

“ARCHITECTURAL DESIGN OF SHOPPING CENTRE IN MARKET AREA FOR DHULE CITY”

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ABSTRACT

All the major roads in urban areas of India are faced with two major concerns: Illegal Parking and Road-side Hawkers. Both these issues have just worsened the traffic conditions on the roads. The preventive measurements and current laws don't give a proper and complete solution to the problems and hence this project study is directed towards design of a shopping centre for roadside hawkers. The scope of project study is limited to hawkers on Agra Road in market area of Dhule City.

Keyword - Traffic Survey, Principle for Design of Shopping Centre, 3Shopping Centre Planning

1.Introduction

“Everyone lives by selling something”

- Robert Louis Stevenson

The words seem to be very right in 21st century, the century of cut-throat competition. Everyone is trying hard to succeed and the best way to achieve that is by selling goods. Everywhere from your computer screen to busy street, we find a cluster of sellers. The streets are full of hawkers and vendors as much as pedestrians and vehicles.

A street full of hawkers is a major growing problem in entire world. However, we, being part of a developing economy, are faced with huge challenges due to less infrastructure and high population. More & more people being jobless is the prime reason of increasing number of hawkers on street. With street being packed with them, very less space is available for moving traffic and hence more & more chaos is produced.

The project aims at easing a similarly complicated situation – “Agra Road, Dhule”. Every citizen of the city knows a one stop market in the road which offers everything from crockery to Jewellery and spices to clothes. The road is now so packed during the day hours that one can't see the pavement 100 m ahead of him. Hence it is being a need of hour move all the hawkers and street -side vendors in a place which will ease the life of citizens.

