

Development Potential of an area under Municipal Corporation

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Abstract

The local body governing Indian cities in coordination with the State Government is a municipal corporation. Its goal is to provide development programs and plans in a city. Pune City, located in Maharashtra State, has become the largest municipal corporation recently by merging 23 villages. There are many challenges, opportunities and concerns while developing these villages all of a sudden. The quality of services increases, roads become wider, and the land and property prices increase, important services like water supply, drainage and civic facilities are also strengthened. This boosts up the commercialization and may also lead to unplanned growth of urbanization. Dwellings and slums are not considered; the development potential of an area should be analyzed for proper planning of the area and leading towards sustainable growth. This paper analyzes the growth potentials and challenges of a selected area, Susgaon village, Pune, India which has recently merged under PMC limits. The focus of the paper is to study the development potential of a village recently merged into a city area along with its challenges and benefits.

Keywords: development, landuse, planning, suburb, urbanization

1. Introduction:

An understanding is required for the sustainable growth of a municipality whether it is in the right direction or not. Infrastructure planning, sustainable land use planning, service provision and growth potential all of them require an understanding for the municipality to ensure sustainable growth of the city. Pune City has larger growth potential than Mumbai City. Considering population density, climate, services and infrastructure, Pune City has wide potential to develop a sustainable city as compared to other cities. As we know, recently the municipal limits of Pune have extended to merge surrounding 23 villages; this will provide more quality services to the residents, job opportunities to young migrants, investment and residential development potential. But in a village the existing development was not according to the municipal norms. No provision of enough setbacks, irrigation activities and natural landscape was found during observations. The conversion of an existing development can be crucial and may face many issues, thus proper preliminary study is required. [3]

A sustainable Municipal Corporation should be able to provide:

- Involve the community and support their interests and govern it.
- Provide adequate services like water supply, drainage, medical and fire services, infrastructure and municipal administration according to demographic data.
- Affordable housing, affordable services and infrastructure should be given to the residents
- Contribute towards the social, cultural, environmental and economic well-being of the people.
- Provide other facilities of supply and demand.
- Funding the services by local resources or partnership.
- Provide educational and emergency health services funded by the government nearby.



Figure 1: Map of extension of Municipal Corporation highlighting study area

Aim:

To analyze and study the development potential of Susgaon, Pune which was recently added to the municipal corporation boundary.

Objectives:

- Literature study, site selection and study of urban planning characteristics
- Field Survey and analysis of selected site
- Observation, Identifying the potentials, challenges and benefits of the study area and provide recommendations.

Research Gap:

During the rapid growth of urbanization, the city limits are increasing causing the merging of nearby suburbs, the development potential of these areas needs to be analyzed before setting up guidelines in the region. The existing informal development may affect the planning of the city.

2. Methodology:

The methodology of this paper is based on secondary data, preliminary survey and observations on site along with literature study of various journals that support the topic. Literature is based on urban development, municipal corporation guidelines provided by government authorities, sustainable growth of the city, land and management aspects, etc. The present state of the area is

observed by reconnaissance survey method and mapping the existing landuse on maps. The connectivity, open spaces, amenities, type of buildings, industries or commercials is mapped. Refer to authors stating sustainable development of a city and analyzing the adverse effect on the environment. All of these put the paper together with necessary outcomes.

3. Study of Selected Area:

The site selected consists- Susgaon Village, Nande and Chande village located in the North West area of Pune city. (See Fig 2) These villages have good connectivity to Pashan, Baner and Hinjewadi phase 3. Mumbai Highway (NH 48) is a boost to the development and connectivity of this area. Sus road is approximately 14km which starts from Mumbai highway to Chande village. Pashan and Baner road are also connected to the area. The location is ideal for residential and real estate development. The area has essential facilities like schools, institutes, hospitals, shops, automobiles and commercials and a wide number of housing projects. Sus is surrounded by hills on both sides and thus lies in the valley. Baner Hill, Pashan Hill, Sutarwadi Hill and the Lavale Hills are surrounded in the neighbourhood. The climate is pleasant with no extreme high or low temperatures and adequate rainfall.

