
UPLIFTMENT OF PANVEL VEGETABLE MARKET

To redesign the existing market by rethinking the use of space other than market.

UPLIFTMENT OF PANVEL VEGETABLE MARKET

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CERTIFICATE

This is to certify that the Design Dissertation titled “ **REDEVELOPMENT OF VEGETABLE MARKET** ” is the bonafide work of the student **Kshitija Manojkumar Mhatre** from Final Year B. Arch 2016 -2017 of AIKTC - School of Architecture and was carried out in college under my guidance.

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Date: _____

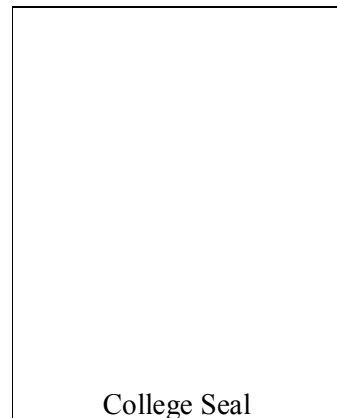
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Abstract

Market plays a vital role for the traders as well as the people around. It is a common platform for buyers and sellers. In a wholesale market, the goods come from different parts of the state. It is equally important for local farmers whose produce is dealt in the market. Market is unique in its own way. Market hours begin with early morning and end till the goods get sold. The duration of market differs from place to place as well as it depends upon the commodity which is to be dealt.

The market is located in Panvel. Market begins at midnight and shuts by afternoon, after which the market remains unused.

This research aims at re-planning the market with respect to its function, services, hygiene and circulation. Also, planning an additional activity that will be carried out after the market hours which can keep the market alive after regular hours. Such plugging activity would invite other residents to the area and also would improve interaction.

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Aim /objective

Aim

To design a market which is informally open to all and not limited to specific users, i.e., buyers and sellers.

Objective

- To socially elevate the use of the market after the market hours.
- To transform a market into a recreational space.
- To introduce an additional activity that will generate income out of it in the non-working hours of the market.
- To improvise the present conditions of the market, in terms of services, circulation, hygienic conditions, etc.

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Topic justification

The market has its own significance in the area.

Why

The market lies within the commercial and industrial area. It is unique because it caters to many users from different areas. The stock comes from different locations like Pune, Nashik and local rural areas. Currently, it is facing problems related to cleanliness, the unhygienic conditions, congestions that slow the flow of people, lack of services. The wastage produced has no proper dumping area; the storm water gets stagnant at a place creating muddy pedestrian paths, no segregations of commodities around the market. This wholesale vegetable market serves the need of many retailers, households and commercials.

What

To create a space with proper planning by solving current problems faced and also adding an activity that will keep the space alive even after the market closes. Currently, the market gets closed by afternoon after which the space remains unused. The idea is to add an activity that will keep the market busy (space) even after the working hours, but in form of a recreational space.

Whom

The place will cater to buyers and sellers, the primary users of the market. The market will be a new space to use for the buyers and sellers with function able space and planned services. It will also cater to the users who will be visiting the space post market hours to use the recreational space.

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What is a market?

A market is place where **buyers and sellers gather for transaction, which involves the exchange of goods and services.**

A market may extend to a **locality, village, town, region or a country** according to the demand of a commodity.



Those **business activities are included** in Marketing **that directs the flow of goods and services from producer to consumer.**

History of Market

Since **ancient times, markets have been existed.** It was called the agora, in ancient Greece and the forum in ancient Rome. The world's oldest still-operating market is in Istanbul and it is known as Grand bazaar.

The construction of this market began in 1455. During 15th century Tlatelolco, the market was the largest in all Americas.

For sale, a merchandise range is featured by the market or there may be a specialized market such as:

- Animal markets
- Antique markets



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- Farmers' markets (focuses on fresh food)
- Fish markets



- There is a type of bazaar where used goods, low quality items, high quality items are sold at low prices at a commonplace. This type of bazaar rents space to people. They either sell or merchandise. Flea markets or swap meets are one of them.

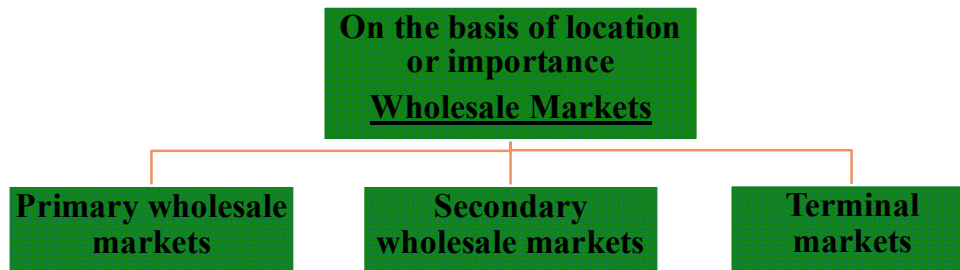


- Flower markets
- Handicraft markets
- Supermarkets
- Gourmet food to consume on- and off-premises are featured by food halls such as at Galeries Lafayette (Paris) department stores and Harrods (London)



Types of markets in India and their classifications

- Wholesale market
- Retail market
- Fairs



Wholesale Markets:

These markets are further subdivided into

On the basis of location or importance:

I. Primary wholesale markets:

- Markets are held periodically, either once or twice every week.
- Agricultural produce are brought from neighboring villages.
- In these types of markets, sale of commodities like fruits, vegetables, food grains, all household requisites takes place.
- For e.g.: Village market.



II. Secondary wholesale market:

- These types of markets are generally at district or taluka headquarters.



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- Small merchants **purchase from a primary wholesale market and sell in these markets.**
- Sometimes **cultivators themselves sell their produce** in these markets.
- Each **market comprises an area with a 10-20 miles radius.** These are also **known as ‘mandis’.**
- For e.g.: District and taluka market. The secondary wholesale market is in permanent operation.
- They are **not seasonal in nature** or they **don’t deal in special produce.** **Large volumes of produce are traded** here.
- **Commission agents and brokers** are involved for specialized functioning.

III. Terminal markets:

- Here the produce is either **finally dispatched-off directly to consumer or processors or assemble for shipment to foreign countries.**
- There are **cold-storages and warehouses are available/** cover a wide area, may be state.
- These markets are **located in major metropolitan areas.**
- These are **located at major ports dealing with export and import produce.**



2. Retail markets:

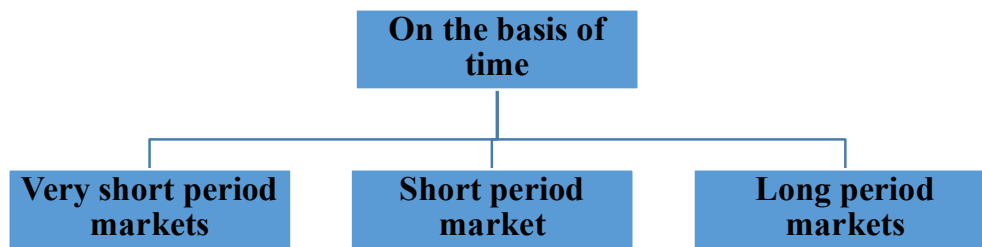
- These **markets are placed all over the city or town under municipal control.**
- They **deal in all types of produce and serve the needs of the city people** as well as of the villages in surrounding.
- Located in a particular **locality.** Cloth market is in one locality and vegetable, fruit, and grain market are in different localities.
- There is direct selling of the produce to the consumer.



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3. Fairs:

- These markets take place on religious occasions, at or around a pilgrim center. Some markets deal in agricultural produce, livestock etc., for e.g. Magh Mela at Allahabad.
- There are **various dimensions of markets.**



On the basis of time:

a. Very short period markets:

- These markets are **held for few hours during the day time** and are mostly for highly perishable commodities like fruits, vegetables, fish, milk, etc.



b. Short period market:

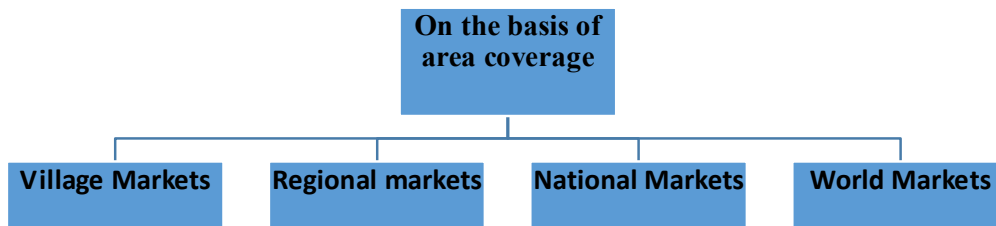
- In these markets, **commodities** that are **sold are perishable and can be traded for some time.**
- The commodities are like **oilseeds and food grains.**



c. Long period markets:

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- Time span available is long to adjust supply to meet demand even by managing production.
- These markets can be for **machinery and manufactured goods**.



On the basis of area of coverage:

1. Village Markets:

- In these types of markets, **activities of buying and selling are confined among buyers and sellers of the village or villages in the neighborhood**
- Mostly they deal in **perishable commodities**.



2. Regional markets (District/ State):

- Here buyers and sellers are drawn for commodity on a **large area than the local markets in India**.
- They generally exist for **food grains**.



3. National Markets:

- In these types of markets buyers and sellers are at national level

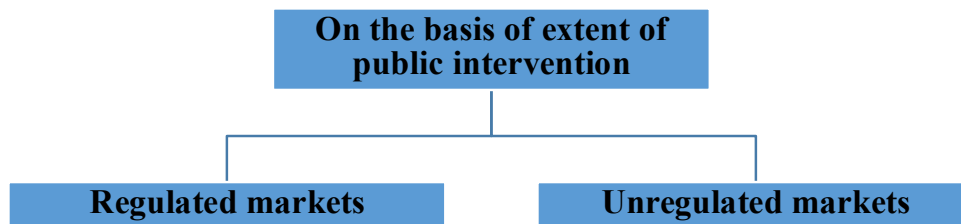


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- E.g. Durable goods such as Jute, Tea.

4. World Markets:

- In these types of markets, sellers and buyers are drawn from the world's biggest markets from area point of view and exist for commodities having demand throughout the globe.
- E.g., Coffee, Gold, silver.



On the basis of extent of public intervention:

I. Regulated markets:

- In these types of markets, the **business is done as per the rules and regulations by the statutory market organization.**
- The **charges for Market are fixed and standardized** and practices are regulated by the Agricultural Produce Market committee.



