## Geographic Factors Affecting the Endemism Industrial in Hail Area

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**Abstract:** The study endemism industrial and factors affecting it important in industrial planning, due to its importance in providing a database of industrial decision makers. The aim of this study was to analyze the industrial structure in the Hail region, To identify the factors influencing the decision to choose the industrial Location, Function-based approach has been used to study industrial structure, In addition to using statistical methods to see the effects of geographic factors in determining industrial location. The study found that the Hail is still not attractive for industrial investment, why are only (7%) of the factories Kingdom, constitute the food industry (26.5%) of them, the study found also that the proximity of the market is one of the most important factors influencing the choose a location food industries, wood industries and crafts semi-metallic, while the factor availability of labor did not affect the industrial endemism in the study area because of the dependence on foreign workers. The study recommended the need for attention to infrastructure in the Hail region, and the need for more serious studies to find out reasons for the low proportion of national employment in the industrial sector.

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**Key words:** endemism industrial, industrial structure, the proximity of the market, the industrial association.

#### Introduction

Industry is the basis for any progress, industrial and social, since it is an economic activity is highly intertwined economic high, they are the backbone for the development of all economic sectors, in addition to their direct impact in increasing the added value of national income, and working to contribute to the balance of payments support by reducing the import of goods and products and the corresponding increase in the export sector, the industry is also working on the exploitation of raw materials available locally.

Has defined the Kingdom in the early some industries professional simple, Such as jewels manufacturing, and some leather industries and industries based on palm leaves, and has been industrial activity until the middle of the last century, limited to the traditional industries, an industry textile, carpets, soap, furniture, cement industry, and in 1945 established the Saudi Aramco Ras Tanura filter capacity of 50 thousand barrels per day<sup>(1)</sup>.

And the obstacles that delayed the growth of industry in the Kingdom, the lack of technical expertise and trained manpower, lack of water and high electricity prices.

So turned the country into manufacturing aimed at diversifying sources of national income, and was based at the two axes, namely: First: that the State establish basic industries because of the magnitude and complexity of the technical aspects, marketing, and the second: to create a favorable investment climate and attracting foreign investment.

Therefore, the Kingdom has established the General Organization for Petroleum and Minerals (Petromin) in 1962, and Saudi Basic Industries

Corporation (SABIC), which was a cornerstone of Saudi industries<sup>(2)</sup>.

Since then, Saudi industry began development until it reached to (4631) factories in the kingdom, are characterized by concentration in certain regions of the Kingdom. (Table 1)

**Table 1:** The geographical distribution of the volume of investment and industrial factories in the Kingdom, employment by region until the end of the first half of 2010

the first half of 2010					
The region	Total funding (million riyals)	Number of factories	Number of labor		
Eastern Region	192.833	999	128.655		
Riyadh	66.616	1.748	199.607		
Medina	64.052	168	21.236		
Makah	61.671	1.177	145.164		
Qassim	6.448	225	15.879		
Asir	3.831	123	7.359		
The northern border	2.345	15	1.408		
Jazan	1.747	43	2.247		
Tabuk	1.734	38	3.448		
Najran	1.687	21	1.627		
Hail	517	34	1.409		
Jouf	236	24	947		
Baha	88	16	459		
Total	403.805	4.631	529.445		

Source: Ministry of Commerce and Industry, Saudi Arabia, 2012

The total number of producing factories in the Kingdom by the end of the first half of 2010 (4,631) a factories, Account of the Riyadh region, the number of (1,748) for the bulk factories product by 38% of the

total number of producing factories in the Kingdom, Followed by Makah region (1,177) factories by (25%), Then the eastern region the number of (999) factories by (22%).

