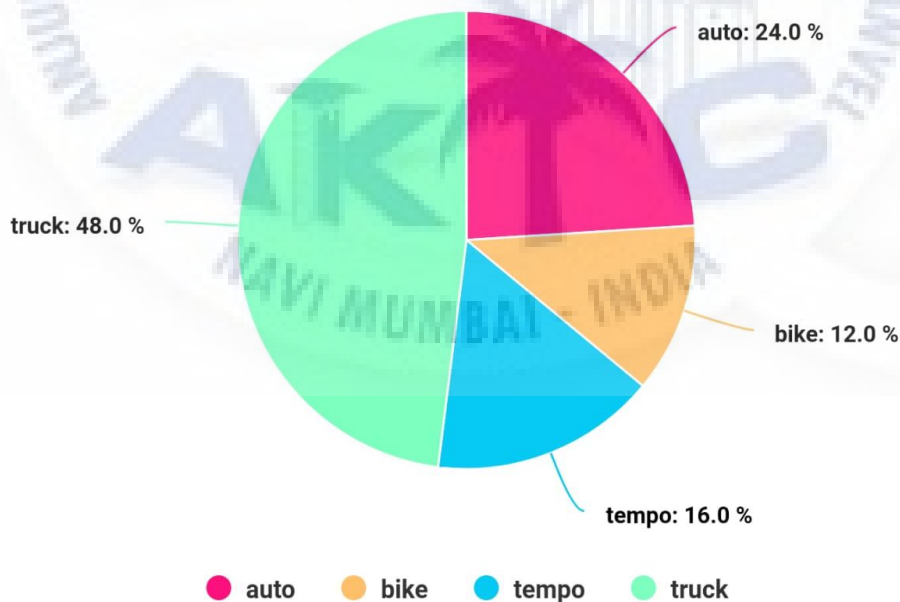
**FIGURE 16**  
**ORIGIN OF GOODS**  
 (SOURCE PANVEL MARKET YARD)

Additionally, the reach of panvel's vegetables extends beyond state borders. Produce from this market finds its way to both karnataka and gujarat, contributing to the agricultural trade network that spans multiple states. This interregional trade not only supports local economies but also helps meet the diverse demands of consumers in different parts of india.



**FIGURE 17**  
**HAWKERS DATA**  
 (SOURCE: PANVEL MARKET YARD)

Hawkers are essential to markets due to their role in enhancing accessibility, offering diverse products at competitive prices, and supporting local economies. They provide consumers with greater choice and convenience, often operating flexible hours and adapting to changing preferences. In the case of markets like the panvel market yard, where many vendors or sellers conclude their business by 11:30 a.m., hawkers play a crucial role by continuing to provide convenience to people throughout the day, ensuring that shoppers have access to a wide range of goods and services beyond the regular market hours.



**FIGURE 18**  
**TRANSPORT**  
 (SOURCE: PANVEL MARKET YARD)

Many of the vendors at the panvel market yard are farmers who rely on small vehicles to transport and sell their produce within the local market. However, when it comes to importing and exporting produce to distant regions like karnataka and gujarat, the use of trucks becomes a necessity due to the longer distances involved. Unfortunately, the panvel market yard currently lacks proper truck facilities, which can pose logistical challenges for traders engaging in interregional trade. Simultaneously, there is a need for the market to provide adequate facilities for small-scale vehicles as they are essential for the transportation of goods within the local area, ensuring the efficient flow of produce to and from the market.

## ABOUT MARKET

Panvel market yard is 100-year-old marketplace where vegetables are sold prominently. The latest complex for trading was built here in 1999 by then mla vivek patil, but this place is quite un-functional, and local retailers here demanded adequate change in infrastructure since in june 2011 administrative body agreed to redevelopment but because of fund problems project is been delayed since.

The main concerns here are problems related to loading and unloading, huge unhygeine, and poor infrastructure facilities.

The government plans to increase 156 units already placed market to 500 units market yard comprising from vegetables, fruits, and other daily needs items for cooking. Apart from it, there are plans to instill water tanks and sanitary facilities to counter unhygien in the environment. A 500 sq.m administrative wing and 35000 sq.m built-up area.

(source: Mumbai mirror)



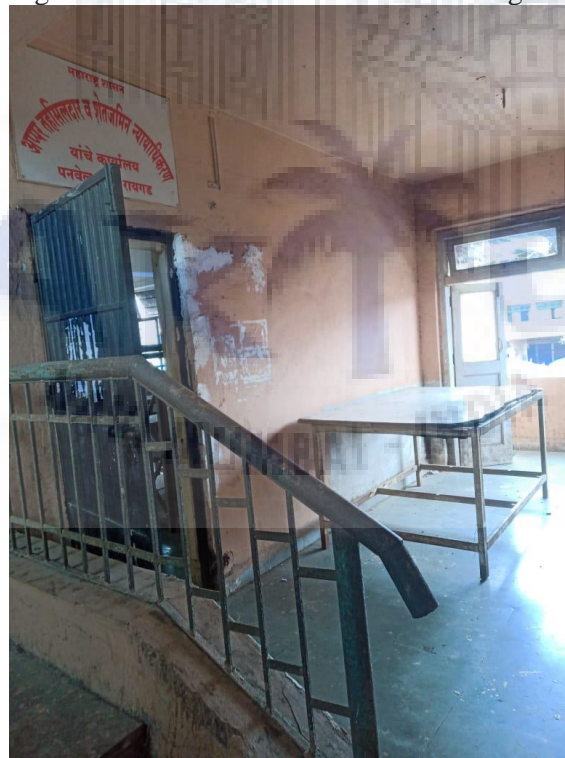
**IMAGE 2**  
**ENTRY GATE OF PANVEL MARKET YARD CAMPUS**  
(SOURCE: AUTHOR)

There is a need for community schools in this area which people are enthusiastic about.



**IMAGE 3**  
**SIDE SCHOOL CREATED BY LOCALS**  
(SOURCE: AUTHOR)

There are government offices related to the farming community.



**IMAGE 4**  
**DISPUTE RESOLVING AND MEASURING OFFICE**  
(SOURCE: AUTHOR)

Need for dedicated loading unloading area and drainage system.



**IMAGE 5**  
**CONGESTED, UNHYGIENIC AND UNORGANIZED SITUATION OF THE PANVEL MARKET YARD**



**IMAGE 6**  
**WASTE GENERATED ON DAILY BASIS IN MARKET YARD**  
(SOURCE: AUTHOR)



Market yard complex building in bad condition.



**IMAGE 7**  
**DEPLETED CONDITION IN MARKET YARD**  
(SOURCE: AUTHOR)

Cabin structure



**IMAGE 8**  
**CABIN STRUCTURE**  
(SOURCE: AUTHOR)

# MASTER PLAN APMC PANVEL



**IMAGE 9**  
**MASTER PLAN OF PANVEL MARKET YARD**  
 (SOURCE: AUTHOR, PANVEL MARKET YARD OFFICE)

## HAWKERS

Hawkers are essential to markets due to their role in enhancing accessibility, offering diverse products at competitive prices, and supporting local economies. They provide consumers with greater choice and convenience, often operating flexible hours and adapting to changing preferences. In the case of markets like the panvel market yard, where many vendors or sellers conclude their business by 11:30 a.m., hawkers play a crucial role by continuing to provide convenience to people throughout the day, ensuring that shoppers have access to a wide range of goods and services beyond the regular market hours.

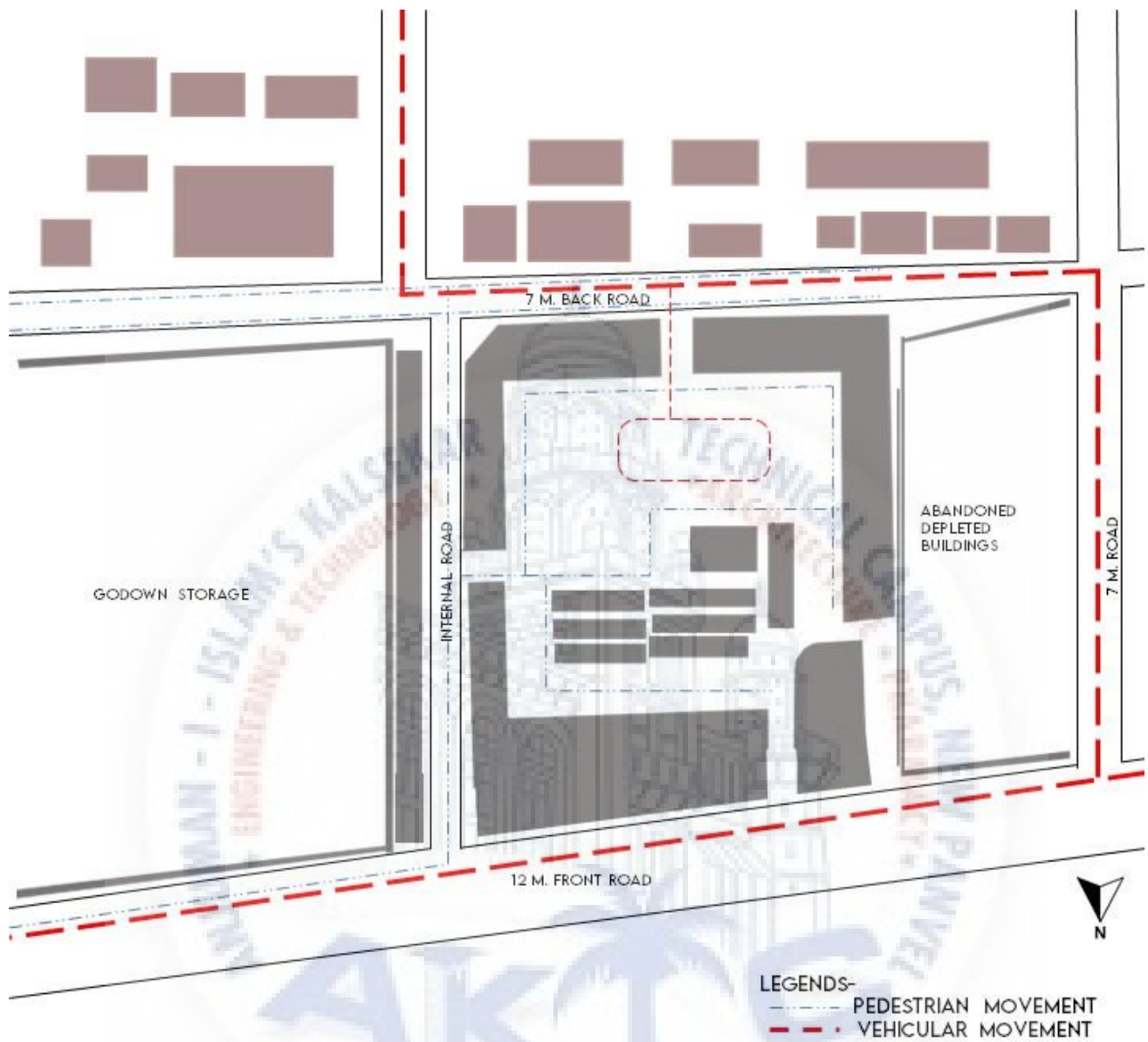


**IMAGE 10**  
**HAWKERS STATIONS**  
(SOURCE: AUTHOR)

Many of the vendors at the panvel market yard are farmers who rely on small vehicles to transport and sell their produce within the local market. However, when it comes to importing and exporting produce to distant regions like karnataka and gujarat, the use of trucks becomes a necessity due to the longer distances involved. Unfortunately, the panvel market yard currently lacks proper truck facilities, which can pose logistical challenges for traders engaging in interregional trade. Simultaneously, there is a need for the market to provide adequate facilities for small-scale vehicles as they are essential for the transportation of goods within the local area, ensuring the efficient flow of produce to and from the market.

