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**Abstract.** This paper gives special attention to the phenomenons of geomorphology and human factors khalkhal city that by investigating these features try to be in the end, after the conclusion of appropriate solutions for the development of the city offered and as regards the concept of development means advance and progress. Therefore, the study area compared to other towns and villages, In terms of economic development and prosperity, in analogy with the reasonable expectation unfortunately has not improved. I'll be forced to research, the findings achieved and in this article, put for dear readers. Before the start of the study, Due to the mountainous area and geomorphic phenomena prominence, initially it was expected that natural factors such as slope, Climate Change, High and tight fog that is often the dominant region, most have a role in the lack of development of the city. But after investigation it was determined Features, that Apart from natural factors, abnormal factors other, have played a significant role. So that if this factors, More from natural factors, havent role, they arent less effective. However, two factors, Natural Factors and Abnormal factors were divided that each have A subgroup of its own, Meanwhile, in the end notes, that In general, this research, is A descriptive study, in that use of Library methods.that Experimental studies have been conducted with field.

Keywords: geomorphological phenomena - Development - khalkhal

## 1. INTRODUCTION

Nowadays, especially in developing countries, one of the main issues is the development or the lack development of sustainable cities. Many factors in the creation of several issues directly or indirectly involved. And while the study area, among the cities that unfortunately, in comparison to other cities in your area, havent any improvement or economically, Social. Therefore, this study tried to be To identify the most influential factors in the lack of development of the city, And examining the factors that contribute and After the conclusion of appropriate solutions, It might be a small step in removing some of the barriers, with study and research paper previously by other investigators, Taken in relation to other cities location, And every city have a Specific factors. However, due to the mountainous region, beginning Natural and unnatural causes of the factors examined.

## 2. RESEARCH HYPOTHESIS

Geomorphology and climate change phenomenon is reflected in the lack of economic development khalkhal city.

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## 3. THE STUDY AREA

The study area is khalkhal city that from the north to Kosar city and from the East to Gilan province and from south to Zanjan province and from west to the mianeh city Connected. The city is at longitude 48 degrees 32 minutes and 37 degrees 37 minutes latitude of Greenwich meridian located. And one of the most strategic areas that have unfortunately been neglected for many, this area of the divisions is as follows. This region is a mountainous region that its height decreases from East to West and North to South. Talysh Mountains in the East it is stretched from north to south that as a barrier between the Caspian Sea and is located in Gilan and Azerbaijan province. So that unlike the Eastern Slopes, in the western foothills to reduce rainfall and dry air, not seen Luxuriantand significant vegetation. In this city main river same <u>Qizil</u> <u>Owzan</u> And its branches as shahrud, arpachay and shengabad to south flow And finally shed to the Caspian Sea. This area of climate, is with mild summers and cold winters. In terms of geographical locations and mountainous, this area has the coolest hot mineral water sources that most important of that is mineral water khalkhal that is in distance between cities khalkhal and Givi. [Wikipedia, 1393]



Map 1. Khalkhal country's geographical location.

Central Section: there is One of the functions of the city khalkhal, that capital city is khalkhal, And 96 km from mianeh city And 110 km away of Ardabil city. According to the Census, Statistical Center of Iran, central part population in 1385 was equal to 65,638 people.

Shahroud Section: One of the functions of the khalkhal city, the city center is Kolowr. Tati language is the language of this section.that One of the languages of the Northwest of Iran. According to the Census, Statistical Center of Iran, The population of the city in 1385 was equal to 14,162 people.

Rustam solar Section: this section is one of the functions khalkhal of the city of Ardabil Province of Iran, The city center is hashtchin, People in the region to exchange their economic, refer to mianeh, zanjan and khalkhal towns. According to the Census, Statistical Center of Iran, The population of the city in 1385 was equal to 15204 people.



Map 2. Study area.

#### 4. RESEARCH METHODOLOGY

The research to documentary method and Library and Along with experimental studies and field, For the purpose of Analysis data had been. In this study, in order to understand the phenomena and geomorphological features, of the content analysis and topographic maps, to evaluate the geomorphologic conditions prevailing in the region is used.