The top of the Riyadh region, all other regions of the Kingdom in terms of the number of industrial employment the number of (199,607) workers by (38%) of the total number of industrial employment in the Kingdom of (529,445) workers. This is followed by Makah region (145.164) workers by (27%), then the eastern region of (128,655) workers by (24%) of (21.236) Medina Worker by (4%). The four regions (Riyadh, Makah, Eastern Province and Medina) combined about (93%) of the total industrial employment in the Kingdom, while representing the rest of the nine administrative regions combined (7%) of the total industrial employment<sup>(3)</sup>.

There are (34) factories in the Hail, distributed between the food industry, wood and metal craft<sup>(4)</sup>.

industrial sector in the Kingdom consists of the three main sectors are: basic industries, and oil refining industry, and manufacturing industries.

# First, the theoretical framework for the study 1-1 Objectives of the study:

This study aims to reveal the industrial structure in the Hail region, and to identify factors of industrial location selection for industrial facility, and assessing the factors affecting the industrial location selection, and their suitability with the industrial activity in terms of its geographical location, type and size of the industry to be resettled.

## 1-2 Problem of the study and questions:

Summed up the problem in the study that there is a range of geographical factors that influence the choice of location industrial facilities in the study area, and contrast these factors significant impact on the geographical distribution and endemism in the region without the other.

Therefore, the study will answer the following questions:

1 - What are the geographical factors that influence the choice of industrial location in the Hail region? 2 - How these factors affect variation in the industrial area in the study?

## 1-3 Importance of the Study:

Highlights the importance of this study:

- 1 Hail region is witnessing a renaissance at present a comprehensive development of all economic sectors, including the industrial sector, but notes that there are problems in the selection of suitable industrial sites that fit with the human and natural potential of the region.
- 2 Is the study of geographical and spatial factors affecting the selection of important industrial location in the process of industrial planning, and therefore the results of this study will form the

database for the decision maker in the industrial

## 1-4 Methodology of the study:

The study relied on function-based approach in the industrial structure in the study area, depending on the means and the following quantitative methods, in order to analyze the locations of industrial Factories and the extent of the discrepancy between these factors, namely:

- Description of the statistical data, in order to obtain averages and standard deviation for the variables of the study.
- 2 test T, to test the null hypothesis, this test is used to examine the proportion of variation in the factors affecting the industrial facility Locations selection by variable geographic location.
- 3 Analysis of variance (one way Anova), to test the hypothesis that different averages for the set of variables, both within the same group or between groups, and determine the value of (F) the moral of each variable separately, and at the level of significance (0.05).

## Hypothesis of the study:

to achieve the objectives of the study, was formulated the following hypotheses:

- 1 There are no statistically significant differences at the level of significance (0.05) between the factors of endemism industry in the study area, which include (proximity to the market, the market need for their products, and a gathering industrial, proximity to Transportation and Communications, land prices and rent, proximity to sources of raw materials, proximity to sources of energy and fuel, the presence of integrated industries, the policy of the state) in the industrial facility location selection and variable geographical location.
- 2 There are no statistically significant differences at the level of significance (0.05) between the factors of endemism industry in the study area, which include (proximity to the market, the market need for their products, and a gathering industrial, proximity to transportation and Communications, land prices and rent, proximity to sources of raw materials, proximity to sources of energy and fuel, the presence of integrated industries, the policy of the state) in the industrial facility location selection and variable Industry type.
- 3 There are no statistically significant differences at the level of significance (0.05) between the factors of endemism industry in the study area, which include (proximity to the market, the market need for their products, and a gathering industrial, proximity to transportation and Communications, land prices and rent, proximity to sources of raw materials, proximity to sources

of energy and fuel, the presence of integrated industries, the policy of the state) in the industrial facility location selection and variable industry Size.

## Population of the study:

The study population consists of (34) manufacturing facility divided into four administrative units, are (Hail, gazelle, Baqaa, Shannan), Questionnaire was distributed to the study of these industrial units, collected, checked, and then analyzed.