(source: author)

**MARKET STUDY:**



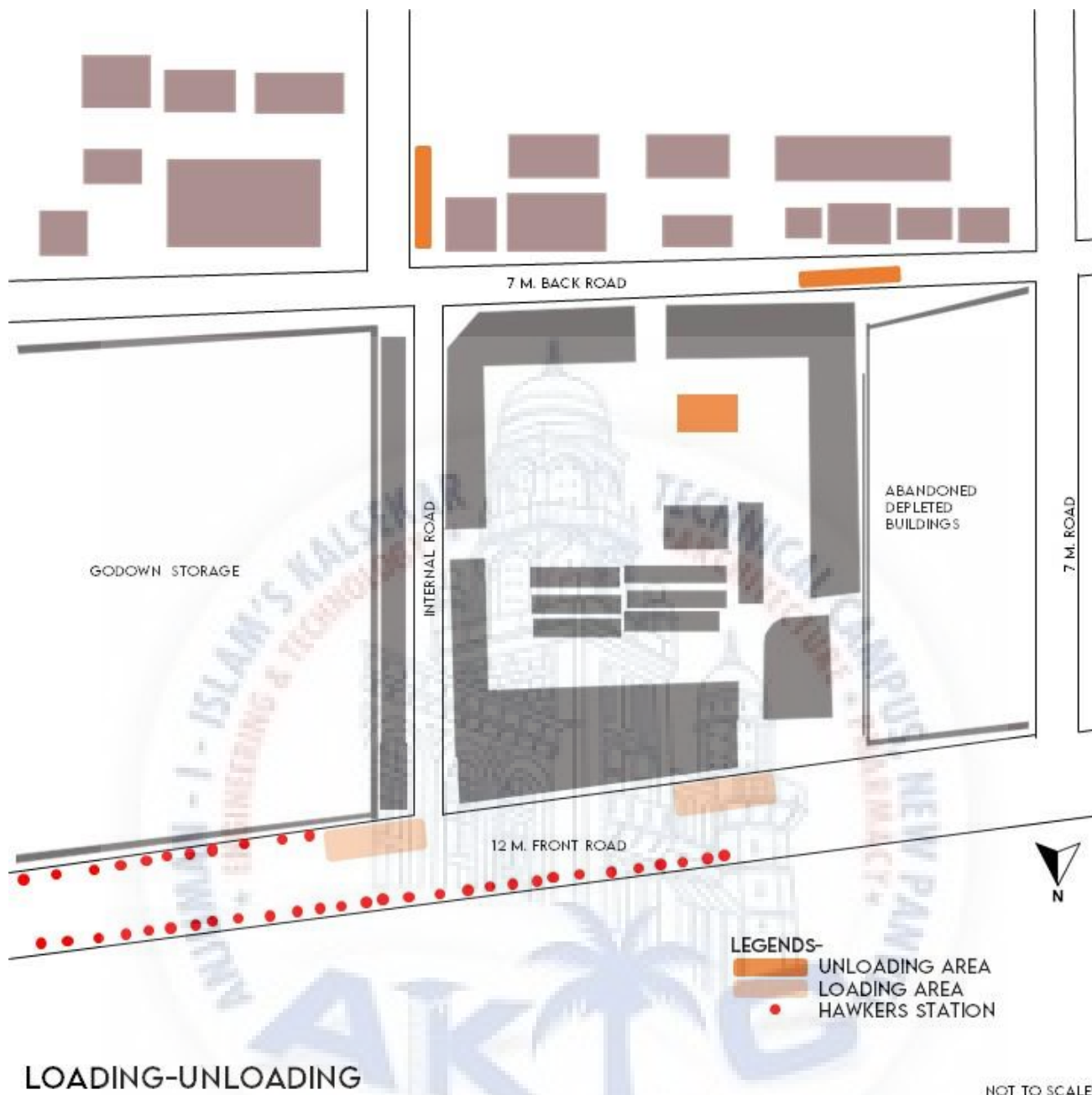
**VEHICULAR & PEDESTRIAN MOVEMENT**

**FIGURE 19**  
(SOURCE: AUTHOR)

NOT TO SCALE

Above, figure showcase pedestrian and vehicular traffic routes at Panvel market yard. Pedestrians have entry from entry gate and circulate throughout campus, but large vehicles such as truck-lorry do their loading/unloading at the back of the market yard, which is always congested. Market yard requires separate areas to resolve conflicts during auctioning and measuring.

Small vehicles such as motorcycle-auto-rickshaw, and small scale vehicles import vegetables inside market campus.



**FIGURE 20**  
(SOURCE: AUTHOR)

Above figure reveals loading unloading areas of where truck and lorry load and unload their shipments. South of market yard where vegetables from outside Maharashtra is get unloaded in morning 4.am sees heavy footfall of transporters,dealsers and retailers(vendors). North of market is loading spots from where shipments to Karnataka goes,while unloading are under campus used by small scale vehicles.



FIGURE 21  
(SOURCE: AUTHOR)

panvel market yard faces big problem related to the vegetable waste whenever one walks into panvel market yard one sees filth and mud filled with vegetables which are smashed between gooey liquid. market generates approximately 7000 k.g of waste daily.

**Need of sanitary facilities and large water tank is imminent.**



**FIGURE 22**  
(SOURCE: AUTHOR)

Spaces used by both temporary(2-3 days) & permanent vendors are faces problems of sanitary and functional requirement new shade house at market helps people co-ordinate but crowded and unhygienic way of structure put health of both seller and buyer at risk.

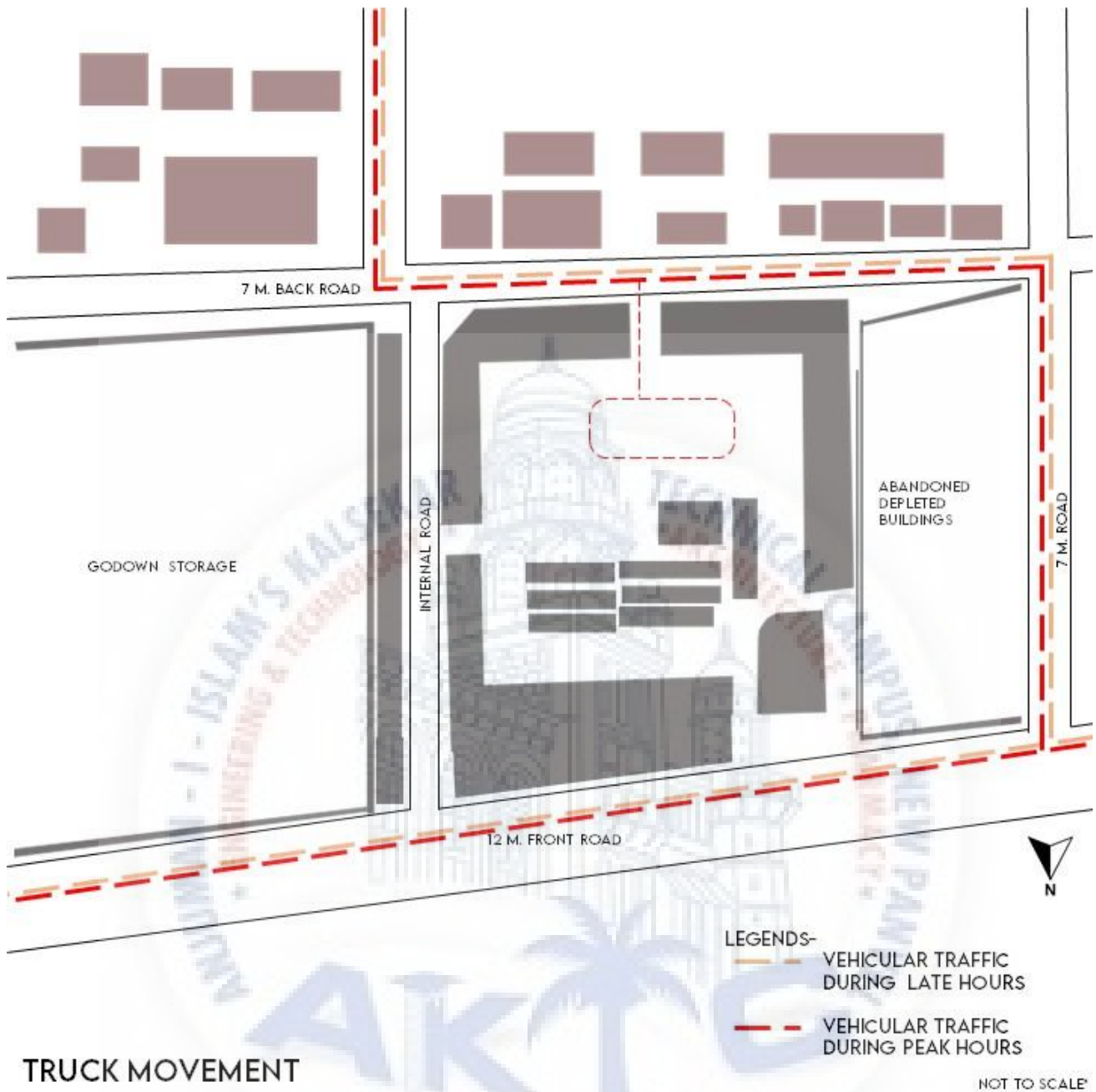
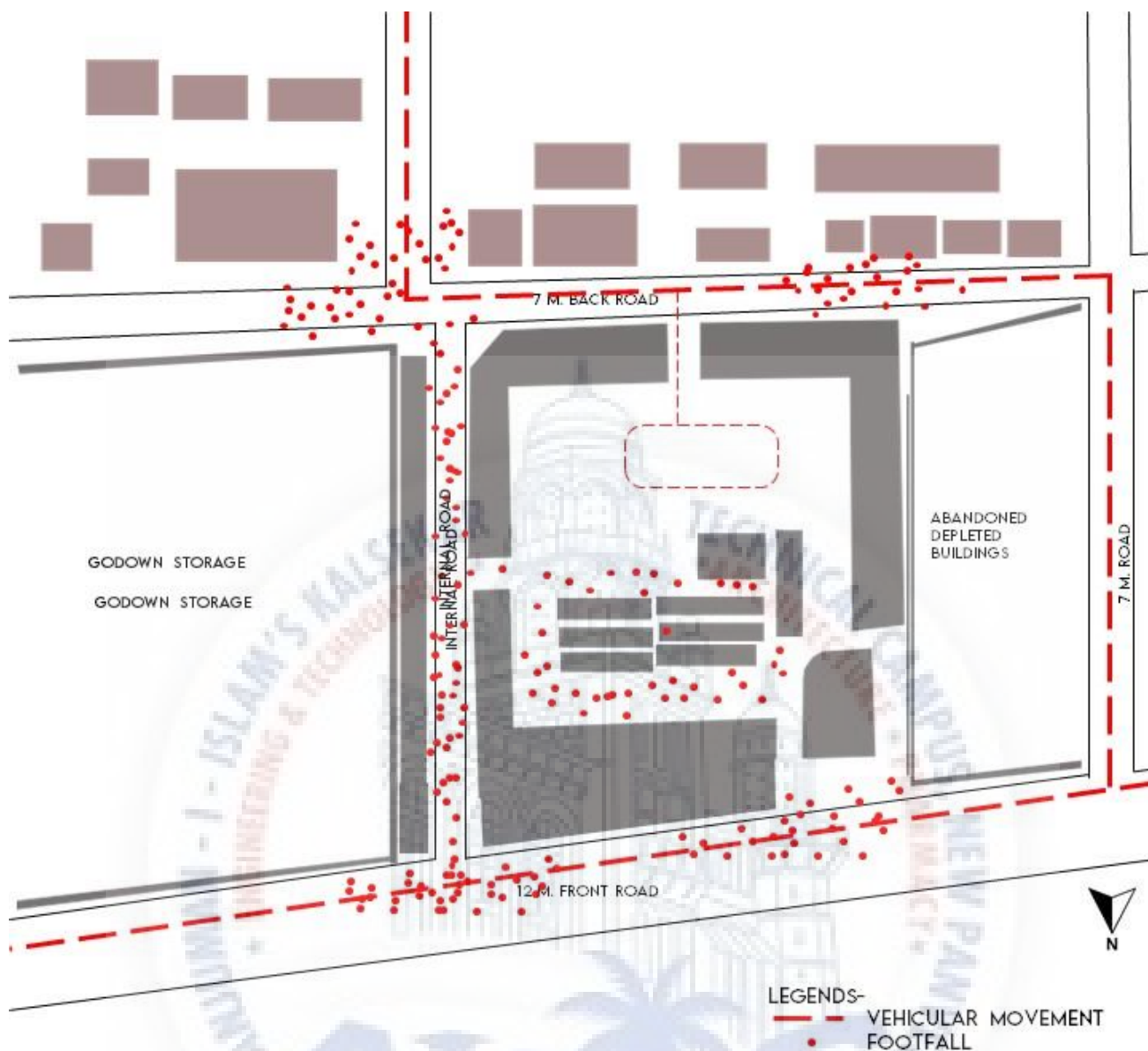


FIGURE 23  
(SOURCE: AUTHOR)

Market yard sees so much vehicular traffic that it needs to accommodate small scale and large vehicles land occupied by abandoned buildings is vacant and can be used to accommodate and provide facilities to people.



