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Planning Guidelines for the Development of Urban Periphery - Case of Akola

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Abstract: *The growth of any City, Village or Settlement is totally depend on, the opportunities it gives to the people in terms of the economic development and accommodation. Urbanization has caused the development of an area beyond its original municipal limits which leads to the haphazard growth of the city. This has caused the transformation of villages from rural to urban; giving them mixed characteristics of village and city. Rapid urbanization is the main cause of emergence of the urban periphery as well as slums in the cities. Urbanization is caused due to industrialization, as the small town grows into city, people starts migrating to city. As the urban land holds a very high value the lower income groups cannot afford them and starts living in the outskirts of the city which leads to the growth of urban peripheral area.*

Keywords: urban periphery, urbanization

I. INTRODUCTION

Due to the growth of city and population and migration from rural to urban cities are growing fast which create negative impact on urban periphery. Urban peripheral areas are the areas which are neither fully urban nor totally rural in other word a somewhat urbanized rural region or an urban village.

So the urban periphery may be defined as “that area of mixed urban and rural land users between the point where full city services are not available and the point where agricultural land users predominate.

OR

Urban peripheral area may be designed as that area outside the central city that has a strong, functional, economic, and social linkage with the central city and is characterised by higher degree of interaction between the city and the surrounding areas.

Peripheries of the city have different meaning related with them. Important and common characteristic of peripheral area is that they have space which are transforming with the urban and rural interconnection. Definition of urban peripheral area varies for developed and developing areas. Generally in India these areas have different role for different group of people. For the lower income group it is simple that settle in these areas and find some work either in agriculture or in main city. Middle income group find these areas good for building big houses. And the higher income groups find these urban areas as investments. These areas are also used by government for garbage disposal, landfills, airports, etc.

II. WHY DEVELOPMENT OF URBAN PERIPHERY IS IMPORTANT

India has been experiencing remarkable growth in urban areas within the past years, with its major number of cities rising from 23 in 1991, and 35 in 2001, to 53 in 2011. the share of person living in urban areas rose by 3.35% in the last decade and 2.10% in the decade 1991 to 2001. Due to the high cost of living in the core area of the city, people who shifted in cities for economic reasons are unable to live in cities. So they settle along the periphery of the city. This expansion due to the migration of people results in transformation of land use, occupation, character on the urban periphery.

These areas are neglected by authorities and start growing haphazardly due to lack of development guidelines and loopholes. These areas lack in services, infrastructure and also lead to slum like living condition. When such areas are merged in an urban area limit it disturb the city development and it became challenging to solve these issues hence it is important to tackle these areas at initial stage to avoid future slums in the city.

III. ABOUT AKOLA

Akola is located about 580 kilometres east of the state capital, Mumbai, and 250 kilometres west of the second capital, Nagpur. Akola is the administrative headquarters of the Akola district located in the Amravati division, and is governed by the Akola Municipal Corporation.

Akola is located north-central side of Maharashtra state, western India, on the banks of the Morna River. Akola is an important city due to its history, culture, politics, and agriculture. It also has a prominent road and rail junction that functions as a commercial trading centre. Akola is an important educational center with several colleges affiliated with the Sant Gadge Baba Amravati University. The city is developing into a market center as well as educational hub.

IV. EVOLUTION OF AKOLA

As Akola is growing continuously from last few decades the more and more rural area is being converted into urban area. Before 2012 Akola municipal corporation limits were only up to umarkhed and kaulkhed. In 2012 umarkhed, umari and kaulkhed were included in AMC limits. In 2015 13 grampanchayat of 24 villages were included in Akola municipal corporation limits. In these 24 villages shivar, shivani, akot fail naygaon and gudhadi was also included. Development plan shows the extension of corporation limits in Akola.

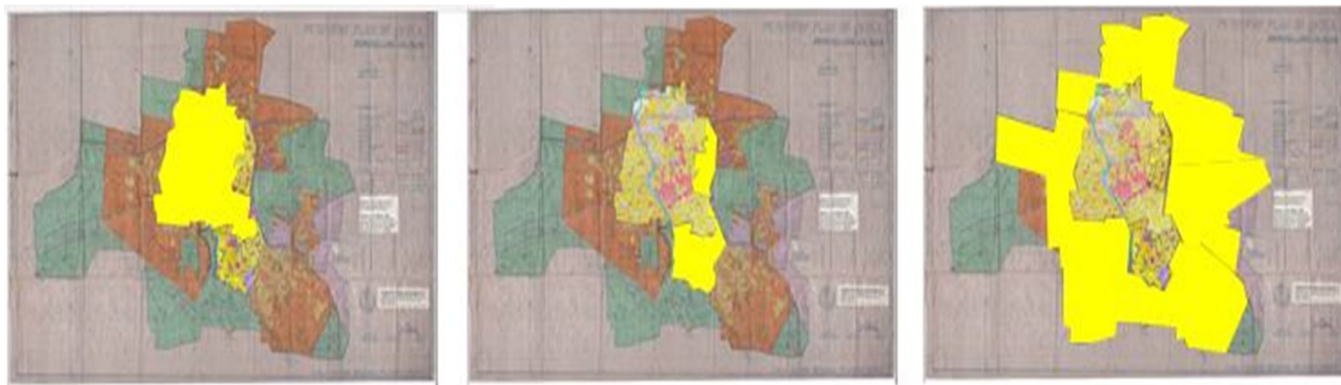


Figure 1 : evolution of Akola city

Source : Author

V. SITE

Categorising areas at urban periphery - Different areas situated at the periphery of Akola are compared for the site selection.