### Secondly, previous studies

Of studies on endemic industrial and factors affecting it, a study (Ismail) (5) which studied 20% of the existing industries in the district of Khabat, has been used several statistical methods, and concluded that the proximity of the market is one of the most important factors influencing the selection of locations the food industry, chemical industry, the timber industry and its products, crafts semi-metallic, and the proximity of raw materials is an important factor in the selection of locations industrial construction industries, while the worker provides the energy of the important factors to locate metal industries, and the industry filter oil and its derivatives, has been affected dramatically by a factor of proximity to transportation in the location of industrial units.

The study Sharifi<sup>(6)</sup>, which dealt with the craft industries in the district of Abu Khasib, it has aimed to study the craft industries in the district of Abu Khasib \ Iraq in terms of the types and characteristics of the study factors of endemism and geographical distribution, as well as the study of the most important problems facing the development of these industries, the study found that most industries in the district established in small geographical areas and specific, so the market will be limited to these areas and working to meet the local market with the exception of the manufacture of boats and the industry sweetness (Khoz River), which reached its production to markets in neighboring provinces. It also features the geographical distribution of craft industries in the district of Abu Khasib spatial concentration, especially in the center (country Sultan) and 29.7% of the total craft in the judiciary's (84) Workshop. Most of the craft works by women, resulting in a limited geographical distribution of the houses.

The study Alsalia<sup>(7)</sup>, which dealt with the issue of small-scale industries in the Kingdom of Saudi Arabia, in view of the role these industries play an important role in the expansion and diversification of production and contribute to achieving the basic objectives of economic development, the study showed that the spatial distribution of these industries does not differ significantly from the general pattern for the distribution of industries in the Kingdom, and small industries depend mostly on the resources and local

raw materials which makes it integrate with the national economy is larger than the large industries, and that its products are mainly directed towards the domestic market as they have arisen to meet the domestic demand. The small-scale industries have a number of characteristics make them play an important and significant and sustained industrial development.

### Introduction of the study area:

Located of Hail in north-western Saudi Arabia, between the Latitude degree 25 to 29 degrees north and longitudes 38°50 - 43°35 degrees in the area of Jabal Shamar Western Valley Aladara (Wadi Hail), and away from Riyadh, the capital (690 km), and Medina (450 km)<sup>(8)</sup>.

There is in Hail continental climate, with high temperatures in summer to reach (38 ° C on average), ranging in winter between (10-15 ° C), and down sometimes to below zero, and rain in winter and spring, and the average height the sea about (915 m)<sup>(9)</sup>.

In terms of structure of administrative, Hail is made up of four provinces, namely: Hail, Baqaa, Shannan and the gazelle, the number of administrative centers of the provinces 29 places, the area of Hail (about 109.14 thousand km<sup>2</sup>), (5.7%) of the total area of the Kingdom, and the size of the population amounts to about (597 144), by (2.2%) of the overall size of the population of the kingdom<sup>(10)</sup>.

In terms of economic structure, Hail economy is depends on the Agriculture, Agriculture accounts in rural areas 70% of total employment, almost no employment in the most traditional small farms.

The ratio of cultivated land 19.3% of agricultural land distributed. The total area of all crops for more than 92.000 hectares, equivalent to 7.6% of the total area of all crops Kingdom, and for agricultural crops has occupied the wheat ranked first in the region and was produced for the same year about 285,598 tons, equivalent to 13.7% of the production of the Kingdom, and the number of farmers about 17,563 farmer or the equivalent of 15% of the total farmers Kingdom in 1999<sup>(11)</sup>.

Found in Hail industrial city was established in 2003, an area of 800 thousand square meters as a first stage, and is available near the industrial city of the raw materials used in food industry, metal industries, and additional private, such as bauxite, gypsum, magnesium, addition to the presence of factories for light industry such as tissues and factory of the water. The available network of highways and railways that link the region to other regions<sup>(12)</sup>.

