Perception of Shopkeepers, Residents and Visitors on Mixed Landuse in core area of Pune

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Abstract - Mixed land use typology is referred to the area where different types of land uses exist together. It can include residential, commercial, administrative, industrial etc. Pune is a vastly developing city. There have been great residential and commercial developments in Pune. An advantage of mixed-use development is the convenient walking access to living, work, and shopping. Though there are many advantages to urban mixed-use living, there are many obstacles to mixed-use developments, as well. There must be some problems regarding to the quality of life and may be some health issues because of the mixed land use. At the same time, the convenience of the user of getting their daily requirement in nearby area increases the demand in the urban living. Mixed land use is important and leads towards benefits of urban development in city like Pune. The core area of Pune is very old and historic. It has combination of many old and modern type of building. Some of the old buildings are also mixed used and make large difference in living environment for people. There must have been some pros and some cons for people who live in that development. It is important to understand how user of Pune city found this type of land in beneficial or in non-beneficial way.

Keywords - mixed use typology, mapping, users, land use, survey

INTRODUCTION

Mixed land use has multiple advantages, but the most important advantage is the human interaction and multiple activities together in a single land use. It creates better living environment and useful surrounding. The term 'mixed use' is a mixture of different building typologies together on one site. For example, there can be mixture of retail shops with homes and offices, restaurants with banks and many more. In indian context, having large population and less land, this mix use concept can be the great solution for many problems.

Pune has a core city area rich in heritage, architecture and important in history. The whole core city has very dense housing. It is important to understand their problems, their social and housing demands. The Peth areas in the core of Pune city are highly populated area having commercial shops, banks, parks, and residential properties. Having this large amalgamation of typologies, it is important to study their advantages and disadvantages for achieving more convenient and beneficial society to live in.

This research paper is an attempt to identify the pros and cons of mixed-use developments in Rasta Peth and challenges faced by the users in these areas considering the nature of development in this area. The study focuses on challenges with regards to crowding, walkability, and access to various places for users.

LITERATURE REVIEW

- 'The concept of mixed use is one of the oldest in human history from the ancient towns of Greece, China and India to the present mix of land uses that continue today in major cities of London, Tokyo, Paris & Beijing.'
- The medieval towns in India which were planned based on caste & occupation, also consisted of self- sufficient neighbourhood.
- Mixed use occurs in different patterns. The basic four types are: (1) within districts or neighbourhoods (2) within the street and other public spaces (3) within building or

street blocks (4) within individual buildings.

- In India, vertical mixed-use development in one building is found more prominent. These vertical mixed-use developments are characterized by the 'stacking' of uses.
- In development plan of pune (2007-2017), there is no separate zone for mixed land use. However, mixing of land use is permissible in most of the areas under certain limit of electric power, road width, etc.

There are many studies which are conducted on basis of mixed and use of foreign countries but there is a gap with indian and western typology.

METHODS AND METHODOLOGY

Rasta Peth is a large part of core area. It is one of the oldest areas having large number of old and new buildings. People from Rasta Peth has been living there since long period and they also have seen the development of the Peth. Also, the Peth area has great number of mixed land user and different combinations of land uses like residentials, retail stores, restaurants, grocery stores and banks.

Study of existing land use and carried out for understanding the neighbourhood and its need. The mapping of Rasta Peth includes the details of how much area is use as mix land and what are the combinations of building typology present in that area.

Main objective of the paper is to understand the perspective of the people who belongs to this Peth. For this purpose, three questionnaire is prepared for shopkeepers, residential people, and the visitor of Rasta Peth. This form was filled out by people by taking interviews of each individual. Also, there will be a visual survey of the activities going on in that area.

Surveys were conducted by random sampling method in which the samples will be retail shopkeepers, owners of residential properties, and people who visit Rasta Peth regularly. It is important to understand and identify the problems and benefits they get by living in the Peth area.

RESULTS

This is the brief mapping of Rasta Peth and marked the mixed land use area and purely residential blocks in this location of study area, details of road network, and areas.





