

THE ROLE OF SMALL TOWNS IN ECONOMIC DEVELOPMENT OF VILLAGES OF PENETRATION AREAS: THE CASE STUDY OF THE CITY OF NOSRAT ABAD

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ABSTRACT: *Today, migration from the countryside to the big cities is one of the problems facing the spatial and population structure of countries. In order to solve this problem, strengthening small towns and improve facilities in these cities has been considered by planners. The present study investigates the role of small towns in economic development of villages of penetration areas by studying the city of Nosrat Abad. The study population of this research is residents of villages near the city of Nosrat Abad which the sample size is 309 people based on Cochran formula. A researcher making questionnaire made by simple random sampling method was distributed among statistical sample. SPSS and GIS software have been used for studying the data and testing the hypothesis. Based on the analysis results, according to the statistical community, the second hypothesis was confirmed ($t=6/914$, $p<0/05$). If the economic infrastructure in the city of Nosrat Abad improves, this city can could influence the economic development of villages of its penetration areas.*

KEYWORDS: small towns, economic developments, villages of penetration areas, Nosrat Abad

INTRODUCTION

Today, urbanization is one of the most important and obvious manifestations of the evolution of human societies. However, with the expansion of cities, especially large cities, human societies are faced with several problems such as the problem of housing, lack of resources and environmental capacity and pollution associated with it are the most important of these problems. Large cities with the lack of complete integration into the medium and small cities, have the highest growth potential and have allocated much higher levels of social and economic services. At the same time small and medium cities with their poor communication with inferior communities have been became as margin and around spaces and haven't sufficient power to cover national spaces (Bagheri, 2006. 21). Existences of problems caused by the growth of large cities, population density and rural migration to these cities have caused planners to focus attention to strengthen and grow small towns (Harris, Tanaka, 2005). It is believed that by strengthening small towns can avoid focusing too much of population in large cities and change larger rural-urban migration path and solve many of the problems in rural areas which are due to the lack of villagers' adequate access to services centers.

Attention to the small towns in regional planning can deal effectively with the weaknesses and shortcomings of these cities at the local level. These cities are areas that have been marginalized and stagnated and retarded from development and because of the negative consequences of urban growth. Call attention to the space at the regional level (Rostami, 2010, 18). Small towns in Iran as a central location have the most relationship with their rural penetration areas. The role of cities as centers of service delivery and market of agricultural products not only caused the dynamics of the rural sector but also they are factors in the commercialization of the agricultural sector in rural areas.

In fact, the key to rural development can be seen in a network of small towns that interface with large cities. In this way the link and functional integrity of small towns with larger centers and rural areas will develop an area.

It needs an organic relation between the city and its penetration areas to use existing infrastructure in Nosrat Abad and to set up a regional development engine and deepen and broaden the circulation of capital and increase financial resources in the city and region. On the other hand, any change in the economic structure of the region and villages will be possible by providing and enhancing social and economic opportunities of Nosrat Abad until it will play its organizational and management in best way. But this trend is not observed in the region.

The research question

Is there a functional link between the city of Nosrat Abad and its villages of penetration areas economically?

THEORY

The small city

It is more focused on population size for defining the small city and the reason is the limitation of information about other features and characteristics of these cities (Tacoli, 1998). The definition of a small town in each country and region is different according to economic and social conditions and requirements of demographic. The means for small town are cities that have less than 10 thousand to 50 thousand inhabitants and has some city functions such as retail, marketing, administrative center of the transport sector (Abedindarkosh, 2010).

In terms of its place in settlement System, small towns are located at the bottom of the urban hierarchy and in a dependent set of horizontal relation with other centers. Small towns are in the end of administrative chain link. It should be considered in the classification of cities by population, there is no definite boundary. For example, a city with a population of 48,000 people with 52,000 urban people are not very different, in addition, the population is variable because of some factors and it is the fundamental aspect of urban function and its role in the surrounding area that gives credibility to the size of city. Best classification has been done for cities of Iran in land experimental design which has a population basis and the cities operation also have been added to them. In this project, the cities that are less than 50 thousand inhabitants has been attributed as a small city and cities that have 50-100 thousand population has been attributes as

average small cities, but cities that are less than 25 thousand inhabitants are been considered as a village city however they are reckoned as small towns.

