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# Rural-urban housing influencing changes in the physical-spaces of urban environment: A case of Hamidia City

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Rural settlements as geographical landscape are considered as emerging through the interaction between human and environment. In recent years, the process is influenced by factors, and the changes in the physical-space texture are influenced by internal and external forces, developing problems and inadequacies of residents' future living condition in rural settlements. In this regard, cities in geographical areas are excellent centers that have extensive effects on the process of changes in rural space through propagation patterns of habitat and livelihood practices. Amidst these, urban-village housing is formed as a half-way dwelling for optimal use by residents for such positions. Despite the strategies in villages, it requires changes in form, physiognomy and is unaffected by the transformation and imitation of urban environment. In this article, the author uses a practical approach and library and field information to analyze the position of urban-village housing as a ring connection between the centers of low rural population and high urban population. In the approach, the resulting changes are caused by time and space process in rural areas, followed by urban lifestyle. The case study selected as an urban village is the City of Hamidia in Yazd.

**Key words:** Rural, urban villages, rural housing, rural-urban relation, physical-space changes, Hamidia.

## INTRODUCTION

In the recent decades, urban-village society as a country's settlement has hierarchy in terms of the changes caused by socio-economic policies and public and private sectors; additionally the creation of complex and close relation with urban society exposes it to many changes in the physical-space arena, and the dimension of these changes in spatial planning is recognized. Therefore, appropriate model is provided for the development of these areas and good living environment for the residents (Figures 1-3).

The physical-form texture of urban-village through the manifestation of culture of residents over time provides new requirements including the changes in structure and

function of the society. If time and space condition of that society fails, it would cause social welfare and regional under-development, resulting in the migration of people (Taleb and Saeedi, 1996). Following this development, the issue of housing and physical space formation, which is important part of construction element in each urban-village, is not immune to these changes and does not lose its initial performance as a shelter. The work place of residents must be involved in the changes to achieve optimal function and to provide a safe environment for the residents. Thus, spatial development in urban-villages, resulting problems in residents' living and livelihood along with complex urban-village relationship (day to day

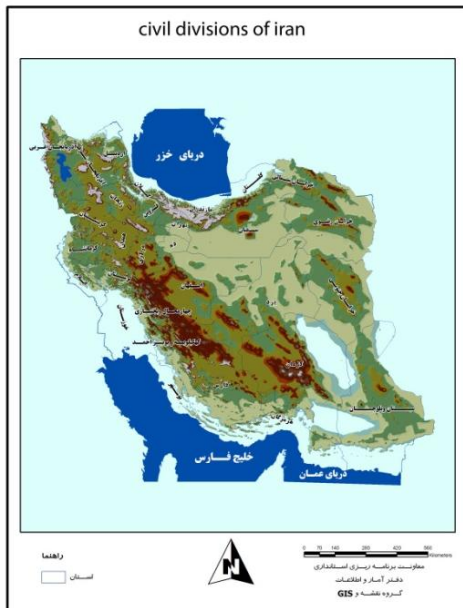


Figure 1. Subdivision map of Iran.

dependence of rural areas on urban areas), the influence of urban environments and imitation of their customs and lifestyle to achieve desired living texture of the space-form of the rural areas have changed severely. Therefore, there is a need to research the urban-village housing along with other emerging components of urban and rural settlement fabric.

John Friedman, the founder of rural-urban planning, has eliminated the collision between rural-urban areas. Rural-urban planning is based on the provision of basic need in spatial development. This policy coincides with the status of rural society and high population. One of the main approaches to urban-village development is to provide basic needs as the first goal of development (Ziari, 2004).

In this study, the researcher investigates the spatial – temporal changes in the form of urban-village areas. The changes resulting from the influence of this process through urban environment are due to special mechanisms of urban-village relation. The analytical-descriptive approach relies on library and field work for analyzing the factors affecting changes, such as urban-village relation and John Friedman's rural-urban theory (Ziari, 2004).

### Theoretical background

In this section, we will define the sustainable development and the concept of urban-village area through various perspectives so as to clearly express and analyze the current situation of urban-village places.

