

Market Demand And Productivity Assesment For Selected Land Parcel In Airoli, Navi Mumbai

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Abstract- Airoli is located at 19.15900 N,72.99860E in Navi Mumbai. Airoli is a part of MMR Region and has emerged as a commercial and residential hub. The growth of the micro-market is credited to Mindspace office developed by Rahejas and the Airoli bridge. Airoli is connected to Mulund, Thane and rest of Navi Mumbai. The micro-market also has Maharashtra's first state of the art Coastal and Marine Biodiversity Centre.

A market scrutiny is a quantitative and subjective assessment of a market. It investigates the extent of the market both in capacity and in worth, the different consumer slices and purchasing behaviours, the opposition, and the financial condition regarding barriers to segment and direction. (Anon., 2018). Market analysis is a term that is mainly used in economics but has more narrowed down meaning in the appraisal discipline. (Appraisal Institute of Canada and the Appraisal Institute, 2010). Market and feasibility analysis commence the action of focusing from a larger perspective to data that is relevant to the selected asset. The analysis to identify most profitable, competitive use for which the selected property can be maximised.

The scope of the study is to assess the highest and best use for the selected land parcel. The potential was estimated for residential, commercial, retail and hospitality sectors of real estate development. It was concluded that the micro-market lacked in the hospitality and retail sector and the highest and best use is commercial Grade A space.

Keywords- Micro-market, Market Analysis, Feasibility.

I. INTRODUCTION

Airoli is spread across an area of 8.91sqkm, divided into 28 sectors. It lies on Thane-Turbhe-Vashi rail corridor situated little off from main Navi Mumbai Suburbs and is closer to Mulund and Thane. Developed by CIDCO (City Industrial Development Corporation), Airoli is now managed and administered by Navi Mumbai Municipal Corporation (NMMC) and the city level developments are additionally regulated by Mumbai Metropolitan Regional Development

Authority (MMRDA) and (Maharashtra Industrial Development Corporation (MIDC) (Samidha Bansal, 2013) (MIDC, 2019). The growth of the pivotal node from the year 2004-2019 was evident in commercial and residential zones. The rapid transformation in character from industrial/manufacturing (Thane-Belapur industrial corridor) to services dominated industries like IT/ITeS/Knowledge parks and the financial service sector is witnessed in the region. These office projects and the subsequent employment generation have been acting as catalysts and influencing projects in the residential sector (Times Property, 2011). The advancement of the node is also regarded to availability of land at a cheaper rate, affordability of houses and connectivity to Mumbai through Airoli-Mulund Bridge. Due to the presence of green belts and mangroves, many of the projects are facing approval issues from the Coastal Regulatory Zone (CRZ) and State Environment Impact Assessment Authority (SEIAA) along the Thane creek. An International Diplomatic Enclave (IDE), which would be a high security zone for various countries to establish their consulates is being planned to be established in the node (Samidha Bansal, 2013).

II. OBJECTIVES

1. Understanding the Market scenario for residential, commercial, retail and hospitality segments.
2. Preparing a Market delineation report for Residential, Commercial, Retail and Hospitality segments.
3. Creating feasibility report which includes demand and supply analysis and calculating Highest Builtup Potential (HBP) of Residential, Commercial, Retail and Hospitality.

III. RESEARCH METHODOLOGY

1. Understanding the Geography, Historic growth and Regional linkages of the micro market.
2. Analyze the Demography, Development trends and Economy of the micro market.
3. Estimate the demand and supply for Residential, Commercial, Retail and Hospitality segments.

4. Inferencing the Highest built up potential of the site for Residential, Commercial, Retail and Hospitality segments.

IV. ANALYSIS

A. Geography

Airoli is located at 19.15900 N,72.99860E in Navi Mumbai at an elevation of 3m (Maps-StreetView.com, 2019). Airoli is covered by Western Ghats on the east side and Thane creek on the west restricting the growth to north-south direction. The north of Airoli is covered by Thane district and on the lower side is the Vashi micro market of Navi Mumbai (Google earth pro).

B. Growth of Airoli

Since 2003 Airoli has seen the massive growth due to the development of Thane Belapur MIDC area and many manufacturing companies pitching in. Airoli node was designed by CIDCO, the central and southern region was designated as residential use and western and northern region for industrial and commercial use respectively. The growth is being taken place as per the plan of CIDCO, NMMC and MIDC zonal restrictions (CIDCO, 2019).

C. Regional linkages

Airoli is located at Trans harbor of Thane-Thurbe-Rail corridor. Connection from Mumbai and Navi Mumbai in the shortest distance by the Airoli-Mulund bridge. The major highway passing through the industrial corridor is the Thane-Belapur highway connecting Thane district and Vashi to Belapur (Google Earth Pro).