A. *Naygaon/ Akot fail*

Akot fail and naygaon are situated on the north side of Akola near the Akola railway station and can be categorized as urban villages.

It serves as an area providing budget accommodation or cheap living facilities to those visiting or working in the nearby areas.

Unplanned transformation and increase in intensity of users have stressed on site infrastructure to large extent. Old as well as dilapidated structures can be seen here. Open defecation is common in these areas. A large land parcel is occupied by dumping ground.

B. *Kaulkhed and Umarkhed*

Kaulkhed and umerkhed are situated on the east side and can be considered as a part of old expansion. Can be categorised as planned area undergoing rapid transformations.

C. *Shivani/ Shivar*

Shivani and shivar are situated on the south side of Akola city. These areas are formed mainly due to presence of MIDC. Shivani and shivar are surrounded by MIDC, Airport and PKV. Because of this there is no scope for further growth of the area.

D. *Gudhadi and Dabki*

Dabki and gudhadi are the small villages which were included in AMC limits in 2017. These two areas have very less population. Farming is occupation of the majority of people living here. As these areas are not well connected with the city, rate of migration from rural to urban is less as compared to other areas.

VI. COMPARATIVE ANALYSIS







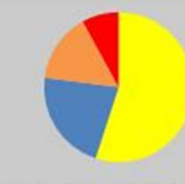
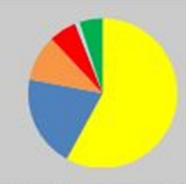
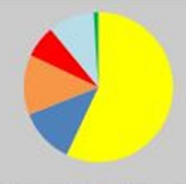

PARAMETERS	NAIGAON/AKOT FAIL	KAULKED	UMERKED	SHIVAR	SHEVANI
Area (in hectares)	415.48	164.05	298.30	310	557.45
Ward number	1,3 and 4	21 and 29	5	6	20
Population	49890	34931	20262	16131	16042
Location	Along the akola daryapur road 	akola washim road 	Along daryapur road 	NH-6 (near PKV) 	Along NH-6 (near MIDC) 
Land use					
Features	Railway station act as a major magnet here. Act as a community space for muslim community during festive season as one of the famous mosque situated in this area. A big land parcel of the area is occupied by dumping ground.	Area is formed due the presence of different workshops like ST workshop. Major part of the area is residential and there is no land available for further development of the area.	Northern side of the area is occupied by PKV. People living in area are engaged in experimental farming in association with PKV. Area is also known for the agricultural exhibitions.	Site is surrounded by PKV and airport. Very few agricultural land is available in this area. The area is divided into two parts, due to NH-6.	Area is majorly occupied by MIDC. Kapshi lake situated in the area act as a tourist point for local people. Due to the occupation in 2 large manmade ponds are formed in the area.

Figure 2 : comparative analysis of areas at urban periphery

Source : Author

After comparative analysis akot fail/naigaon have the second highest area and highest population resulting into highest density is selected for the final proposal.

VII. ABOUT AKOT FAIL

Akot fail and naygoan are situated on the north side of Akola near the Akola railway station. On the akola-akot main road. Site includes two wards of Akola Municipal Corporation which are ward number 1 and 2. It combines two major areas of the city i.e. akot fail and naigaon. Ward number 1 includes naigaon which is again subdivided in new and old village. Ward number 2 consist akot fail. It is situated near railway station and has a dumping ground, cremation ground, burial ground.

A. Evolution of Site



Figure 3 : Evolution Of Akot Fail And Naigaon

Source : Author

VIII. SITE INTRODUCTION



Multi communities live in site. Temples, masjid, and Buddha vihar can be seen in site. The major area of site is occupied by dumping yard, cremation ground, and burial ground. Different markets are present in the site like pottery, vegetable market. Community wise occupation also seen in the site. Communities like bhoipura, gavalipura, malipura are dominant communities here.

Figure 4 : Site Orientation
Source : Author

A. Site Issues

- 1) *Street Markets:* occupation based communities are present in site; they occupy the main Akot -Akola road and major nodes of the site for selling their products.
- 2) *Encroachment under Bridge:* railway over bridge is there and people encroached the space under the bridge for their cattle, building shops as well as houses
- 3) *Dumping Ground:* All the solid waste from the city is dumped in this area. Which is harmful for the health of people living in the area. And this restricts the further growth of the area
- 4) *Natural Water Stream:* A natural water stream is there in site which is now converted into naala. It further connects the Morna River.

IX. INTERVENTIONS

For the development of the area futuristic guideline were proposed. This can be used for the further growth of the city. Space occupied by dumping ground and encroachment under the bridge are used for the public space designing. Designated space is provided for the street markets. Conservation of natural water stream is done.

X. CONCLUSION

In conclusion, the research paper on urban periphery has provide detailed information about the peripheral area of the city, how they are formed and what are the broader level issues faced by them. The study has derived the importance of developing area situated at the urban periphery and how it affects the city if not developed properly. Proper guidelines for the development of urban periphery minimize the chances of peripheral area becoming a slum. So development of urban periphery contributes in overall development of the city.

REFERENCES

- [1] https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3334405
- [2] chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.ijser.net/archive/v10i7/SR21702124836.pdf
- [3] chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.ijser.org/researchpaper/Planning-Strategies-for-the-Development-of-Peri-Urban-Area.pdf
- [4] <https://akola.gov.in/about-district/>
- [5] <https://akola.gov.in/map-of-district/>



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