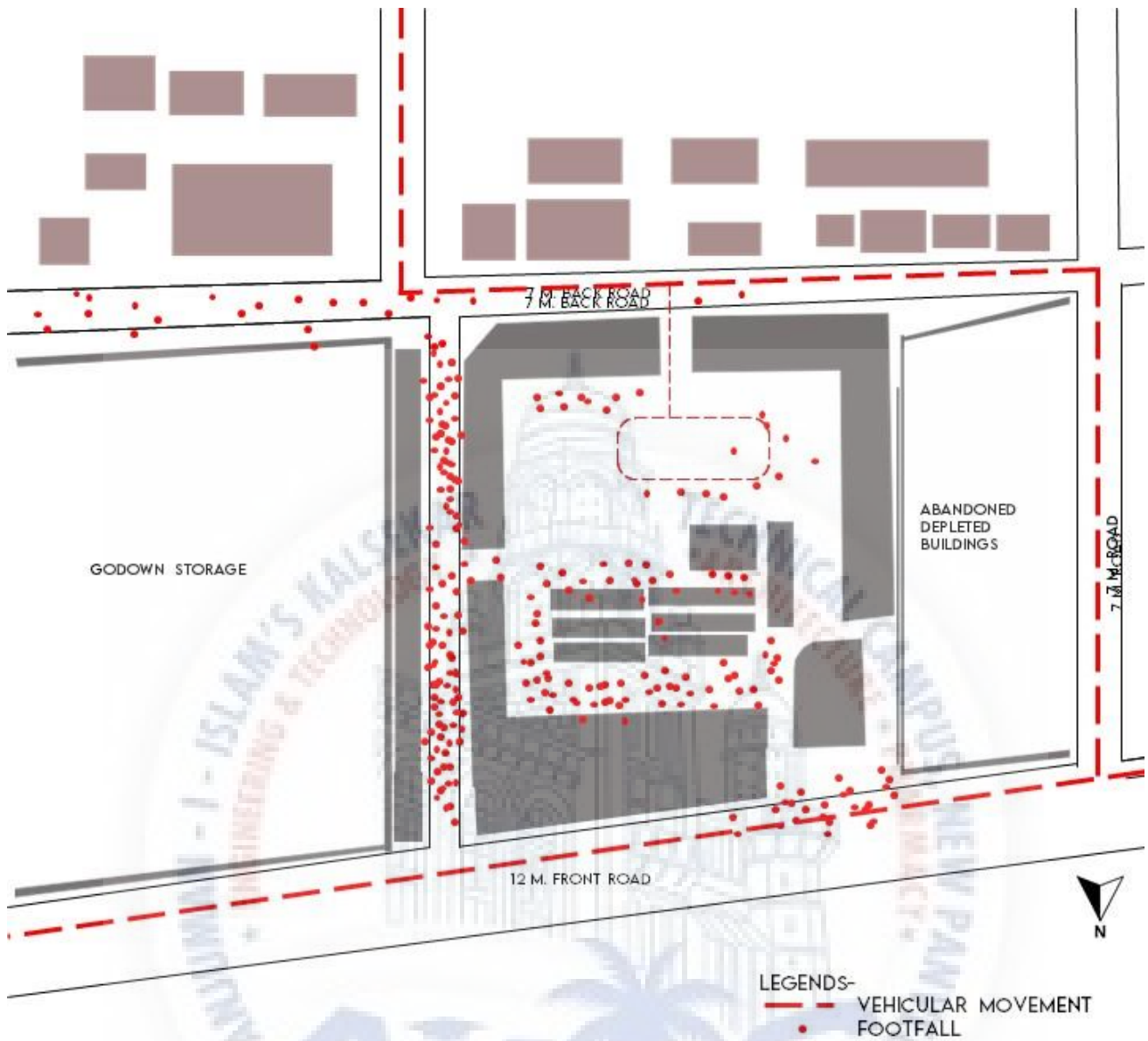


FOOTFALL & PARKING -4.00 AM TO 7.00 AM

NOT TO SCALE

FIGURE 24  
(SOURCE: AUTHOR)

during 4.30 – 6.30 am market campus is full of vendors auctioning and traders putting their stock in front of them continuously loading and unloading perishable items.

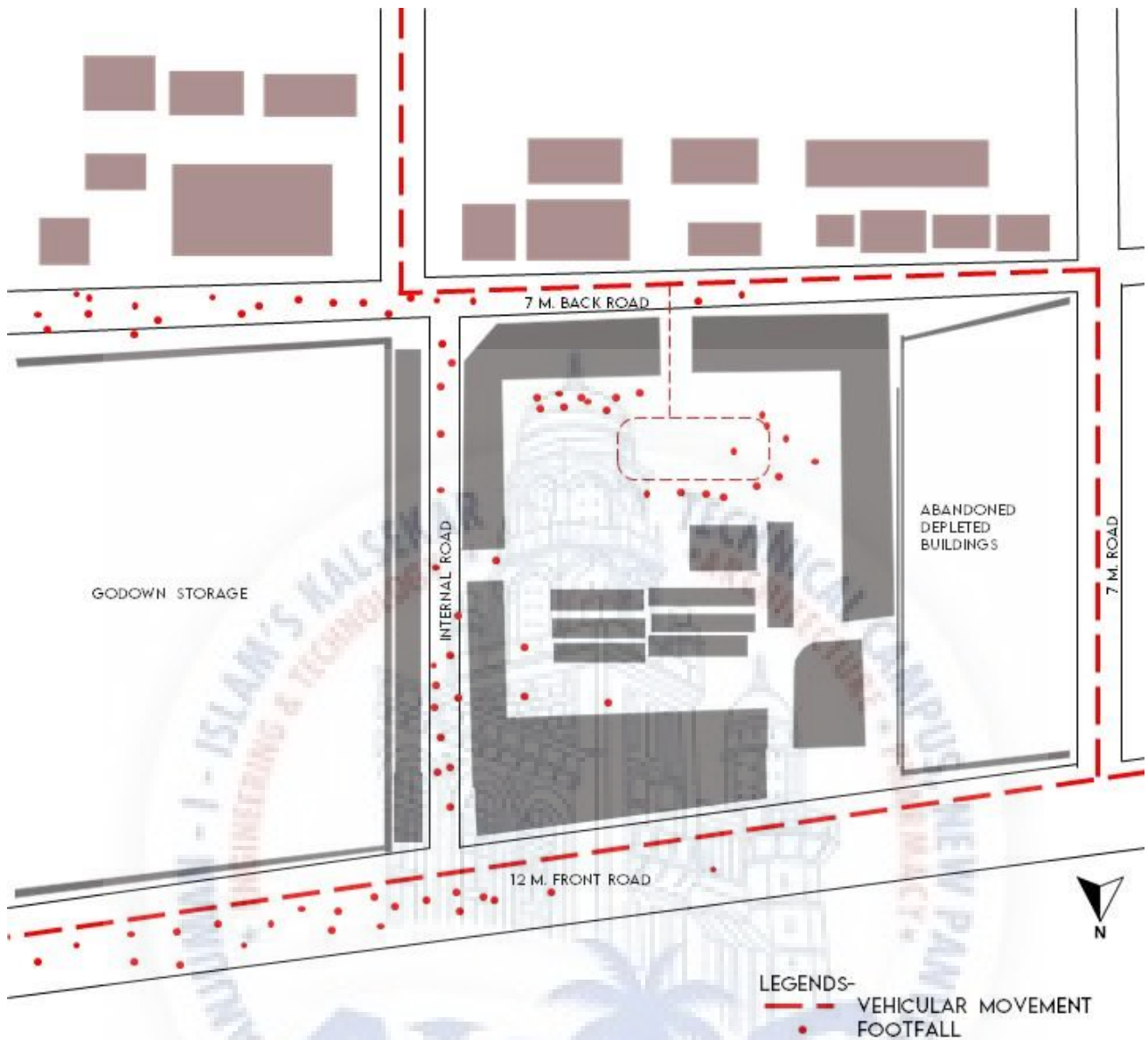


FOOTFALL & PARKING -7.00 AM TO 10.00 AM

NOT TO SCALE

FIGURE 25  
(SOURCE: AUTHOR)

In the morning hours of market, many peoples from around the area come here to have there fresh vegetables.



FOOTFALL & PARKING -10.00 AM TO 1.00 PM

NOT TO SCALE

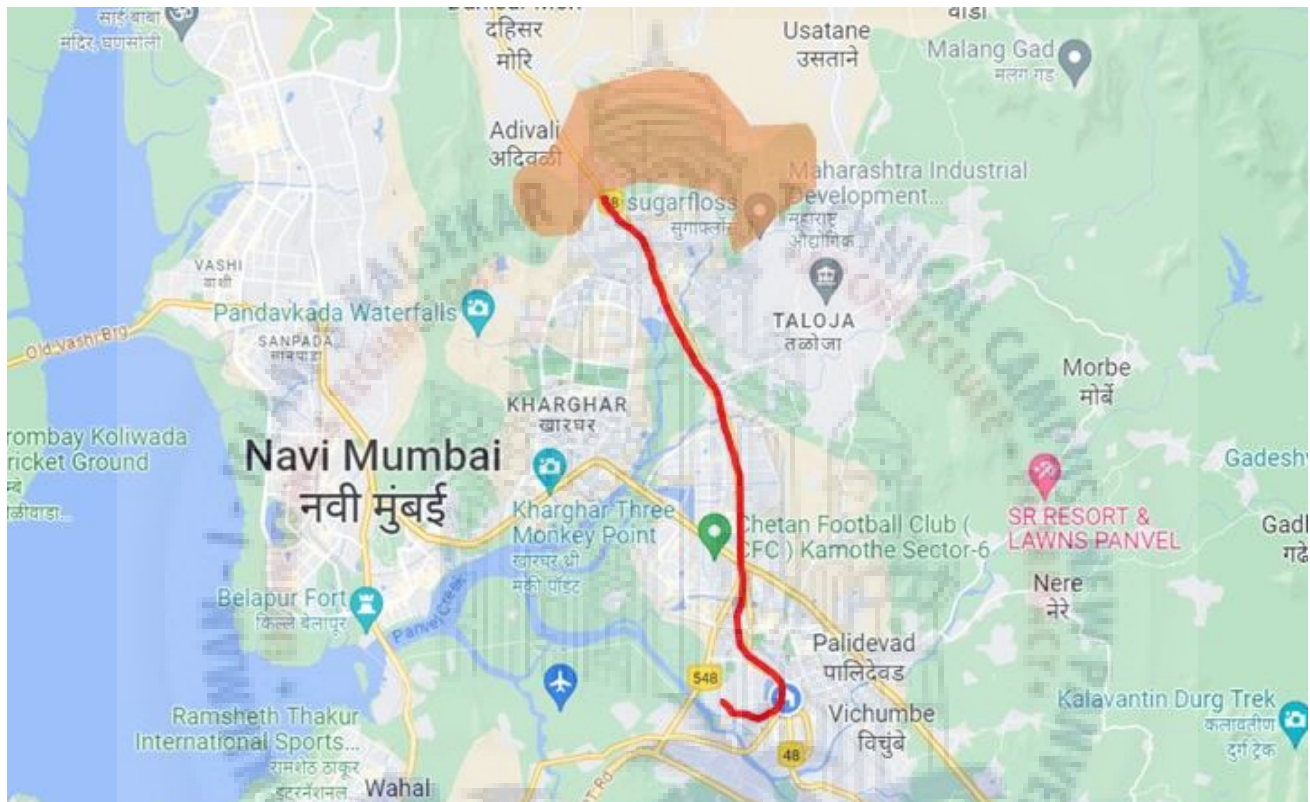
FIGURE 26  
(SOURCE: AUTHOR)

