Pathology of Urban-Rural Interfaces Role in Urban Growth Management

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1 ABSTRACT

Rapid urban growth toward surrounding areas and lack of a positive interaction (between cities and their peripheries), causes problems and issues that are matters of concern for the authorities. The basic assumption that future cities will be ready to extend indefinitely without bringing damage to the environment, in the name of urban growth management has been formed. To manage and prevent the negative effects of undesirable aspects of urban spontaneous growth, urban authorities need mighty arms of an integrated and comprehensive thought.

This research with the aim of examining urban growth management in cities with high growth rate of urbanization, explain the urban growth management with particular emphasis on the kind of rurban (often places which are the result of city and surrounding spontaneous growth and sometimes watched such as urban areas problems) that is considered in Iran. To look for the empty place of this type of urban management in Iranian cities, Nazarabad rurban in Bandar Abbas City has been selected. The study has been done in two levels with four factors extracted from urban growth management theories. The research results and findings indicate wide gaps caused by the lack of this type of management views in new urban areas interface which turn opportunities of rurban areas to the threats by time.

2 INTRODUCTION

Urban context is a collection of communication sites, such as interactions location field, and beyond the property division. Influenced by the surrounding and their environment and affecting and affected over and around of themselves. These areas are more dynamic to static, then their definition not limited to physical identity but their definition includes identifying of overlapping and the various interactions. This be a really When the rurban will be formed with a range of interactions with urban and their periphery in the process of urban growth.

3 URBAN GROWTH

Urban growth is a Consequences of congregate of physical and society process in space and time will be extended and created different areas. (Liu,R. Phinn, 2003) this process of growth can be occur in tow shape of vertical and horizontal tape. this research focus on Horizontal urban growth that show itself with increasing the city limits and with low density development, sparse, relief, and fled of the urban scattered expansion toward the outside areas and suburban. (yazdipapoli : 61·1382 ·27) this characteristic cause the negative effects as increased use of land and natural resources and endangered the landscape value that are beyond the urban boundaries and crystallize phenomenon of air pollution by expanding the use of cars. (Arbury,2005,p32 RAmachandraiah &Prasad, 2004,p7) Thus Urban Growth Management attract the attention of urban planner because This pattern of land development occupied and require too much space and don’t suitable for cities and environments.

3.1 Urban Growth Management

Growth management during the 1960 years following the illness of the expansion of cities in America and the unbalanced development of urban areas, outside of the access to municipal services boundaries and to awareness of the wide spread of costs and its damaging and negative effects on social life in this country was formed. (Cosner, 2001& Zovanyi,2004,p35) And its main content is based on this simple but important of idea that developing process should be in parallel with providing the necessary infrastructure and to go with consider external communication and various measures.(mahdizadeh,1382,363) until urban development will be mean beyond the urban growth. In fact, urban growth management, is a system to achieve the best terms of factors such as density, access, land use and development time, and insists to the parallel of logical and rational growth with now and prospects conditions of development in the future. (Ohio land use and
Urban development) Urban growth management uses its wide dimension to control the dispersed urban and protect rural areas and valuable natural lands by determining the type, speed, quality, and effects of growth. (Puget Sound Regional Council, 2008, p1) Thus the purpose of managing urban growth is to reach a balance between growth rate and ability to provide various facilities required by residents. (Pollock, 2008, p4-5)

### 3.2 Urban Growth Management: The Factors and Tools

Urban growth management relies on understanding the general urban growth agents in six categories to identify the factors that cause urban growth, including: economics, population, social-Economical characteristics of Community, land use, urban form, and urban transport networks characteristics. (Fulton, 2002) Thus the mobility of each of the sectors, especially in keeping pace with other sectors, is achieved by shaping the competitive arena. Most of the criteria of profitability (cost of land) that the jumble of revenues with the economy and locations are in compliance, cause Horizontal expansion of the city in different directions.

