

## The Study On Influential Factors Of Village Bazaar Location

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**Abstract—** This article take an empirical analysis on 6 key factors which influence village bazaars location. On the basis of analysis of 22 principal factors on the location, the author put forward 6 key factors and measured the influence level of the key factors. Then the author emphasize that village bazaar construction needs combine with local economic development situation and requirements, integrated natural environment, social environment with environmental benefits.

**Key words-village bazaars ; influence factors; factor analysis**

### I. INTRODUCTION

Since reform and opening up , with the rapidly developing of the village economics, many village bazaars become gradually from the initial distribution center for agricultural products to the main base for the exchange of commodities. Because of the irreplaceable role in linking up every industry product demand and need, promoting rural consumption , increasing farmer employment, boosting county economy developing and guiding the new village economic development, the central government attaches great importance to the development and construction of rural fairs. From 2006, the Government began to elaborate how to develop the village bazaar in the Central Document No.1.

The scholars home and foreign have made a lot of research for the bazaar location since the 1950's. The research of Stine in 1962, one American geographers, showed that the development of village bazaar is influenced by two factors, namely "transportation conditions" and "economic level". RHT Smith, and VG Fagerlund (1970) research suggests that the development of village bazaar is influenced by "competitive market nearby" else. Since the beginning of this century, many authors homely make a great deal of research for the village bazaar location. The research of Ying Guan and Suli Zhang(2003) suggest that the village bazaar location should take account of "traffic factors, location factors, demographic factors, consumption levels, competitive factors". Tiaoxiang Xie and Qingquan Wei(2008) thought the mainly factor which affect the spatial distribution of wholesale markets in Guangzhou is "regional conditions, traffic conditions, shopping distribution, commodity type, urban planning, historical factors, concentration factor". Yutian Liang etc. feeled the factors which influence the bazaar spatial distribution is "population distribution, spatial proximity, competitive factors, managers quality, policy factors"; Xiangqian Qi(2008) proposed the evaluation factors of supermarket site selection include "terrain features, population, urban infrastructure conditions, traffic conditions,

the competitive environment". Xiaoi Dai (2009) thought the supermarket location was influenced by "cost, population, transportation, and competition" and other specific factors.

As a public infrastructure that fabricate living, whether village bazaar location is reasonable or not, not only is related to the convenience of farmers, but also influence the investor benefit. So, researching the village bazaar location furtherly has become an urgent and practical issue. Based on the previous studies' summary, combined expert survey ,this paper survey the factors affecting the location of village bazaar and proposed the crucial key factor .So as to provide specific reference to the demander and further meet the need of village bazaar investors and managers.

### II. FACTOR SELECTED

This paper draw out many specific factors based on the previous location experience and the specific job requirement. These factors mainly include geological conditions, topography, traffic conditions, surrounding security situation, spatial scalability, income level, financial revenue in the town where village bazaar locate, per capita consumption, village layout, industrial structure, infrastructure, set source, trade tradition, development planning , policies and regulations, passenger flow, population structure and density, family structure, Similar market size nearby, Similar market layout nearby, the first investment in bizarre building and market construction period etc.<sup>1</sup>

In these 22 factors, some factors would have a larger impaction for the village bazaare. Otherwise, some factors would have a little impaction. Hence, we can extract the key factors on the basis of the research for the specific factors and measure the influence degree.

### III. DATA SOURCES

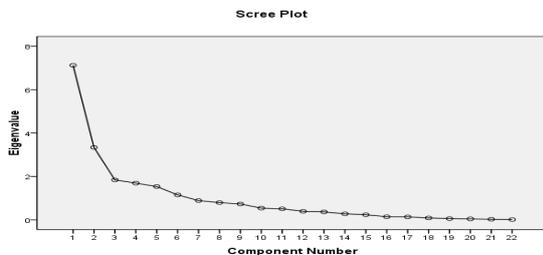
In order to obtain the corresponding data ,the paper design factor analysis questionnaire of village bazaar location. In researching, the author asked the investigators make Listeria points in accordance with every specific factors, namely identified "the least important" to 1 and "most important" to 5. These investigators we choose are practitioners, who are familiar with the village bazaars location , experts and scholars on the town planning and famous professors. To ensure reducing bias as much as possible in survey, during the questionnaire, we asked the investigator must read related notes and standards carefully. Meanwhile, every investigator was required to complete each questionnaire independently. Investigation was carried out in

December,2009.In this investigation we granted 97 questionnaires, recalled 90 questionnaires which 84 questionnaires is valid.For the recalled questionnaires we analyze with the classical spss software.

