A Review of Concept of Peri-urban Area & Its Identification

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Abstract: City development has been a continuous and challenging activity for government. There are various agencies like Municipal Corporations, Town and Country Planning Department; Development Authorities are involved in city planning and development. The biggest challenge is of managing the transforming area into city area as it produces capacities and inbuilt problems for long. The current review focus on finding definition of Peri-urban area and defining the Peri-urban area in reference to Indian situations. It further identifies the parameters so as to identify the Peri urban areas. The secondary sources of data are surveyed so as to find the desired results.

Key Words: Peri-urban, infrastructure, planning

Introduction: Last few decades in particular decades after 1993 i.e. the after the implementation of policy of economic liberalization, globalization and privatization there has been tremendous growth of urban areas in India. The cities have been expanded geographically and functionally to new dimensions. This phenomenon has created situation of rapid transformation of rural area to urban areas. The transformation has been gradual. This means the area near to city which was converted to city has functions well as characteristics of city and rural area both. This area is called as Peri-urban area.

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There have been various authors tried to define Periurban area. As there is gradual conversion of rural area to urban there are fringes which do not represent urban planning standards.

Wherein defined the rural urban fringe as "The area of transition between well recognized urban land uses and the area devoted to agriculture". This definition fails to provide criteria for delimitation of the rural urban fringes/Peri-urban around cities.

Blizzard and Anderson, defines Peri-urban areas as "the rural urban fringes is that area of mixed urban and rural land uses between the points where full city services cease to be available and the point where agricultural land use predominates". This definition too has its limitation, as within the city boundary itself availability of city services is neither equal in terms of quantity and quality nor maintained to desired standards. This definition does not cater for human factors.

The cities are surrounded by villages which do have specific boundaries called revenue boundaries. The villages near to city have urban characteristics as the distance from city increases the urban characteristics reduces. The transportation and communication facility from city center defines the distance up to which urban characteristics will survive.

In accordance with the simplest definition "the rural urban fringe or Peri-urban is an area of mixed rural and urban populations and land uses, which begins at the point where agricultural land uses appear and

extends up to the point where the urban land uses disappear or the dependency on the city for employment becomes insignificant".

This simple definition encompasses several important features. First is agricultural land uses the use as agriculture may be wet or dry. The dry agricultural land may be gradually used for non-agricultural activity. Therefore the degree of agricultural activity in terms of land utilization and the produce will indicate whether a particular settlement is either urban or rural or Peri-urban.

In general in Peri-urban areas crops like vegetable, flower gardens and dairies producing milk for the city indicate strong linkages with the city inducing the growth of activities, which are urban in character. The employment structure in the settlement is a major indicator of the nature of the settlement either urban or rural. If a few adult, men and women commute to the city for work purposes everyday then it indicates the urban character.

The important feature of the Indian rural urban fringe or Peri-urban is the presence of both rural and urban people in the revenue villages around the city. However it can be identified that the literacy rate and the occupational characteristics of the village population are different from urban population. The new residential colonies arising out of establishment of an activity namely institutions, education centers etc may be located at the periphery of the villages, mostly having very little interaction with the village excepting availing people for domestic help, farming etc.

As per Census of India definition if more than 75 percent of the men work force is engaged in non-agricultural activity in a village having more than 5000 population then the settlement is said to be urban in character.

At the same time, villages though falling within metropolitan region may not have any distinct urban land use as well as the influence of city in farming and animal husbandry. Daily commuting to the city for work may not be present.

Structure Plan, which is a policy document on Urban Development for Chennai Metropolitan Area identifies three distinct areas within the Chennai Metropolitan area namely (i) Rural areas (ii) Rural Fringe and (iii) Urban Fringe based on services and utilities. Similar definitions have also been adopted by several Master plans and Development plans.

The rural area is with very low demands for services and utilities, the urban fringe having densely urbanized area is with full urban services and the rural fringe is having partial coverage of services and utilities. On cursory observation one may conclude that the 'rural fringe' fits in to the definition of "Periurban area".

The urban growth pattern, the Metropolitan management and the common denominators prevailing in the Super Metros of India have indicated that 'Peri-urban' conditions prevail within the administrative boundary of a Metropolitan Development agency and it is designated as 'rural fringe'. Irrespective of definitions, a settlement having urban character mixed with rural functions is common in the Metropolitan regions of India.

The conclusions of the study Is that area nearby city having functions of city and rural area both. Geographic economic and human factors of rural and urban areas both are acceptable characteristics of Peri-urban areas.

The major features of Peri-urban areas are as below

- A process of increased differentiation or polarization between capitalist and subsistence producers is often referred in Peri-urban areas.
- Those who cannot take advantage of the opportunities presented by urban markets include the already land poor, those who have insufficient capital to purchase land and/or intensify production, and those who are excluded from credit and extension systems lives in Peri-urban areas.
- 3. Urban pressures on common pool resources such as forests, rivers and wetlands, may

lead to environmental degradation and change of land use.