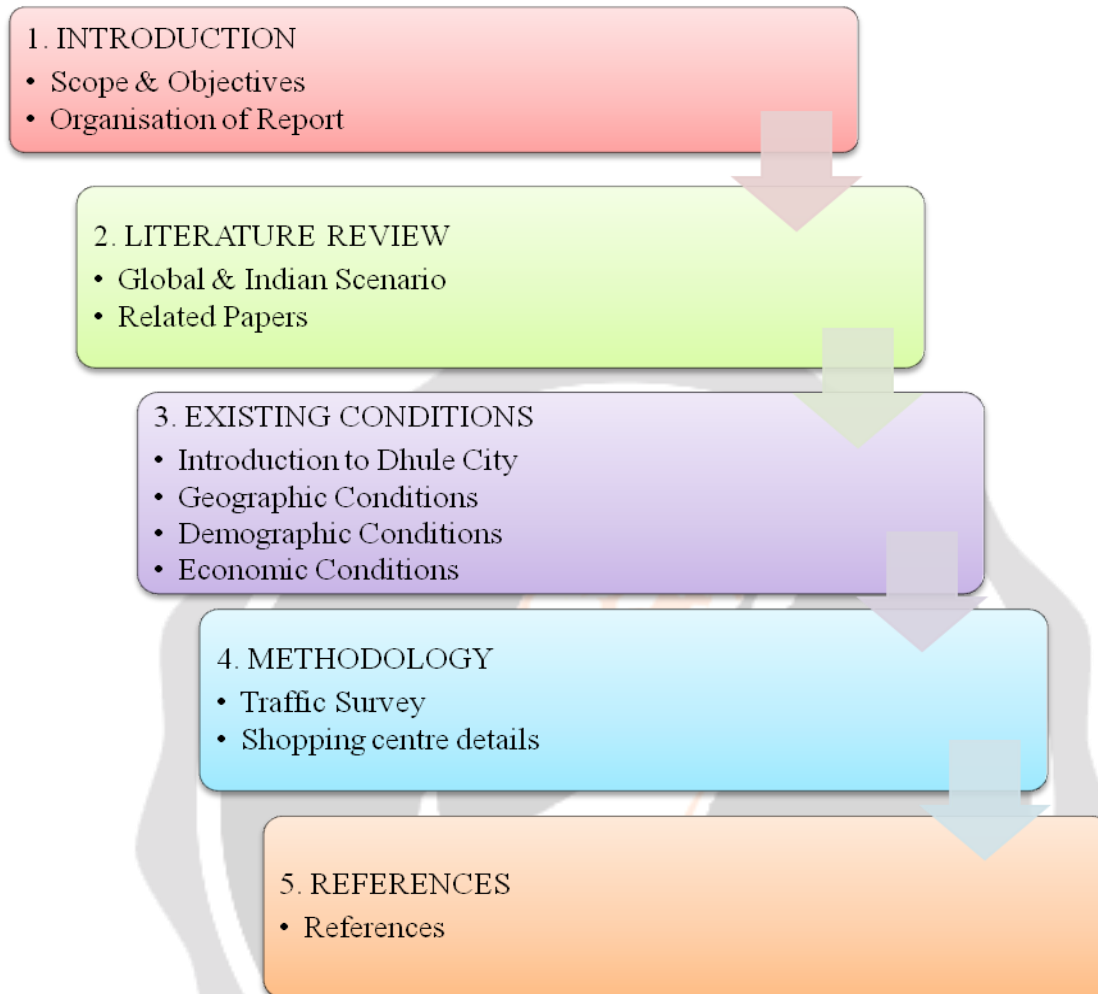
1.1. Scope of Project

The scope of the research is restricted to space planning and architectural design of shopping centre. The project is based on the case studies, present scenario and building byelaws of local body. The project also covers a survey of traffic & market conditions in business area of Dhule City.

1.2. Objectives

- To study traffic conditions in Business area of Dhule City
- To analyse the current market conditions & details of hawkers on Agra Road
- Identifying possible available open spaces for shopping centre
- Architectural Design of Shopping centre in market area of Dhule city

1.3. Organisation of Report



2.LITERATURE REVIEW

2.1 Present Conditions

Emerging Asian countries of China, India, Indonesia, Philippines, Thailand and Vietnam have in recent times witnessed a sharp rise in economic growth, thereby propelling the level of income and spending power of its vast population. As a consequence of this rising consumerism, retail real estate development has witnessed high level of growth. However, each country within this group of nations has different characteristics in terms of consumption pattern and retail development. While China's high level of income has led to rising aspiration for high-end and luxury products, India has seen big-box and high-end retailing flourish in its major cities. The Emerging ASEAN nations that we have considered in our study have a well-established organised retail culture which has been expanding further as infrastructure and income improves.

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shown in Fig. 2.3. All the street side hawkers and vendors will be surveyed and a better location will be suggested such that their business isn't affected and at the same time the road breathes freely for its traffic.