The characteristics of small towns

The most important characteristics of small towns can be expressed as follows (Zebardast, 2004, 18).

- A significant proportion of the workforce of city are engaged in non-agricultural activities.
- They have relatively minor administrative functions and generally they have low-level concentration of public services such as health centers and schools.
- They have a relatively minor role in the regional and national production, but they play an important role as a provider of goods and services to the residents of the surrounding as well as providing access to regional and national transport networks.
- Through small towns, rural and agricultural areas is highly correlated with population centers and concentrated public services.

Theoretical perspectives in relation to small towns

There are several theoretical perspectives about the small towns and the ways of their development among which we can mention following items (Rondinelli, 1985).

- ❖ Walter Christaller central place theory
- ❖ Growth pole theory
- ❖ Theory of concentric circles
- ❖ The theory of village-town

THE HISTORY OF THE RESEARCH

Javkar (2007), in his treatise entitled "The role of small towns in regional development", has concluded that if structure of employment in Firozabad is not changed by formulized policies and plans, the city will be changed to a consumer and service center. Dashti Berenji, (2011), in his thesis that has studied the city of Takab in West Azerbaijan Province, has concluded that Takab city is known as a service city that is involved in the distribution of services to its surroundings. In organizing and creating a hierarchical order in the city, the role of Takab as a regional center and rural areas with rural central region is considered as a development platform. Rostami (2010) has conducted the regional performance towns by using network analysis. It has been tried in this thesis to study the capabilities of region by network analysis which is a new method in regional planning and in addition to determining the location that has the ability to develop, he has presented suitable solutions.

Hossaini Hasel (2009), in an article entitled "functional status and role of small towns in rural development in Razan, Hamedan," has written that the small cities can help to dynamics of rural communities if they gain their real role and identity. These cities use the spaces as a place to provide and the trade and services and in their surroundings can create job areas whether in relation to employment for near villagers or job industrial creation in the rural environment.

Nouri et al (2009), in a study entitled the role of small towns in the balancing of the rural settlements in Yazd province have found that Yazd province has a polar development.

THE METHOD OF THE RESEARCH

In terms of goal, the method of this research is functional, because the results can be used for officials, planners and managers of cities. Also, because data of this research has been collected by distributing questionnaires, therefore this research is among correlational researches. It is noteworthy that all the villages in penetration areas are 121 but because of the high dispersion and low population, the author examines only villages with more than 200 people who are over 15 years old.

Community and the statistic sample of the research

The statistic sample of community is 6457 people of citizens who are over years old in Nosrat Abad and the villages around and 309 people was calculated as the sample size by using Cochran formula. For this purpose, using simple random sampling and by calling on the city Nosrat Abad and surrounding villages, the number of 309 questionnaires were distributed among the statistical population.

Table 1: Distribution of statistical sample in villages of penetration areas of Nosratabad

Statistic al sample	Rural populati on	Househo ld numbers	Name of the village	Row	Statistic al sample	Rural populati on	Househo ld numbers	Name of the village	Row
27	226	55	Mdoh an	6	67	564	107	Town of Garaghe h	1
24	212	38	Jooj	7	34	293	65	Kohan	2
21	183	50	Rood Mahi	8	33	284	55	Hosain Abad	3
20	173	52	Eslam Abad	9	33	282	59	Anjirak e Paein	4
18	152	23	Ab Dozak	10	32	281	73	Town of Shorchah	5

Source: research results

GEOGRAPHICAL LOCATION

Geographically, Nosrat Abad city is located at eastern longitude of 59 degrees and 59 minute and at northern latitude of 29 degrees and 51 minute and in terms of political divisions in the city of Zahedan, it is located at a distance of 105 kilometers from it.