The most common definition of sustainability is defined by the World Environment Commission Development (WECD). WECD defines sustainable development as the development of the needs of the current generation without damaging the ability of the future generation to meet their own needs. Considering sustainable development is through the objectives and policies such as sustainability of land exploitation, equal distribution of activities, maintaining land manufacturing capabilities, dispersion and organizing policies of population settlement and considering geographical foundation (Soror, 2005).

The key principle that expresses the foundation approaches of urban village development is the urban-village areas connection to regional communication network through improved communication channels between urban villages and large towns. This program leads to independent bottom-up development. In fact, urban-village areas have plenty of agricultural economics and self-empowerment; hence urban villages can be called agricultural cities (Ziari, 2004).

With regard to the process of urban-village existence, some people believe that rural town is rural settlement, caused by its concentration and population density, which is a criterion for being a city; yet majority of the population are engaged in agricultural activities. This type of urban-village areas is usually self-sufficient (Shokoi and Musa Kazemi, 2005).

In this study, with respect to its definition, concept, characteristic and geographical condition, urban-village areas are considered as small cities with high population and rural areas based on geographical dispersion and center of gravity due to population acceptance; and maintaining the population's migration from rural to urban areas is sustainable for planning towards strengthening and promoting of service.

### METHODOLOGY

The study intends to address common issues and generalize their results, with emphasis on spatial policies of settlements. This approach is considered because in engineering program of the territory of human settlements, either rural or urban areas are seen as separate population center, that is, to view the mere prevalent point from any viewpoint in space. This single-oriented view is easily spotted even within rural and urban centers. This method teaches us that programs and engineering activities without relying on scientific foundation such as theories and thinking cannot help in achieving the improved goals and development. Therefore, the use of relevant principles of spatial planning can be an effective way to identify the effective components in space. The results can be useful in development planning of rural areas and cities.

### Physical-space changes in rural environment

Life in rural areas as an important role in historical-civilization process was the first inhabitants of social



settlement is that it is dynamic and occurs in space and over time with the help of transformation, shape changes and displacement. This indicates that it involves migration of population, spreading and propagation of culture, flow of goods, energy, information and capital (Delfooz, 1991). Thus, a natural base of settlement and changes in it are considered as buildings, streets, facilities and constructing the needs of residents of the place depending on the requirement for occupying the space (Bahraini, 1991). Therefore, this collection of space-location as an inter connected system composed of elements linked together, shaped by the interaction of forces and environmental factors has structure and specified functions (Saeedi, 2000). This has occurred throughout development and events (in the history of every country) which are affected by forces, internal and external procedures dominating the rural areas; it involves major changes in texture, their spatial forms and being able to survive. Their development needs coordination with the developments in other social housing areas and upgrading the environmental living conditions of their settlement with technology, socio-economic conditions and changed environment.

This work aims to clarify the issue of living process of rural settlements as an example of transformation cycle in settlement environment. Thus, with the small population group of human settlement whose livelihood is based on the basic approaches (family features, spatial relation and common social characteristics) to benefit from high security, production of water and monitoring of cultivated crops (Mahdavi, 1998), with division of labor for better use of surrounding environment, rural area has emerged with the changes in the living behavior (from initial form to crop cultivation along with husbandry). With regard to the passage of time and development of economy investment, socio-political changes in the territories, especially in the recent half century, complex human relations and settlements were exposed to break down and changes in cultural, social, economic and form dimensions (Foroozaniya et al., 2007). Therefore, it is important to study this development because the government is trying to develop a change in their own transformation. It is clear that after moving the population towards the urban-village centers, these changes in all spatial aspect will lead to other changes. In this respect, new settlements are formed and in many cases it is emerging since there is no definition in the socio-economic literature of the country.

### **City and changes in physical-space in rural-urban areas**

In spatial system, areas are set of cities, towns, village-town and village with shaping space and different types of settlement areas, different parts of the region; their

connections and relationships are complementary. A trade-off relation exists between geographic region and adjacent areas. The communication between regional centers and the influence of settlements are strengthening factors between areas; they affect the transformation and changes process of life and development in the structural-functional of each area.