### Analyze the industrial structure of the study area:

The analysis of industrial structure of any area is important, because it reveals the extent of variation in the size and characteristics of the industrial activities existing in that unit spatial, as well as determine the relative importance of each branch of industrial activity according to a set of standards concerning the structure of industrial organization in the study area<sup>(13)</sup>.

To this has been to rely on what is available from these standards, which include (the number of industrial establishments, the number of labor force), which is one of the basic standards for measuring industrial activity.

There in the Hail region (34) industrial establishments differ in their geographical distribution among the four administrative units, although the lack of data and information about their geographical distribution, but, according survey results show that industrial facilities are concentrated mainly in the Hail

city, by (27) manufacturing facility, representing (79.4%) of the total establishments, followed by the gazelle province, by (4) industrial manufactory, an increase (11.8%), and distributed the rest of the industrial establishments on the rest of the provinces of the region.

In terms of structure the quantitative and qualitative structure of industry in the Hail region, according to the international classification of industrial activity (ISIC), and adopted by the Organization of the United Nations and the World Organization for Industrial Development<sup>(14)</sup>, was classified industrial activities in the study area into five branches of industry, as in (Table 2).

Table 2: The relative importance of indicators of industrial structure in Hail Region \ 2010

Type of industrial activity	Number of industrial	%	Number of	%
	establishments		labor	
The food industry	9	26.5%	876	62.1%
Manufacture of construction	8	23.5%	162	11.5%
materials Basic metal industries	6	17.7%	121	8.6%
Manufacture of wood and its products	8	23.5%	208	14.8%
CRAFT semi-metallic	3	8.8%	42	3%
Total	34	100%	1409	100%

Source: Results of the field survey, and the Ministry of Industry and Trade, published data on the website, 2012

### Clear from the table:

1 -In terms of the number of industrial establishments, food comes first place, a rate (26.5%) of the total industry, as it includes the food industry, juices, milk products, water and grinding grain.

Followed by the construction materials industry, and the timber industry and its products, by (23.% Each), then by the basic metal industries (17.7%), and finally the craft by semi-metallic (8.8%).

2 - In terms of labor, excels as well as food industries, in terms of some (62%) of the total industrial employment, followed by the timber industry (14.8%), followed by construction materials industry (11.5%).

# Thirdly: Factors Analysis affecting the selection of industrial Location

The process of location selection of industry is not random, but based on a set of principles that work for the success of the manufacturing process and achieve savings of Economic serving economic activity as a whole, as well as avoid the negative effects that can arise from lack of localization appropriate for the industrial facility in accordance with the standards of planning long-term<sup>(15)</sup>.

Seen from (Table3), which refers to the order of the arithmetical averages of the most important factors of location selection of industrial factories in the study area, as there is a difference and the clear contrast between these

averages, and indicates the largest averages to the most important factors of location selection industrial, and vice versa.

Table 3: The mean and standard deviation of industrial location selection factors in the study area

Tocation selection factors in the stad	, 41 04	
Industrial location selection factors	The	The standard
	mean	deviation
		(±SD)
Proximity to market	5,21	5,34
Market demand for their products	5,11	4,81
Availability of raw materials	4,13	4,21
Proximity to sources of energy and fuel	1,01	2,21
A gathering industrial	2,01	3,01
Proximity to transport routes and	4,81	4,90
transport		
Availability of land and cheap rent	2,11	3,09
Availability of labor	2,41	2,56
The presence of integrated industries	2,03	3,75
State policy	1,94	3,64

Source: Statistical analysis of the study sample (n =), using the

### Analysis of the data table:

1 - factor comes close to the market in the first place among these factors, the arithmetic average (5.21), and standard deviation (5.34), because most industries aimed at the conduct of its products in the city of Hail, where the largest population density, especially and that most of the industrial establishments in the study area is the Food industry needs its domestic market, therefore, came in

second factor is a need to market their products, arithmetic average (5.11) and standard deviation (4.81).