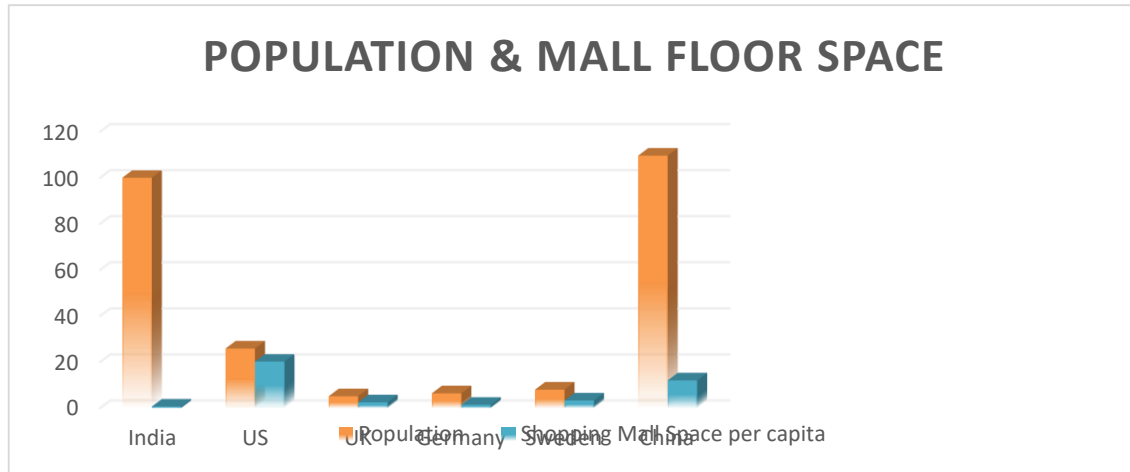


Fig 2.2 Present Condition of Agra Road



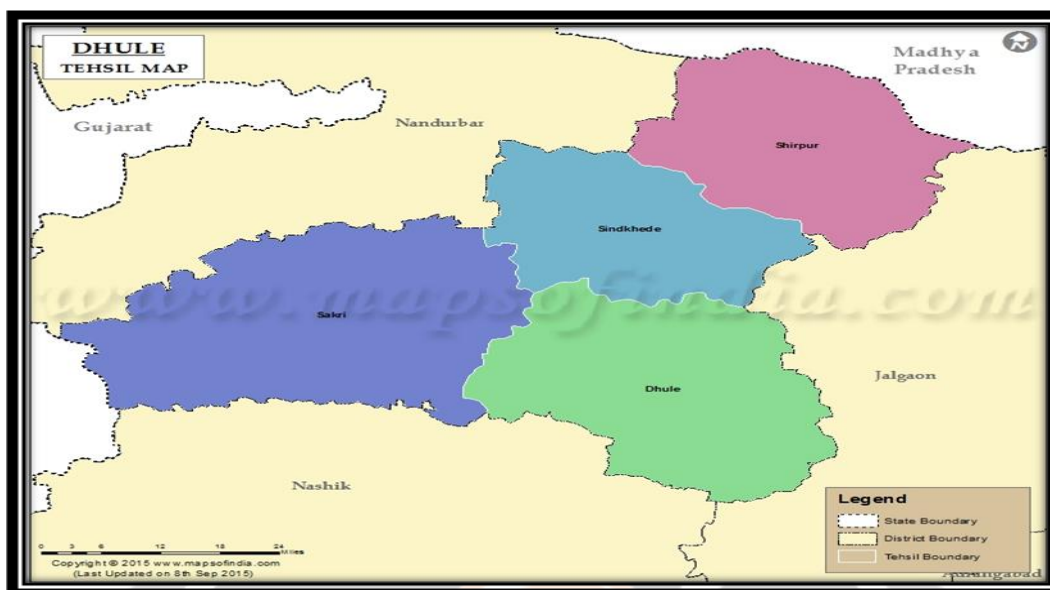
Fig 2.3 Old Agra Road Map

3. EXISTING CONDITIONS

Dhule is a city and a municipal corporation in Dhule District in the north-western part of Maharashtra state, India. It is one of the very few well-planned cities of India. Dhule is widely known across the country for its architecture and urban design. The town planning of this city was done by Sir Mokshagundam Visvesvaraya.

Dhule is largely emerging as one of the biggest upcoming hubs of Textile, Edible oil, and Power-loom across the state and has gained a strategic advantage for being on the junction of three national highways viz. NH-3, NH-6, AND NH-211

3.1 Geographic Conditions



Dhule Tahsil Map

Dhule District is located in northern side of Maharashtra state spread between Latitude 20 38' to 21 61' N and Longitude 73 50' to 75 11' E. Dhule is a district in Maharashtra surrounded by Jalgaon, Nandurbar and Malegaon (Nashik) districts. It is also having a close proximity to Madhya Pradesh and Gujrat. Dhule district is divided into four sub-districts namely Dhule, Sakri, Shirpur and Sindkheda.