AFTER, 11:00 AM VENDORS MOSTLY RAN OUT OF THEIR STOCK STILL SOME VENDORS SELL VEGETABLES TILL 8.00 PM. BUT HUSTLE BUSTLE MARKET SWEEPS DOWN AFTER 1.00 PM

## MARKET SURPLUS SOURCE

Every new year some 7000 new families come & settle in panvel area to accommodate and to provide basic necessities like food is becoming a problem day by day. it is estimated that till 2031 some 321000 people will be living in panvel city by census of 2011 new data will be more staggering and hard to manage.

Panvel market yard collects its vegetable baggage from villages such as, Bid, Adivali, Rohinjan, Dhansar, Pisarve, Turbhe, Karvale Budruk, Nagzeri, Taloje Majkur, Ghot and Koynavele. all this villages are connected to panvel via national highway no.76 & 48.



**FIGURE 27**  
**FARMS SUPPLY**  
(SOURCE: GOOGLE MAPS)

New developing panvel junction opens up possibility of long term trade surplus to allocate it.

### Kisan rail

The Ministry of Railways and Ministry of Food Processing Industries have decided to provide a 50% subsidy on the transportation of specific fruits and vegetables through Kisan Rail, as part of the 'Operation Greens - TOP to Total' scheme. This subsidy has been in effect since October 14, 2020. Eligible items for this subsidy include various fruits like mango, banana, guava, and vegetables like peas, onion, and tomatoes, among others. Kisan Rail plays a vital role in transporting agricultural products quickly and efficiently across the country, benefiting both farmers and consumers. It has been instrumental in increasing farmers' income and preventing the wastage of perishable produce. Several Kisan Rail routes have been inaugurated to facilitate this transport, and Indian Railways continues to support the movement of agricultural goods, even during lockdowns, to ensure a steady supply of essential items.

## CONCLUSION

### The way things are right now:

- In the current market, planning isn't efficient or focused on quality. The land use is not well organized, with too much space for marketing activities and not enough for parking. This causes a mess in the market.
- The shops and storage areas are not working well and don't consider the culture. This makes the market disorganized.
- There aren't enough facilities to handle and improve the quality of the products, and there's a lack of food certification and grading. This makes it hard to export the produce.
- The market lacks the infrastructure needed, which keeps farmers from exporting their goods. The infrastructure within the market is also not good.

### Problems faced by farmers in the APMC:

- Not enough space.
- Transportation issues.
- Low prices for their products.
- Inaccurate measurements.
- Lack of places to rest or load and unload goods.
- No grading facilities.
- Transparency issues in the auction system.

### Problems faced by traders in the APMC:

- Not enough space.
- No place to dump and repack goods.
- No accommodations for traders.
- Lack of parking.
- No sorting and grading facilities.

Thus, market is great need of redevelopment.

## CHANGES IN PANVEL FUTURE PLAN ACCORDING TO NEEDS

The Panvel Municipal Corporation (PMC) is seeking expert advice for its 25-year development plan, which is projected to cost ₹10,514 crore. This plan will be implemented in phases over 7, 14, and 25 years. The PMC aims to consider environmental regulations like Coastal Regulation Zone (CRZ), forests, Eco-Sensitive Zones (ESZs), and water bodies during the planning process. The appointed firm will help identify areas to be

reserved for various purposes, including open spaces, parks, recreational areas, educational institutions, healthcare facilities, commercial centers, and industrial zones, taking into account factors such as population and infrastructure. Additionally, the firm will assist in addressing potential legal issues that may arise during the plan's submission and implementation phases, ensuring compliance with zoning regulations, infrastructure provisions, and environmental considerations.

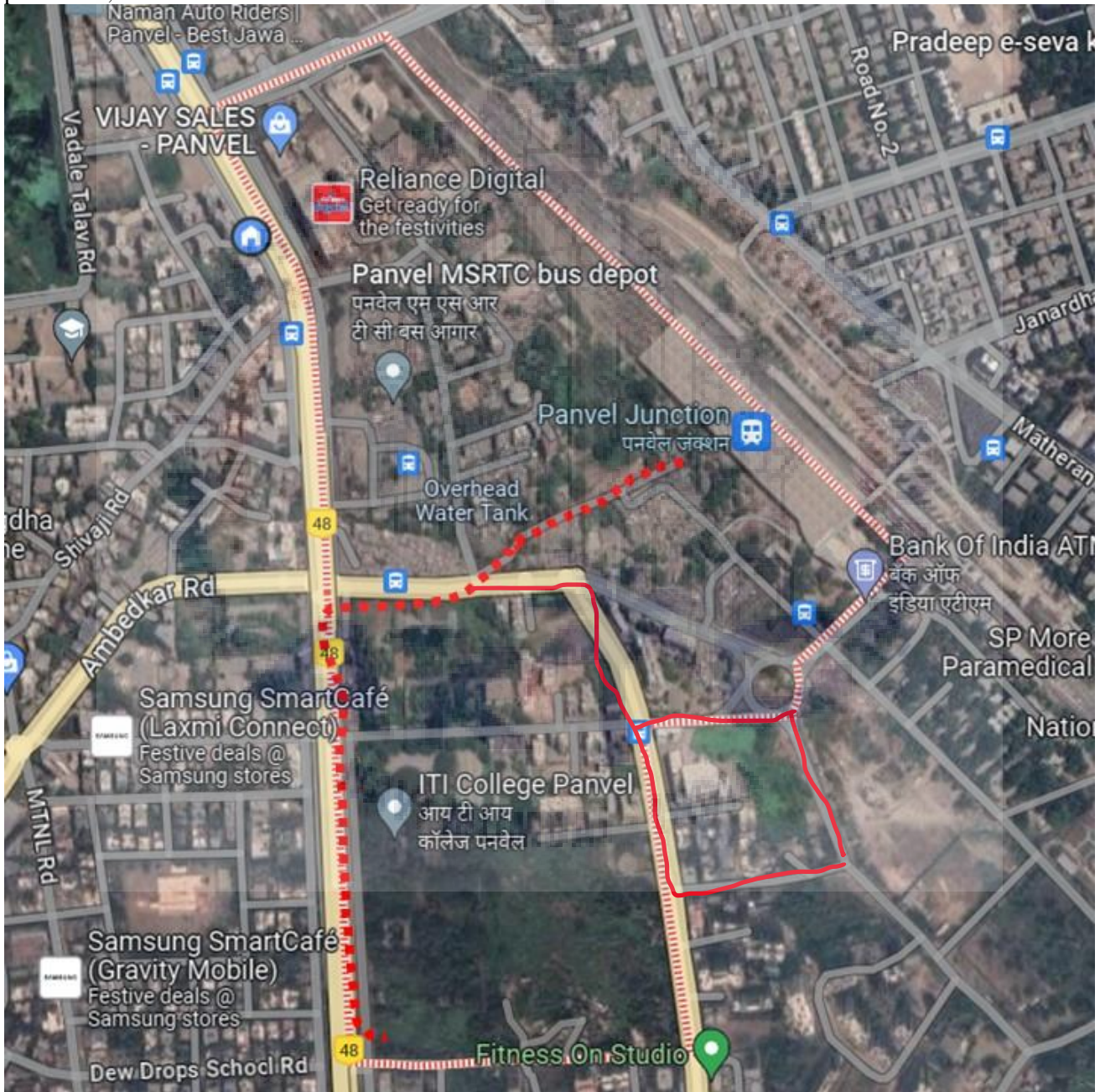
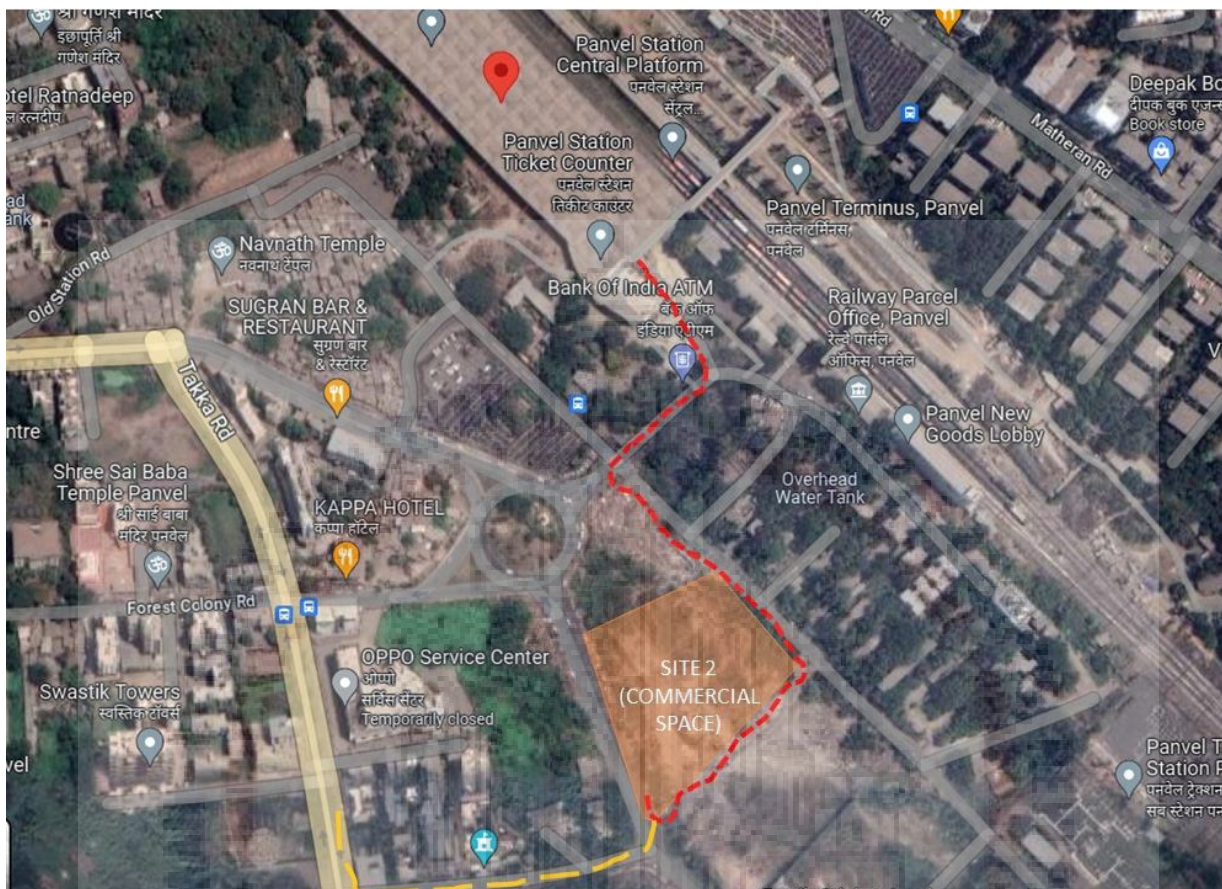