II. Unregulated markets:

- In these types of markets, **the business is conducted without any set of rules and regulations.**

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- **Traders themselves frame the rules and conduct business.**
- These markets may **suffer from various defects in functioning.**

Socio – cultural aspects of a market

- From a social perspective, a market holds immense potential.
- Since it is a **place to procure all necessary commodities**, it is a **common place for people to come together and interact.**
- Given such a vast span over which vendors sell their goods, the same can be a great asset for the city, by providing a place for interaction.
- Irrespective of other aspects, people flock to markets to fulfill their daily needs. Hence, when collectively observed, the market automatically becomes a spot for intermingling among people from various age groups, genders, religions, etc.

Conversations are initiated between vendors and buyers, one or more buyers, vendors and suppliers, etc. This would lead to the building of relationships and aid in future ventures.

In terms of the cultural aspect, as compared to modern markets, such as supermarkets and hypermarkets, in which goods are placed systematically and they just need to be picked by the consumers, the Indian traditional market is such that it fosters public interaction and maintains the culture of Indian households, wherein people still go to the local market to purchase stuff.

Most of the buyers are well-acquainted with the vendors and other buyers too. It forms a sort of cycle or system, which, in their views, acts as a better alternative over modern markets.

Speaking of additional activities as proposed, the market is idle after the goods are sold. Hence, the huge space can be put to constructive use. By this, the market would gain a different identity, something that has not been executed as yet.

The idea is to provide a gathering spot for people. This is the main factor in the socio-cultural development of the locality. The market would be multi-functional. Offering additional activities would even attract a larger crowd, who would probably flock to the place for those

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activities but they would also be made aware of the existing market. This in turn would increase the footfall of the market, which is a boon for the vendors.

All in all, it is necessary to revamp the market in such a manner that it would attract visitors from all age groups, for different purposes; but which would serve the common purpose of socio-cultural development through public interaction.

Economic aspects of a market

In terms of economy, a market plays a very vital role. The transactions between vendors and buyers aid economic growth of the market. Since goods sold at the market are procured from bigger markets, who obtain goods from other raw sources; a market forms a sort of system wherein there is a continuous flow/transaction of money. Hence, economic development is prevalent at all stages. If consumers directly buy goods from the farmers or the first party, there would be no scope for people earning money at various stages. The presence of a market aids this system and benefits all sects of the society.

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Literature review

Consumption and production of the marketed food happen at two different places. The production of goods happens in rural areas and consumption takes place in an urban area. The process of marketing involves overcoming the separation of consumption and production of the market. It allows the produce to be moved from an area of surplus to the area of need. A physical infrastructure is required. A well planned and designed structure for the process of wholesale marketing of vegetables and fruits that are freshly produced.

The purpose of wholesaling: After going through a complex network, which involves production, assembly, sorting, reassembly, distribution and retail stages, food reaches the consumer.

There is a linkage between the producers, i.e., farmers and the retailer. In an assembly and whole trading system, it enables the producers (farmers) to sell in small quantities and purchasing by wholesalers, traders is made in bulk.

Many minor transactions would be involved if wholesalers are not involved, the retailer would be required to purchase directly from farmers. But when wholesale markets and rural assembly is involved, the marketing process is simplified and the number of transactions is reduced. In this case, the retailer does not require to be involved with any process of sorting, reassembly, distribution function by him. He is just required to concentrate on selling to the consumers.

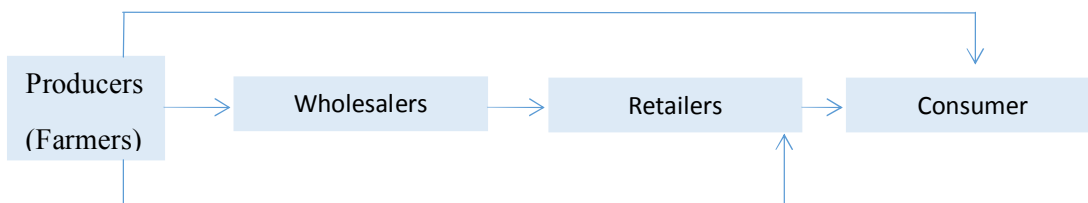
The forces of supply and demand establish price for a single commodity. The economic function of buying and selling is facilitated by wholesaling. The function of storage and warehousing may also be performed by the wholesaler

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or assembler. The people involved in this act of wholesaling act as the merchant, buying and selling the produce. They act as commission agents for the producers or in case if dealing with a foreign trade they act as export/import agents.

How food reaches consumer?

In rural areas, the source of food comes from what is grown on the farmers land and purchases if any from a local rural market. For urban areas, the food depends not on economic and cultural factors. The obvious source is a market, retailers who operate from fixed premises, who receive their supply from wholesalers or directly from the producers.



In economic terms, there exists competition between the markets. There is a perfect competition when the buyers and sellers have a perfect knowledge of demand and supply prices when there are large number (buyers and sellers) to the imperfect competition when there is an individual or a single unit (firm) dominating the market, by monopoly i.e. a single seller or monopsony i.e. a single buyer. The market can be seen with the degree of public intervention.

Wholesale markets are located at a focal point for transport facilities, close to retailing areas. The suitability of existing wholesale market and proposed market are influenced by population growth, urban land use pattern changes and the development in transport system (Modern).

Characteristics of Wholesale Market:

Markets are huge with respect to types of products sold, transportation of produce quality and quantity are standardized.

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These are certain principles that do not occur in wholesale markets:

- When produce is brought, market is not cleaned.
- Produces are not sold separately as per the qualities.
- There is no gradation of produces before selling.
- Selling of produce is not done by standard weights and standard packages.
- There is a lack of information that creates uncertainty.
- Facilities for storage are not used or sometimes not available.

There is need of improvised working conditions for both producers and consumers.

Physical Changes required for wholesale Market:

There is an inability in existing marketing systems to overcome the increased demand that causes congestion and delays. Space required for efficient handling of commodities is insufficient and hence the area of market is overcrowded leading to spilling over on streets. There is no provision for waste disposing off, limited parking facilities. More flexible and cost effective manner for marketing produce can be achieved if there are the improvements in storage facilities.

Outside Forces (why no shifting market):

Changes can occur due to development plans which are not in control of marketing authority. The desire to redevelop as part of the city leads to relocation of existing market or environmental change.

The traders may not be willing to move, the people working in the existing market might experience difficulties to move their place of employment. There is a need to analyze the negative effects of relocating market prior to it.

After China, India is the second largest producer of vegetables and fruits. Vegetables and fruits are common in small marginal farmer as they are more labour intensive; it produces recurring income, high value in the market gives

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risk management mechanism against crop failure, offer possibilities of value addition.

The market price of the perishables fluctuates, there is instability in market price as the fruit and vegetables are most perishable in nature. They require more capital intensive post-harvesting.

The large supply chain of the middleman is created as the small, marginal farmers are not able to sell their produce directly to the consumers due to long distance.

There is high wastage of crops caused due to lack of cold storage facilities. There is no availability of market which is fully equipped to handle the crops.

When there is a lack of proper handling and poor post-harvest practices on the farm or at a rural place, leads to loss of stock before reaching the market. (in case if the small and marginal farmer are willing to sell their produce direct to urban market it brings there changes against them. First, the huge quantity, second the competitive process and third the same quantity and consistent quality), these conditions are not fulfilled by the farmers. The produces and the consumers get poor deal due to middlemen controlling the market.

The second largest employment generating sector is a retail industry.

Wholesale markets can be improvised. The efficiency of a market can be improvised by a promotion of direct contact with the farmers, promotion of auction system of the marketing system, increasing the number of buyers and sellers, introducing services and facilities like cold storage, go-downs.

Modernizing Wholesale Market:

Farmers, traders, and consumers are major stakeholders. APMC is a hub for agricultural trading. APMC provides facilities to stakeholder's facilities of marketing (agricultural).

- Proper handling of agricultural Produce.

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- Dissemination of Marketing Information.
- Efficient waste Management.

Land development, compound wall, drainage, electricity, pavements, auction hall and auction shed – the non-productive assets are public utility infrastructure.

Strategic objective for APMC modernization:

1. Transparency is required in modernization:

Computerized records are to be kept for arrivals of vehicles entering a market with agricultural produce, keeping records of sale transaction and accounts.

2. Open auction sale of fruits and vegetables to be conducted:

Open auction of the agricultural produce is mandatory in the model bye-laws with the provision for stringent action against the defaulting APMCs for not complying with an open auction. These measures will result in an increase in income of farmers; resulting in increased income of APMC which will boost the sustainability of the project.

3. Value:

There is the requirement of proper gradation and packing of fruits and vegetables. In modernized APMC electronic auction halls are proposed in some APMCs. Wherever necessary washing, cleaning, grading and packing for vegetables and fruits are proposed.

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History

Panvel has seen the period of influence of British and Portuguese and also been part of great Maratha kingdom and Mughal Empire. It has a significant step in the history of economic development of this region. Via technologically advanced trading routes of land and sea city has observed the enormous flow of merchants of import and export.

Panvel is a junction on the Bombay-Pune national highway and Bombay Konkan goa state highway. The availability of easy transportation facilities has contributed to the importance of Panvel as a commercial center. Trade and commerce are carried via Panvel between Mumbai and Konkan.

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LOCATION

The market is located in Panvel. The site lies in the commercial hub. Around the site lie warehouses, timber workshops, government stores, residential store.

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History of Panvel market

Panvel has a regulated market which was done outside the yard of the market committee. A lot of vegetables are produced around the Panvel rural areas. These are exported in trucks to Byculla (Mumbai) market, from where they are distributed over the various vegetable markets in Mumbai. Some of the vegetables are chilies, tomato, val, cabbage, coriander, gram, brinjal, gawar, lady's finger, red pumpkin are more common of them.

The market has begun since on **31st October 1957**. It started with sheds and an auction hall. APMC was allotted with the plot for the agricultural produce marketing zone. Total 9 acres of the plot was allotted to the APMC later APMC allotted these some of the open plots to people on the lease. The lease is for about 30years. People developed these plots to shops on ground floor and residential space on above floors. They started with shops of groceries. Some of them developed it to fruit storages. There are other activities(garages, cold drinks go-downs) happening on the APMC land they have been given with notice as they are not permitted to use the place for other activities but only related agricultural produce.

Initially, the market was just built as ground floor structure and it was taken by a committee on a lease which later built a Raigad bazaar on the first floor. There was no interference of APMC in constructing of the first-floor structure. This committee owns various branches in Raigad. Raigad bazaar is a kind of shop that deals with groceries, daily needful commodities. It shutdown 2-3 years ago the reasons are unknown. It is given on lease on a lease of 30 years after 30 years the ruling body of that committee will renew the lease. There is an office that runs on the first floor in some part above the ground floor shops. There are seminars held for the farmers regarding crops, seeds, flowers etc.