Table 3.1 Key Geographic Features

Indicator	Year	Dhule	Maharashtra
Area in sq.km	2001	8,063	307,713
Percentage share in state geographical area, %	2001	2.6%	100%
No. of sub-districts	2001	4	353
No. of inhabited villages	2001	678	41,095
No. of households	2001	324,557	19,576,736
Forest area as a % of total geographical area	2001	28.5%	100%

3.2 Demographic Conditions

As per Census 2011, Dhule district has a population of 20.49 lakh persons – 1.8 per cent of the State population. While 72 per cent of the population in the district is in working-age group (15 to 59 years), about 56 per cent is actually working i.e. work participation rate. The district's literacy rate is 74.61 per cent, which is lower than the State average of 82.91 per cent, and equivalent to the All-India average of 74 per cent. If things are looked out at

gender wise, male and female literacy were 82.59 and 66.21 respectively, with the male literacy being higher than the female literacy.

Key Demographic Indicators

Indicator	Year	Dhule	Maharashtra
Population, No.	2011	2,048,781	112,372,972
Decadal growth rate of population, %	2001-11	19.96%	15.99%
District's share in State's population, %	2011	1.82%	100%
Urban population as a % of total population, %	2001	28%	45%
SC population, %	2001	6%	8.79%
ST population, %	2001	26%	15%
Sex ratio, No. of females per 1000 males	2001	941	925
Population density, per sq.km.	2001	285	365
Literacy rate, %	2001	74.61%	82.915
Main workers, No.	2001	573,496	34,748,053
Marginal workers, No	2001	164,445	6,425,298
Working age population* as a % of total population, %	2001	72%	59%
Work participation rate^, %	2001	56%	42.50%
HDI	2000	0.36	0.58

4. METHODOLOGY

4.1 Traffic Survey

A traffic count is a count of vehicular or pedestrian traffic, which is conducted along a particular road, path, or intersection. A traffic count is commonly undertaken either automatically (with the installation of a temporary or permanent electronic traffic recording device), or manually by observers who visually count and record traffic on a hand-held electronic device or tally sheet. Traffic counts can be used by local councils to identify which routes are used most, and to either improve that road or provide an alternative if there is an excessive amount of traffic. Also, some geography fieldwork involves a traffic count. Traffic counts provide the source data used to calculate the Annual Average Daily Traffic (AADT), which is the common indicator used to represent traffic volume. Traffic counts are useful for comparing two or more roads, and can also be used alongside other methods to find out where the CBD of a settlement is located. Traffic counts that include speeds are used in speed limit enforcement efforts, highlighting peak speeding periods to optimize speed camera use and educational efforts.