## 5. THE FINDINGS

The main factors that led to the lack development of the city khalkhal, Divided into two groups natural and unnatural factors. Each of which contains its own specific subgroups. Here we describe the natural factors involved, including:

#### 6. SLOPE

While the general slope of the mountain towns in one direction, n many ways they are too steep. Although there was a dip in some ways like a beautiful city, Natural cleaning Passages By runoff and so it is important.but the slope of the cities (Especially critical slope and excessive) Can cause problems such as flooding, Difficulty of transportation within the city, Range of motion and so created. According to the standard provided by the International Geographical Union, Smooth surfaces and low slope to the city proper has been diagnosed should not exceed 11 ° C.? The amount varies slightly depending on the environment. Slope of 8 ° or 15%, to the upper limit applicable slope for construction in the city is considered. [Zomorodian 1383]



Map 3. Topographic map of the city khalkhal Source: (ranjbar, 1389).

## 7. GLACIAL

Glacial to conditions called which the temperature of the air is zero or below zero, the phenomenon of ice damage each year in a wide variety of fields including transportation creates. This phenomenon that is due to a rapid decline in the region's energy, In the cold months is more frequent, The extent of damage caused by ice in various sectors including agriculture, Water, supply and distribution of fuel, energy, tourism, industrial activities, transport including bridges, Road construction and road hazards, Necessary knowledge and detailed study on this phenomenon, To deal with possible damage necessitated. Each specific temperature has a normal activity needs, Despite the impression some people, each activity by interfere the development of sub-zero temperatures Not impaired. Thus the intensity of the heat that would stop or interfere with the activity Determined. Due to the structure of the atmosphere, the height of the surface is important, and can be reasonably high, between height and glacial features in each region Established. Thus, it can be predicted frost and organizes the critical the colds. Rosenberg1 and Myers 2 The topography of the area, more than any other factors affecting the occurrence of glacial know. [Mohammadi 1389]

The khalkhal city Due to the altitude and topographic features that are specific, n most cases, long frosts in winter that this causes the communication path is disconnected. As a result, most of the time of entry and exit of raw materials and commodities have been impaired; the city will have a significant impact on the economy.

#### 8. CLIMATE

Most plant species are sensitive to climate action, Climate change will directly affect the amount of product, and Agricultural production takes place on three major sources,

1-Natural Resources (climate - soil - Topography - genetic predisposition),

2- Financing (for example fertilizers - labor, machinery and livestock)

3- Human resources (labor - management issues - market conditions)

Climate, investment, financial resources and also the impact on the natural environment, For example, wet conditions may prevent the cultivation of crops by animals and agricultural machines, And thus delayed the planned plantation, The climate may impact on fertilizers, Pesticides and other human impacts reduce. And thus reduce the yield. [Mohammadi 1389].

# 9. FOG

In road transport, since many vehicles are private cars that Owners Unlike most public services are organized to act independently, Seen a lot of flexibility. Tanner has shown that the volume of freight traffic during the period, the simple operation of the air is not at the same time. But when the trip is done, Will depend on the weather, in concept of freight traffic reduces bad weather, If the good weather on traffic congestion adds. Especially during the holiday weekend with other courses, Types of traveling by air handlers, Like riding a motor bike and the weather conditions, Twice as many cars are susceptible.in Very foggy days, Traveling with half or three-quarters of these devices is limited in clear and sunny days. [Mohammadi 1389].

## 1- Rosenberg

2- Myer

Abnormal factors, including:

#### Road communications:

Move and shift Creatures what on earth what the weather, Of specific pathways, There are road name. The agent has thousands of years of human history, Envisage the man routers and acquisitive has been, And for various purposes, such as access to food sources And the necessities of life, Meet friends and relatives, Pilgrimage and tourism, trade relations with the regions and countries near and far, Or attacking tribes and..., Seeks construction and construction of road vehicles, Railway. Water and air to come. Demand for transport, are causing transformation of transport systems and networks. Certainly the increased demand for transport, Followed by economic growth emerges, [Motiyi Langeroudi 1388].Roads including freeways, highways, railways, and..., one important factor is the economic development of cities, and this is in addition to the economy, on other factors development will have a significant impact.. khalkhal city enclosed in a rugged mountainous area And the lack of road safety and standard, Such as roads Dual, Highway and rail network particularly rail, Limits established for the region, that This is going to be an important factor, to be The lack of economic development of the city is considered. Because this issue has led to lower investment, willing to invest in this area cover. Because due to the blocking of roads network in the region, Most winter days due to glacial phenomena, And the lack of suitable alternative road, In such times of severe crisis factories with raw material supply. Or send the goods of the city will face. Agriculture has traditionally been carried out during the Only be established with the main objective, First, the needs of the farmer's life, Second, it was possible to exchange the product with other products but Today, the most important factor of economic growth and agricultural

development, Depending on factors such as the communication and transportation is an important. Unfortunately, the limitations of the road above, Agricultural development in the region to slow.

