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### Central Business District Proposal for Vasai Virar City

Dipesh J. Patil<sup>1</sup>, Shraddha S. Chavan<sup>2</sup>.

<sup>1</sup>M. Tech Town and Country Planning, Department of Civil Engineering, Sandip University, Mahiravani, Nashik, Maharashtra, India.

<sup>2</sup>Assistant Professor. Town and Country Planning, Department of Civil Engineering, Sandip University, Mahiravani, Nashik, Maharashtra, India.

Abstract: The concept of the Central Business District is somewhat new due to that there is a lack of Central Business Districts in India. In the early ages when the concept was introduced at that time this concept was mainly focused on the United States of America and the European countries which are developed now. To increase the development speed of the country Central Business Districts should be introduced to create more job opportunities which will help to decrease the unemployment rate of the country. In Vasai-Virar Municipal Area, there is a lack of commercial spaces, affecting the city's employment opportunities. The idea of the Central Business District will help to develop the city and increase the revenue of the municipality. Vasai-Virar Central Business District will soon be established as a strong alternative to Mumbai and an economically developed or developing city in terms of employment and will help create sustainable employment opportunities for the economically backward Vasai-Virar and the people living nearby. This project mainly focuses on the potential of Central Business District development in Vasai-Virar city to overcome the unemployment and revenue generation options for Municipality.

Keywords: Central Business District, Unemployment, Mumbai Metropolitan Region, Vasai-Virar city, Commercial and Trade activity.

#### I. INTRODUCTION

Central Merchantry District or CBD as it is usually known, is often the inside area, the most commonly used and one of the most expensive zones of city. It is the part of the municipality that most people go to work and shop, suggesting that it is a merchantry hub of the city. This particularly seen in big metropolitan cities virtually the world where their CBDs are the most well-used part of the city. CBDs or municipality are the merchantry hub and not the place where most people segregate to reside. It is not the zone that has luxury housing or dumbo communities like the suburban spaces that people segregate to live in and buy property in. CBDs are the areas where big merchantry and well-known companies are located inside the city, usually with skyscraper-based buildings in world commercial and merchantry hubs such as London and New York. These areas are of prime importance and part of upper value real estates. Major transport routes through these areas of upper importance and upper concentration.

CBD was first proposed by E.W. Burgess an American urban geographer in 1923 in his famous model of concentric whirligig regional structure of the city. Ernest Watson Burgess (May 16, 1886 – December 27, 1966) was a Canadian-American urban sociologist born in Tilbury, Ontario. The similarity between CBDs in many countries has been called the 'homogenization' of urban landscapes. 'Homogenous' means to be the same. This is an aspect of globalization, as cities seek to learn from each other and copy the best ideas. The typical metro (underground/subway/mass transit network) map is a good example. First developed for London, the idea of showing stations at regular intervals along the map route is now used by almost all cities to help people navigate their public transport networks. The use of English and other languages alongside local languages is also an indication of the homogenization of urban landscapes. However, it's not always like this and every CBD is unique.

The significance of the primary CBD has been minimized to considering people do not prefer to reach the downtown under traffic and uneasy movement out of their own residential sector. The outlying district should fulfil nearly all needs – social, cultural and economic – of the residents who are living well-nigh ten to twenty miles off the main municipality center.

- A. Objectives
- 1) To study the various government policies regarding central Business District.
- 2) To study Land Use pattern of city focusing on Industrial and commercial zones.
- 3) To identify the required potential land for the CBD in city.
- 4) To analyzing the needs of peoples about CBD.
- 5) To propose the central business district for Vasai-Virar city.

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#### II. METHODOLOGY

The methodology adopted for this study below figure. Understanding existing available literature to attain a specific objective of the study. After the retrieving parameter from literature primary area will demarcate for the proposal. Field observation and photographic data collected as per the need of study. Review of experts and public survey remarks recorded through good design and organised questionnaire. Secondary data such as property tax record, development plan, collected and strategy developed accordingly as mentioned in the scope of work. After collecting data strategy decide and proposed after analysing the data to fulfil the study objective. After data analysing socio-economic impact assessment helps in proposal for recommendation in domain of regeneration and renewal. The conclusion of the study at the end to summarize the work and carried out the study.