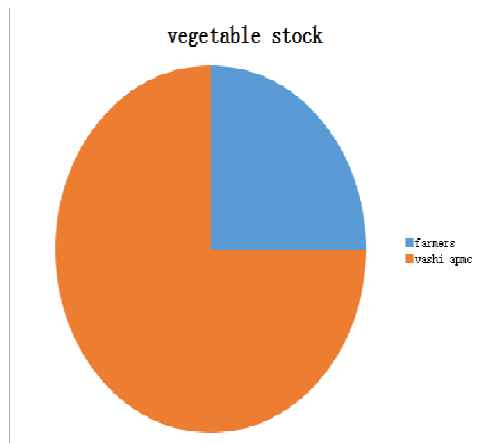
Bazaar Smiti is the ruling body of the market under APMC. It holds the record of all the sellers and the transaction made and the profit earned. The shops are given on the lease.

The market gets its stock from various rural areas and Vashi APMC market. The dealers get their stock from Vashi APMC. The dealers commute to Vashi market for auction purpose and get their stock filled. They commute back to Panvel market for selling purpose. Some sellers get their stock from rural places of Panvel, Pen, Karjat. Some farmers themselves commute to this market to sell their produces in this market. With technology, the sellers have started to

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call the dealers in Vashi order with the stock of vegetables and pick the material from the market by escaping the auction stage that occurs in the market.

Supply for APMC Panvel

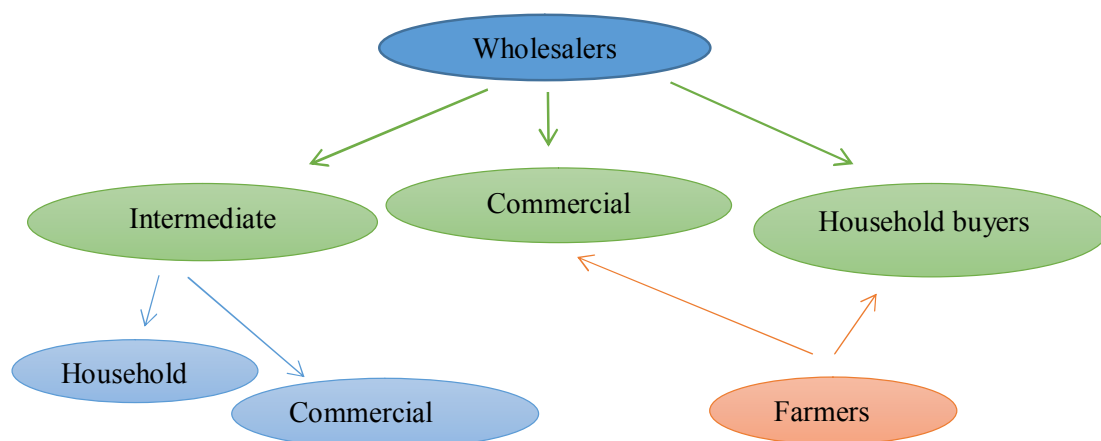


There are farmers who commute to the market carrying staple produce of the region to sell in the market. The traders commute from a different part of Panvel for trading. Various user Class is dependent on this market for trading. There are

intermediate buyers who buy vegetables from the market at wholesale rate later sell in different parts of the town. Many retailers from the city depend on this market for their vegetable stock. Retailers the vendors from New Panvel and Old Panvel commute to the market to fill in their stock. Buyers also take the vegetables for commercial purpose like food stalls, restaurants etc.

In the span of midnight and early morning auctioning takes place in which the dalals (dealers) auction their stock to small traders who sit in the same market for selling the goods.

There is a cold storage facility for the vendors of the market to store their unsold commodities in the cold storage. But the vendors don't use the facility. They store their remaining stock in their shops or below their platform of cubicles. The waste generated from the vegetables sold is thrown at a same place.



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Types of sellers in the market

- (1) Who get their stock themselves from APMC Vashi.
- (2) Who buy from the vendors of the market or dalals then again sell to buyers.
- (3) They buy from farmers in local village and sell in market.
- (4) Farmers who themselves sell.

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Inferences from interviews:

The market gets its stock from various rural areas and the Vashi APMC market. The dealers get their stock from Vashi APMC. They commute to Vashi market for auction purpose and get their stock filled. They commute back to Panvel market for selling purpose. Some sellers get their stock from rural places of Panvel, Pen, Karjat, etc. Some farmers themselves commute to this market to sell their produces in this market. With technology, the sellers have started to call the dealers in Vashi to order the stock of vegetables and pick the material from the market. This saves time by escaping the auction stage that occurs in the market.

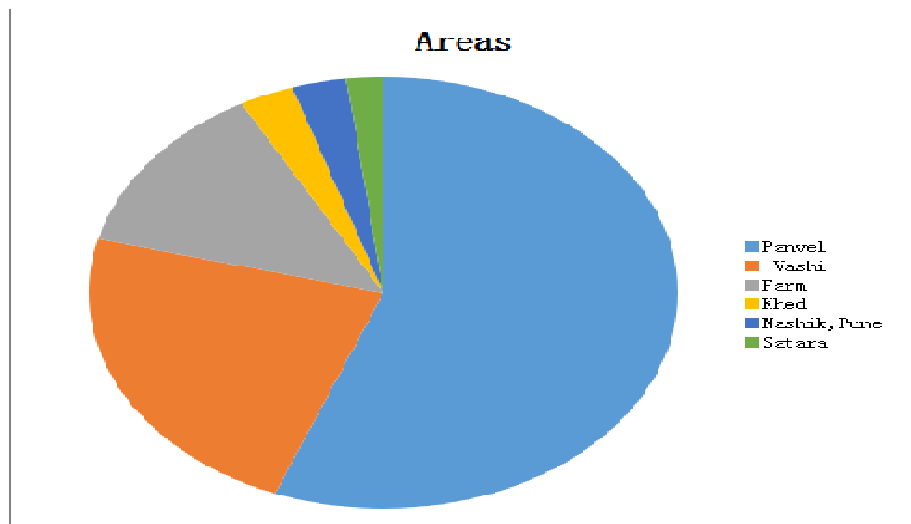
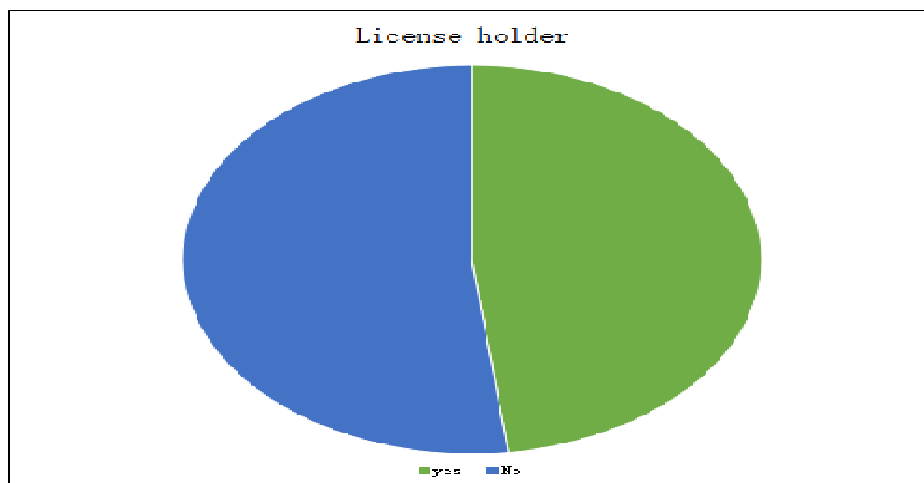
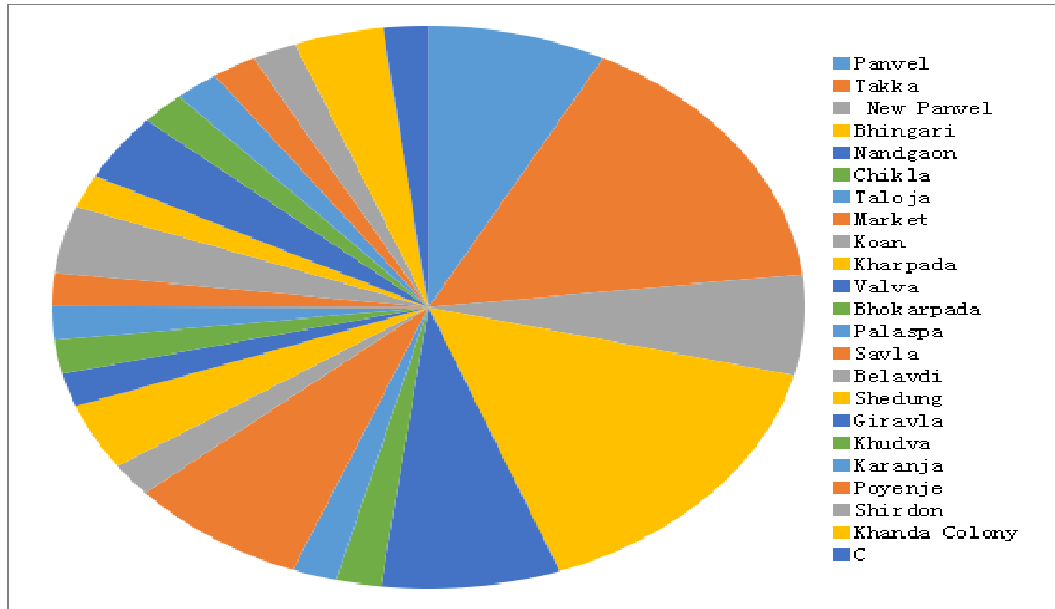


Figure - Different areas from where the stock is brought



Despite of the selling license being necessary, a considerable amount of vendors sell without having a license. As per statistics, these people constitute about 52% of the market, which is quite high.