#### **10. IMMIGRATION**

To investigate the causes of migration. Geographers are difficult. because there isnt a rule coherent immigration. The causes and motives for migration of different, yet complementary, although both repulsion and attraction of immigrants play an important role in the origin and destination. so simple sometimes intensify their motives. Migration among certain occupational groups over other groups are common. Classes and groups of experts and professionals on equal terms. than to Skilled and unskilled workers are more likely to migrate. Unemployed people show tends to migrate more than workers. Migration is also a choice of race, nationality and education affected.and usually the process of migration to the destination, over the origin depends. Migration that has motivated strong repulsion, less of migration that are solely under the influence of gravity acting. [Mahdavi 1387]

Khalkhal People as well as other cities, every year is the face of immigration. The difference is that in this city, more seasonal migration, by farmers in the provinces and major cities, to work in factories or construction work done, which is a consequence of its own.

## **11. UNEMPLOYMENT**

Another of the factors that is obstacle underdevelopment this city, there are many unemployment n this area. Because the job is not acceptable for the people of this region proportional to the population, therefore, in most cases, has led to the development of poverty. And due to the excessive increase of unemployment in the region and the lack of sufficient income and job security, People arent able to participate in any of planning for investment project.

## **12. AUTHORITIES**

Unfortunately, it is quite evident from the past decade in this city, this implies that a significant failure on the part of the authorities, In relation to the growth and development of the city for the social, political, cultural and economical aspects has been, that the reason is mostly political hearted. And while there have been cities in the past few decades, aligned and have equal this city. But with their courage and efforts over MPs, their City out of the recession and the economic and cultural progress today and have made significant.that Unfortunately, at this time no significant effort has been made by the representatives of the city. Other issues Authorities, is the Lack of interaction and cooperation between some of them together. For example, in most cases, Differences and lack of cooperation between the governor and legislature, And some other authorities, have been Leading to non-implementation of some projects.

## **13. CULTURE**

In Decade 1980, at the same time there was a change in the sociological, And criticism of the culture of modernity by schools, were sameThe Frankfurt School. Culture as a very important concept in sociological literature. As a result of this change, we ARE Rotation control, of Attention to Economic role in the development of the role of culture. The importance of the role of culture in development, in developing countries, It was a special place. At the present time, Culture has a broader scope and deliver their TO other fields of science and technology. And with them, raise their presence and show influence. Today, as economic, social and state

security tied to issues cultural, that Ever seen. Due to the fact that cultural, Centered on the first activities, And the Center for Strategic Studies, Particular attention has been paid to this topic. [Panahi, 1376]

Lack of meritocracy in appointments:



Meritocracy Refers to a method of governance or management that Credits are chosen based on their ability and competence and not on the basis of financial or social status and family. New technologies and accelerate the transformation, Specialized manpower is needed more than ever, this work the corporate and government leading to Meritocracy system. Communities meritocracy, attitudes nepotism, tribalism, Democratic Party, etc is despicable. Merit system is a system which the right people at the right time and place appointed. And they make individual goals, there needs to be a social enterprise. Note that meritocracy, Not a Government, but it is an ideology. Meritocracy is often mistakenly seen as a form of government, While meritocracy in fact an approach and a factor, is the the appointment of persons in a state.peoples in the system of meritocracy, on Varying standards of competence are judged. These criterions can be vast fields, of General talent, until have a specific knowledge in their field. [Wikipedia, 1393]. As regards Meritocracy and timely appointment peoples, despite the great potential that lies in them, Can play a large role in the development of the city. Unfortunately, in most cases, Individuals with regard to the financial and political privileges, etc., which are, Are appointed in their positions which unfortunately does not have the competence needed to perform their role in city development and But also obstacles on other factors and progress, and this is important so that Imam Ali Said that:

Four factors will cause the collapse of a society, first: Disregard for the principles and key issues. The Second factor: hang to Superstructure work and Ceremonial Affairs. The third factor: Put forward and Responsibility to the gang. The fourth factor: The abandonment of the rich and Experts.