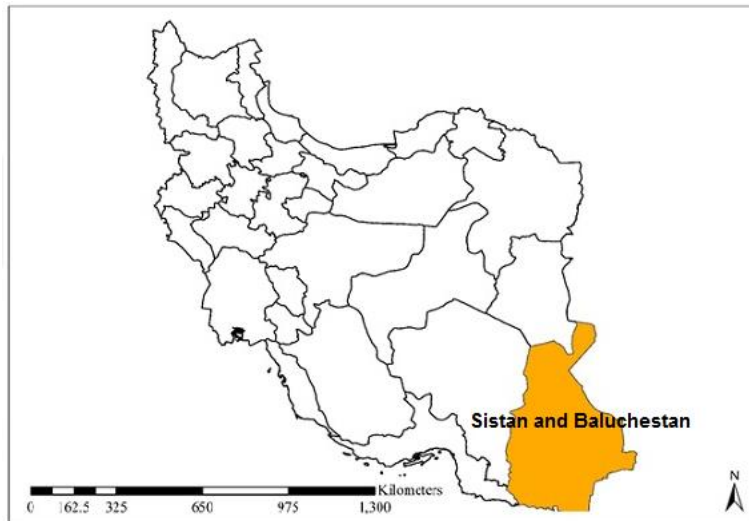


Figure 1: The position of Sistan-Baluchistan province in country division

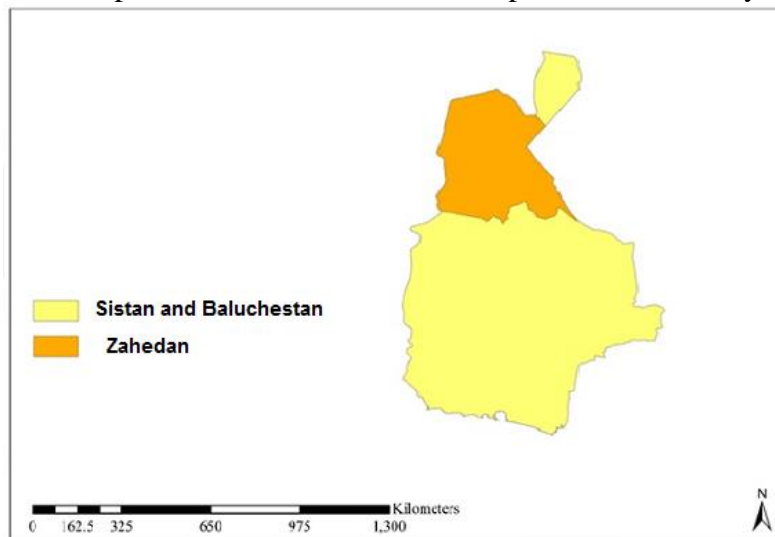


Figure 2: the place of Zahedan city in divisions of Sistan-Baluchistan province

THE RESEARCH FINDINGS

Research hypothesis:

H0: improving the existence economic infrastructure of the small town of Nosrat Abad will not be led to the economic evolution of villages of the sphere of influence.

H1: improving the existence economic infrastructure of the small town of Nosrat Abad will be led to the economic evolution of villages of the sphere of influence.

To investigate the hypothesis, six questions were asked about the components of rural economic development. In table 2 of the research, frequency distribution of Villagers 'response to each of these components is visible.

Table 2: Descriptive statistics of the research hypothesis questions

Average of replies	I totally agree	I agree	Neither agree nor disagree	disagree	Totally disagree	(questions)	
4.56	234	34	20	6	8	Connection with the Nosrat Abad city has caused the village development	1
	75.8%	11.2%	6.5%	1.6%	3.4%		
3.13	40	81	18	133	35	Connection with the Nosrat Abad city has risen employment for villagers	2
	13%	26.3%	6%	43.2%	11.5%		
3.06	40	48	110	44	33	Connection with the Nosrat Abad city has improved the villagers' income	3
	13%	15.6%	35.9%	14.3%	10.9%		
3.27	29	102	83	36	24	Connection with the Nosrat Abad city has caused the villagers to satisfy with their jobs.	4
	9.9%	33.3%	27.9%	12.5%	7.8%		
2.43	13	36	83	71	74	Presence of the citizen of Nosrat Abad in village has caused the expansion and boom of villagers' business.	5
	4.2%	12%	27.1%	23.4%	24.2%		
2.47	7	42	100	65	67	Visiting the citizens of Nosrat Abad has increased the villagers' incomes.	6
	1.8%	13.8%	32.6%	21.4%	21.9%		

Source: research results

To test the research hypothesis from given replies to any of the economic components listed in Table 2, they will be averaged and a new variable is created in order to test this hypothesis.