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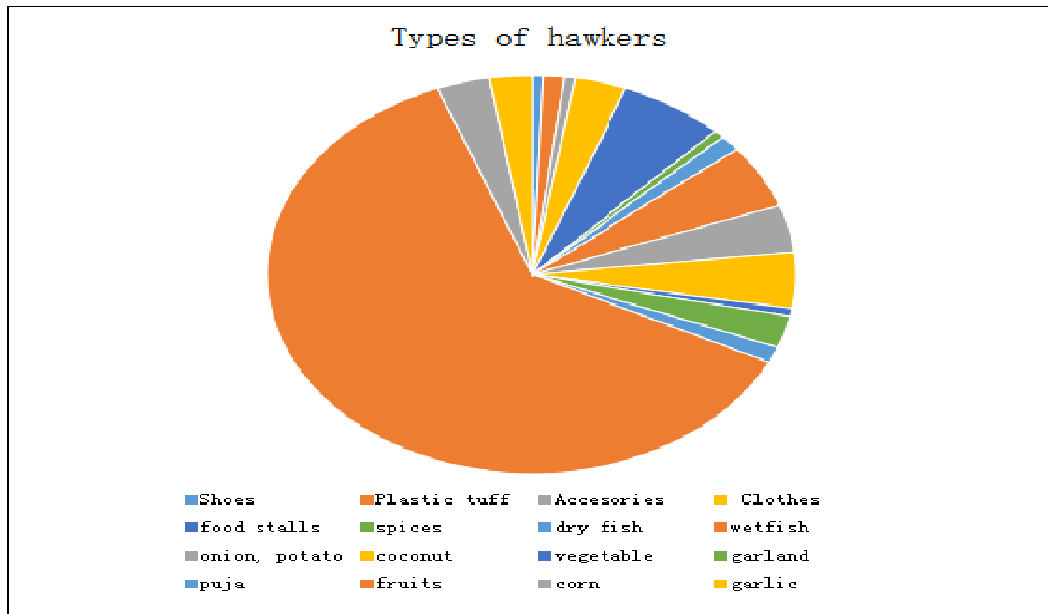
As the pie chart suggests, the consumers commute to the Panvel market from various localities.

Owing to the location of the market, the majority users are from the market premises and closeby areas. Quantitatively, 30% of the commuters are from Takka and Kharpada, which are nearby villages.

Surprisingly, Old Panvel and New Panvel have only 8% and 6% commuters respectively.

Looking at the pie chart, it is clear that the market is accessed from various areas. Hence, the footfall is also high. This would contribute in healthy functioning of the market and would justify the additional space that is to be provided since it would cater to such a large variety of public, coming from different backgrounds.

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Types of hawkers:

The Panvel market majorly deals with the sale of fruits, followed by a small percentage of vegetable selling.

Apart from this, many other small businesses flourish outside the market. These include shoes, garlands, wet fish, accessories, clothes, spices, etc.

Individual stalls specifically selling only a certain product are also present, such as coconut, onion, potato, corn, garlic, etc.

The abundance of goods available at the market is large. But, with main emphasis on fruits, majority of visitors are ones that frequent these stalls.

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Footfall

The market becomes active by midnight, beginning with loading and unloading practices, followed by buying and selling practices. The buyers come to the market from distant places during the early hours of the morning. By afternoon, the density of people in the market decreases as the sellers begin to wind up their shops. By evening, only cleaning activity takes place.

As per the chart, considerable amount of people visit the market in the wee hours of the morning. These people mostly consist of buyers (selling at places other than the market), vendors (bringing in goods to be sold during the day), delivery men (bring in stocks from distant places), etc.

As time passes, the common consumers begin to flock in. These consist of regular buyers that buy goods for their households and also small vendors. As the time span between 3-9 a.m. is the beginning of the sale, goods are sold at reasonable rates, which is why majority of people prefer visiting the market during that time. Another reason being, they might be office goers who might want to cook food before leaving for work.

The peak hours of the market are 9 a.m.-12 p.m. This is the time when most of the buyers are done and dusted with their household chores and they get time to visit the market to buy vegetables for lunch. The crowd has a larger percentage of females as compared to males.

During this time, majority sale is done.

Following this, between 12-3 p.m., the crowd gradually reduces as during this time people visit according to their availability. Someone might visit the market as they pick their kids from school, some might be buying vegetables to prepare lunch, some might have afternoon time as the only time when they are free from household work, etc.

Post 3 p.m. there are hardly any people in and around the market, as most of the shops close down by 3 p.m. due to finishing of goods.

Again, between 3 p.m.-12 a.m., the market premise is not in use as the market shuts at 3 p.m. The premise is barren and idle. Hence, to attract footfall during these hours, additional activities can be added in the market.

UPLIFTMENT OF PANVEL VEGETABLE MARKET

Garbage truck:

The above chart depicts the movement of the garbage truck during the working hours. There is only one garbage truck collects garbage throughout the area and disposes it. This activity continues till the place is completely cleaned. The chart shows the halt of the truck hour-wise through the entire vicinity.

As the chart suggests, the garbage truck is in function all throughout the day, circulating around the area, to continuously dispose off garbage, keeping the area clean.

Hawkers:

There are hawkers that occupy the road sides connecting the market. These are illegal hawkers. As they occupy the road sides, there is traffic congestion on the road during the peak hours of the market. As the market ends, the hawkers tend to move to a different location.

The hawkers chart clearly depicts that hawkers occupy the roadside mostly during the beginning of the day and they gradually go on reducing towards the afternoon, and are almost cleared up by evening. They take their stalls elsewhere.

Since the market is active till about 3 p.m., the hawkers tend to settle around the market from morning to late afternoon so as to attract the customers that visit the market.

As the market closes, the crowd reduces and hence the hawkers put up their stalls at other busy areas.

UPLIFTMENT OF PANVEL VEGETABLE MARKET

Parking:

Although there is a paid parking service available opposite to the market, visitors tend to park their vehicles on the adjacent roads creating traffic congestions. Visitors also park their vehicles inside the market blocking the pedestrian movement inside the market.

During non-peak hours, there is not much traffic and parking needs are addressed by the pay and park service.

But, during peak hours, a large number of vehicles travel to the market. Some people use the pay and park service while the rest tend to park their cars across the road, adjacent to the market or even inside the market premises. This can be due to unavailability of parking space in the pay and park premise or uncivilized behavior of the customers. Since they need to visit the market only for a short span of time, they conveniently park their cars nearby.

UPLIFTMENT OF PANVEL VEGETABLE MARKET

Traffic:

As per studies, the traffic chart prepared above suggests that vehicular traffic is highest during the peak hours of the market and the flow gradually decreases by late afternoon.

Traffic congestion is an issue during the peak hours. However, the flow of vehicles decreases after the market hours. Later, the flow of vehicular movement can be seen in the residential and commercial parts around the market.

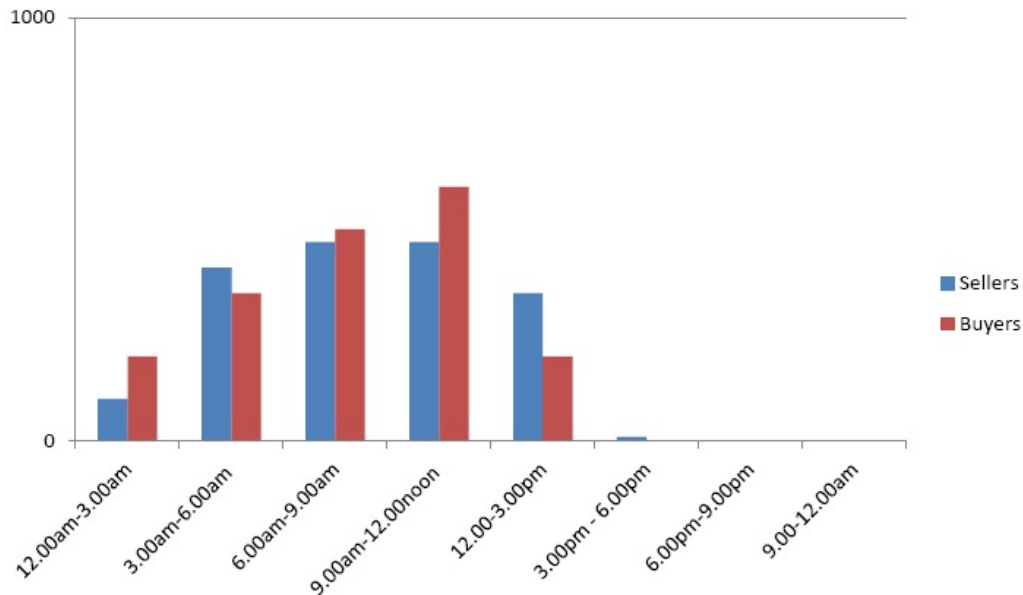
Vegetation:

The above chart shows the present vegetation around the site. There are fewer amounts of trees present on site.

A noticeable amount of vegetation can be seen only a few yards away from the market.

Vegetation must be made an active part of the market, so as to create a healthy and fresh environment.

UPLIFTMENT OF PANVEL VEGETABLE MARKET



Buyers and sellers:

The ratio of buyers to sellers keeps changing over time. It varies at different time intervals during the day.

Between 12 a.m. to 3 a.m., the amount of buyers is higher as it is during that time of the day that small vendors buy goods from this market to sell at other places.

Since the time span between 3 a.m. to 6 a.m. is quite early, it is but obvious that the number of sellers exceeds the number of buyers. This is a time for the buyers to fetch good deals.

During the peak hours, the ratio of buyers to sellers remains almost equal, with the number of buyers being a bar higher than the number of sellers. Since majority of people flock in at this time, the number of sellers that are required to cater to that number of buyers are low. This is because the vendors remain constant while the number of buyers goes on increasing.

As the day progresses, towards late afternoon, the number of buyers gradually goes down. This is when the sellers too start winding up for the day, as a result of which, post 3 p.m. there are hardly any sellers.

After 3 p.m., there is absolutely no footfall as the market is not in use.

UPLIFTMENT OF PANVEL VEGETABLE MARKET

Observations

	Facilities				
	Storage pockets	Toilets (male only)	Weighing scales	Drinkingwater	Dustbin
Shops	✓	✓	✓	✗	✗
Vendors (in shed)	✓	✓	✓	✗	✗
Vendors (occupying ground)	✗	✓	✓	✗	✗

As observed on site, the availability of a few facilities was analyzed. According to the survey, toilets are present in the market premises but only for males; weighing scales are present at all shops and stalls, but storage pockets are only available for shops, not for the vendors that sell their goods on a mat on the ground.

The vendors that sell on mats have to leave their leftover goods on the ground, to the most, covered by a cloth. This hampers the quality of the goods and makes it unsuitable for selling the next day. Since the produce is then not fresh, it is sold at much lower rates. Hence, this affects economy too.

Also, basic facilities such as drinking water and dustbins are absent.

It must be made mandatory to have drinking water dispensers to cater to the vendors who are at the stall for a very long time and also for customers that visit the market.

Dustbins are a must. They are necessary to dump the waste accumulated at the end of the day. Presently, the waste is generally dumped outside the market, or left scattered in the premises. A 'ghanta gaadi' (garbage truck) collects the waste every day from the market.