FIGURE 28  
SITE 1 PARAMETERS  
(SOURCE: GOOGLE MAPS)

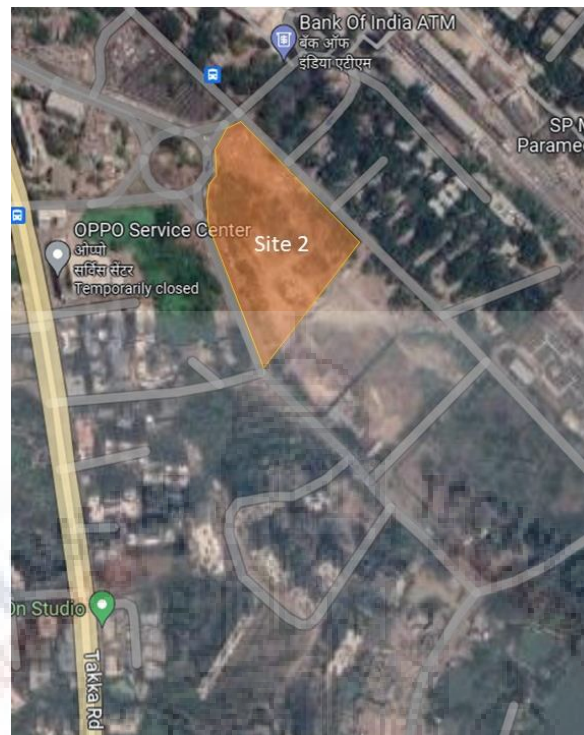
New places of forest colonies can be convinced by authorities for new land for accommodating the needs of the increasing population. this site is in direct proximity to Panvel railway station giving proper land & and goods to the kisan rail project. this place is directly connected to national highway 48 through which all vegetables come in parallel and gives a better place for loading – unloading and exports.



**FIGURE 29**  
**SITE 2 PARAMETERS**  
 (SOURCE:GOOGLE MAPS)

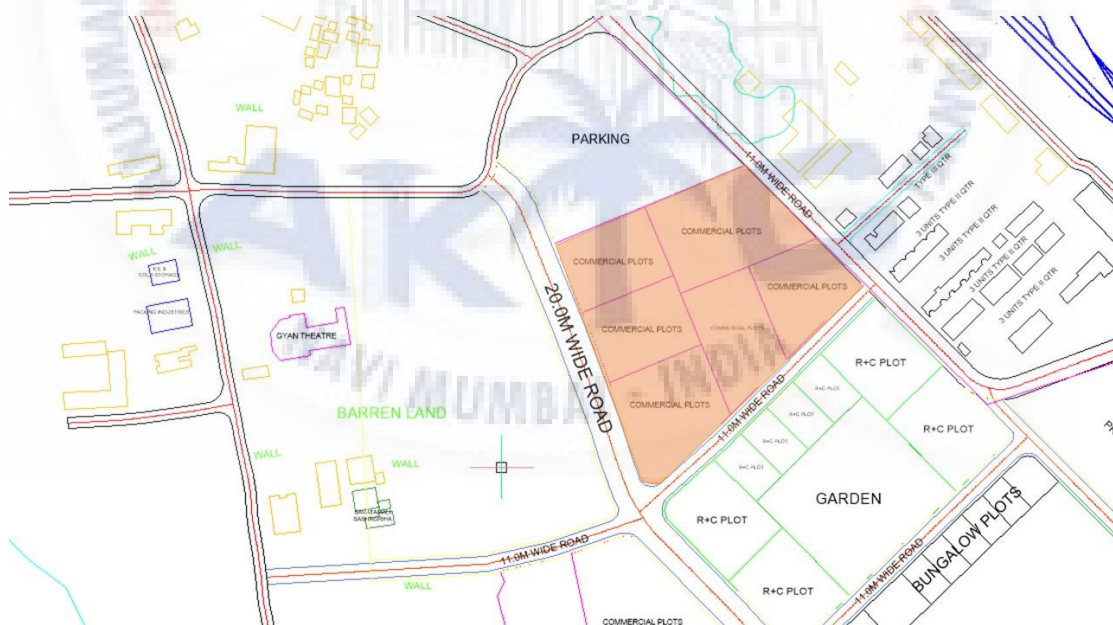
another better place is the 6 commercial plts just behing railway colny from where connection to kisan rail will be very easy to achieve to check viabilty see section 4.1

## NEW PROPOSED SITE LOCATION



**FIGURE 8**  
**SITE 1 & 2 FOR NEW PANVEL MARKET YARD**  
 (SOURCE: Google Maps)

AS PER, LAND USE PLAN OF 2010 SITE 1 COMES UNDER SEMI PUBLIC-PUBLIC CATEGORY WHILE SITE 2 IS SITUATED BACKSIDE OF PANVEL RAILWAY STATION IS COMMERCIAL SPACE.

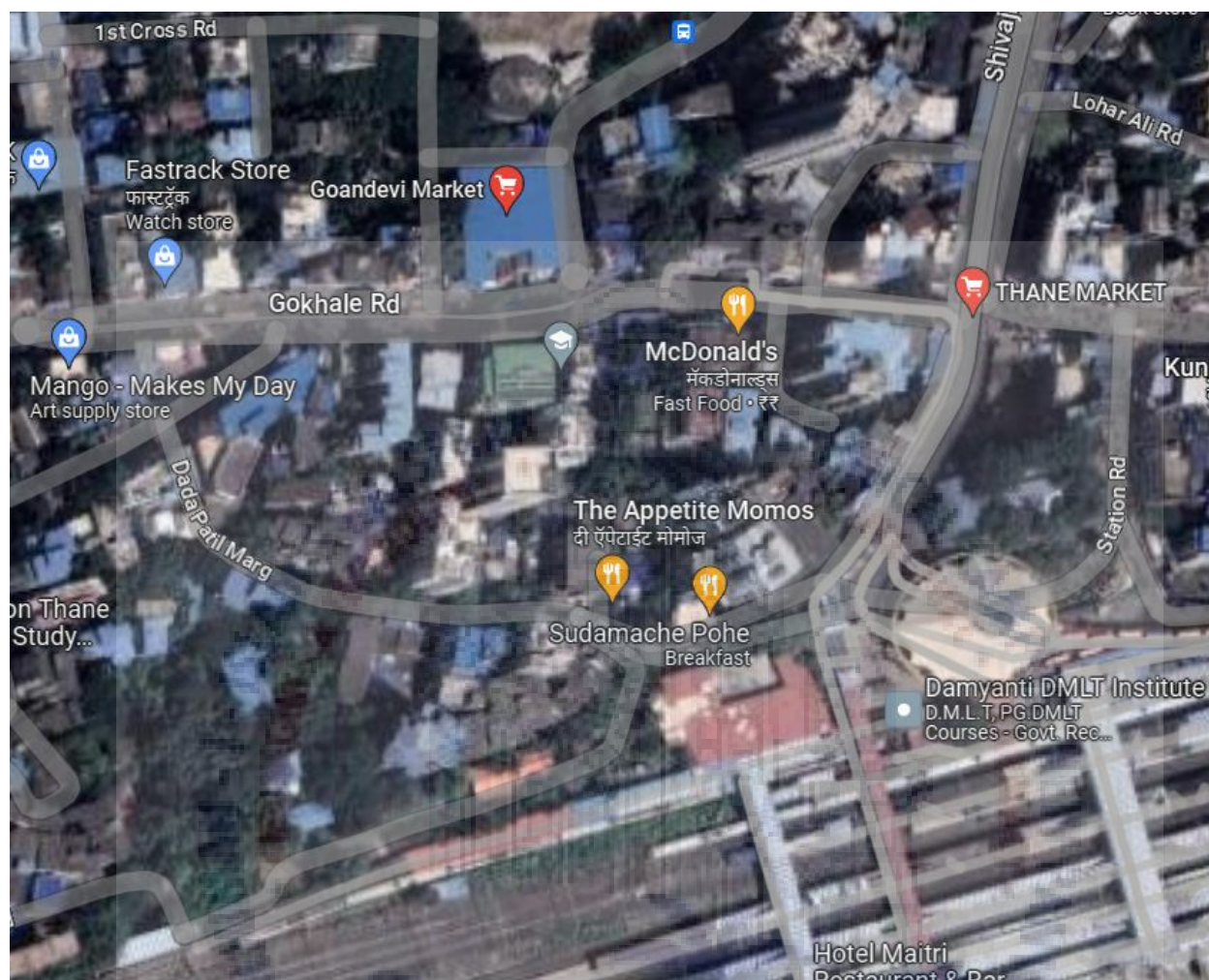


**FIGURE 9**  
**LAND USE PLAN FOR PANVEL**  
 (courtesy:sandeep sir:guide)



## 6. CASE STUDIES

### 1. GAVDEVI BHAJI MARKET ,THANE



Location plan

**IMAGE 11**  
**GAVDEVI MARKET**  
(courtesy: Google Maps)

The market is conveniently located within a short distance of the railway station. Instead of specializing in a single product, the market offers a wide range of commodities. This market supplies everyday necessities. The market handles an assortment of items including vegetables, fruits, clothing, religious items, snacks, electronics, accessories, tailoring services, and more.

There is a total of 156 cubicles, and each cubicle has either a dimension of 0.9 meters by 1.5 meters or 1.2 meters by 1.5 meters, with a height of 0.9 meters.



**FIGURE 30**  
**GAVDEVI MARKET**  
 (SOURCE: JUNAID PATEL)

The market features a marked circulation lane, and there are five separate entrances to access it. Visual connectivity within the market is ensured due to the absence of traditional shops; instead, cubicles are used, although the height of the cubicle furniture may somewhat limit visibility at certain levels. Vendors have their dustbins located near their cubicles, ensuring that waste is disposed of in an orderly manner, contributing to the overall cleanliness of the market. The central hub of the market is primarily occupied by vendors specializing in perishable goods. These vendors leverage technology to offer home delivery services to customers who place orders over the phone, as well as to their regular patrons who visit them in person.



**IMAGE 12**  
**NEARBY AREA OF GAVDEVI MARKET**  
**(SOURCE:AUTHOR)**

nearby area of gaondevi market in the evening during 6.30 pm heavy traffic.