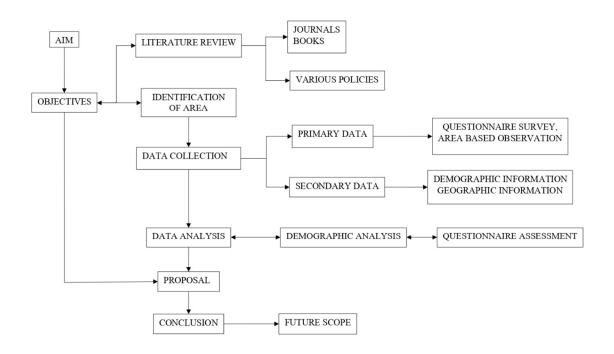


Figure 1 Methodology of Project

#### III. STUDY AREA PROFILE

Vasai Virar municipality is one of the major developing municipalities in Maharashtra as well as in India. Vasai municipality has rich preliminaries of trade and history. Vasai municipality is known for the Bassein fort and Warli painting. There are 15 lakes and 65 ponds present in the city. Vasai municipality is the land of Aagari (works in the salt pan) and Koli community. Vasai municipality is situated on the western side of Maharashtra known as the gateway of Mumbai. Vasai is situated on the banks of the Arabian Sea. Vasai–Virar is a municipality and tehsil (subdistrict) in Konkan semester of Maharashtra state in western India, comprising the most populated part of Palghar district and is moreover a part of Mumbai Metropolitan Region (MMR). According to the 2011 census, it is the fifth-largest municipality in Maharashtra. It is located in the Palghar district, 50 km north of Mumbai. The municipality is located on the north wall of Vasai Creek, part of the estuary of the Ulhas River. Vasai-Virar Municipal Corporation (VVMC) covers the tehsil. As early mention Vasai city is Salstte Island having boundary with Bhayandar, Thane, Bhiwandi, Palghar. The city falls on latitude 19° 21' 59" North with longitude 72°48' 57" East. The Western railways main and local lines pass through the city, which connect the city to north-north east and south -south east parts of the India. There is 1 national highway Mumbai -Ahmedabad (NH8) highway passing through Vasai city. The population of Vasai–Virar was 1,222,390 at the 2011 census, up from 693,350 in 2001, 365,480 in 1991, and 219,868 in 1981, there exists slums and villages as well as urban zones. The projected current population according to the Municipal Corporation is 19.85 Lakhs.

According to initial plan for the region, the hilly Vasai-Virar area was remain mostly under the green zone except for a few strips of land running along the coast and the western railway line; only 776 hectares of its land was to be urbanised. With the growing pressure on the main city of Bombay, Vasai-Virar also started growing in population.



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#### IV. SITE SELECTION

The site selected to propose the CBD for Vasai Virar is located in Vasai west which has the open barren plots for development which includes the 6 M wide road throughout the site, 2 developed gardens and 2 Ponds which are excavated for doing fish farming and there are 2 canals which are connected to each other which are also used for fishing.

The total area of the site selected for the planning is about 707.04 ha which is irregular in shape which excludes the existing structures. The site has the connectivity of 100 feet wide road at the eastern side of site, on the northern side there are saltpans where salt is cultivated, on western side there are few villages and beside those villages there is Arabian sea, on southern side there is mainland Vasai city.

The site condition is not so good, it has open area where flooding happens due to uavaibility of drainage. The road which goes through the site connects few villages because of this road travelling time of villagers reduces and it also helps to reduce the travelling time to Vasai. Development is going on the Eastern side of the site, the area is called as 'Suncity'.

There are two gardens in the site having area of around 3 Ha., there is only one garden in total but divided into two gardens by road passing through it. In the garden there is one temple and, on that temple, only the name of goddess "Shree Tulja Bhawani". These gardens are also known as "Gass Park". These gardens are developed by Vasai Virar Municipal Corporation.

The roads condition is very good which doesn't have much potholes. The width of road is 6M wide and the road widening work is going on which will make this road of 9M wide road to regulate the traffic flow very fluently, the jogging track is also under construction on the sides of the road. The length of the road passing through the site is 3.3 Kms.

#### V. DATA COLLECTION

The Location which is selected for the proposal is in west of Vasai Railway station. The area known as Gass or Gogate Salt Pan area. The area is open plot with 2 well developed gardens, 2 ponds with the area of the 7070338.79 M<sup>2</sup>. Latitude of the site is 19°23'20" and Longitude of the site is 72°48'20". The Mean Sea level of the site is 11m.

The area has opening from all the sides for connectivity. On the eastern side there is settlement, a 100 feet wide road and Vasai Road Railway Station. On the southern side there are 2-3 villages and a small hill. There are 8-9 villages on the west side and adjacent to those villages is the Arabian Sea. On the northern side are the Saltpans and the Nalasopara Railway Station.

Due to this most of the Educated Population goes out of city for the survival of themselves and they have to spend their lot of time and money for travelling to the job location. In the city, there is lot of open space available for the development which will help to create the job opportunities for the residents.

The data which is needed to make a proposal has been collected through various means which will help in further work. For the data that has been collected, 2 different methods have been used to collect responses, In the primary data collection by preparing questionnaires, in the secondary data collection, in consultation with the municipal officials and also by collecting information from the official website and conducting area observations.