![Communication Urban Growth Actors Diagram](source)

**Fig. 1: Communication urban growth actors diagram. Source: Authors**

### 3.3 Sectors Intervention of Urban Growth Management

To identify sectors of intervention, according to the purpose of this project, pay attention to two areas: a) Key elements of urban development patterns and b) areas of intervention of urban growth management actions, and then extract the sectors of intervention in urban growth management with comparison of the both.

A) Srvry and Katlmn (1996) introduced density, diversity, and design as three key elements of urban development patterns in a study on "affecting Factors the amount of miles traveled by car". Density associated with the number of people, businesses, or residential units in a particular area. Diversity attention to land use in a region and refers to balance extent and harmony implies of design and visual features along the street network in a particular area and based on the structural parallel of visual pleasure for pedestrian and motorist.

B) Action results of urban growth management, mainly in three areas will presents. That Included:

- The urban form, that affected from density and distance of the space in development,
- property and land values, that land use policies in these areas are important. And
- cost of urban infrastructure and services. (Carruthers, 2002, p1964)

Match these two fields (A and B) suggests that key elements of urban development patterns are factors that shape areas of urban growth management measures. And growth management implemented their key elements of development in a lower level of your whole self with three functional arms such as:

- Infill Development
- Density Transfer Credit to other areas
land Planning for how to use
Shape to strong boundaries
Reduce the visual tear in the city

This arms that support functions of urban growth management, including: visual management of the city, urban land management (land use) and infrastructure and urban service areas management.

4 URBAN GROWTH (URBAN SPRAWL) AND FORMATION RURBANS

Urban sprawl by increasing the urban bonders added areas with different social, cultural and visual features to the city. Sometimes these areas are the villages, with the intermediate social and economical characteristic. this region that have a mixed urban-rural horizons, are called rurban. Latin equivalent of the term (rurban) suggests that combination and integration of urban and rural social structures in marginal urban centers.(saiedy,1385.125) In fact, the rurbans are junction of interlaced urban, rural and natural systems, that will shape with the expansion of human settlements (urban or rural) in process of Urban sprawl.(daneshpur, 1385, ) and depending on the location and status, tow overall kind of objectivity be shaped:

- internal rurbans: areas that over the time and with spread of the city boundaries, are located within the city and functional such as an urban cores, but have a mixed morphology of urban- rural visual. Special trait of these areas are the open spaces that exist between the made regions.
- rurbans in city boundaries :that situate in the edges or suburbs of the urban areas, and more like a village but have many functions of the city in their place. rural visual and urban functional are these special trait areas. (Antrop,2000,p24)

5 JOINING SPOTS OF RURBANS WITH URBAN GROWTH MANAGEMENT

To scrutiny Joining Spots of Rurbans with Urban growth Management, Identification

Of Rurbans communication with each type of urban development management arms is important. For this attention to components relevance of the Rurbans threats and opportunities upon urban visual, form, land use and services in urban growth process.

<table>
<thead>
<tr>
<th>Negative effects</th>
<th>Associated components</th>
<th>Positive effects</th>
<th>Associated components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rapid loss of environment and natural space reduce</td>
<td>Environment</td>
<td>Opportunities for various social and</td>
<td>Socio-economic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>economical interaction</td>
<td></td>
</tr>
<tr>
<td>reduce the agriculture and horticulture activities in</td>
<td>Environment -</td>
<td>New resources and opportunities for</td>
<td>Earth -</td>
</tr>
<tr>
<td>parallel formation of</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Based on the above table, the relationship between urban and rurban (rurban as part of a larger area, urban) due to four factors: social, economic, land and environment, that divided the relationship between the urban and rurban to three general categories:

- the relationship between location of urban and rurban and their organizations,
- the relationships between activities and their activists
- the relationship due to assimilation or inconsistencies of place, activists and residents (Rurban project,2005)

But disarray in these relations due to the obvious distinctions in one of the areas that include, land use, residents and their life style or visual aspects in compatibility or incompatibility with urban. In this areas (rurban) land use have rapid changes and sometimes have multi or hidden user that will not be the exact expression.( Antrop,2000:) In the second case (residents and their life style), rurbans have different communities of farmers, local residents that active in the service or industry sector in urban or urban migrants.( Claval, 2005) and about visual aspects can see that existing differences in two previous fields (land use, residents) to cause the different characteristics in tissue and subsequent in infrastructure, services and materials, that cause the attachment or break to urban.