## 14. LAND USE

Understanding Land, Objectives of land use and land-use practices have a large impact on reducing deprivation, on aspects of Social, cultural and economic security.and Contribute to regional stability. In fact, we can find that the with implementation of spatial planning, of the international level to the local level, can be terminated to this imbalances. In addition, through spatial planning, both rural as well urban will be left of poverty and exclusion. Otherwise, the emphasis on sectoral planning, And lack of attention to the implementation of spatial planning, In addition, it creates restrictions for rural, Causes that Marginal areas peoples and especially rural, Migrate towards the poles and big cities. And since the cities will not be admission All individuals in rural and marginal areas, Therefore, there suburbanization and urban issues, In the vicinity of large cities, Air Pollution and... It will not be too far from reality. And spatial inequality will continue to exist. Accordingly, due to the great land-use policies necessary. [ranjbar, 1389].

## **15. AGRICULTURAL LAND**

Most farmers in the world that number to 75% of the world's farmers have Arable land little. This small size that create An important limitation in increasing agricultural production, More scattered pieces and separate, in Owned The farmers Which has doubled restrictions. The problem arises from the size of arable land and scatter them, Thought of Create new arable land but biger, And too little land reform, and distributed Has raised. That the integration of arable land, The result of these considerations, In solving agricultural problems considered. Basis integrating agricultural lands, Reducing the number of arable land, And broaden them through Connecting them to each other, Eliminate the irregularities in the boundaries of their, that result of facto Long irregular borders previous system rs such as heredity, And buy and sell free account. In The integrated system of agricultural lands, That waste part of the land, Vanished and instead of There is regular boundaries And extensive communication, Which connects them to the trading center and Or major communication lines. [Badrifar,1383]

## 16. NEGLECT OF TOURISM POTENTIAL

Tourism in the economic sense, it is an economic good, The most direct effect on the economy is the by injecting money, Tourism development and thus increase the revenue generated from that, Acts as an increase in exports and special feature is that Many non-tradable goods converted into tradable good. Employment creation, use and circulation of money and demand, For services and local area Products, And help to balanced economic growth, The economic benefits of tourism. According to report the World Tourism Organization (wto), In 1995, 567 million people have traveled internationally, According to a survey conducted by the organization, International tourism revenue generated, During the same period is amounted to \$ 371 billion, and During the last ten years, tourism in International, have in Average growth of 5.5%. And with average rate of 5.12 percent, Will continue to grow. [Mohammadi 1389]. Today The statistics indicate that, Even the most remote towns or villages, When used properly Tourism has the potential productivity.if the khalkhal city in this among, haveThe ability and special potential, that if The use and correct management, One would expect, In a multi-year plan, The ruling significant economic growth in the city. While unfortunately the evidence shows that any effective effort has been not taken In this regard. Some of these features include:

#### 1-The field of tourism:

With encourage investors to build a cable car in niches, Including Hot spring Kosar that according with the certain morphology, It will be possible to implement several projects.

#### 2- Development of tourism:

Unfortunately, after several years of operation, hot spring Kosar, The No space Health and beautification, The location was not ruling, That these factors, Tourism has caused discontent As a result, Will lead to Less tourism refer to the area.

## Climate and winter tourism:

Among the changes that have occurred in recent decades in the tourism industry, is the Seasonal variation, Winter tourism is a form of seasonal tourism, In the past, Privileged social classes could Use of it.but Today, due to the boom in tourism, And affordable accommodations, and public tourist flows, considered also been Other groups. Countries that have ideal conditions and snowy mountain slopes, Create ideal conditions for winter tourism. And tha revives to the winter tourism, is Conditions and factors that are favorable relative to each other are In relation. Length and height of the snow for winter tourism is concerned. is desirable a height of 40 to 60 centimeters of snow in a long period. Areas where the snow cover is less than 30 days and less than 10 cm of snow height, not provide Very suitable facilities for winter recreation. Climate and ruggedness scattered in every country should be such that:

- Atmospheric fallout might be too much snow.

#### - Winter is long enough

System ripples give the possibility to create various applications Ski jump. [Mohammadi 1389]

Due to the cases mentioned above special mentioned three characteristics that khalkhal city are All three characteristics, It also Privilege that benefit from this Divine facility, Able to portray the country as a tourism Pole for winter.but Unfortunately, no productivity of winter tourism, in this area is not dominant.