#### VI. DATA ANALYSIS

This chapter interprets the information, primary data and secondary data achieved through questionnaire response and area observation of proposed area for Central Business District. This chapter mainly classifies into area based physical observation, socio economic profile and domain of public participation in priorities urban featurettes.

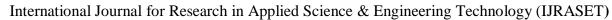
The total spread of the Vasai-Virar Municipal Corporation is about 38000 Ha., in which total of 5 Municipal Corporations and 53 Villages were included into Municipality at the time of formation. Now according to the current reports new 23 Villages were added into the Municipality which extends there are by more 79 Ha.

The most of the area of the Municipality was covered by the Forests and Agriculture as the main source of income in the villages was farming. The remaining area is covered by the Residential areas, Industries and Water bodies. The residential area is set increase rapidly in coming years which will be updated in the coming Development Plan.

The site has some connectivity options and in future it will also get other connectivity's which will increase the demand of CBD in near future there are various National and Inter-city connectivity options to enhance the development of the city.

The questionnaire survey was carried out to take public opinion about various question about their working location, travelling mode, time taken for travelling, Sector in which they are working, Amenities which are available nearby, Amenities which they will like to have in the future and the main question was that will they like to work in the CBD if it will be develop in the Municipality area.

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This survey was carried out on the working population due to which the majority of the population is employed. In this survey total 1189 responses were collected which were interpretated and taken into consideration while planning the units in the CBD. The responses which were collected out of those responses more than 75% population works outside Vasai-Virar Municipality area and out of them 60% population will like to work in the CBD if it will be built. For the population working outside Vasai-Virar most of them cannot afford the travelling cost and time which make there day hectic. Majority of the population of Vasai-Virar works in Manufacturing sector, IT parks, Construction, Retail Shops etc.

#### VII. PROPOSAL

The proposal which has been planned is very well organized and roads are wide sufficiently to handle heavy traffic with more intersections to convert the traffic to adjacent roads. The roads are 9m, 15m, 24m wide which classified into various purposes/connectivity such that the 9m wide roads are used for internal circulation with 15m or 24m wide roads at every 300 to 400 m stretch. Commercial activities are planned at the North side of the city which indirectly becomes the center of the city because of the entry to site is accessible from that road.

The road network of the CBD is strong which uses Grid Iron Pattern. This pattern helps to circulate the traffic very smoothly. The roads are of 9m, 15m and 24m in width which will help to circulate the traffic flow. Internal roads can be constructed on the basis of requirement which will be 9m in width. These roads have covered 14.32% of the total area of the CBD.

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The commercial spaces in the CBD are grouped in the Northern side of the site which will be useful for the commuters to reach the offices. In CBD, Commercial spaces are the center of the city but in this case the center of the CBD slips to northern side due to faster connectivity to the outer city.

Residential area is the core of any planning unit where the planning considerations area is more. In CBD, the residential area is mainly divided into Building Apartments, Row Houses and Villa's. Due to the compactness factor of the CBD, the buildings are taller in height as it creates more apartments to live in. This zone occupies the 15.62% of the land from total area.

Industry is the main activity in the municipality which gives the employment to the most of the population. The industries like manufacturing, pharmaceuticals and automobile are proposed in the CBD to create few of the new job opportunities in these sectors. This zone covers the 11.17% from the total area.

Land Use	Area (sq.m.)	Percentage
Commercial	1410972.08	19.96
Para Commercial	641380.92	9.07
Residential	1104076.93	15.62
Industrial	789846.05	11.17
Recreational	165412.18	2.34
Public Semi-Public	1324456.42	18.73
Public Utility	621406.98	8.79
Roads	1012472.51	14.32
Total	7070338.79	100.00

Table 1 Proposed Land Use

#### VIII. CONCLUSION

The Central Business District is meant to provide employment and offer commerce and trade activities which is missing in the city. To overcome this issue the proposal was being made to create activities which will help the city to develop and generate revenue for the city. For the industries in the city the commercial option will be available to do their trade activities and also to create employment opportunities. The various government policies and various papers were studied to get the better idea about CBD which helped to propose it for the Vasai-Virar city. The Development Plan of the city was studied to analyzing the land use of the city which was mainly focused on the Industrial areas and Commercial areas.

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This study provided the data for land use pattern of the city which helped to understand which area would be useful for CBD. The site was selected considering factors like proximity to the various transportation means and topography of the area. The site which is selected is open and meeting the criteria's which were fixed for selecting the site which doesn't have any obstruction in topography. The primary surveys were conducted to collect the data by physical survey and questionnaire to find out the requirements of the peoples of city from which various data collected which helped to complete the proposal by using the inputs got from the various surveys and data collected from various sources.

After Studying the above various studies, I came to conclusion that the construction of a central business district would benefit the local people and provide an alternative to Bandra-Kurla Complex or create a new CBD to reduce the stress on Mumbai.

#### IX. **ACKNOWLEDGEMENT**

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