### 6 CASE STUDY

Nazarabad is a neighborhood in the primitive fabric of Bandar Abbas. This place was a Oasis that in process of urban growth (Bandar Abbas growth) formation the rurban in the city. In this research nazarabad rurban studied in two levels with four factors that’s include population, social, economic, land use and urban morphology or urban form characteristics which measure in tow fields of urban economic and place.

#### 6.1 Bandar Abbas history of growth and location of Nazarabad rurban in this

Svrv was an Initial small core of Bandar Abbas, then Dutch’s built second physical expanded of this city with especial textures and architecture. And third expanded of the Bandar Abbas contemporaneous with the rapid growth of urban populations in every Iranian cities. This rapid growth formation sprawl growth in Bandar Abbas that cause the nominal urbanization on surrounding areas. After this time fourth stage of city growth occur toward the North and East. In between Nazarabad situated in terms of location in the beginning
of the third ring of urbanization thus nazarabad was the first target area that captive with the rapid urbanization of Bandar Abbas.

Economic interactions in Bandar Abbas formed the mixed bazaars in two primary urban growth area in city, which consequently location Nazarabad situated on the border of this area, that caused the Nazarabad edges occupied by the urban economy and inside this neighborhood being replaced of residential areas with the storage of goods.

![Fig. 3: Bandar abbas urban growth stages and locations of the Nazarabad neighborhood in this process. Source: Empowerment and improvement projects in Bandar Abbas poor neighborhoods, 1382](image)

6.2 **Social and economic characteristics**

In nazarabad Neighborhood settled about 1600 people. a greater share of the population belong to the second age group (15-64) years. Demographic characteristics of this Neighborhood show that absolute majority of are native residents. But in the range of economic, business mix and in this is as follows: 82.88% services, 8.70% industrial and 8.42% fishing and farming.

6.3 **Features of nazarabad morphology in Bandar abbas**

The entries in the two areas considered: height parades and anatomy of mass and space in overall the nazarabad neighborhood. The height changed show variation in duration of ages. In this Neighborhood, according to surveys conducted, 98% building have a floor, 1.02% two and 0.31% have three floors and more. The following images show a low level within the Neighborhood and evident difference height at the edges.

![Fig. 4: Height characteristic in inner and edges of neighbourhood. Source: authors](image)

The images and the surveys expressive that height vexation in nazarabad neighborhood has a monotonous process which have a apparent contradiction with the height trend in their edges. But Study of anatomy of mass and space in neighborhood looking for life style and percentage of effects of residents from urban economical and social condition. The surveys expressive that the lifestyle is a mixture of rural (Oasis) and urban conditions as the residents that superficial absorbed in the urban economy, so are not affected from. As a result of trying to use environment facilities to secure the needs of a part of living with kept domestic
animals. Thus this particular social and economical characteristics formation its own physical objectivity that is a response of the internal needs in accordance to external forces.

![Sample of the Anatomy of Mass and Space](image1)

![Space for Animals Residential Area](image2)

Fig. 5: anatomy of mass and space in neighborhood and how to use the available space. Source: authors

### 6.4 Features of Land use

Land use was scrutinized in this area to understand the behavior of existing functions and activities in response to residents needs.

<table>
<thead>
<tr>
<th>Land use</th>
<th>Percentage of total area</th>
</tr>
</thead>
<tbody>
<tr>
<td>educational</td>
<td>0.53</td>
</tr>
<tr>
<td>residential</td>
<td>55.78</td>
</tr>
<tr>
<td>commercial</td>
<td>3.03</td>
</tr>
<tr>
<td>industrial</td>
<td>2.45</td>
</tr>
<tr>
<td>green space</td>
<td>1.06</td>
</tr>
<tr>
<td>arid</td>
<td>3.72</td>
</tr>
<tr>
<td>Passages</td>
<td>33.43</td>
</tr>
<tr>
<td>entirety</td>
<td>100</td>
</tr>
</tbody>
</table>

![Fig. 6: map of land use nazarabad neighborhoods. Table 2 table of percentage each land use in nazarabad neighborhoods. Source: authors](image3)

Based on information in the land use table, maps and observations the whole of this neighborhood belonging to residential. But in the neighborhood edges each parcel of land depending on the conditions used in any kind of non-residential land use which majority went too commercial and industrial that has a large scale with urban responding.