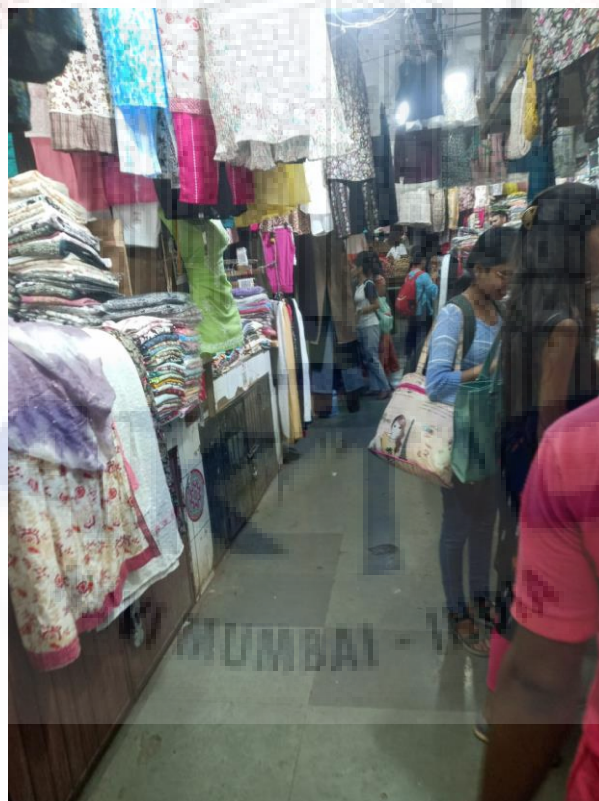


**IMAGE 13**  
**NEARBY AREA OF GAVDEVI MARKET**  
**(SOURCE:AUTHOR)**

area behind the market where most flowers are for sale



**IMAGE 14**  
**INTERIOR OF GAONDEVI MARKET**  
**(SOURCE:AUTHOR)**



**IMAGE 15**  
**INTERIOR OF GAONDEVI MARKET**  
**(SOURCE: AUTHOR)**



**IMAGE 16**  
**ONE OF FIVE ENTRY/EXITS OF GAONDEVI MARKET**  
 (SOURCE: AUTHOR)



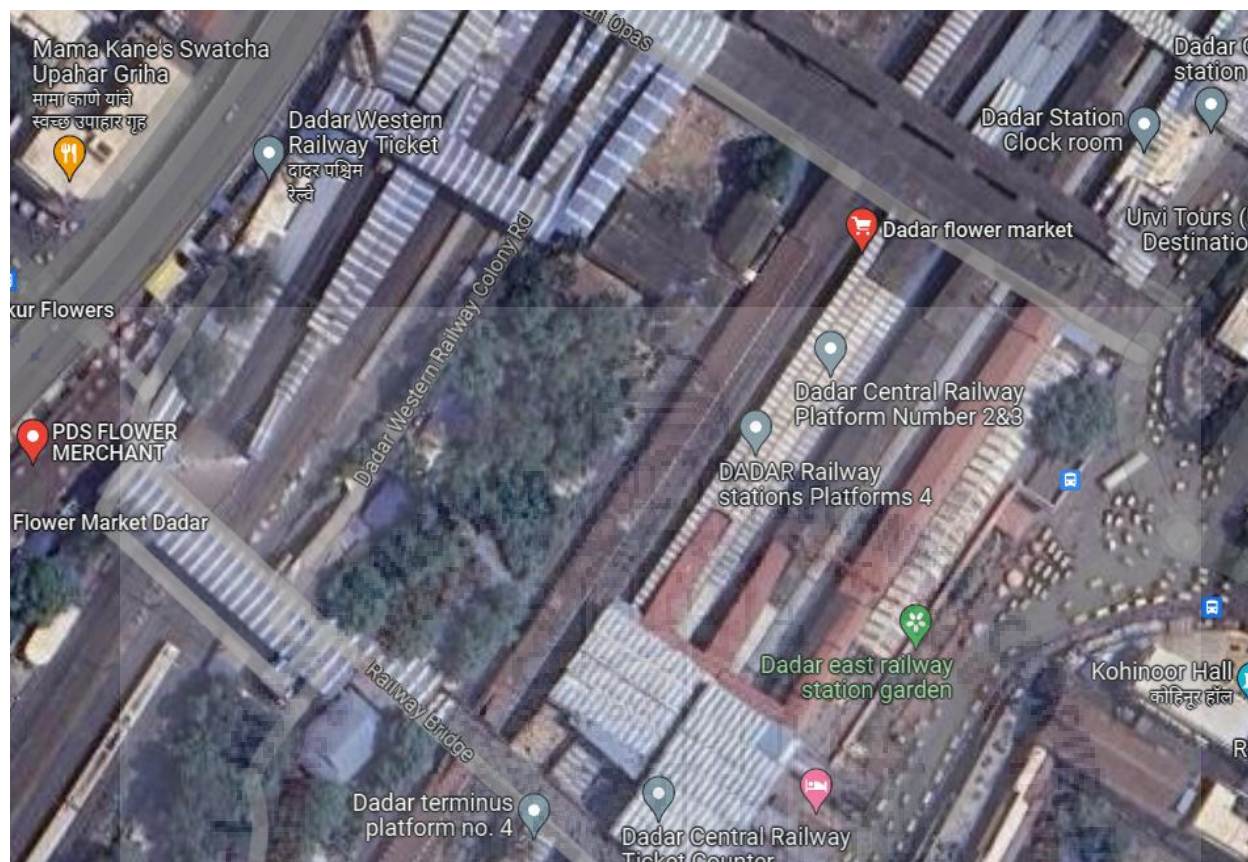
**FIGURE 31**  
**GAVDEVI MARKET**  
 (SOURCE: JUNAID PATEL)

At the center of the market, you'll find a significant area occupied by vendors specializing in perishable products like fresh fruits and vegetables. These vendors have harnessed the power of technology to enhance their services. They've introduced a convenient home delivery system, which proves highly advantageous for customers who prefer the convenience of ordering goods from their own homes. With a simple phone call, customers can place their orders, and these vendors promptly arrange for the requested items to be delivered directly to their doorstep.

In essence, the central core of the market serves not only as a bustling center for perishable goods but also as a prime example of how traditional market vendors have adapted to modern conveniences. They offer a seamless blend of in-person shopping experiences and the ease of remote ordering and home delivery.



## 2. DADAR MARKET



Location plan

**IMAGE 17**  
**DADAR MARKET SITE**

(courtesy: Google Maps)

Nestled just outside the bustling dadar station in the heart of central mumbai, you'll discover the enchanting dadar phool market, also referred to as the dadar flower market. This vibrant marketplace is a haven for flower enthusiasts and professionals alike, primarily operating as a wholesale hub for floral treasures.

The market awakens with the first rays of dawn, as its gates open promptly at 5:00 a.m., welcoming vendors and buyers into its fragrant realm. However, the bustling activity begins to wind down by 9:00 a.m., making it a true early-morning spectacle.



**FIGURE 32**  
**DADAR MARKET FOOTFALL & BUILT UNBUILT**  
 (COUTSEY: <https://www.leaf-india.org>)

Dadar phool market (flower market) is located outside dadar station in central mumbai. It is a whole-sale flower market, which starts at 04:00 a.m. and ends by 11:00 a.m. flowers like rose, chrysanthium, marigold, jasmine, gladiola, aster, lily, gerbera and carnation line the narrow street. The flowers come from pune, bangalore, thailand, kolkata, mumbai, muzaffarnagar, shimla and kullu in dadar.

Mumbai's oldest wholesale flower market is situated just outside dadar station, beneath the flyover. The market's narrow pathways are filled with stalls and wooden platforms showcasing a wide array of seasonal flowers.



**IMAGE 18**  
**FLOWER SELLERS AT MORNING**  
 (SOURCE: AUTHOR)



The market is witness to frenetic activity daily. Around festivals it gets even more busy and chaotic. Despite the crowd, and filth, especially during monsoons



**IMAGE 19**  
**FLOWER SELLERS AT MORNING**  
(SOURCE: AUTHOR)



**IMAGE 20**  
**FLOWER SELLERS AT MORNING**  
(SOURCE: AUTHOR)

### 3. MOHALI MARKET



**FIGURE 33**  
**MOHALI FRUIT MARKET**  
 (COURTESY: GADM, SILHOUETTE PICS, GOOGLE MAPS)

The state-of-the-art fruit and vegetable market, mohali is the first such market not only in punjab but in the entire north india.

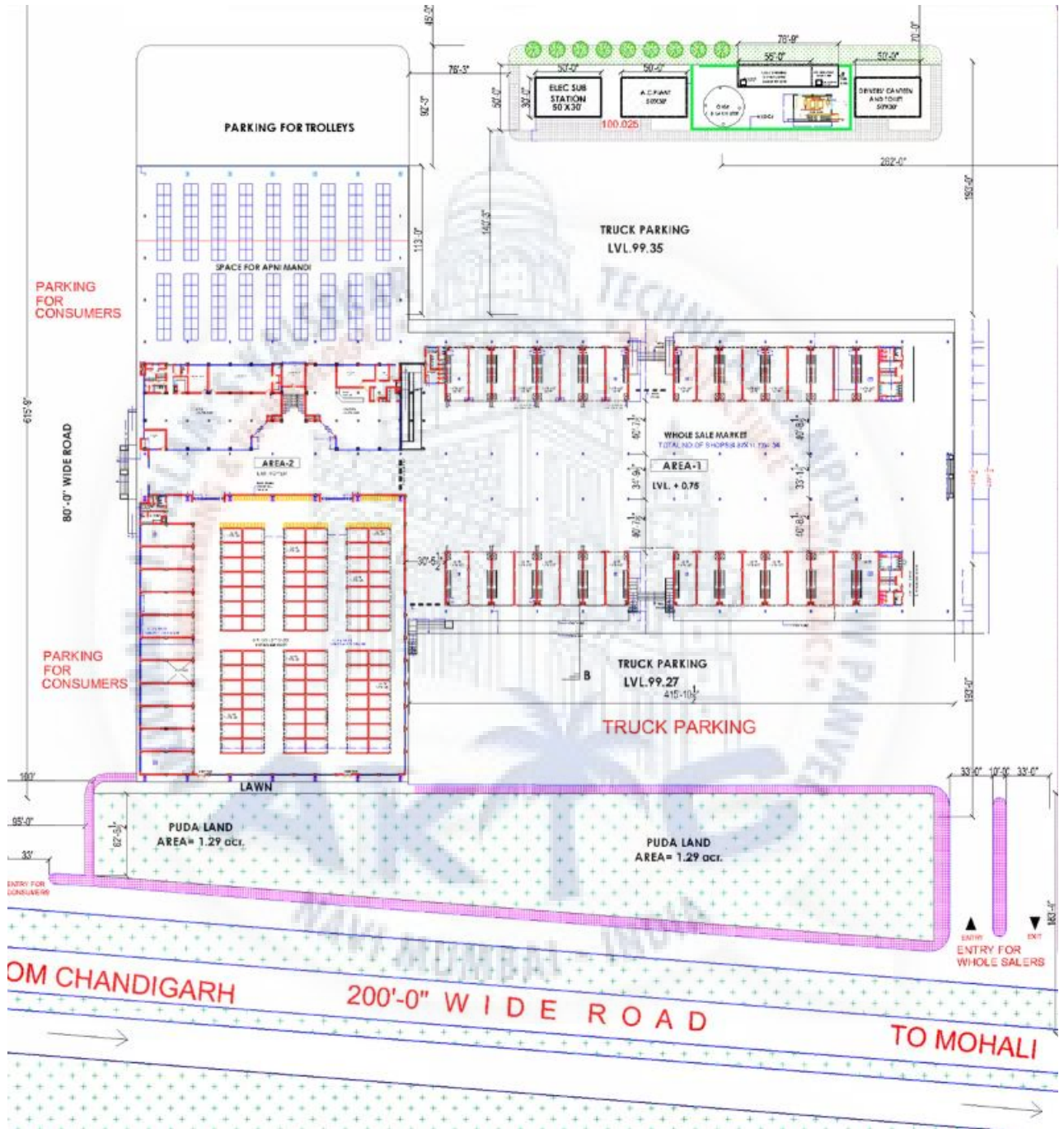
It is constructed on a plot of 12 acres in sector-65 a, mohali.

The site of the market becomes part of the 20-acre development scheme comprising general shopping area and offices.