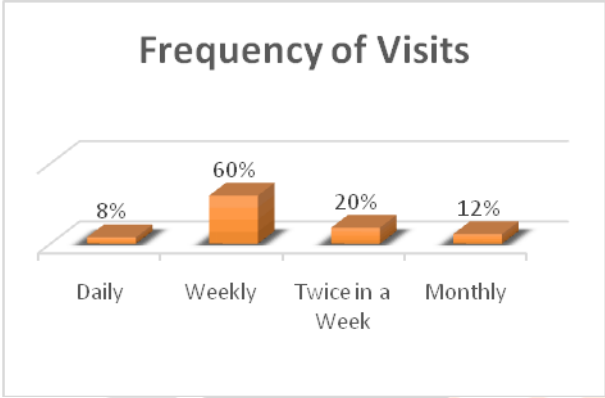

4.2 Principle for Design of Shopping Centre

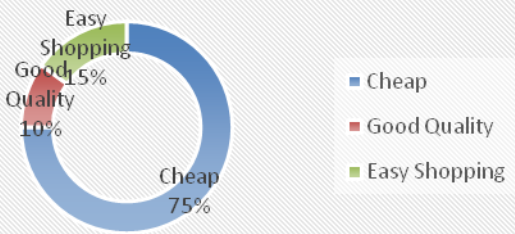

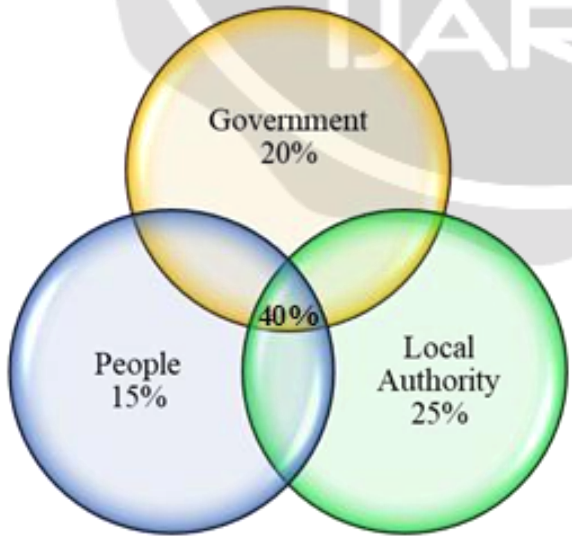


Shopping Centre Design Principles

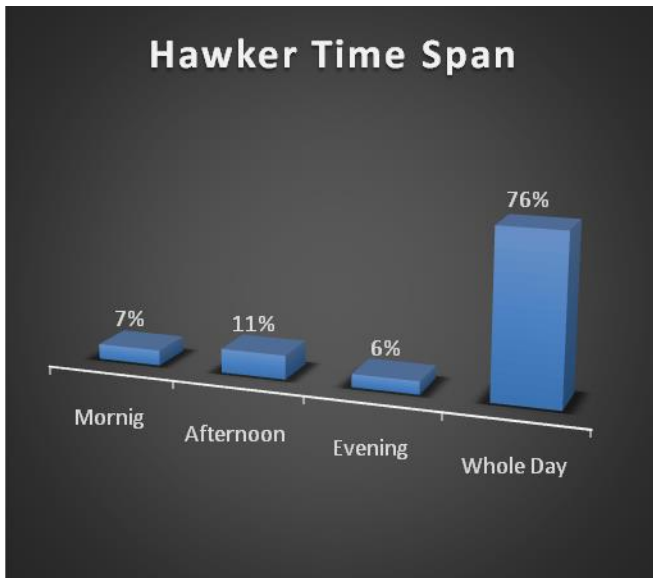
4.3 Analysis of Questionnaire

Questionnaire Analysis

Question	Comment										
<p>How often do you shop from Agra Road?</p>  <table border="1"> <caption>Frequency of Visits</caption> <thead> <tr> <th>Frequency</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Daily</td> <td>8%</td> </tr> <tr> <td>Weekly</td> <td>60%</td> </tr> <tr> <td>Twice in a Week</td> <td>20%</td> </tr> <tr> <td>Monthly</td> <td>12%</td> </tr> </tbody> </table>	Frequency	Percentage	Daily	8%	Weekly	60%	Twice in a Week	20%	Monthly	12%	<p>Over 60% of the people visit Agra Road once in a week. However, only few people visit the road more than once in a week as well as once in a month.</p>
Frequency	Percentage										
Daily	8%										
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<p>What item are available for sale on road?</p>  <table border="1"> <caption>Item on Sale</caption> <thead> <tr> <th>Item</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Grocery</td> <td>1%</td> </tr> <tr> <td>Food</td> <td>4%</td> </tr> <tr> <td>Daily Needs</td> <td>3%</td> </tr> <tr> <td>All</td> <td>92%</td> </tr> </tbody> </table>	Item	Percentage	Grocery	1%	Food	4%	Daily Needs	3%	All	92%	<p>Almost all of the people think that all the items are available for sale on Agra Road.</p>
Item	Percentage										
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All	92%										
<p>Why does people prefer shopping from hawkers than shops?</p>	<p>Very few people are buying from hawkers for their quality while most of them are just focusing on the cheap price part.</p>										