### 6.5 Analysis the Nazarabad as a neighborhood

The study on different aspects of Nazarabad neighborhood expressive that collection of factors such as single-family development, the presence of urban scale commercial - industrial land use with a variety of retail, beside of the apartments and tall structures in the edges, moreover the location of the components such as school and playground along side of the passages, formed neighborhood which have major difference with a conventional neighborhood. This difference isn’t in how to use of land rather is in how to definition of neighborhood center and scale of land use. Now the western border of nazarabad neighborhood shows itself as a center of neighborhood. Because has a most frequent interaction. Indeed the reconstruction on nazarabad couldn’t renovation the existing pattern of land division and haven’t a significant effect an reshaping of this. thus follow the same system trying to provide the services and needs of residents. But why create a upside down neighborhood in this environment? The answer of this disturbance can find in the ownership, their culture and history of place development.
In fact after the Bandar abbas sprawl growth and junctures of nazarakabad to them, formed the services commitment to this area that showed themselves with introduction of infrastructure services and same structure such as school and playground, but the existing trends in nazarakabad neighborhood caused to that shaped at the edges of neighborhood. Thus created both inner (nazarakabad) and outer (Bandar abbas) areas with contradictions and conflicts. Therefore nazarakabad couldn’t shaped the authentic communication with Bandar abbas and has been liked an island in the urban.

7 RESEARCH FINDINGS
The review of the communication between nazarakabad and Bandar abbas suggest that their relationship is due to four factors and fundamental force: social, economical, land and urban texture and force. This process started by surrender of Initial small core of urban to the urban economy and supplanted of its residents to the surrounding. this movement towards the surrounding and need a similar place in viewpoint of demographic, cultural, and geographical location (proximity to urban areas) and the simultaneous force of power of social forces that prevent the incorporation of two classes of native and newcomer to the city, causing Was outcasts of the city, choose the near oasis to urban areas for life.

So the Initial small core residents that have urbanization base and different economy from oasis settled in this. As result, gradually community formed that be urban with trends of rural. New residents to the Oasis (nazarakabad), accepted its economy consequently their economic-place conditions and instead of this, oasis dwellers changed and adapted the anatomy of newcomers house and physical structure and were used. This relationship cause the mutation in the Oasis to neighborhood in urban which have physical condition different from the shed but confirming with functions to the oasis settlement was needed. After following the physical conditions of Oasis gradual reform of the neighborhood fabric but nazarakabad community after the mutation was mixture of oasis dwellers with the civic physical and economics and urbanite with rural tendency and it should be noted that this dichotomy is a consequences of disability coordinator tools and arms of urban growth management. Thus inattention of urban management to requirements of residents and place cause to formation the contradictions and tensions. Until in now condition two areas stand in contrast of them and hidden the explicit incoherencies behind of neighborhood edges.

8 CONCLUSION
Overall can explained that arms of urban growth management in Iranian cities are not as structured and isn’t road map for guides the dimensions of urban growth.

Which means unplanted to how changes in land use, visual aspects, and about having civil service in these areas in assimilation or heterogeneity of city caused the created the islands within the city with the social conflicts in back of the physical confliction. that exist urban growth management could with considering and attention to same factors such as population, method and place of their settlement, economy and trade in both filed of spatial and non spatial, the city boundaries, proportions of infrastructure, zoning principles, public surveillance and …that cause the achieve to tools for intervention in urban sprawl growth to changes this process toward the urban development process. Then rurbans presented to City collection of opportunities that have perspective of qualities of rural life with a mixture of urban functions.

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