Figure 3. Land use map

Rasta Peth is very diverse in terms of land use. Every part is occupied with some kind of store, temporary shops or some residential use. Various shops, very wide range of people and very diverse visitors use this place in various manners. As observed in the map (fig. 3) almost 80% of the total build up area is used as mixed land use in which there are tons of different shops like clothing, restaurant, footwear, hardware, electrical, dry cleaners, clinics, salons, offices, stationary, grocery and many more

Three questionnaires were developed to investigate perception of retailers, residential people and visitors regarding the mixed-use development they are living in. These surveys were designed to obtain user perception on strength and weakness of mixed land use, parking problems, noise issues, etc. The surveys were conducted by going on site and taking interviews of individual. The response format was a 5-point rating scale, from strongly agree to strongly disagree, used to measure respondent perception of the mixed land use development.

Population and sample

The population of this case study is the core area of Pune city and sample consist of randomly selected shopkeepers, residential people, and visitors.

DATA COLLECTION

Data for this study were obtained through the questionnaire survey using schedule. Survey of 34 shopkeepers, 52 residential people and 57 visitors were carried out. Survey form of 30 shopkeepers, 50 residential people and 50 visitors were taken for further analysis.

Retailers responses

Examining the characteristic of 30 shopkeepers, they reported carrying the following in their store: clothing (18%), food (18%), grocery (18%), hardware (11%), tailoring (7%), grocery (7%), electrical (7%), stationary (7%) and bike repairing (7%).

In the next session of survey, participants were asked to rate their level of agreement or disagreement with statements about the mixed-use development and their advantages and disadvantages.

Table 1 - Shopkeepers Perception On Mixed Land Use

statements	strongly	agree	neutral	disagree	strongly
	agree	-9,00			disagree
It is good that you got customers around your store asyour shop is in mix land use community		13		3	
	(46.67%)	(43.3%)		(10%)	
Your store is in a good location in this area.	6	13	_	11	_
	(20%)	(43.3%)		(36.67%)	
Your store would gain more business ifit was in a better location within the area.	3	17	2	8	
	(10%)	(56.66%)	(6.66%)	(26.67%)	
	1	7		15	7
Streets are clean enough for publicuse.	(3.33%)	(23.33%)	-	(50%)	(23.33%)
Having residence around the shop		9		15	6
creates negative impact and resist to development.	-	(30%)	-	(50%)	(20%)
This mixed-use development attracts customers	8	18	1	3	
	(26.7%)	(60%)	(3.33%)	(10%)	-
Most of the customers are localpeople who live in Rasta Peth.	10	14	1	5	
	(33.3%)	(46.67%)	(3.33%)	(16.6%)	-

You have many repeated customers.	14	14	_	2	_
	(46.67%)	(46.67%)		(6.66%)	
You notice noise problems within this mixed-use development.	1	12	2	15	
	(3.33%)	(40%)	(6.66%)	(50%)	-
It is difficult to find your shop to new customer.	5	14	2		9
	(16.7%)	(46.67%)	(6.66%)	-	(30%)
Do vendors block the entrance of the shop.	9	13		7	1
	(30%)	(43.3%)		(23.33%)	(3.33%)
Vendors give bad impression on customer.	8	14	3	4	
	(26.7%)	(46.67%)	(10%)	4	-
Mixing of the stores is a strength ofmixed land use community.	7	14	3	6	
	(23.33%)	(46.67%)	(10%)	(20%)	-
You have to pay high rent for shops inthis area compared to other areas	2	15	2	11	

	(6.66%)	(50%)	(6.66%)	(36.67%)	-
You have to face lot of competition	1	23	1	5	
because of same kind of stores around you.	(3.33%)	(76.7%)	(3.33%)	(16.7%)	-

Table 2 – Residential People's Perception On Mixed Land Use

Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
The shops on the street side make this area busy and chaotic.	14	33	1	2	
	(28%)	(66%)	(2%)	(4%)	-
The shops and the vendors are thereason for uncleanliness in Peth.	14	22	_	14	_
	(28%)	(44%)		(28%)	
The area is unsafe for woman because	6	16	4	24	
of all people who come to visit the shops.	(12%)	(32%)	(8%)	(48%)	-
We face lot of noise problem because of the crowd and traffic.	20	26		4	
	(40%)	(52%)	-	(8%)	-
The shopkeepers and vendors are friendly and helpful.	4	27		18	1
	(8%)	(54%)	-	(36%)	(2%)
Shops many times do not serve local needs.	1	15		32	2
	(2%)	(30%)	-	(64%)	(4%)
Vendors and Semi-permanent shopslike tapri make the streets narrower causing traffic.	19	29		2	
	(38%)	(58%)	-	(4%)	-
It is hard to find your house for the guest because of the shops which cover the entrances of the building.	14	18	1	17	
	(28%)	(36%)	(2%)	(34%)	_