- 2 was the proximity of transportation and communication important in the location Selection industry average (4.81) and standard deviation (4.90), and that the importance of this factor, because of the large area of the study area, therefore, become the transportation costs are important, both for the transfer of raw materials to the factory, or transfer the product to the market.
- 3 worker availability of raw materials came in the ranking fourth among these factors, the average arithmetic (4.13), because most of the existing industries are food industries based on agricultural raw materials and livestock produced by the Hail region, as well as industry, construction industries, which depends on the material primary in the region, bauxite, silica, tungsten, zinc, gypsum, magnesium, and ornamental stones.
- 4 worker availability of labor did not contribute to effectively in industrial location selection, the arithmetic average (2.41), due to the adoption of industry in the study area on foreign workers from South and Southeast Asia, by (85%), while not only a local employment (15%).
- 5 factor political state did not contribute in the selection of industrial location, due to the indiscriminate proliferation and the lack of advance planning for some branches of industrial activities and a link to its factors, the most powerful such as the availability of the market and raw materials, and that was a direct effect on the low impact of this factor, with an average arithmetic (1,94), in addition to the weakness of government intervention in directing industrial activity in the study area, and focuses attention on the major cities in the Kingdom.
- 6 has made some of the factors contribute to low rates in industrial decision, I have obtained the low rates of less than (2.5), as in the worker provides the land and cheap rent (2.11), and factor the existence of an industrial combine (2.01) and factor the presence of industries integrated (2.03), despite the establishment of the city of Prince Abdul Aziz, economic, but it is still not attractive to industries in the region.

## Analysis of the factors by geographic location

The first hypothesis: provides for the hypothesis that there is no statistically significant differences at the level of (0.05) between the variables of the study (the proximity of the market, the market need for their products, gathering industrial, proximity to transportation, land prices and rent, proximity to sources of raw materials, proximity to sources of energy and fuel, the presence of integrated industries,

and the policy of the state) in the industrial facility location selection and variable geographical location.

After testing this hypothesis through the use of test (t - Test) as in the table. 4, which shows the value of (t) calculated in the variables (proximity to the market, the market need for their products, proximity to transportation, proximity to raw materials), is the largest of the value of (t) spreadsheet, which was about (2.09) at the significance level (0.05), which means rejecting the null hypothesis and accept the alternative hypothesis, which states that there are significant differences between these factors and variable geographical location, that these four factors explain a large proportion of the variance when choosing the installation site according to the variable industrial site, and for the following reasons:

- 1 that most of the industrial activities (80%) has been endemic within the city of Hail, and that by providing the right market for the consumption of products on the one hand, and take advantage of the proximity of the market to reduce transport costs, especially as the city lies on the road between the northern and Qassim region and the region Central in the Kingdom, which is a contributing factor in the ease of access to areas of distribution.
- 2 The availability of local raw materials for some branches of industrial activities, such as in food industries and construction industries on the easy availability of raw materials needed for these industrial activities and thus endemic near the sources of these raw materials.

Table 4:T test results for significant differences in the site selection factors varied industrial facilities depending on the location variable

location variable			
Industrial Location selection factors	The calculated value of T		
Proximity to market	4,64		
Market demand for their products	3,25		
Availability of raw materials	4,12		
Proximity to sources of energy and fuel	1,31		
A gathering industrial	1,42		
Proximity to transportation	4,26		
Availability of land and cheap rent	2,01		
Availability of labor	1,30		
The presence of integrated industries	2,00		
State policy	1.92		

At the level of statistical significance (0.05), T. spreadsheet (2.09), degree of freedom (55.423).

Source: Results of statistical analysis of the study sample.

## Analysis of the factors by type of industry

Table 5 which shows the averages to arrange the factors of the industrial facility Location selection, depending on the variable type of industry, that there is a difference in the value of these averages among the branches of industrial activities in the study area as follows:

1 - is the proximity of the market of the most important factors influencing the site selection of

food industries and construction industries, crafts semi-metallic and timber industry and furniture, where she received the highest averages, as follows: 6.4; 4.3; 6.4; 5.2, respectively. And that the correlation is high between the products of these industries and the consumer market and connect direct consumer, and also because some of the products of these industries destroyed as rapidly as in the manufacture of ice and soft drinks, sweets, or may be directly linked to taste the consumer, such as furniture and Furniture wood.