Table 3: Descriptive statistics of the research hypothesis

Standard deviation	Variance	Average	Hypothesis
0.84354	0.712	3.151	the research hypothesis

Source: research results

As it can be seen in Table 3, the average of replies to second hypothesis is 3/152 and the variance of responses is 0/712 and standard deviance of responses is 0/843. As the first hypothesis of the research, the t-test is used for proving the second hypothesis. In this test, 3 will be attributed to the t- value. The results of t-test is given in Table 17-5. Considering that the main hypothesis of the study (hypothesis H1) is positive, if significance level is less than 0/05 and the amount of t is positive, the hypothesis of the research will be confirmed.

Table 4: testing of the research hypothesis

t-value=3			hypothesis
Significance level	df	t	
0.000	308	6.914	The second hypothesis of the research

Source: research results

Since the amount of significance level is less than 0/05 and it is 0/000 and the amount of t is also 6/914 and positive, so the H0 hypothesis will be rejected and H1 hypothesis will be confirmed therefore, the research hypothesis is confirmed and as a result, from the view of the villagers residing in villages of penetration areas of Nosrat Abad, if the existence economic infrastructure in the city is improved, it will lead to economic development in these villages.

Friedman test has been used for ranking the effect of Nosrat Abad city on the component of economic growth of villages of penetration areas of this city from the respondents' views. The test results are given in Tables 5 and 6.

Table 5: Friedman Test

Significance level	df	Chi square	Statistics
0.000	3	810.288	Statistic value

Source: research results

According to table 5, since the amount of the significance level is less than 0/05 so there is a significance difference between the villagers' view about the components of economic growth in this study.

Table 6: Ranking the components of economic growth

rank average	Rank	Place
1.51	4	development and prosperity of villagers' business
1.67	3	Improving income of villagers
3.82	1	increasing jobs for villagers
3	2	The villagers satisfaction with their jobs

Source: research results

As it can be seen in table 6, among the studied components and from the villagers' views, improving the economic infrastructure of Nosrat Abad will increase the jobs for villagers and then it will satisfy the villagers from their jobs and then in third rank, it will improve the villagers' income and finally, it will develop the villagers' business.

CONCLUSION

Six questions were asked from participants in the research to investigate the research hypothesis. One-sample T-test and the average of the respondents 'comments are used to investigate the hypothesis of the research. Based on the results of this test, since significance level is less than

0/05 ($p=0/000$) and the value of t is positive ($t=6/914$) so the H_0 hypothesis will be rejected and the H_1 hypothesis will be confirmed and as the result of it, from the view of statistical community, the research hypothesis will be confirmed. So the villagers residing in villages of penetration areas of Nosrat Abad believe that if the economic infrastructure of Nosrat Abad is improved, the economy of villages in the region will be changed. In other words, the city of Nosrat Abad could have a significant role in economic development in villages of its penetration areas.

According to Friedman ranking Test, it was found that from the view of the villagers residing in villages of penetration areas of Nosrat Abad, the situation improvement of Nosrat Abad city can have the following economic impacts respectively:

1. Attention to Nosrat Abad city will increase jobs for villagers.
2. Improving the infrastructure of this city can satisfy the villagers from their jobs.
3. The city of Nosrat Abad can have a significant role in villagers' income.
4. The city of Nosrat Abad can provide the opportunity of business development for villagers.

SUGGESTIONS

From these results it is concluded that Nosrat Abad city has no facilities to sales of agricultural products and the authorities and the mayor of city, in addition to improving the supply of agricultural commodities in the city, can improve the economic situation of villagers by establishment of adequate fruit and vegetable centers and by giving discounts to rural farmers to deliver their products. In addition, the authorities, by purchasing of agricultural products at reasonable prices and supply of agricultural products in these centers, can help the farmers to supply agricultural products in these centers faster.

The expressed issue for the farmers is true for herders, too. By guaranteed purchase of livestock products and by faster supplying of reasonable price of these products, government and the authorities can improve the economic situation of villagers in addition to offering healthy livestock products to the public. As well as the necessary infrastructure, including road and convenient transportation between Nosrat Abad and the villages can be effective in better connection of villagers with Nosrat Abad and thus their economic situation can be improved.

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