#### IV. FACTOR EXTRATION

With factor analysis, we came up with the key factor using dimensionality reduction.The number of key factors was provided by the scree plot. The scree plot of key factors which influenced village bazaar location is shown below.In below figure, the vertical axis represents the factor eigenvalues, the horizontal axis represents the number of factors. Seen from the figure, when the number of factors is less than 6, the characteristic value is greater than 1; when the factor number is greater than 6, the characteristic value of less than 1;and from the 7th factor, the characteristic value becomes more and more stable. Therefore, the key factor of village bazaar should be set to 6.

TABLE I. SCREE PLOT



For the obtained data,we use the classical principal component factor analysis to select the key factor. Calculated using the orthogonal rotation method(Varimax), after 25 iterations convergence we can get the orthogonal rotation factor (principal components) loading matrix.At last,we arranged load factor corresponding matrix according to the factor order and the numerical size,the alignment matrix was shown in Table 2.Seen from the corresponding analysis result: through factor analysis,22 factors in the survey was reduced 6 categories. Although the factor in the 6 categories had strong similarities through analysis, the difference of specific factors' was a little.

##### A. Analysis of specific factors

From Table 2 we can know that 22 factors was divided 6 closely common factors. Fully accordance with the suggestion of expert and scholar,the author divided the common factor specifcly:

"External constraints system of consumption" common factor: this common factor mainly include per capita consumption, per capita disposable income, transportation condition, passenger flow and topographical features etc.These factors play a restricted role in village bazaar location. During the course of location,we must fully considered this constraints for point to site and made scientific election integrated with the basic situation.

"Economic and Environment" common factor: this common factors include infrastructure, policies and

regulations, industry structure, construction period, village layout , geological conditions factors.These factors contain the existing resource we can own in the beginning of location.This work is that we need to operate in carrying out site.

"External competitive" common factor: this common factors main include development planning, similar market size nearby, similar market layout nearby and surrounding security situation factor etc. These factors reflect the external competitiveness of location are those issues we need to important care about in village bazaar location.

"Demographics" common factor: this common factors main include family structure and population structure and density factor etc. These factors reflect the need to consider population nearby when making location of the market.Usually we require setting a minimum population limitation on location to ensure the threshold of future market transactions.

"Economic investment restrictions" common factor: this common include financial revenue in the town where village bazaar locate, the first investment in bizarre building and trade tradition etc. Because China's village market investor is mostly conducted by the local government,this common factor main consider the local government economic strength.This inclination reflected local government administrative promotion capacity for the building of village bazaar.

"Spatial constraints" common factor:this common factor include spatial scalability and set source factors.This common factor mainly take account into village bazaar future development. This common factor is the main driving force for the bazaar sustainable development.

##### B. Factor Reliability analysis

Nunnally believe  $\alpha$  coefficient above 0.7 is an acceptable reliability value generally. From Table 2 we can see a coefficient of six common factors above are within the acceptable range. Among them, the "economic and environment " common factor  $\alpha$  coefficient exceeded 0.76, should t be considered as a Priority factor, and