But, dustbins must be provided at regular intervals, forming a consolidated system wherein the waste from these dustbins is collected and collected at the end of the day to dump into the garbage truck. This not only makes the premise systematic and efficient, but also hygienic, which is a very important factor.

UPLIFTMENT OF PANVEL VEGETABLE MARKET

SWOT Analysis

<p><u>Strength</u></p> <ul style="list-style-type: none">• The market serves the needs of wholesalers, retailers, households, commercial buyers (food stalls, hotels, etc.)• Location of the market is crucial. It is near to NH4.• Location is off centered to the main city which reduces the possibility of traffic congestions.• The site is surrounded by residential, commercial and industrial areas.	<p><u>Weakness</u></p> <ul style="list-style-type: none">• Present open spaces might get clustered with the new proposal.• Due to the addition of new activities, more area would be used up, resulting in a decrease in open spaces.
<p><u>Opportunity</u></p> <ul style="list-style-type: none">• The vendors who come from local rural areas occupy the ground for selling vegetables. There is an opportunity to provide them with a place to accommodate all entities by providing a shop or a cubicle.• The hawkers selling fruits outside the market will be catered to in the new market.• Post the working hours of the market, the space can be utilized for the additional program that can aid interaction.	<p><u>Threats</u></p> <ul style="list-style-type: none">• The new proposal of a market might affect the culture of the market and its users.• The vendors might get disappointed with the new space planned for them, as probably they won't easily be able to adapt to the changes.

UPLIFTMENT OF PANVEL VEGETABLE MARKET

Fruit and vegetable market , Mohali

CASE STUDY

Fruit and Vegetable market, Mohali

Sector – 65

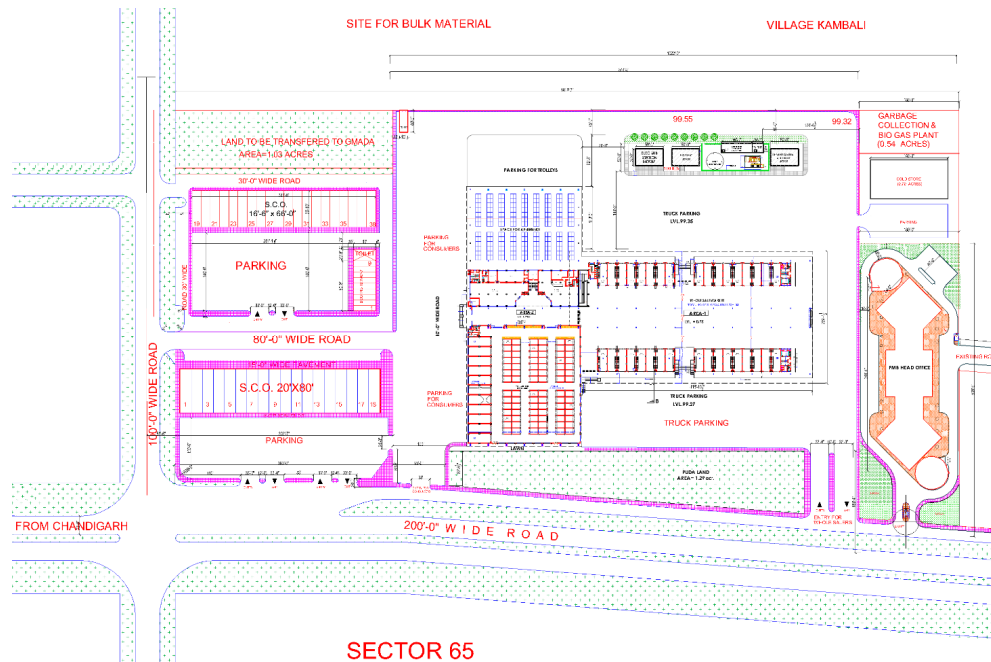
Architect- Sarbjit Singh Bagha



Constructed on a plot of 12 acres.

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

The site of market is of 20 acre development scheme comprising general shopping area and offices.



Master plan

UPLIFTMENT OF PANVEL VEGETABLE MARKET

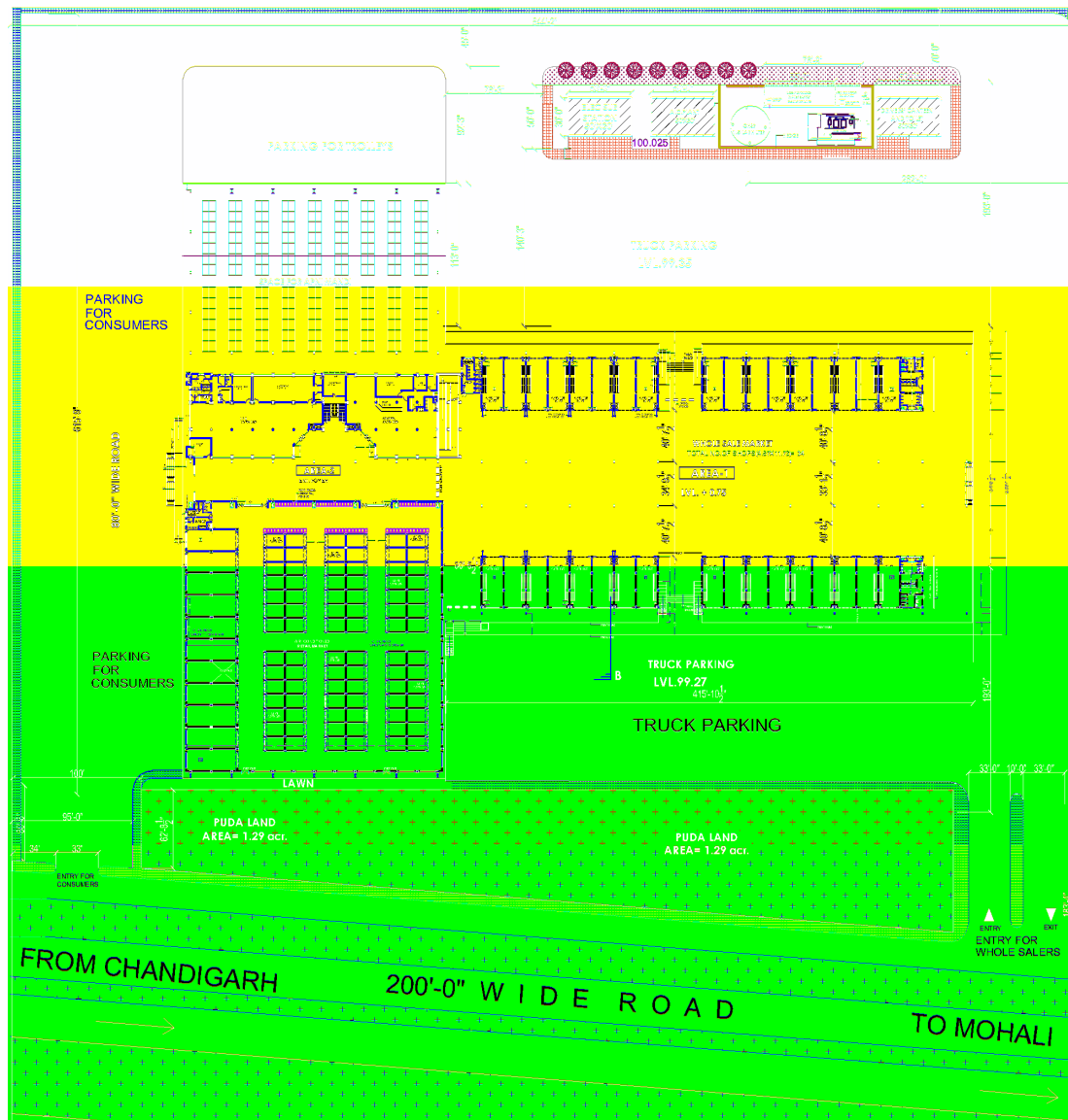
Planning

The market is fully covered.

Facilities like cold store/ripening chamber, garbage collection and disposal, workers canteen, water works, air conditioning plant etc.

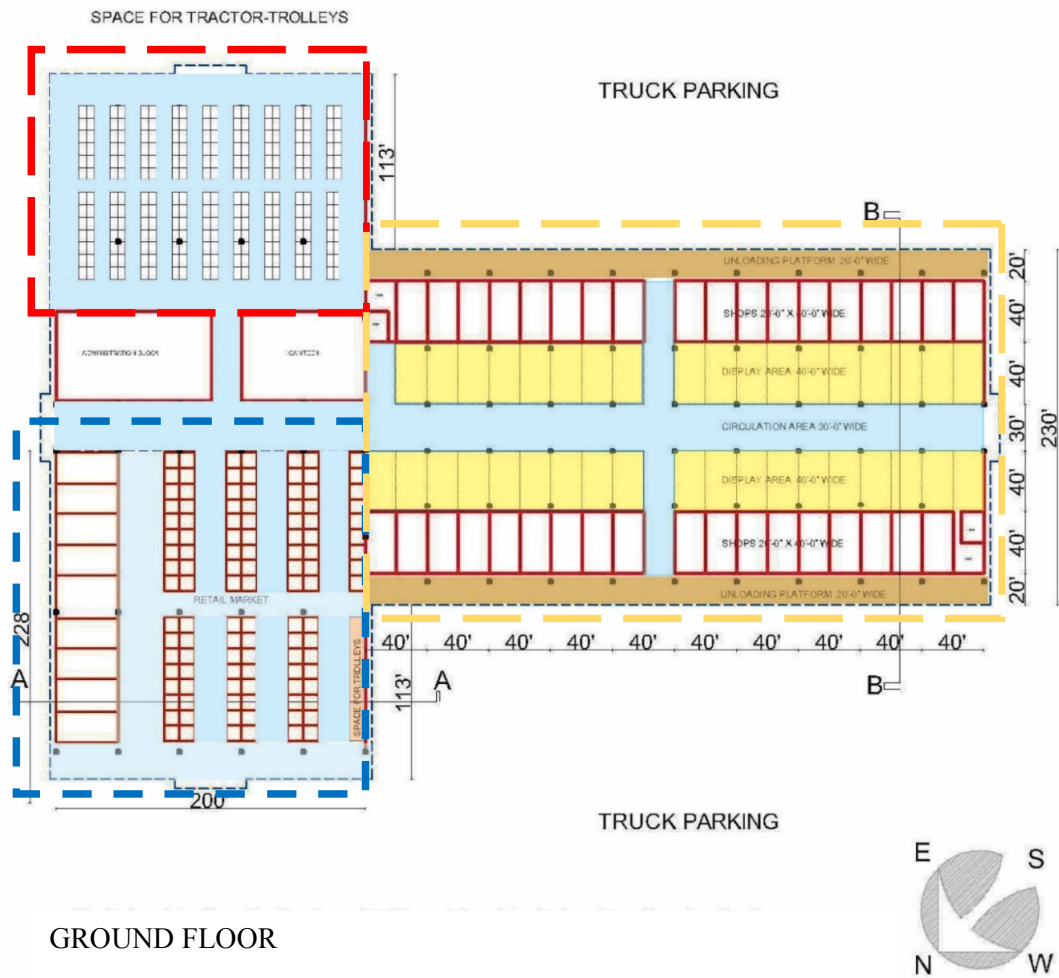
There is provision for adequate parking for all types of vehicles coming to the market.