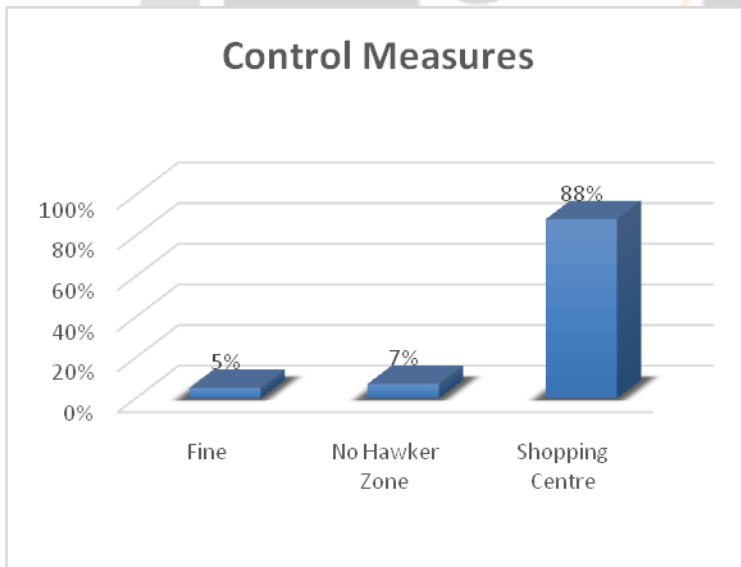
<p style="text-align: center;">Hawker shopping reasons</p>  <table border="1"> <thead> <tr> <th>Reason</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Cheap</td> <td>75%</td> </tr> <tr> <td>Good Quality</td> <td>10%</td> </tr> <tr> <td>Easy Shopping</td> <td>15%</td> </tr> </tbody> </table>	Reason	Percentage	Cheap	75%	Good Quality	10%	Easy Shopping	15%			
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<p>What is the main cause of illegal parking on Agra Road?</p>  <table border="1"> <thead> <tr> <th>Cause</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>No Parking Spots</td> <td>7%</td> </tr> <tr> <td>Hawkers</td> <td>63%</td> </tr> <tr> <td>Shop Encroachment</td> <td>30%</td> </tr> </tbody> </table>	Cause	Percentage	No Parking Spots	7%	Hawkers	63%	Shop Encroachment	30%	<p>While 30% of the people are cursing shop owners for their encroachment a big set of people of over 60% is blaming hawkers for parking problems.</p>		
Cause	Percentage										
No Parking Spots	7%										
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<p>Who are responsible for lack of basic utilities?</p>  <table border="1"> <thead> <tr> <th>Entity</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Government</td> <td>20%</td> </tr> <tr> <td>Local Authority</td> <td>25%</td> </tr> <tr> <td>People</td> <td>15%</td> </tr> <tr> <td>Overlap of all three</td> <td>40%</td> </tr> </tbody> </table>	Entity	Percentage	Government	20%	Local Authority	25%	People	15%	Overlap of all three	40%	<p>While very few people are taking the responsibility, around 40% of people think all the components of the system are responsible for its failure.</p>
Entity	Percentage										
Government	20%										
Local Authority	25%										
People	15%										
Overlap of all three	40%										

What is the peak time span for hawker problems on Agra Road?



Most of the hawkers on the road are present for whole day, as per 76% of people.