In the recent years, it has been experiencing rapid growth of Housing projects by famous builders, the cheaper rates and connectivity attracted people to stay in these housing projects. It has all the basic facilities needed. Thus it was not a typical village with temporary roads and poor development. Thus it had potential to be a part of the city. The development increased along the road and scattered between the highway and Sus road. Before merging into Pune Metropolitan Area, in spite of being a small village, sus has been increasingly urbanized. Agriculture and natural land are spread widely. The Airport is within 20km from the place. In Hinjewadi Phase 3, Office buildings and IT parks encourage housing in this area as real estate properties are developing close to prime locations.

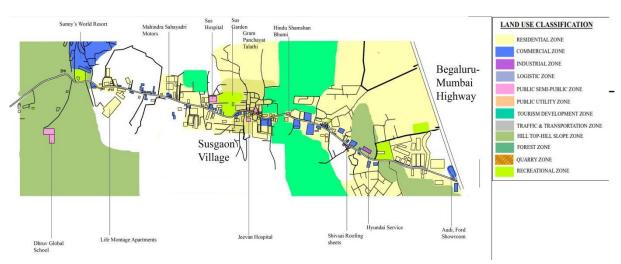


Figure 2: Landuse Map of Susgaon Village

From the above landuse map (refer Figure: 2) Linear development is observed along the secondary road. The primary road i.e. Bangalore-Mumbai Highway is located towards the East and a secondary road joins it. Thus the connectivity of Sus is very strong. Residential development is observed majorly attached to the highway. In the center, old residential and commercial

development exists. Uneven plots, narrow streets, local markets and crowded settlements are observed. The Sus road spans around 14km and we can observe four recreational spaces. Irrigation activities are also present, thus, farming should be preserved. Schools, hospitals, and commercials are enough as per current development. The Hilly region exists in the western direction of Sus, Hilly land is not safe for poor construction, thus development must be limited and properly planned to prevent landslides, degradation of biodiversity, etc. The white space is vacant land which is not much used; future development can be properly planned in these areas. Public utilities are very less observed. Industries should be away from residential dense zones.

The high rise buildings are located towards the highway and not much in the village. Another significant reason for housing is medical provision and educational facilities. Multispecialty hospitals and testing labs are located in the vicinity. All of the aspects show that there is high growth potential in the future of housing. As Susgaon has been included in the municipality, the FSI will increase, giving more opportunity for residential and commercial development. The major challenge in landuse planning is urban sprawl which means dispersed low density development. Some of the development is observed in the vacant land and on the hills which are unidentified and unplanned. In the main core of Susgaon, irregular and rapid growth with an increase in population is observed, thus it has undergone spatial change. Space between buildings is not sufficient.

3.1. Site Observations:

- The road width of Susgaon varies from 9 to 12m, but is narrow at the core.
- Enough setbacks are not provided by commercial, housing projects and other buildings along the street.
- The site is rich in trees, vegetation, and biodiversity and irrigation activities.
- A resort is located on the hillside which offers good views, thus attracting visitors.
- Public transportation services are available.
- Uneven constructed roads are observed in the area, as compared to Baner which is close, the roads
 here are laid unevenly and in some places unnecessary roads are present. Roads do not run parallel
 or in geometric form, they are informally developed.
- Steep hills are present in the surrounding area.

3.2. Challenges:

- Development of roads, road widening, constructing footpaths is a challenge and requires demolition of old structures.
- The housing projects do not have sufficient setbacks this may cause apartments too close to the road traffic in future.
- Due to the increase in land value, there is a possibility of uneven development and hill cutting on the surrounding hills may occur.
- Development may cause issues in rainwater runoff from the slopes; a proper drainage system is required.
- Awareness towards the public is a major challenge to bring forward new norms.
- Physical development and economic changes can increase population
- Environmental hazards and waste management.
- Irrigation may decline in this area due to development.

3.3 Benefits:

- No major intersecting roads are found, thus a linear development can be maintained.
- Vacant land is available for planned development.
- Residential and commercial development potential
- This area is a connecting point to various job locations and both municipal corporations.
- Ideal for migrating people who need to be connected with the city and able to travel out of the station.
- Potential to become a well-developed neighborhood.
- Urban redevelopment and adaptive reuse of the old settlements.