Segregated entries and exit have been planned for different types of visitors, the retailers and wholesalers have separate entry and exit.



Market plan

UPLIFTMENT OF PANVEL VEGETABLE MARKET



GROUND FLOOR

- - - - - Farmer's market
- - - - - Retail market
- - - - - Wholesale market
- Space for trolley
- Display area
- Circulation area
- Loading and unloading platform

UPLIFTMENT OF PANVEL VEGETABLE MARKET

Wholesale market

- The **main market is T-shaped** the block comprises mainly three wings
- The **larger flange** of the 'T' **consists of 34 wholesale shops**
- **Size of shop is 16'0" x 38'0"** and these shops are **double storied**
- There is a provision of **3-metre wide platform outside** the shop for **unloading purpose** of unloading **towards the parking plot.**
- There are **two rows of display platform on both sides with a circulation path of 30 feet wide.**



Inner view of wholesale market



Double- storied wholesale shops

Retail market

- The smaller flange of the T consist of retail market on the front side
- It comprises of 84 small shops
- Shops are fully enclosed and are centrally air conditioned.
- Size of small shops is 15'0" x 10'0"
- There are also 11 larger shops, size of this shops is 16'0" x 38'0".



Entrance to the retail market

UPLIFTMENT OF PANVEL VEGETABLE MARKET



Outer view of retail market



Another view of retail market

UPLIFTMENT OF PANVEL VEGETABLE MARKET

Farmer's Market

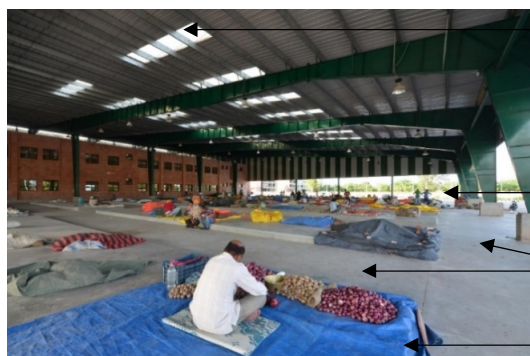
- The other smaller flange is planned as farmer's market.
- Also known as Apni Mandi. Here the farmers get bring their produce to sell it to the consumers. They directly sell to the consumers thus this eliminates the middle man.
- This is beneficial to both farmer and consumer
- There are 234 raised platforms of each 6' x 8' in size
- The platforms are for display. Here the farmers display their produce and sell it to the consumers directly
- There is 10 feet wide circulation path defined between two platforms
- This market is covered with roof but open on sides.



Internal view of Farmers market



Outer view of Farmers market



Skylight

Open from sides

Circulation paths

Raised platform for display

UPLIFTMENT OF PANVEL VEGETABLE MARKET

Comman facilities

- The market is **partially double storied block** sandwiched between the farmer;s market and retail market
- It **accomodates common facilities** like **canteen, bank, police control room, first aid room** etc.
- The block is can be **easily accessible from different wings of market.**



Campus view



Unloading area



View of market

UPLIFTMENT OF PANVEL VEGETABLE MARKET



View of market



Internal View of Farmer's market

UPLIFTMENT OF PANVEL VEGETABLE MARKET

Gavdevi Bhaji Market , Thane



- Market is located at walking distance from railway station.
- Market **does get confined to one product** or commodity it deals with various commodities at same time.
- Market serves with day to day required things.
- Market deals with various commodities like **vegetables, fruits, onion potatoes, clothes, worship stuffs (puja stuff), snacks corner, Electricals, accessories, tailors** and many more etc.
- This market is present on Ground floor of an office building.
- There are **small cubicles** for the vendors where the vendors have **customized their own furniture** according to their product need. The **furniture varies from vendor to vendor** it more likely depends on what they sell and the kind of display they require.

Total number of cubicles – 156

Size of cubicles around 0.9m x 1.5, 1.2 x1.5 m 0.90m in height.

Some shops remain closed.

UPLIFTMENT OF PANVEL VEGETABLE MARKET

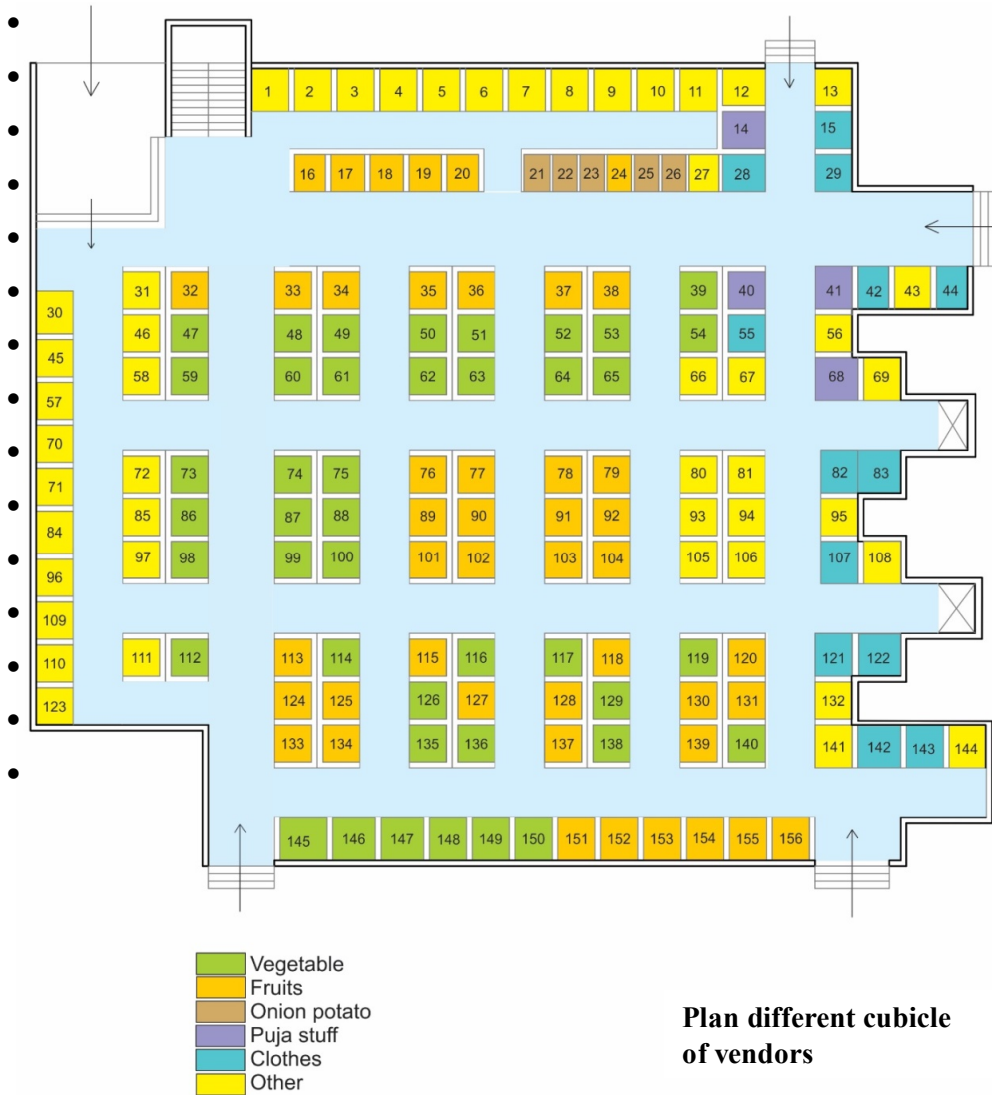


Ground floor plan

- Market is occupied on ground floor
- There is **well defined circulation** lane in the market. There are **5 different entries** to the market.
- There is **visual connectivity** to the market as there are no shops but the cubicles that allow visual connectivity. The height of furniture in the cubicle might restrict visions at certain level.
- The vendors have their own dustbin near cubicle the waste is thrown into the dustbin hence factor **cleanliness is maintained**.