Towns and villages are represented as part of a system in specific geographical area; there are different links and interactions between them such as traffic flow of people, goods and capital, and these flow with two features of influences; the effects are guided by the urban-village residence trends (Sharieyh, 1994). The importance of urban space for the surrounding environment and region is a unique hub for development, in areas close to towns seeking to improve the relation and connection of urban village area and expansion of urban elements in rural areas, which is an emerging phenomenon known as peri-urban residential growth or peri-rural (Bastiyeh et al., 1998). Here, the philosophy of the presence of urban village areas can be scrutinized.

In Iran, less urban influence exists in the rural area with the constitutional revolution and influence of western culture. The establishment of organization and government structures intensified by severe territory acceptance has reached its peak with the transformation of the Islamic Revolution. Rural society with communication development tools and increase influx of villagers to the city were forced to comply with the culture of the city and to get acquainted with the urban life style (Taleb and Mosa, 2005). Henri Lefebver states that 'geographical spatial method and urban life in villages based on the factors governing the relation between urban-village areas cause disruption in the traditional rural societies and their old lifestyle' (Tavassoli, 2004).

With increased village and town relation, followed by the expansion of communication networks, development of radio and television coverage, introduction of monetary relation in rural community, educational institution development especially land reform and eliminating owner political power from the village cause the Iranian rural society to be influenced by the urban area and to provide the rural areas with the changes and transformation process. This makes the rural communities to quickly integrate themselves within the entire community (Taleb and Mosa, 2005). The effect of changes in different sectors including social, economic and cultural, in urban-village areas has given a new form that over time new settlements will be formed as urban-village areas.

In general, forms influencing cities play a role in the physical-space changes of urban-village areas which can be expressed in two ways.

First, the cities expand in terms of their beautiful landscape and sightseeing (restaurants, parks, cinema, amphitheatre, luxury market, beautiful buildings, magnificent educational-health centers and most important is



**Figure 5.** Residential house in the urban-village of Hamidia.

the advertisement of the capitalist world about cities being comfortable to live in, full income employment, world facilities and living facilities); the urban-village residents get familiar with luxury facilities while relating and communicating with the city. This communication would cause changes in the mind and thought of urban-villagers and to use these new facilities to force themselves to adjust to their residential environment with these development. Change in thought, traditions, and culture of urban village areas take up patterns from the urban lifestyle and create changes in space and physical form of urban-village, harmonizing with change in time. The first is the transition stage from a simple rural culture and the second is the tolerance of culture in the urban maze.

Other issues are cities with institutional mechanisms, expanding services to urban-village areas and providing living facilities and taking the patterns and forms of urban life to urban village areas. In Iran, Housing Foundation of Islamic Revolution and Ministry of Agriculture implementing renovation projects in rural environment and urban-village areas and providing living facilities in the first stage of form-space has been changed to urban lifestyle; for example, in performing the design and construction of physical space in these areas.

Therefore, to follow the emerging changes in the city and to observe the international system and global capitalism, certain patterns and lifestyles have entered into peripheral territory space, which 'sometimes is not consistent with the traditional culture of our country'. But in this process of change, there is no escape from the process of globalization; there is stability of city, based on specific communication and exchange process as well as the cultural and economic mechanisms and the expansion of commutation between urban and rural residents. To harmonize with these development and time-space processes, urban-village areas require change in texture,

form and their environment. Therefore, urban-village areas for consistent use of settlements at any geographical location were forced to change their surrounding space and residence.

Consequently in cities, available space (with their continuous and coordinated mechanisms) were forced to be dynamic instead of being slow and delaying the achieved economic and cultural findings (Shariye, 1994). The inclusion affected several elements where housing, perhaps, is the most important among them. Therefore, urban-village housing can be analyzed as follows.

### Urban-village housing

An important element in rural areas is housing formed as a symbol of how people interact and communicate with their surrounding natural environment years ago in terms of time and place (especially history, culture and economic fundamentals of its ideological manufacturers) in every region. It indicates the type of activity through economic dimensions and socio-cultural attitude of rural areas and how the development and use of technology and ultimately the level of income and livelihood of the residents. In other words, housing is the initial, basic and most complex form of people living at one place. It does not only act as resorts but is also responsible for production, living, storage and workshop (Hosseini and Seyed, 2001).