**IMAGE 21**  
**MOHALI MARKET**  
 (SOURCE:SLIDESHARE)

The t-shaped main market block comprises mainly three wings.  
 The larger flange of the t accommodates 34 wholesale shops.  
 These shops are double-storied and each shop has a size of 16'-0" x 38'-0".  
 A 3-metre wide unloading platform has been provided on the outside of the shops that is towards the parking lot.  
 On the inner side, a 40-foot-deep display platform has been provided in front of each shop.



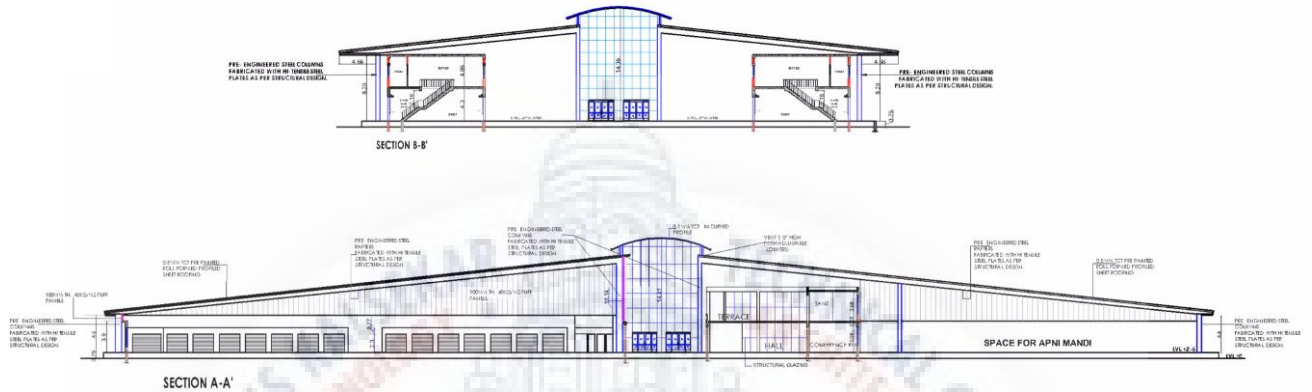
**FIGURE 34**  
**MASTER PLAN OF MOHALI APMC MARKET**  
 (SOURCE:SLIDESHARE)

The layout plan of the market incorporates a fully covered market besides the general facilities like a cold store/ ripening chamber, garbage collection and disposal, workers' canteen, water works, air-conditioning plant etc.

Provision has been made for adequate parking for all types of vehicles coming to the market.

Separate entries and exits have been planned for the segregation of different types of commuters for instance, the wholesalers and retailers have separate ingress and egress to the market.

(SOURCE:SLIDESHARE)



**FIGURE 35**  
**SECTIONS OF MOHALI MARKET**  
 (SOURCE:SLIDESHARE)



**IMAGE 22**  
**MOHALI MARKET INTERIOR**  
 (SOURCE:SLIDESHARE)

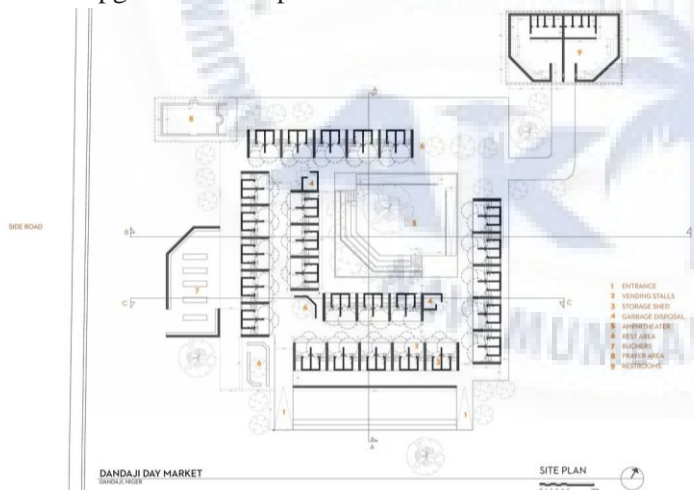
#### **4. DANDAJI MARKET**

In rural niger, markets run every week, meaning that individual villages never really develop a local economy. The demographic growth of dandaji has led it to attempt a turnaround by commissioning a permanent daily market. Because the current market is organized around an ancestral tree that has long been an important public space on market day, the new project stays on the same site, amplifying an experience the population has come to count on.



**IMAGE 23**  
**DANDAJI MARKET**  
(SOURCE:ARCHDAILY)

The objective was to create an infrastructure that would be visually striking, instill pride in its users, and attract more commerce to the area. Ultimately, an important goal of the project is to create a space that triggers greater confidence and aspirations for the future in the users themselves by offering a dramatic upgrade for this public infrastructure.



**FIGURE 36**  
**DANDAJI MARKET PLAN**  
(SOURCE:ARCHDAILY)

The design of the project is kept very simple, using a colorful metal canopy produced by a succession of individual shading structures. It provides solar and thermal protection to the vending spaces underneath. The result is a whimsical world that complements the colorful goods on display while protecting patrons from the scorching sun.



**FIGURE 37**  
**SECTION OF DANDAJI MARKET**  
 (SOURCE:ARCHDAILY)

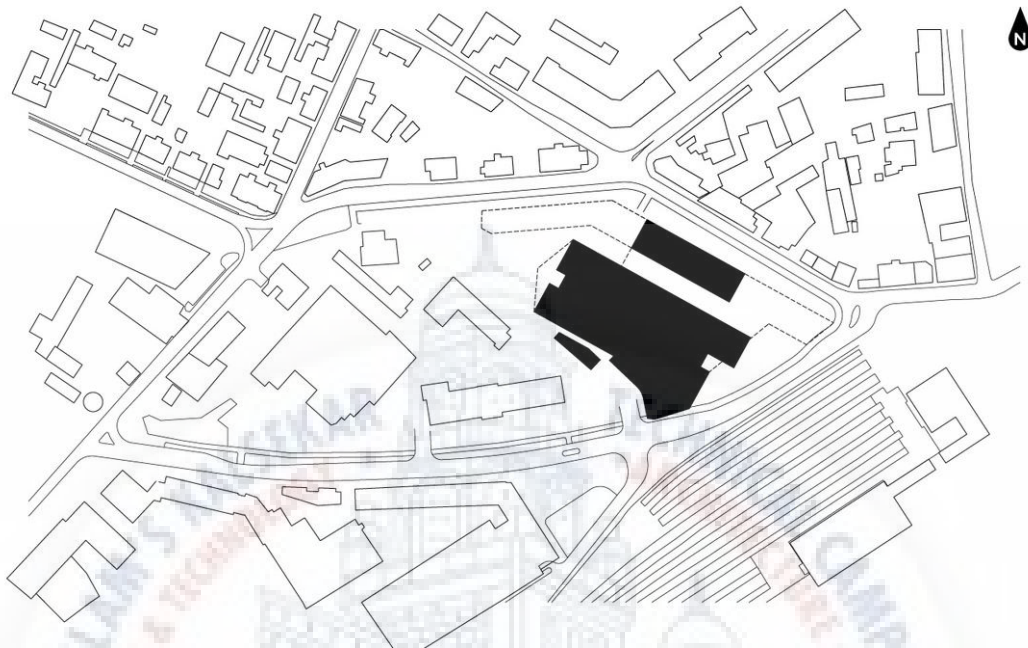
The market is laid out to progressively step down to the old tree, the surroundings of which are formalized to become a real public space with seating and rest spaces for all to gather around. Walking along the shaded lanes, one experiences the simplicity of the compressed-earth brick stalls that contribute to the cooling of the space, while the alternating heights of the shading structures help the airflow throughout.(ARCHDAILY)



**IMAGE 24**  
**DANDAJI MARKET**  
 (SOURCE:ARCHDAILY)

## 5. BALTIC STATION MARKET

The baltic station market is located in north [tallinn](#) between the city’s main railway station and the popular residential district of kalamaja.



**FIGURE 38**  
**BALTIC STATION MARKET**  
(SOURCE:ARCHDAILY)

The reconstruction design aimed to create a contemporary and diverse market, while also preserving the historic character of the market with all of its hustle and bustle and chaotic nature. We added to the pre-existing context to attract the widest target audience possible - from rail passengers to local residents, young people to tourists, and everyone who happens to be passing through the area.



**FIGURE 39**  
**PLAN OF BALTIC STATION MARKET**  
(SOURCE:ARCHDAILY)

The main architectural facade of the market is made up of three two-storey limestone warehouses from the 1870s. The new extension essentially includes a single unifying pitched roof that follows the shape and size of the original buildings, and of an underground floor to contain the new functions.



**IMAGE 25**  
**BALTIC CENTRE STATION MARKET**  
(SOURCE:ARCHDAILY)

The main objective of the market's ground floor is to convey the hustle and bustle. The desired environment is created through the massing of various market forms, brought together on the ground floor.

Typical functions of a market – stalls for meat, fish, and dairy – stand side by side with the farmers market, vegetable stalls, and a street food avenue in the central building. Combining these functions creates an entirely new way to experience the baltic station market. (ARCHDAILY)



## 6. VASHI APMC MARKET

Vashi apmc is regulated market in india new Mumbai area, it major trade hub for vegetables in all Mumbai & beyond.

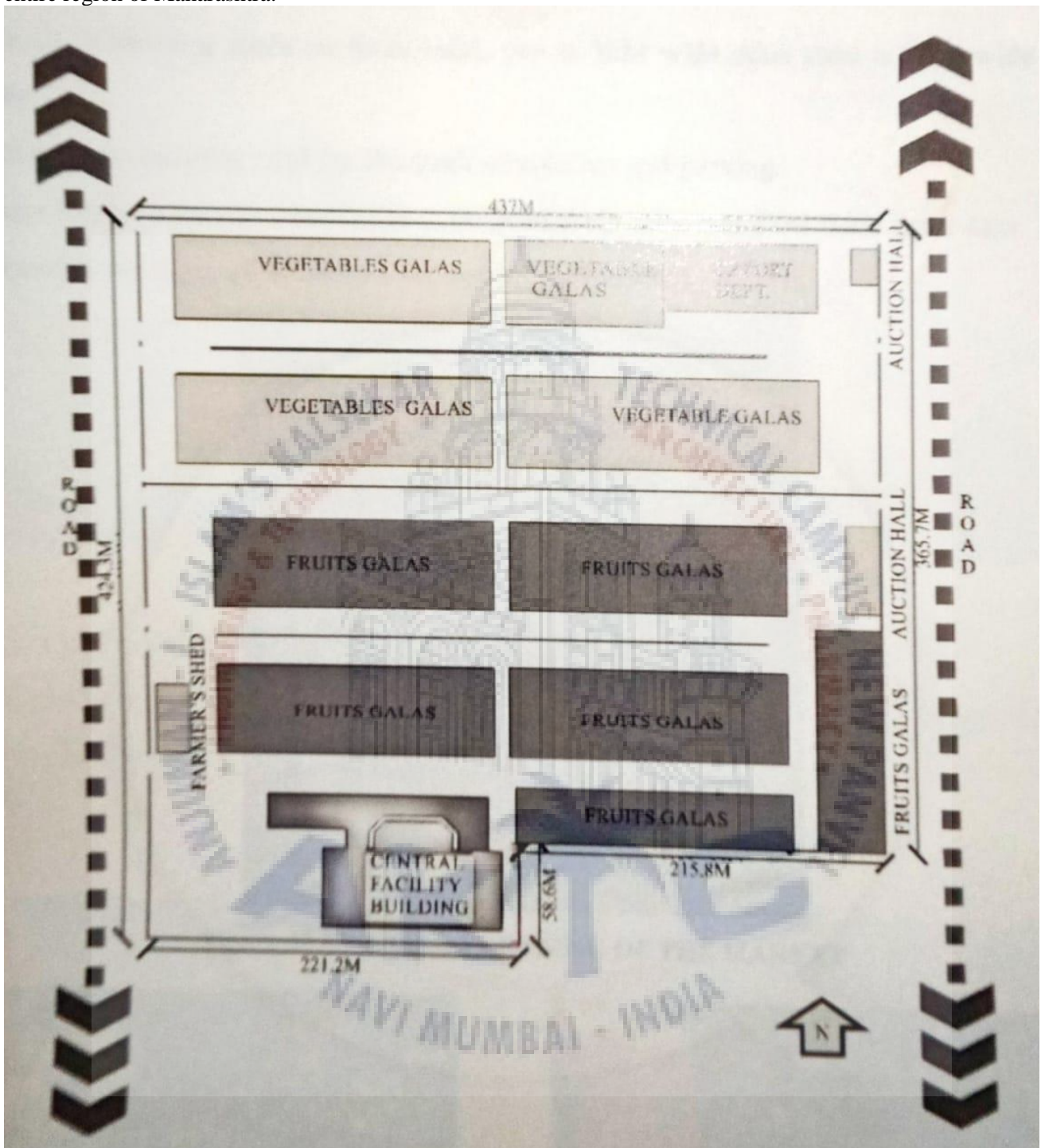


IMAGE 26  
VASHI APMC MARKET  
(SOURCE: X.COM)



FIGURE 40  
VASHI APMC MARKET  
(SOURCE: AYAZ ALI THESIS WORK)

Vashi vegetable & fruit market comprises 17.18 hectares of land. As shown in below figure north section is full of vegetable galas and south section is full of fruit galas auction hall is sideways its is biggest apmc in entire region of Maharashtra.