- Residents in villages within the zone of Peri-urban influence are presented with alternative economic opportunities for self employment.
- There is likely to be increasing competition for resources (such as water, building materials, and energy) between local communities within the Peri-urban area and the city.
- 6. The poor are more likely to be casual workers, and may move from working in agricultural work to more urban-based work, such as construction, road building, selling fruit and vegetables.
- 7. Women may have greater opportunities for undertaking paid agricultural work, as more men take up urban employment. People respond differently to opportunities and threats posed by urbanization. This could result in increasing polarization between income groups.
- There is considerable difference in social and cultural aspects of urban and Peri-urban areas.

The Indicators for Identification of Periurban Settlements

As above discussions represents there are various ways and issues in defining Peri-urban area. The biggest challenges appear before the planning agencies to define and identify the Peri-urban area properly. Further the discussion above reveals that the Peri-urban or fringe area shall be seen on the basis of extensive analysis of socio-economic, agricultural and infrastructure issues. The can be done by assessing Socioeconomic indicators, agriculture indicators and infrastructure indicators. If the indicators assessed they shall result in identification of city area, Peri-urban area and village area. These indicators are as below

Socio-economic indicators

Population: The population is an important indicator, however for the purpose of identifying Peri urban area, the definition of census of India that > 5000 is urban and < 5000 is rural may not be suitable as the population in Peri urban areas show great variation

Population Density: Population density would be more realistic as the density is an indicator of the demand for development or settlement of people. To be more realistic this may have to be supported by the extend of land and land use disposition prevailing in the settlements.

Literacy: As per the definition of census of India, if a person knows reading and writing he / she is called literate. While literacy rate may be significant from socio-cultural point of view, it may not indicate its relevance to economic status and activity. The higher the level of education, the better the opportunity of funding gainful employment. Therefore instead of literacy level, education level again with a further classification on the type of education can lead to a better identification of Peri- urban area.

Workforce: Workforce represents the share of population in the working age group. In Indian cities where there is significant unemployment, all the people in the age group getting employment is not possible. Therefore, even if 50 percent of the workforce is employed it should represent an urban and or a Peri urban status. In the present day context, female in the working age group engaged in a job is significant in urban area. In rural area it is insignificant excepting in agriculture. But in Peri urban area, female work force is engaged in several of the factories and industries which have the potential of attracting female workforce. Therefore, workforce share is considered to be a relevant indicator. The share of dependents is an indication of the level of employment or the unemployment. It is an indicator which is directly related to the economic well-being.

Non agricultural workers: The share of non agricultural workforce is a significant indicator as any settlement having more than 75% non agricultural workforce can be classified as urban or Peri urban. The share of agricultural workforce is significant in rural areas. Therefore, the percentage share of agricultural work force as an indicator can help identifying a Peri urban settlement.

Non agricultural activities is classified as. manufacturing and household industry and other services. Peri urban areas have always provided the opportunity to establish consumer oriented industries. Therefore wherever, the share of people employed in manufacturing industry is more it could reveal urban or Peri urban condition. Therefore, the agricultural workforce and the share manufacturing industry could be reasonable indicators.

Conclusion

It can therefore be concluded that indicators namely, population density, education level, workforce, non agricultural workers, employment in manufacturing sector could be selected for identifying Peri urban area or the Peri urban areas should have these indicators and the values in position.

Agricultural indicators

Agricultural land use: The share of agricultural land use in a settlement is a significant indicator of Peri urban / rural area. But the area under actual cultivation would be a more realistic indicator. Since agricultural activity in an urban area is almost nonexistent, it would be visible in Peri urban area and predominant in rural area. Therefore, the share of land under agricultural use is considered as an indicator.

Agricultural workforce: This is the most important indicator of Peri urban/rural status.

Type of crops: Agricultural activity is said to be intense in Peri urban areas. Often local bodies have records of crops grown and the area under cultivation for every year. Therefore, having agricultural produce as an indicator is not only possible but reasonable too.

Cottage and small scale industries: Presence of cottage and small scale industries is common in settlements away from the city and food industries can easily be identified as they are mostly found in Peri urban area as they are continued even after the rural area is gradually converted to urban areas.

Conclusion

Two agricultural indicators are found reasonable in the selection of Peri-urban settlements. The rest of the indicators are found less significant in view of the fact that bulk of the supply come from far off rural areas and very less from Peri-urban areas.

Infrastructure indicators

There are nine indicators test that identify Peri urban settlements. The indicators which have significant implication are those which establish the distance of the settlement from the city center and the nearness to major transport corridors particularly rail corridors. The other indicators relating to education facility, health facility, shopping facility water supply, latrines and septic tanks and drainage facilities are all available in all type of settlements. However, the level and standard of the facility differs depending upon the type of settlement and the local body.

Observations made during interaction with the local people did not indicate that availability of the service facilities is treated as an important criterion for selection of settlement for residence by the new settlers. Instead majority expressed that transport accessibility as the most important fact and avail facilities at a nearby major settlement (urban areas).

The value of above parameters on absolute measurement if more than 60% and above then the areas is city area. If values are in the range of 25% to 60% then the area is Peri-urban and below that it is Village area. This type of identification will provide realistic picture of city function and development planning will be far more realistic. This will resolve the issues of proper planning and effective issues for Peri-urban areas.

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