#### Sale of mineral raw materials:

Minerals In addition, infrastructure and industry, consistently known as one of the outstanding characteristics of the different periods of human civilization.human from the beginning of creation and history, Based on the needs and knowledge used of the minerals. Iran with more than 24 billion tonnes of known reserves of mineral is one of the richest and most diverse countries in the world that reserves Copper ore. Iron. Coal. Lead and zinc. Gypsum and salt. Chromite. Limestone. Dolomite. Industrial and decorative rocks. Despite the vast and varied Resources from one, And the to achieve need liberation from economic monoculture on the other, As well as access to affordable energy and appropriate staffing, Strategic position and competitiveness of its products, in Regional and world markets. Demands that all measures necessary to share this part, there needs to be On Trade and Global Markets there needs to be. Lands, mineral resources and raw materials, have a Perfect opportunity for growth and development. Because national industries, if the Power necessary to convert these materials into consumer goods population has been. Fields of creating jobs and increasing the added value, and economic growth in the region will be provided. [Motiyi Langeroudi 1388].

Increased exports of minerals as raw, in recent years, the widespread criticism of the government, has been in this area. The craftsmen and traders believe that Prevent the export of minerals, as raw, And turn them into value-added industrial products, In addition to creating jobs in country will be export revenue growth.but Export of minerals as raw, Causing the loss of many jobs In the mining industry as well as reducing the current earnings [sarghini,1392]. Unfortunately, every day people in this city who witnessed the passing of heavy machinery, The huge rocks carried on their backs, and Exported in raw form to other cities and provinces.while

with encourage investors to build factories Stonemason in this city, In addition to earning more income, And reducing unemployment, will be Factors in the economic development of the city.

# **17. CONCLUSION**

To improve urban management and Remove and overcome the obstacles listed inResearch, And most importantly, with Cultural backgrounds and provide economic growth, Which will be an important factor for economic development, And considering that the study area have the most capability and potential of tourism in their, It is hoped that To overcome these factors, Once we have this city, Developed alongside the our country's cities. To other Dear people of the city to Provide income for their families with the hardship of being away from family, in season not go to other provinces for work. Therefore, after the end of the investigation, I offer the several guideline in following.

## **18. GUIDELINES AND RECOMMENDATIONS**

1- As regards the khalkhal city of Tourism Potentials, has a Particular advantage, And most of them is hot spring kosar and springs azna, and In addition to these two places mentioned, The region also have a other tourist attractions. Unfortunately, most people around the country, havent knowledge of the city's tourist attractions, whileIt can be a media Propaganda at the national level. And the winter and summer festivals in this places, Will attract significant tourism. That this factor, will be important factor in the economic, cultural and social development of the city. Because attract tourism and according to skills and leadership this area in Crafts, Significant development Also economically, will be by selling them to tourists.

2- Encourage domestic and foreign investors to invest. Of course encouraged that tempting Investors, that between several options for construction, Factories and... Eager to have chosen this city. Including the provision of cheap land, Reduced or no taxes and....

3- Due to severe foggy asalem to khalkhal road, even in summer, And with having the tourism potential in the region, with Install a light fog lights, At least in the high-density of fog, we can expect that more tourism, Attracted to the region. Because frequently observed that most tourists, When crossing the road, May they be caught in such a fogs. In Return, In addition to define of beautiful landscapes asalem to khalkhal road, His audience of the dangers of driving in fog, Particularly aware of night vision, that This factor will leads to reduced tourism in this area.

4- Selection and use of appropriate people, and the appointment them in affairs and Resistance against those imposed by the power. And generally improve urban management.

5- Integrating agricultural land for high productivity, because statistics show that States and cities are taking these actions, Such as Germany and France has achieved an acceptable result.

# REFERENCES

[1] Zomorodian, Mohammad jafar, 1383, the application of physical geography in urban and rural planning programs, publications PNU

[2] Mohammadi, Hussain. 1389, Meteorological Applications, Tehran University publications, third edition

[3] Mahdavi, masoud, 1387, Principles of population geography, publisher Ghomes, Eleventh Edition

[4] Panahi, Mohammad Hussain, 1376, the influence of foreign culture change and cultural contexts, cultures, No. 22 and 23, page. 47 and 87.

[5] Wikipedia, January 1393, meritocracy, http://fa.wikipedia.org/wiki

[6] Ranjbar, mohsen, 1389, geomorphological features and constraints affecting the development of the khalkhal city, Journal of Geography, period 4, Number 13

[7] Badri Far, Mansor. 1383. General Economic Geography (Agriculture - Animal Husbandry) Publications pnu. Second Edition

[8] Motiyi Langroodi. Hassan 1388. Economic geography (industry). Publications jihad Collegiate Mashhad. Sixth edition

[9] Serqin, jafar, February 1392. The government plans to stop selling the mineral raw materials. The information newspaper.