D. Demography

The population of Airoli is 1,34,490 as per 2019, with a CAGR of 1.61 the projected population for 2021 is 1,38,687. The average Household is 4.1 in the region, total occupied household being 89.16%, 56% of the population falls into the category of Middle-Income Group – I (MIG-I). 74% and 19% of the families have single person and two people working in the family respectively, with the average monthly income of Rs 32,500 (Kirloskar Consultants LTD, 2010).

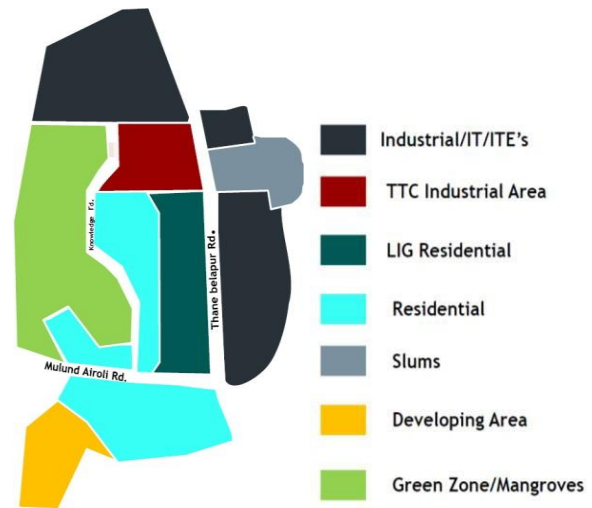


Figure 1. Land use plan of Airoli

Source: *Residual Valuation of Land Parcel at Airoli – Jaikishan Dhondiyal, Tanisha Shetty et al*

E. Economy

The economy of the micro market is majorly driven by the MIDC industrial area along the Thane-Belapur industrial corridor catering to many large to small scale industries, IT/ITES, Commercial Grade-A office Space, like Reliance Corp, Jio, Mindspace, Reliable group cloud city, Airoli Knowledge Park, Patni Knowledge Park.

F. Development and Trends

The major developments and the trends followed in the past decade being the industrial and the IT/ITES sectors with major companies preferring Airoli due to availability of land and low land rates (Times Property, 2011). The development trend of the IT/ITES sectors has acted as a catalyst for the growth of residential sector. The upcoming projects following the trend are Newa Bhakti IT park, Pyramid Infratech etc.

G. Site Characteristics

The hypothetically selected land parcel is in Sector 20 of Airoli node, located in CRZ-II area. The rationale for the site selection being good connectivity, easily accessible, easily visible from the streets. The plot is Polygonal in shape, size of the plot is 10 Acres (4,35,600 sqft). The plot runs parallel with the Mugalsan road on the west connecting Thane. The plot is at 1.5 km distance from the Airoli railway station and 100m from bus stop. The North, South and East side of the plot are covered by the residential sector (Jaikishan Dhondiyal, 2019).

V. DEMAND AND SUPPLY ANALYSIS

• Residential

The demand and supply analysis for the residential sector is as below.

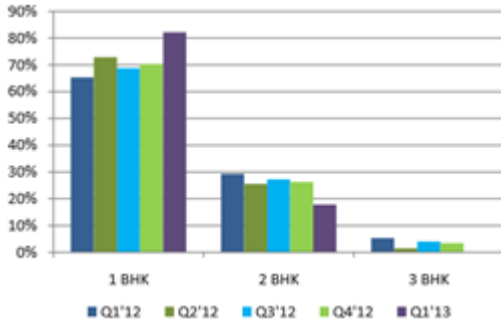


Figure 2. Unit type preference of buyers
Source: (Samidha Bansal, 2013)



Figure 3. Demand for Flats

The above graphs show the high demand for 1 BHK apartments throughout the year. With the CAGR of 1.61 the projected population of 2021 is 1,35,332. Average household of 4.1 the demand for apartments is increasing due to the migration of single family, working class population (Kirloskar Consultants LTD, 2010). The supply in the micro market is through 4 major projects like Pyramid Elements, Newa Bhakti Park, Signia Waterfront, Akshar Green World, providing 1344 units of apartments comprising of around 10 lakh square feet of builtup area (Magic Bricks, 2019). The Demand and supply of the residential sector is going hand in hand.