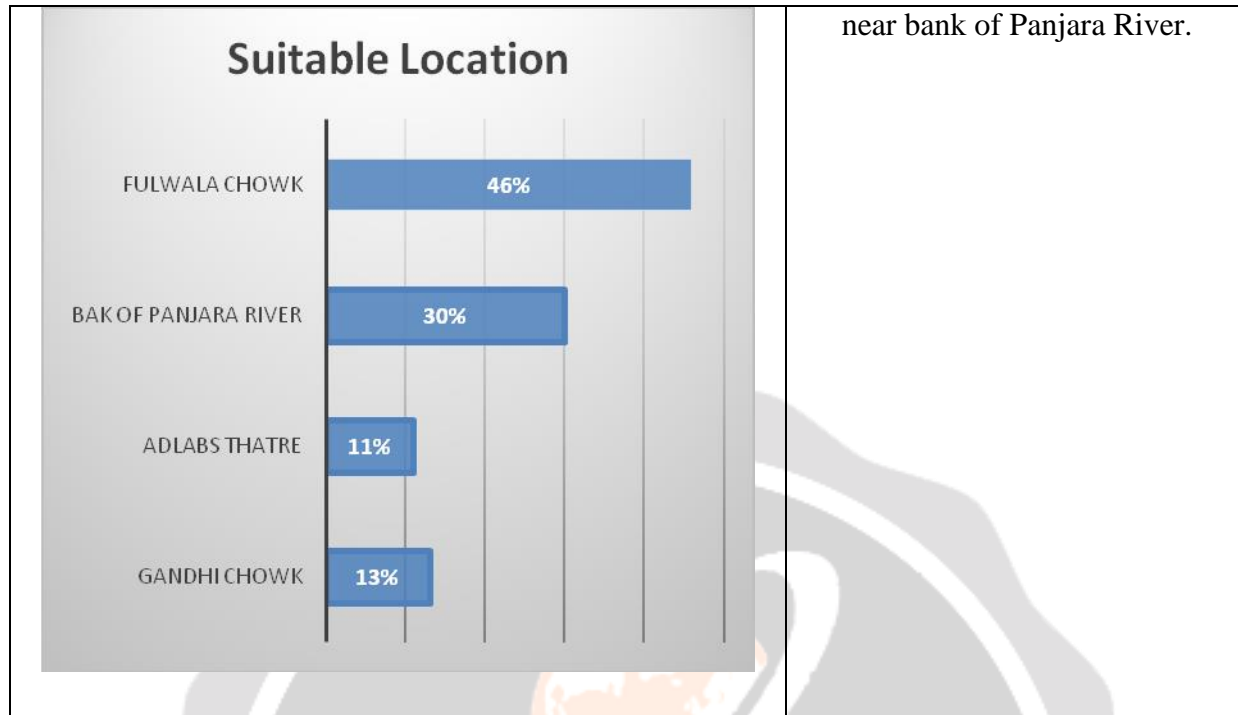
What will be the best method to control hawkers on Agra Road?



Every one of the citizen surveyed is in the favour of constructing a Shopping Centre for hawkers.

What will be the best suitable location for Parking Lot?

The two most favourite options for designing a shopping centre are Near Fulwala Chowk and



5. Conclusion

The project studies and surveys carried out on the project road until the current stage have yielded in following conclusions:

1. The business area of Dhule city which mainly consist of Agra Road is densely packed with vehicles and hawkers. At many times, very few portions of road are available for vehicular traffic due to presence of illegal parking and hawkers on the road.
2. As per the discussions with shopkeepers, citizens and some of the administrative authority personnel, it is found that almost every item of day to day living requirement is available for sale with Hawkers on Agra Road. And hence elimination of hawkers is not an option since a lot of people are shopping from them. And it becomes necessary to provide a better alternative for hawkers.
3. As per the survey carried out in the vicinity of Agra Road, there is no large space available for accommodating a shopping centre. So, the project identifies a central location on Agra Road which have very few running shops and also the area where lot of old structures are present to be developed for Shopping Centre.
4. The architectural design of shopping centre must be carried out as per the design guidelines. The studies have identified various aspects of design of shopping centres. All the guidelines related to preparation of layout of Shopping Centre have been satisfied also the space allocated to various categories of shops is more than today's requirement by 50%. And hence there is substantial provisions for future demands.

1.4. Future Work

The project work can be further carried for structural design of Shopping Centre and also similar projects can be studied to provide a stable and developmental alternative for the hawkers from streets.

6. REFERENCES

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