The research in the country suggests that rural housing influences social beliefs like life saving and house construction using available materials and being consistent with the environment. Hence, rural housing is the shelter and home for people as individuals or collectively (Sartipour, 2007). Urban-villages reduce the growth rate of the city and increase the growth of service factors.

If we recall history we understand that during village formation and settlement, having shelter and housing is discussed as the basic part of residential-agricultural territory for each rural area and core organization of rural life. The idea of adapting house with the natural environment is an issue that has preoccupied the minds for constructing house; which means verifying the external environmental climatic conditions and cost reduction (Gharahnejad, 2002). Based on the examples of residential buildings in various areas of the country, we notice that residents use available materials to build their own houses (Zargar, 2006) (Figures 4-5).

When village people lived in absolute or relative isolation and had less relation with the city and their surrounding environment, geographical and natural factors had a major role in the interior and exterior housing form and general morphology of village (Taleb and Mosa, 2005).

The following development occurred in the history of



**Table 1.** Percentage of materials used in the structure (village, town of Hamidia).

Percent of type of material	Concrete	Bricks and iron	Other materials
Region 1	64.88	33.41	1.81
Region 2	61.86	31.34	6.8
Region 3	69.18	26.69	4.13
Region 4	62.55	34.92	2.53

Source: Detailed city plan of Hamidia.

the country and with the necessity to accept the changes in the socio-economic laws, urban-village areas step by step continuously entered into these developments and the need to change the old policy of the rural areas (village landlords). To follow land reform, man power and capital should be liberalized from the rural areas subjected to changes in the urban-village communication. Therefore, following the land reform and the victory of Islamic Revolution many town-village communication chain was broken and the rural areas got familiar with the world beyond their own residential territory. In a societal system, to follow changes in form, activities, urban functions and also communication network expansion, technology development, small space and time in residential territory and connecting settlements led to the necessity to change urban-village environment. Examples of this transformation can be observed in the way construction and urban-village houses form imitate urban houses.

Also, the transformation of rural houses is not secured and the change in housing requires investment; also the style of arranging houses with socio-cultural root transformation takes place slowly. This causes changes to occur in rural housing compared to the delay in societies' economic development (Dero, 1995). But this development occurs more rapidly in the urban-village settlement texture.

Generally, rural areas as spatial-temporal reality in the country are the resultant of different components interaction such as ecological form, socio-cultural and economic-political interactions, formed according to time circumstance and structural-function of geographical areas (Azkia et al., 2007). Thus, the space for survival in areas and to meet the needs of the residents require changes in form and socio-economic space to adapt and harmonize with their surrounding environment. Housing being the most important need is not secured with these changes and the observation suggests that urban-village do not benefit with these spatial changes.

Finally, all the factors in morphological change and form texture of urban-village housing can be briefly stated as follows, taken from the study done in the urban-village of Hamidia.

1. Changes in agricultural land-use, issuing ownership

documents, received government loans, interest of villagers on land and high land prices.

2. Introducing new technology and new production machinery in villages (urban-village) which cause the financial independence of families and increase in their income.

3. Population increase to comply with health and medical issues in urban-villages where the debate of immigration acceptance is important.

4. Changes in family policy.

5. Urban-village neighborhood to large and medium cities and continuous communication with city and necessity to develop urban-villages as a wave breaker against the vast migration of villagers to the city.

6. Implementing improved project in rural environments (urban-village) to imitate urban space and observance of urban planning principles.

7. Predominance of culture and patterns of living and urbanization in the rural life (urban-village) (Taleb and Mosa, 2005).

8. The spread of urbanization.

9. Increasing the relative building price.

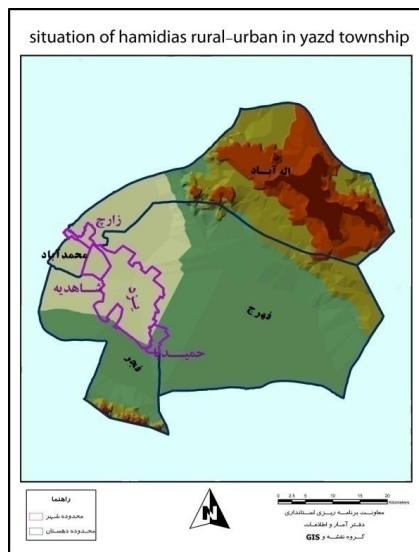
10. Changes in type of building materials and tendency towards the consumption of sustainable building materials like concrete.