• Commercial

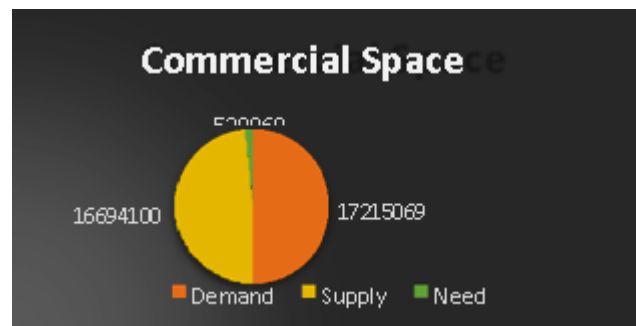
The demand for commercial sector is driven by the working-class population. 74% of the working population has a single member working in one household. 56% of the working population is under MIG-I category (Kirloskar Consultants LTD, 2010). In the upcoming years the working population is expected to increase due to development of more

number industry and service sectors. With the vacancy rate of 22.6%, the present the inventory in the micro market is 16,694,100 sqft and 62,90,800 sqft is yet under construction. The average rental price being 50.4 INR/Sqft/month. Based on Jennings study, the following formula can be derived:

$$Dt+1 = (S/P) * Pt+1$$

Where:

- D t+1 = Demand for total office space in a future time period;
- S = Stock of office space in a given period; P = Population in a given period;
- S/P = Average of the ratio for several recent years; and
- P t+1 = Forecasted population in time period t+1



• Retail

The increase in population has shown the demand for mall space, entertainment zone, multiplex in the micro market. The demand for mall space is calculated by the Per Capita Mall Space index (PCMS), that is for India it is taken to be 1.2 sqft per capita therefore the requirement for mall space in the micro market is 1.2×115335 = 138402 sqft (Nagargoje). Currently the supply is only of supermarkets like Dmart and shopping complex of the ground floor of residential and commercial developments. Newa Bhakti park is coming up with 90,000 sqft of retail shopping complex. The supply for the malls is nil due to the fact that Inorbit mall in Vashi and Seawoods Grand Central mall are not more than 30 minutes away from Airoli (Primary Survey).

• Hospitality

The current demand for hospitality is high as Airoli is a commercial, IT/ITES, hub due to which huge number of corporate guests visit the companies and the nearest available destination for hospitality are Vashi and Thane which are 30 minutes away (Primary Survey). Although Reliable Groups has The Mango Hotel (4 Star) it is purely used by the company for its own guests and doesn't cater to others. A multi star hotel with banquet halls, conference halls, Service

apartments, Studio apartments, are in high demand due to high immigration.

VI. PROPERTY PRODUCTIVITY ASSESSMENT

The Highest Built-up Potential (HBP) of the Selected Land Parcel is calculated referring to the GDCR of Navi Mumbai and following all the norms of CRZ-II and local municipal authority (NMMC).

Segment	Allowable FSI	HBP
Residential	1	435600
Commercial	3	1306800
Retail	1.5	653400
Hospitality	2	871200

VII. CONCLUSION

From the market conditions and the analysis, it is concluded that Commercial Grade A office space is having the highest potential for development. The financial feasibility of the commercial space has to be worked out to determine the Highest and Best Use.

VIII. ACKNOWLEDGMENT

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REFERENCES

- [1] Appraisal Institute of Canada and the Appraisal Institute . (2010). Market and Marketability Analysis . Vancouver : UBC Real Estate Division .
- [2] CIDCO. (2019, April 23). *CIDCO*. Retrieved from CIDCO Maharashtra: <https://cidco.maharashtra.gov.in/>
- [3] Jaikishan Dhondiyal, T. S. (2019). Residual Valuation of Land Parcel at Airoli. In I. I. Management, *EKTAARA* (p. 228). Navi Mumbai: Indira Institute of Business Management.
- [4] Kirloskar Consultants LTD. (2010). *Socio Economic Survey Of Households In Planned Nodes In Navi Mumbai - 2010*. Navi Mumbai: CIDCO Maharashtra.
- [5] Magic Bricks. (2019, April 23). *Airoli*. Retrieved from Magic Bricks: <https://www.magicbricks.com/property-for-sale/residential-real-estate?proptype=Multistorey-Apartment,Builder-Floor-Apartment,Penthouse,Studio-Apartment,Residential-House,Villa&Locality=Airoli&cityName=Navi-Mumbai>

- [6] Magic Bricks. (n.d.). *Magic ricks*.
- [7] MIDC. (2019, April 03). *Maharashtra Industrial Development Corporation*. Retrieved from www.midcindia.org: <http://mrsac.maharashtra.gov.in/midc/>
- [8] Nagargoje, S. (n.d.). Market Analysis and Feasibility of Shopping mall in the Micromarket of Whitefield, Bangalore. *IOSR Journal of Business and Management (IOSR-JBM)*, 73-77.
- [9] Samidha Bansal. (2013). *Airoli*. India Property : Solid Grounds.
- [10] Shri. Tukaram Mundhe, I. (2016). *Environmental Status Report of Navi Mumbai Municipal Corporation-2015-16* . Navi Mumbai: NMMC
- [11] *The Business Plan Shop Ltd* . (2018). Retrieved November 03, 2018, from https://www.thebusinessplanshop.com/blog/en/entry/market_analysis_for_business_plan
- [12] Times Property. (2011). Balanced Growth. *Times Property*, 3.