4. Literature Review:

4.1. Tewari, M., Godfrey. N., et al, 'Better Cities, Better Growth: India's Urban Opportunity.'

This paper by the Indian Council for Research on International Economic Relations demonstrates the urban issues related to population density, land regulations, real estate prices, slum growth and urban sprawl. Satellite data, census, environmental and economic data is used in the research study and preparation of a report. As per the authors, urban local government needs to be replaced or strengthened to promote proper planning of urbanization in India. Accountability and funding is required as the increasing population will reduce the possibility of developing a green environment in urban areas. Urban infrastructure investment will benefit affordable housing, employment and improve the economy. The capacity of local and administrative governments should be strengthened. Expansion of resources is the need of the hour to provide sufficient facilities in urban areas.

4.2. Bruce Katz The Brookings Institution, 'Six Ways Cities Can Reach Their Economic Potential'

The paper demonstrates economic potentials of a city in which some points like city assets i.e. the potentials of the city which can develop the economy whether waterfront development, educational dominance, tourism or any other asset is important for the economic development of the city. The author highlights issues of the urban environment such as dense population and rising demand, overconsumption of resources and energy, market and cultural changes, poverty, educational gap, urban sprawl, decentralizing jobs, etc. The ways to develop economic potential in a city are to; enhance various important sectors, transform the physical landscape, improve education and reduce poverty, support low wage workers, create sustainable neighborhoods, and regular study of urban economy and market.

5. Recommendations:

The development potential of a city is based on various aspects. By the above area study and literature review, urban planning is a crucial process which requires timely study at every stage. There is a possibility to ensure sustainable growth of a city before it is being developed.[4] Susgaon has recently merged into the city limits, thus its existing development can be improved and new development can be proposed. We have seen that the development pattern is Linear development. Analysis of every area is required as they have different potentials according to the development pattern, existing landscape, location and connectivity. [3]

The following figure 3 shows what are the main aspects to be considered and planned properly to promote urbanization. Figure 3 also shows that development potential is dependent on economic, cultural, environmental and infrastructure aspects. Susgaon is capable and rich in environmental topography, more infrastructures can be planned, economic benefits are dependent on population and connectivity is the key to population rise. It connects Hinjewadi, Baner area and also to the main core of Pune city; economic development is high in the future.

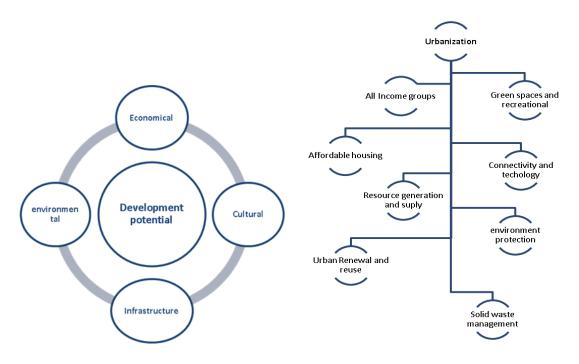


Figure 4: Urbanization and development potential

5.1. Some other views regarding the development of Susgaon are as follows:

- Uneven settlement, hill cutting, slum growth and depletion of biodiversity should be prevented on surrounding hills.
- Urban Renewal and adaptive reuse needs to be done in case of road development and old settlements.
- Poverty planning is required to prevent the growth of slums.
- Proper drainage system is required for stormwater management as there are hills in the surrounding
- Cultural Amenities need to be developed and recreational and open spaces must not decline,
- Maintenance of sanitation and waste management needs to be implicated to promote good health of citizens.
- Irrigation land must be preserved as the soil is fertile, organic waste can be regulated for a healthy environment.
- Social housing and housing for all income groups must be provided.
- Awareness of new policies needs to be provided by local authorities to the residents.

6. Conclusion:

Susgaon area is well developed in housing and infrastructure. This research study was important to prevent uneven growth in the area due to sudden change. Many cities have undergone vast urbanization resulting in depletion of the quality environment. Urban heat island effects, no green spaces and trees, increased pollution and improper waste management occurs when the area is not planned properly. People tend to construct dwellings on hills as land price will be cheaper, this leads to poor construction and may cause damage like landslides. This results in lack of enough space for planning the green spaces, parking, waste disposal, etc. The paper is an attempt to highlight the potentials of an area needs to be mapped and studied because every area is different in terms of climate, topography, pattern, culture, etc. The Municipal Authorities must be aware of individual potentials of the area and DP, planning norms must be developed accordingly. [4]

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