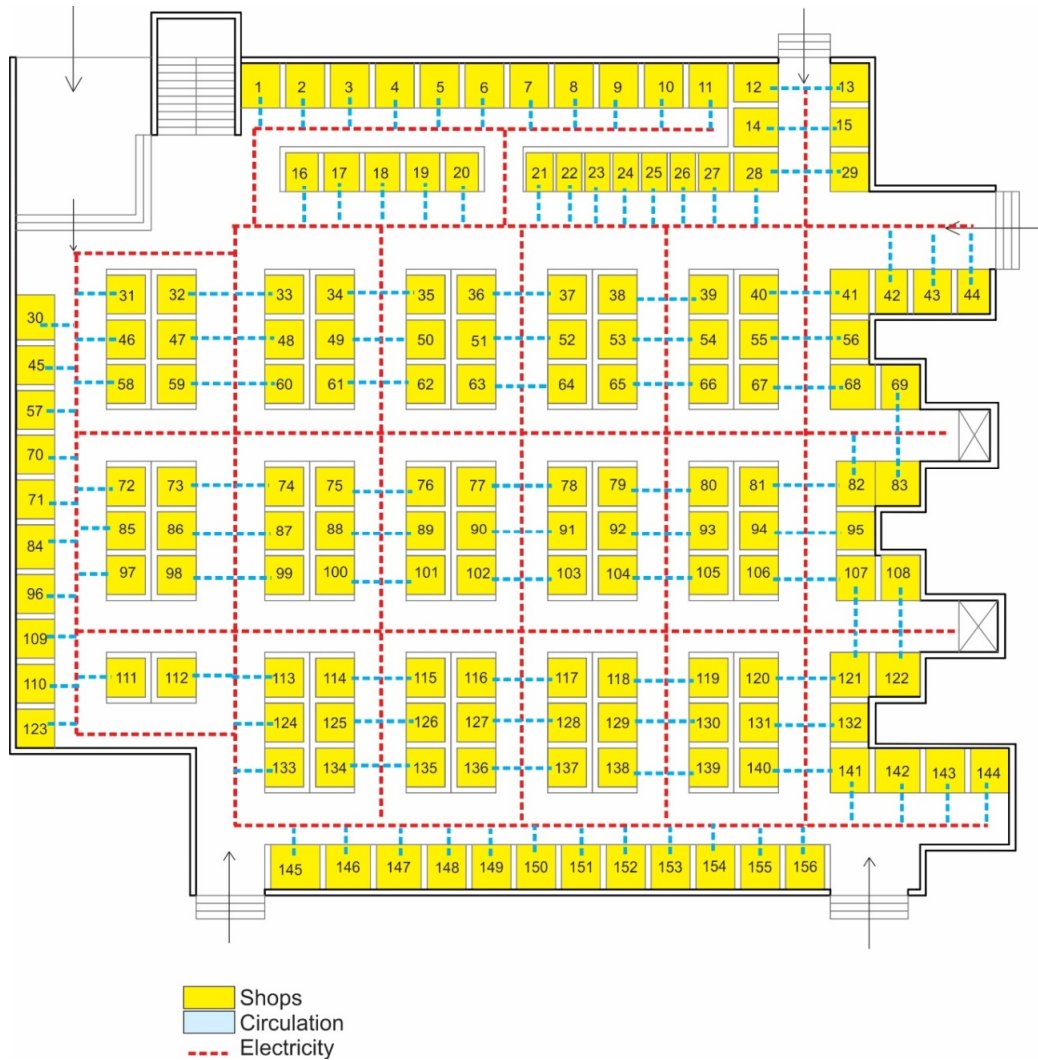
UPLIFTMENT OF PANVEL VEGETABLE MARKET

- This plan shows the different cubicles selling different product. Vegetable and fruit vendors are the maximum vendors in the market. Due to the maintainance of cleanliness and hygienic customers tend to visit the market.



- The central core of the market is occupied by the vendors who deal in perishables. Here the vendors take the advantage of technology they provide home service to the customers who order goods over the call and also to whom, who come to them on regular basis.

UPLIFTMENT OF PANVEL VEGETABLE MARKET

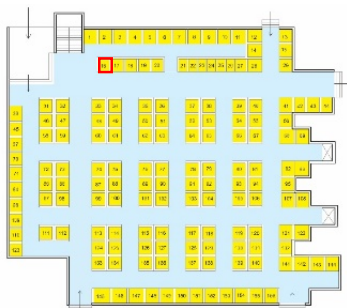


- The plan above shows the utility in the market.
- The plan shows the electrical layout of the market.
- The main line of electricity runs through the main circulation lanes and the vendors have taken sub-connections from the mainline for their cubicles or shops.

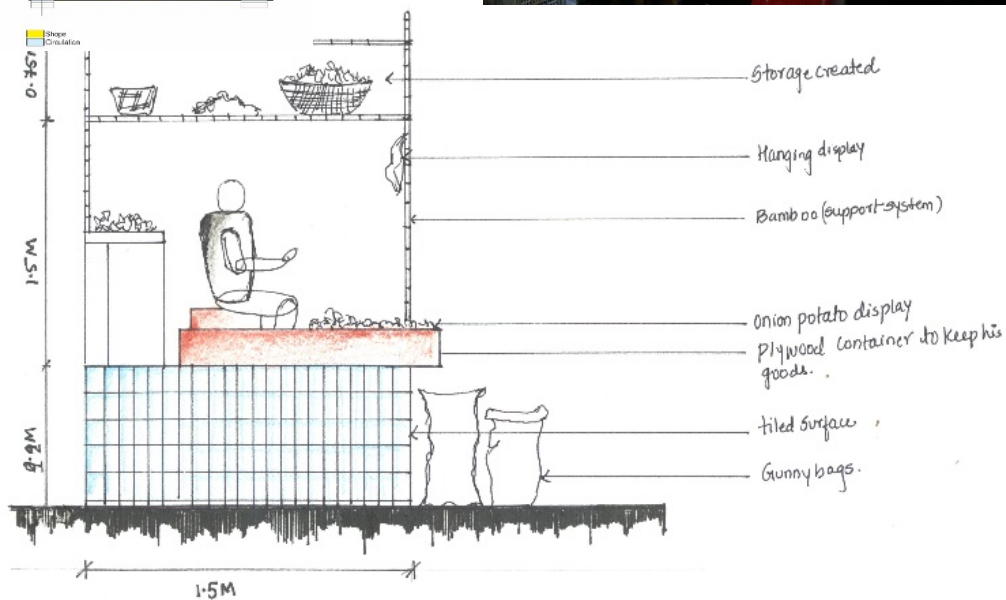
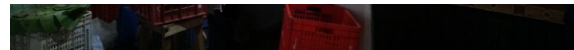
UPLIFTMENT OF PANVEL VEGETABLE MARKET



Potato and onion vendor



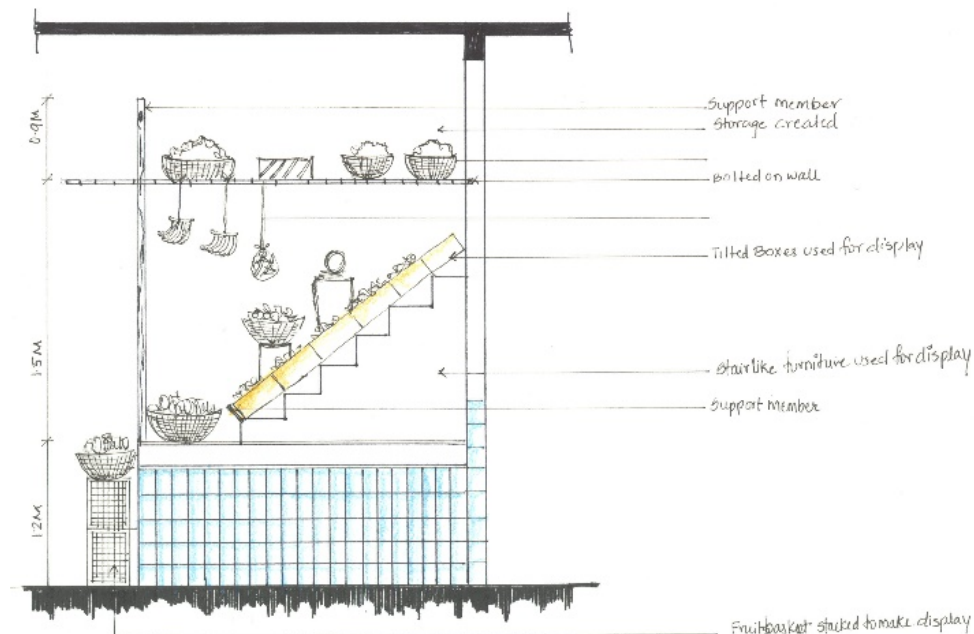
- The vendor sits in his cubicle. Has his furniture customized according to his needs. Since the cubicle is of **0.9m in height** vendors get the space below the platform **for the storage**.
- They have **made doors for the storage** so their things remain in security.
- The **walls of the cubicles are tiled** by the vendors.



UPLIFTMENT OF PANVEL VEGETABLE MARKET

Fruit vendor

- The vendor has totally **transformed his cubicle with his furniture.**
- The **display techniques attracts the customers.**
- The vendor has **created loft using cardboards and bamboo.**



UPLIFTMENT OF PANVEL VEGETABLE MARKET



View of small general store



View of ceiling showing main electrical line running



Some of the cubicles are enclosed by shutters



View of ceiling showing main electrical line running



View of lane with shops of electrical and other accessories

UPLIFTMENT OF PANVEL VEGETABLE MARKET

- Some of the cubicles remain unused hence other vendors put their extra stuffs over the other platforms
- During morning time the vendors are seen busy setting up their stalls.



View through circulation lane



View through circulation lane

- Shops present at peripheral of market get little advantage of natural light.



View of a primary lane in the market

UPLIFTMENT OF PANVEL VEGETABLE MARKET

- The cubicle along with new furniture. Stall is yet to set up.
- But it can be seen for display there are two different furniture and space between is left for



Customized furniture of a vendor



- The cubicle at the corner gets advantage of attracting more customers. Since the place is at junction.

- Shops present at peripheral of market get little advantage of natural light.



View of lane (different stalls like fruits, clothes, spices.)