11. Divergent spread of social relationship.

The calculations show that, over 25 percent area of Hamidia is located at close proximity to the main square of Yazd city (Abuzar) (Figure 6). The land price of this area is between 3.21 – 9.5 million Rials. More than 60 percent area of the city is located close to neighborhood service center, and the land prices are 1.11 – 3.2 thousand Rials and the remaining area of Yazd city is located in the margins between the price range of 700 – 1100 thousand Rials (Table 1).

### **Influence of city on the construction of urban-village housing**

In previous discussions, it has been elaborated on the need to create changes in the rural areas and urban-village housing. Now, the question is how was the procedure of housing development in villages and



**Figure 6.** City status of Hamidia in Yazd city.

urban-village areas? Ignoring and abandoning this area, neglecting the housing and form texture and ignoring the living conditions for a portion of country's population cause disruption of social-economic stability, regional form and the appearing of disorder in the settlement policy of the country (Sartipipour, 2006). Disorder in physical condition and poor quality of rural housing (urban-village) due to the resistance against natural hazards (floods, earthquake, landslide, and cyclone) are the major problems of rural housing (urban-village). Using low durability materials particularly non-compliance with technical standards and house construction principles has an effective role. Therefore, reform obligation, structure stability and housing require modification and improvement to rural context and urban-village. In many cases without modification and improvement of rural context it is not possible for stable rural housing (urban-village) (Rezvani, 2004).

Thus in studying the urban-village housing as part of settlement physical texture of urban-village area, it must consider the different dimensions of form and socio-economic which are as follows:

- (1) The extent and form of open space such as courtyard and gardens at average urban and rural areas.
- (2) Relation of how to build structure and use construction materials with the surrounding environment.
- (3) Interior space of the houses, reduction of number of rooms and changes in the function of each.
- (4) Process in development and expansion of settlement towards the desired areas.
- (5) Elevation form of houses, construction manner and architecture are influenced by the city.

(6) Facilities and features of the urban village houses are influence of urbanization.

(7) Built up area based on residential level, economical use and warehouses (Saeedi, 2000).

(8) Housing in urban villages has completely changed and rural style is less visible.

(9) Rising cost of land.

Village residents and urban- villages due to the lack of safety and technical principles in housing construction and lack of accountability with today's society needs have given rise to changes in housing to follow the construction of urban housing. The achieved mechanism of this process can be described in two general forms:

A) The residents of these areas in addition to develop relation and unbroken link with the cities have learnt the patterns and ways to build houses and have implemented them in their areas, since this type of urban residents could accommodate the residents' needs. Also, against risk and the possibility of natural-human has a better performance and accountability from the houses built in villages (urban-village).

In other words, city predominance and its cultural-economic dominance on villages and urban-village, and the advancement of country's settlements towards link and coordination as a chain attached to the species of world cities, national, regional, large (urban-village) and small villages in a network of settlements have a cross-linked relationship between all components and their elements. Lifestyle of the upstream network goes downstream (centers and urban center to the surrounding villages). So that, the residents tends to build their houses according to the urban style.

Finally, the causes of homogeneity of urban-village houses within the city are factors such as influence of urban lifestyle on the villages (urban-village) and their relation with the city. This communication has caused the infusion of new requirement and some of the villagers needs have been perceptible (urban-village) (Azkia et al., 2007).

B) Another reason to be homogenous is the leading role of the Islamic Revolution Housing Foundation. Since the establishment of the Islamic Revolution Housing Foundation before the third program of countries' development through provision and implementing of rural project, it promotes housing through sample houses and using relative control over construction to improve the housing situation. In the country development third program in civil context and rural development all construction related to task of rural housing is the responsibility of Housing Foundation (Rezvani, 2004). It has been few years that this foundation pays loans to urban-village areas which seems to be an important move. Therefore, housing foundation for the construction of house in urban-village areas provides long-term



**Figure 7.** Hamidia urban village.



**Figure 8.** Hamidia urban village.

installments basis loans of 10 million Toman for 12 to 15 years. The most important point in payment of the facilities is how to monitor it. Housing foundation gives loans to those who use approved engineering plans from the organization to build houses. Unfortunately, all the housing offices do not provide anything else except patterns and samples of urban housing. A fixed plan for entire country is executed without considering the climatic condition.