Table 3 - Visitors Perception On Mixed Land Use

Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
There is sufficient parking available inthis area.	1	21	2	18	8
	(2%)	(42%)	(4%)	(36%)	(16%)
There are enough sidewalks connecting the shops and houses.		20	4	21	5
	-	(40%)	(8%)	(42%)	(10%)
The sidewalks and the whole area are kept clean.		13		30	7
	-	(26%)	-	(60%)	(14%)
Vendors make this street narrow and	16	34			
chaotic.	(32%)	(68%)	-	-	-
The stores in this shopping area are easily accessible.	1	21	1	27	
	(2%)	(42%)	(2%)	(54%)	-
Residential area covers the shops and hence hard to find.	4	31	8	7	
	(8%)	(62%)	(16%)	(14%)	-

DISCUSSION

The main objective of this paper is to understand the user perspective in terms of mixed land use development. From the collected data, it is easy to understand how people thinks and what are the problems people can face in this development. Rasta Peth is a planned area of the city in grid iron method. It was developed as per the need of the people who live there. 5-point Likert scale is used for more understanding of user perception. For reviewing the data, I mixed up the responses of agree and strongly agree as 'agree' and disagree and strongly disagree as 'disagree'. Shopkeepers agrees that they have more customers in this mix typology. When asked about the cleanliness of street, 73.33% shopkeepers think that the streets are dirty and unclean while others think that streets are clean enough for use. 70 % people agrees for having positive impact of residential properties around the store while other 30 % disagree on that. 80 % people said that they have more coustomers from local area and 93.4 % people claim to have very repeated coustomers. When asked about noise problems, 56.6 % people said that they don't have much problem with voice and other 43.4 % said to have noise issues and 6.6% people have neutral reaction.

The next survey was aksed to residential people. 72% respondant thinks that shops and the vendors are the main reason for unclean paths. When asked about noise problems, 92% residence face noise problem due to traffic and chaos and 8% did not face this problem. 68% people think that they got all necessary things in the area itself while 32% thinks that they did not get all the necessary things this area. When asked about vendors and tapris, 96 % people agrees that they cause lot of traffic and chaos in the area and only 4% disagree on this.

The last survey was asked to the random people who were present at the time of visit for some kind of work in Rasta Peth. 46% people came to this area by using 2-wheeler, out of which 51.5% people parked their vehicles on street side parking and 48.5 parked in private parking. 22% people came here by car,

20% visited by walk and others by bus. 52% visitors think that there is insufficient parking in this area and 44% thinks that the parking is sufficient. 74% people thinks that there is no cleanliness in the area and 26% thinks that area is clean.

CONCLUSION

This study examines the perspective of the people who live in Rasta Peth. There are various problems like parking, noise issues, uncleanliness, narrow streets, and chaotic roads. The descriptive study indicated that user wants shops in this area for convenient shopping. There is different perspective of people on one problem. Noise pollution is a big problem and inconvenience for residential people but at the same time shopkeepers don't mind having noise around them. The parking is one the important issue to solve in such mixed land use. People come and visit this place very regularly by 2-wheeler, so they need more parking for the vehicles. The vendors and semipermanent shops are a main reason for chaos. Also, the cleanliness is one of the big problems in Rasta Peth.

The buildings which are converted from residential into commercial/institutional purpose cause more problems as they are not designed for such uses. These buildings cause more problems like parking, encroachment, cleanliness and creates obnoxious environment. It is observed that, property owners get more benefit by such kind of transformation in buildings but residents face problems due to frequent visitors, parking, noise, etc. So, there are lot of problems now, but they can be resolved.

The research concludes that, to acquire all the benefits due to mixed land use, the area should be well designed and well organised in terms of building typology, kind of use, infrastructure and user need.

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