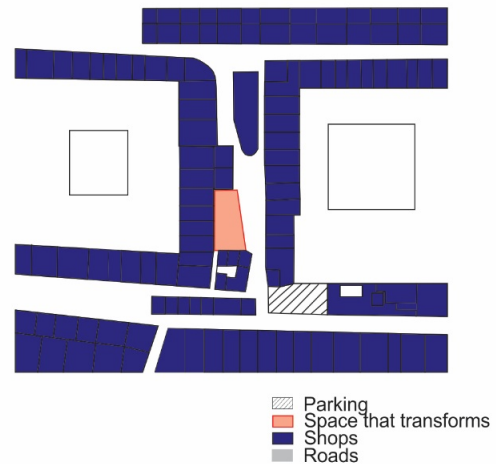
UPLIFTMENT OF PANVEL VEGETABLE MARKET

Manek Chowk , Ahemdabad

Location map

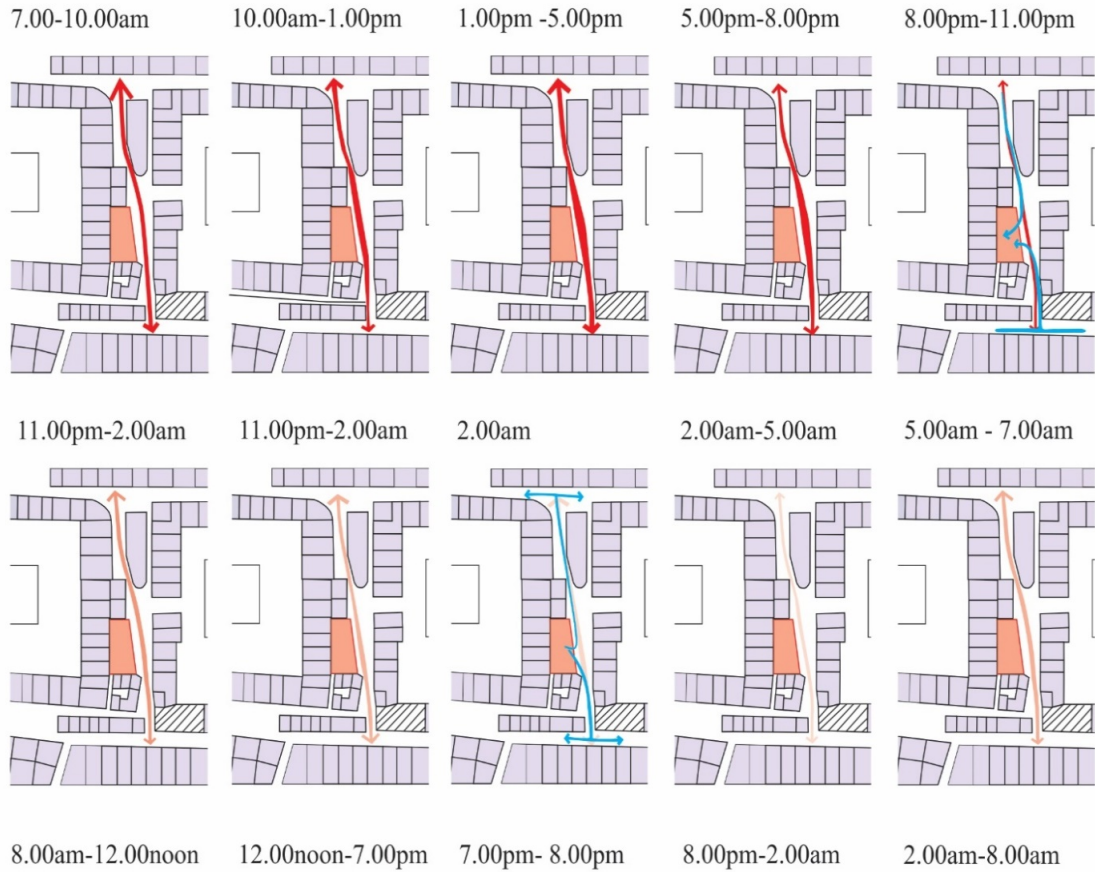


- Night street food market.
- Chowk has a space where people park their vehicles in the morning and also the hawkers set their stalls.
- Around the chowk lies the jewellery shops which open in morning and turns into the jewelry market.
- In night the area transforms into night street food market.



UPLIFTMENT OF PANVEL VEGETABLE MARKET

Vehicular Density

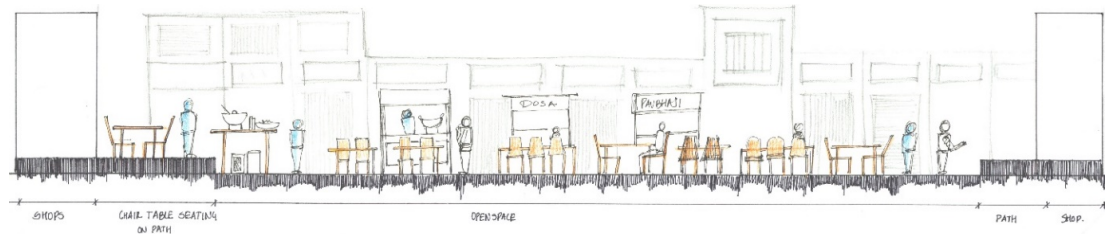
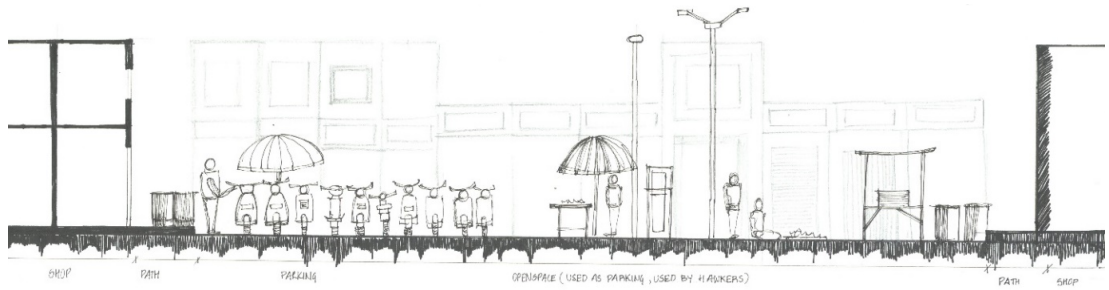
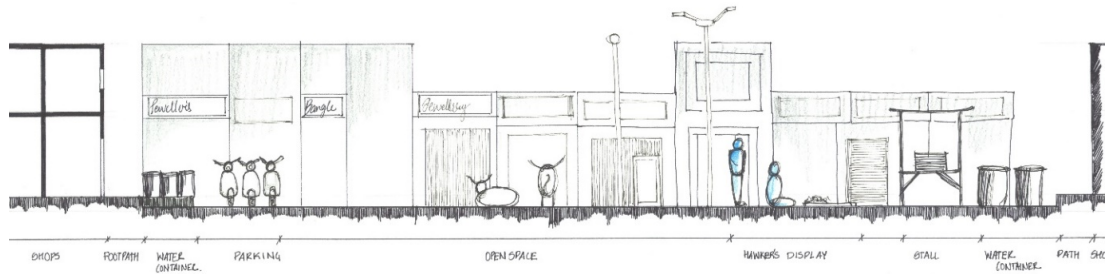


Space use through out day

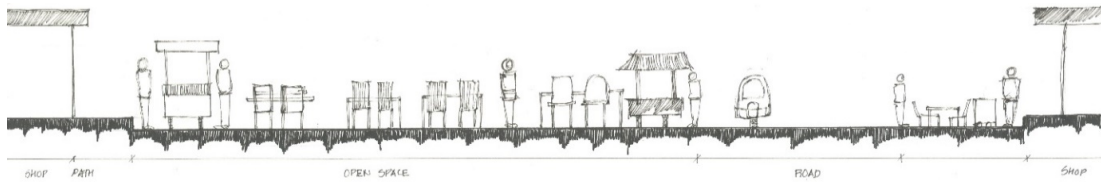
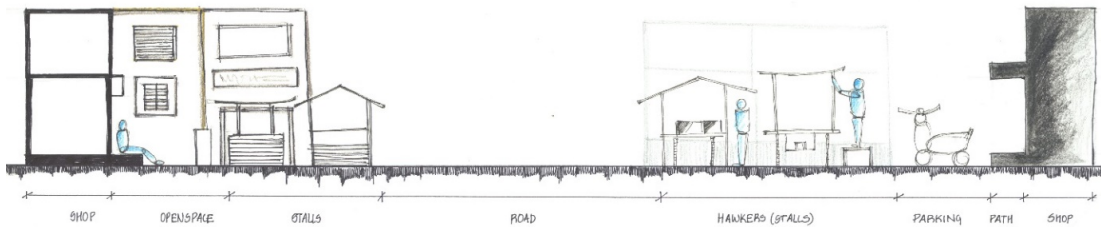
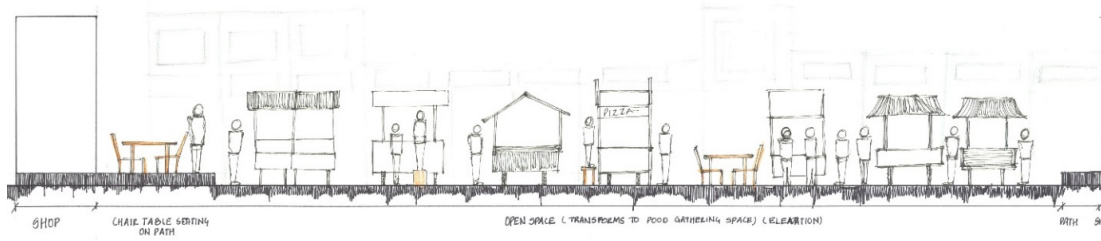


■ Hawkers
 ■ Parking
 ■ Food stall setup
 ■ Seatings

UPLIFTMENT OF PANVEL VEGETABLE MARKET



UPLIFTMENT OF PANVEL VEGETABLE MARKET



UPLIFTMENT OF PANVEL VEGETABLE MARKET

Observations

8.00am

- chowk remains vacant
- Few vehicular and pedestrian movement can be seen on the road.

9.00 am – 10.30 am

- Hawkers set their display
- Vehicular and pedestrian movement increases.
- Shops around starts opening like clothing , snacks stc
- Chai-walas can be seen roaming around.

10.30-11.30am

- The jewelers shop around the market start opening.
- The space which transforms gets occupied with vehicular parking.
- More hawkers set their stalls, some get their mobile carts.

12.00 noon

- More number of shops open.
- Number of vehicles in parking increases.
- Parking in front of jeweller's shops.

12.00 noon - 2.00pm

- Highly increased vehicular and pedestrian movement.
- Hawkers move from one place to another through this area.
- The parking number increases. No space is left for new accumulation of parking.

UPLIFTMENT OF PANVEL VEGETABLE MARKET

2.00pm - 6.00 pm

- Pedestrian and vehicular movement can be seen.
- During span of evening hours more of pedestrian movement can be seen, the street next is vegetable market.

6.00 pm- 7.00pm

- Congestions as pedestrian movement is slow.
- As evening time food hawkers are seen moving with their carts.

7.00pm -8.30pm

- Number of parking goes on decreasing.
- The shops begin to close.
- The food stall owners and workers start commuting to the chowk with their mobile carts.
- They clean their areas where there will be occupying the space for next few hours.
- They set their stalls, counters their tables and chairs.
- They put up their hoardings of their stalls.
- They get their electrical fittings done within short span of time using extension boards
- A lot of congestions can be seen since there is vehicular, pedestrian, food stall people moving along with their furniture.

UPLIFTMENT OF PANVEL VEGETABLE MARKET

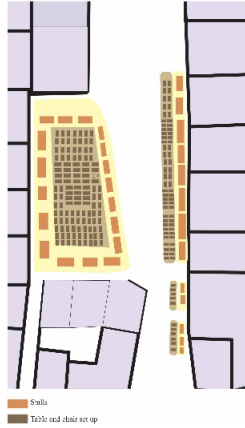
8.30 pm – 1.30am

- All vehicles in parking move, their space is now occupied by the food stalls, table and chairs.
- Smooth working of food stalls begins
- There is vehicular movement seen but reduced.

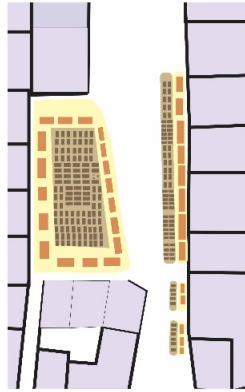
1.30am -2.30pm

- The food stalls are shut by 1.30 am – 2.00 am
- Approximately 1 hour is taken by the stall owners to wind up their stalls and take their furniture back

UPLIFTMENT OF PANVEL VEGETABLE MARKET



UPLIFTMENT OF PANVEL VEGETABLE MARKET



UPLIFTMENT OF PANVEL VEGETABLE MARKET