Other mechanisms for paying the loans are in multiple turns and with the control of the construction supervisor of the Housing Development Fund. In this manner, construction of residential houses is based on urban housing (of-course, urban-village residents have the tendency to use the urban housing patterns). Due to the change in job and urban village function, the working of houses should also be changed. Therefore previous pattern and form of the house change with the pace and

present needs of the society (Figures 7 and 8).

Pattern of housing construction in urban-village areas of the country is performed without paying attention to the geographical conditions and surrounding cultural areas which fail to meet the need of their residents. This can be observed in the interior of the house.

In the past, to follow the economic situation and social classifications of rural residents the houses were built in different sizes. The houses of landlord and head men of the village were bigger with more rooms than that of farmers. Farmers built their houses according to their status in the village. The new-comers (or colonizer) as the lower group residing in the village had un-suitable house dimension. But due to the social classification disruption in villages and rural communication expansion with other residential location in the society, rural and urban-villagers, as per their needs, built their houses without considering their location in the urban-village areas (Most of the low-income household of village is better and bigger than the village landlord). This is an interesting issue from social dimension and everyone can live the way they like.

The interior space of urban- village house is an important issue in socio-cultural dimension along with the past tradition in the village. Because of the close cultural context of rural residents without relating with other residents outside their spatial region, there is prejudice and existing tradition in that region; with extreme conservatism spirit they do not have the tendency to show in public the details of their daily life. Another point in this relation is the isolation of women and girls at work and public places; on the contrary they do not like entering into the house and to be insight of any third party. But the new urban style houses with open spaces and shared hall and kitchen failed to comply with the secrecy and sometimes caused the existence of problems and discomfort within the houses and urban-village society.

Therefore, any policy and house planning (urban-village) is successful when the design and performance coincides with the characteristics and architectural specifications of urban-village areas and ethnic-cultural tradition and climatic diversity in different regions of the country (Sartipipour, 2005).

## Conclusion

The issue emphasized in the approach to rural development is based on single and separate aspects. Neither the environment nor space and development is inseparable in the identical arena.

It is clear that emphasis on integration approach to both rural and urban categories does not mean counting similar two conditions of village and cities; but insist on the fact that the spatial interaction in urban-village areas



and the link between them in any assessment and spatial planning should not be ignored (Saeedi, 2003, Douglas, 1998). Given the importance of relation between urban and rural areas, many believe that to understand the dynamics of poverty especially in developing countries facing rapid urbanization is emphasized on the framework of the manner and scope of interaction between urban-village areas.

On this basis, understanding the relationship between rural and urban environments can help to change the structural-functional relationship and establish appropriate links. Neglecting this important issue would cause the dependence of more disparities between city centers and rural areas (Saduq and Saeedi, 2008).

Therefore, rural society is the lowest part of a country's hierarchy settlement system for releasing man power, capital and breaking most of social customs while connecting links and close bonds with other communities outside the urban and rural environment (using developed technology and communication networks). After the land reform and Islamic Revolution being consistent with the new condition of life and society it needs to develop fundamental changes in their residential environment. Hence due to the lifestyle evolution in other human societies, especially in cities, the residents imitate this development with important changes in urban-village areas for suitable living.

Therefore, housing, a place to develop family relationship and correlation between them in urban-village areas, due to the changes in country's settlement areas to meet the needs of their residents has changed along with other physical development in urban-village areas. These changes such as house construction in urban-villages are based on relation between village and city; economic regulation and cultural patterns of the city and village. The governmental organization role in this field is similar to house constructed in the city. In addition to the advantages and developing security in the region, due to ignoring the geographical-cultural conditions of urban-village area, there also have disadvantages. It is hoped that the revised plans and programs in housing construction of urban-village areas' defects are eliminated and development and well-being are obtained.

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