**FIGURE 41**  
**VASHI APMC MARKET**  
 (SOURCE: AYAZ ALI THESIS WORK)

Total Area of Plot-171950sq.m  
 Area for Parking and Internal Roads - 63365sq.m  
 % of Road upon Total Plot Area -36.85%  
 Area of Galas 46879.47sq.m  
 Total Area of Facility Building -90000sq.m (approx.)

## 7. ANALYSIS

NAME	TYOLOGY	COMODITY	STRUCTURE	BUILT-UP AREA
GAON DEVI,THANE	WHOLESALE	CLOTH-PERISHABLE ITEMS	R.C.C	340 SQ.M
DADAR FLOWER MARKET	STREET	FLOWER VEGETABLES	OPEN-STREET(URBAN POCKETS)	753 SQ.M
MOHALI MARKET,SECTOR 64	APMC-WHOLESALE	PERISHABLE ITEMS	STEEL LONG-SPAN	17610 SQ.M
DANDAJI MARKET	WEEKEND MARKET	PERISHABLE ITEMS	OPEN-CLUSTER	2492 SQ.M
BALTIC STATION MARKRT,TALLUNN	WHOLESALE	CLOTH-PERISHABLE - MISCELLANEOUS ITEMS	FOLDED PLATES LONG SPAN	11115 SQ.M

TABLE 2  
CASE STUDY ANALYSIS CHART



## 8. DESIGN BRIEF

To comprehensively redevelop the currently depleted Panvel APMC market & to accommodate the load that new inhabitants of Panvel will be putting on the supply chain, with initiatives to create a contemporary, well-organized, and highly functional market space, catering to the needs of vendors, transporters, retailers, managers, and consumers. while simultaneously enhancing the quality of life for the local community and providing efficient facilities and services to create a thriving market environment.

**Market Space:** The redevelopment project encompasses a total market area spanning 4800 square meters, with a specific allocation of 400 shops for vegetable sale dedicated exclusively for vendors to conduct their business. The remaining space is designed to serve as a versatile area for gatherings and various community functions, benefiting both the local community and hawkers.

**Shops:** The market complex will house 400 shops, creating a conducive environment for a diverse range of businesses and vendors.

**Administrative Hub:** An administrative wing, covering an area of 500 square feet, will function as the central management and coordination hub for activities within the complex.

**Dedicated Parking Bay:** To alleviate congestion and enhance convenience, a designated parking bay will be included, ensuring that shoppers and traders have a specific area for parking their vehicles.

**Water Storage:** The project will incorporate a substantial water tank with a capacity of 200,000 gallons, guaranteeing a reliable water supply to support various market activities.

**Loading and Unloading Area:** A dedicated space for loading and unloading, spanning at least 750 square meters, will be established to streamline logistics and transportation within the market, improving efficiency.

**Parking Facilities:** Separate parking areas will be provided for both heavy and small-scale vehicles, including sheltered spaces for short-term stopovers, offering enhanced convenience to visitors and market users.

**Reception and Management Area:** A 250-square-meter space will be designated for reception and managerial functions, contributing to the efficient administration of the market complex.

## 9. DESIGN PROGRAMME

### Market infrastructure-

1. Market building
  - Shops
  - Storage
  - Offices
2. Loading-unloading platform
  - Auction hall
  - Loading unloading area

3. Weighment
  - Weighing machine
4. vehicular parking
  - heavy vehicles
  - car & bike parking

sr.no.	type of space	sub space	no.of units	area dedicated to it
1	vendors space	permanent vendor shops	400	2000 sq.m
		hawkers station	30	75sq.m
		temporary vendors stations	45	225 sq.m
2	managemnet	reception	1	15 sq.m
		infrastructure development office	1	40 sq.m
		regulatory body	1	25 sq.m
		staff mangagement office	1	115 sq.m
		board room	1	35 sq.m
3	loading-unloading	w/c	2	20 sq.m
		unloading platform	1	45 sq.m
		measuring station	1	125 sq.m
		dispute management office	2	35 sq.m
		toilets	6	15 sq.m
4	parking	waiting & accomodation for heavy vehicles		530 sq.m
		heavy vehicle parking	35	525 sq.m
5	waste management	small vehicle parking	25	200 sq.m
		waste management unit	1	150 sq.m
6	public toilet	public toilet	20	50 sq.m
7	water tank	water tank	1	30 sq.m
8	green space	green spaces		300 sq.m

TABLE 3  
DESIGN PROGRAMME

Total covered by this design programme for new panvel market vaegeble yard is in total 4800 sq.m (51667 sq.ft )

## BIBLIOGRAPHY

(source: Mumbai mirror)

<https://mumbaimirror.indiatimes.com/mumbai/other/pmc-to-redevelop-panvel-market-on-bot-basis-on-a-four-acre-plot/articleshow/16141319.cms>

<https://www.gatewayhouse.in/how-mumbai-became-a-magnet-for-migrants/>

[https://en.wikipedia.org/wiki/Panvel\\_Municipal\\_Corporation](https://en.wikipedia.org/wiki/Panvel_Municipal_Corporation)

(source: forbes,2023)

<https://www.indiafilings.com/learn/applicability-of-fssai-to-the-food-business-in-india/#:~:text=registration%20is%20required,-.FSSAI%20State%20License.to%20Rs%205000%20per%20annum.>

[https://licenseindia.com/apmc-license-agricultural-produce-market-committee/#:~:text=Solvency%20Certificate%20\(Prescribed%20Format\),.2C%20Resolution%20regarding%20signing%20authority\).](https://licenseindia.com/apmc-license-agricultural-produce-market-committee/#:~:text=Solvency%20Certificate%20(Prescribed%20Format),.2C%20Resolution%20regarding%20signing%20authority).)

.(SOURCES :APMC)

[https://en.wikipedia.org/wiki/Agricultural\\_produce\\_market\\_committee#:~:text=directly%20from%20farmers,-.Maharashtra.by%20the%20Government%20of%20India.](https://en.wikipedia.org/wiki/Agricultural_produce_market_committee#:~:text=directly%20from%20farmers,-.Maharashtra.by%20the%20Government%20of%20India.)

<http://ir.aiktclibrary.org:8080/xmlui/bitstream/handle/123456789/2995/Junaid%20Patel.pdf?sequence=1&isAllowed=y>

[https://www.leaf-india.org/assets/download/publications/open\\_space\\_in\\_mumbai.pdf](https://www.leaf-india.org/assets/download/publications/open_space_in_mumbai.pdf)

(source: panvecorporation,2016)

[https://www.panvelcorporation.com/History#:~:text=Panvel%20\(also%20known%20as%20Panwell,famous%20for%20its%20rice%20market.](https://www.panvelcorporation.com/History#:~:text=Panvel%20(also%20known%20as%20Panwell,famous%20for%20its%20rice%20market.)

<https://news.railanalysis.com/transportation-of-fruits-and-vegetables-by-kisan-rail-subsidized-by-50-read-more/>

( source :endless bounty,2017)

<https://www.freepressjournal.in/mumbai/navi-mumbai-pmc-seeks-expert-advice-for-25-year-development-plan-costing-10514-crore>

## TRANSCRIPT OF INTERVIEW

**MR.PRASHANT:** what are you doing?

**INTERVIEWER:** i am just recording it just in case i ever need it again.

**MR.PRASHANT:** see i am not a teacher, i am just an officer, we give information to agri colleges so they can have a deeper understanding of the market, here cause of your concerns i am giving you all this data, i do it cause i just love it.

.so, in 1960 maharashtra became a state this market is far older than that but later cause it was not managable people before us, created this market co-operation, market union as per say.

But it was very muddy and all so they first created some market units by shed. This market spans in 9 acres. They first built sadhe gale.

Later on, as the labour union got stronger and policies came in our favour in the time of 1980 this building started to be built.

In 1999 this market finished.

This bazaar samiti corresponds to 196 villages.

in the past, in Panvel so many farmers used to live here.

there are in complete total of 96 villages provithat de vegetables on daily basis,and also millets.

but later when a surge of developmet happened over here many farmers selled their lands and started doing some other businesses.

after that only during monsoon vegetables use dto available because of that we faced short of supply thus under this committee we started importing vegetables from another talukas,district,s and states .like of rajshthan ,gujrat,madhypradesh.

we have shipments from nashik, Pune Kolhapur and the furture up also, in here panvel people only do rice farming so we need to rely on far away villages and farmers.

we get vegetbles like onion, potato,lasun, etc.

it takes 7-8 days to come here so we always need the vegetables which do not spoil quickly.  
when a shipment comes here we first give them one entry pass later after unloading we measure that on electronic measurements after that auction get commenced.  
we see that no fraud should happen to farmers.  
if farmer lived then only others will live.

#### DISTURBANCES

**INTERVIEWER:** i can come back .

**MR.PRASHANT:** wait here.

**MR.PRASHANT:** where was i?

**INTERVIEWER:** at measurements.

**MR.PRASHANT:** see we keep eye on both farmers and vendors so that system may function good.see every five years bazaar samite elections happen.

in this bazaar samite in total 19 candidates is get elected 1 leader and other 16 are divided in 4 guiding 4 groups of peoples who manage this market

( SEE WORKING IN LITERATURE REVIEW.)

**INTERVIEWER :** can you tell me something about evolution of this market?

**MR. PRASHANT:** oh yes! See in past there was not this framed structure here before it was only weak kaccha galas were here but after with time, this galas get good as we have funds we want to make it better cause lot of mismanagement happens now we are having problems managing and there are lot of others also.

( MORE INFORMATION ON WORKING FOR THAT SEE LITERATURE REVIEW)

**MR PRSHANT:**we are soon going to open fish ,masal and other commodities here for that we are planning expansions.peoples from nawda and other areas provide these. Ulwe macchi market are also, we have nakkas over ther.

We order bakri ,eggs and chicken also.

We also provide shelter to the farmers for temporary basis here in shetkari niwas. We provide them with toilet and drinking water and fan.

If you want ask something more you can . Or you can call me anyday.

**INTERVIEWER:** no thank you

( FOR AUTHENTICITY OF INTERVIEW CALL +91 77159 21384 )