TABLE II. FACTOR LOADING MATRIX

influenced factor	Factor Loading						α coefficient
	1	2	3	4	5	6	
per capita consumption x8	0.893		-0.111		0.117	-0.195	0.733
income level x6	0.89		-0.19	0.224			
traffic conditions x3	0.787	-0.151	0.448	-0.165		0.134	
passenger flow x16	0.782	0.117	0.494		0.112		
topography x2	-0.761		-0.277	0.315	-0.124	0.244	
infrastructure x11	0.261	0.818	0.151	0.224	-0.11		0.765
policies and regulations x15	-0.108	0.771	-0.126	0.31		-0.361	
industrial structure x10		0.701		0.368	0.382	0.285	
market construction periodx22	0.604	-0.7	0.42	0.308		-0.101	
village layout x9	-0.172	0.673	-0.119	0.132	-0.431	0.136	
geological conditions x1	-0.169	0.633	0.311	-0.109	-0.414	0.471	0.721
development planning x14	0.394	0.608	0.958	0.328	0.132		
similar market layout nearby x20			0.72		0.132		
similar market size nearby x19	0.368		-0.626	0.104	0.199	-0.333	
surrounding security situation x4	0.135	-0.331	0.6	-0.405	-0.159	-0.157	
family structure x18	-0.257	0.207	0.332	0.885		0.215	0.714
population structure and density x17	0.11	0.177	-0.227	0.835	0.318	-0.268	
financial revenue in the town where village bazaar locate x7	0.252	0.36		0.59	0.868	0.301	0.734
the first investment in bazaar building x21					0.748		
trade tradition x13	0.139	0.147	0.365	0.132	0.621	-0.117	
spatial scalability x5	-0.215	0.108				0.912	0.708
set source x12	0.464	0.121	0.437		-0.443	0.631	
Eigenvalue	5.698	5.236	2.583	2.277	1.645	1.354	0.728
Variance Contribution(%)	25.901	23.798	11.742	10.349	7.478	6.154	
Cumulative variance contribution rate (%)	25.901	49.699	61.44	71.79	79.268	85.421	

Date Source: Questionnaire Survey

the " External constraints system of consumption " common factor and "economic investment restrictions" common factor  $\alpha$  coefficient followed next, The two common factor should be as priority on location. The credibility of the other three factors are at the bottom.

### C. Factors Impaction Analysis

For the selection of specific factors, because the factor load such as Per capita consumption, per capita disposable income, development planning, family structure, the first investment in bizarre building and spatial scalability have exceed 0.85. Therefore, these factors should be the key point considered on location.

## V. SUGGESTIONS OF KEY FACTORS

According to the analysis and demonstration above, we came to 6 common factors which have most importance influence for village bazaar location: "External constraints system of consumption" common factor, "Economic and Environment" common factor, "External competitive" common factor, "Demographics" common factor, "Economic investment restrictions" common factor and "Spatial constraints" common factor. But what role can these factors worked in the procession of location? Through analyzed deeply for the researching datas and according to the suggestion of the experts and scholars, we can draw up the proposals as follows:

1) External consumption situation is the cornerstone of fairs whether restrict the bazaar successly. Increasing local consumption level would increase consumers to buy goods in quantity, quality and grade in bazaar, increasing consumer shopping amount and stimulate consumer shopping frequency. So, on the procession of bazaar location we should attach great importance to the local consumption conditions. By conducting careful and detailed market research we can enhance understanding of the status of local consumption and provide clarity market information on location to improve the selection standards of the village bazaar location.

2) Economic and environment system is the reality background which must be taken into account on location. On the stage of location, we must take fully account of local economic development environment and lay a good foundation for future management. We should choose the town which own the larger economic scales on location, taking into account the needs of surrounding towns meanwhile.

3) The competitive factors are the reality factor considered on location. Usually we must consider other competitors from the number, size and geography location and their competitiveness after the village bazaar construction. Priority the market location often choose those villages where nongovernment organization such as industry associations etc. can realize traders' self-discipline.

4) As the consumer factor must be considered, demographic is the foremost element on location. Because it is the manifestation of commercial circulation types, village bazaar should need stable traffic to ensure its following

development capability. Therefore, we must calculate the local population structure and population density scientifically. Usually we often choose these towns which own large population on locations.

5) Economic input limitation mainly include the cost in the future constructing of village bazaar. After all, people usually consider the costs and benefits generated before making investment decisions in market economic today. However, on location stage, we can't get the exact date of income. At this stage we are bound to estimate the difficult level of establishing village bazaar and the construction costs of the infrastructure related to bazaar.

6) The spatial constraints factor is the inevitable choice for the future sustainable development. On location, we must take precautions within the domain reserved for the necessary planning of the future development to meet future country markets function expansion.

## VI. CONCLUSION

As the beginning of village bazaar construction, location need combine local economic development situation and requirements, integrated natural environment, social environment with environmental benefits. Therefore, in order to propel location executing, we must study more profoundly and proposal more realistic location factors.

In summary, the 22 specific factors proposed will inevitably be our future key consideration and concerns when we make location. However, because of our vast territory, factors the author proposed would be too narrow on account of geographical limitations and narrow sample research. Therefore, during utilizing the specific conclusions and results of the above, we should fully take into account the special circumstances of the specific regional and local characteristics, adjust and enrich necessary to meet the specific needs of those requirements.

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