2 - is a factor availability of raw materials most important factors in selection of industrial location for the manufacture of construction materials, the

- average arithmetic mean (6.41), one of the highest averages of the order of the factors, because the raw materials have a significant impact in the processes of production, especially because it requires transmission of large amounts both for the raw material or product, and high transfer costs.
- 3 As for metal industries, the form factor Proximity to energy sources and fuel the most important factor in determining the location, so that the total value of the arithmetic mean (3.98), they are industries that require large amounts of energy or fuel in their production processes, for example, the production of one ton of iron needs to be close to 445 \ Mika |Jules \ hours.

**Table 5:** Arithmetic mean of the order of site selection factors, industrial facilities depending on the variable type of industry

CRAFT semi-	Manufacture of wood	Basic metal	Construction	Food	Site selection factors
metallic	and its products	industries	industry	industries	
6.4	5.2	2.92	4.3	6.4	Proximity to market
5.2	5.6	3.01	4.2	6.3	Market demand for its products
4.3	4.3	2.94	4.4	4.2	Proximity to transport routes and transport
5.1	2.4	3.1	5.6	5.3	Availability of raw materials
2.1	2.1	3.1	3.2	1.2	Availability of labor
1.4	1.3	2.74	3.1	2.3	Availability of land and cheap rent
1.72	1.11	2.95	2.1	1.2	A gathering industrial
1.15	2.1	3.14	1.22	1.01	The presence of integrated industries
2.4	1.4	3.98	2.92	1.11	Proximity to sources of energy and fuel

Source: Statistical analysis of a sample of the study.

In general, the factor of proximity to market is one of the most important factors influencing the selection of site food industries, and craft semi-metallic and timber industry and its products, and this is consistent with the theory of endemism and industrial, which emphasizes that the industries that gain weight after processing, or that damage their products quickly, or those that are directly related to consumer taste tend to resettle near the market<sup>(16)</sup>.

The worker availability of raw materials is considered an important factor in location selection and construction industries, food and crafts semimetallic, This is consistent with the theory of industrial and endemism, which states that industries with less weight after processing tend to resettle near the raw material<sup>(17)</sup>.

## The second hypothesis:

Provides the assumption that there is no statistically significant differences at the level of (0.05) between the variables of the study (the proximity of the market, the market need for their products, gathering industrial, proximity to transportation, land prices and rent, proximity to sources of raw materials, proximity to sources of energy and fuel, the presence of integrated industries, and the policy of the state) in the industrial facility site selection and variable type of industry.

To test this theory, was applied method of analysis of variance (one – way Analysis Anova), it was found that the value of (F) calculated in the factors (proximity to the market, need the market to their products, proximity to transportation, availability of raw materials, proximity to sources of energy and fuel) with a higher value of value indexed to (F), which amounted to (1.23), which means rejecting the null hypothesis and accept the alternative hypothesis, which states that there are significant differences at the level of (0.05) between these factors are attributable to a variable type of industry, and for the following reasons:

- 1 Most industries in the study area produce consumer products food industries and wood industry and handicraft industries semi-metallic, so endemic to these industries Near the markets, particularly near the center of trade in the city of Hail.
- 2 affected by the industry of construction materials by a factor of proximity to raw materials on the one hand, and proximity to transportation routes on the other hand, so, it is noted near endemic of raw materials, taking advantage of the transport routes in an attempt to reduce the costs of transporting raw material and the transfer of the product.

Analysis of factors depending on the size of industry

Shows table 6 averages to arrange the most important factors in site selection of the industrial establishment

variable depending on the size of the industry

Table 6: Arithmetic mean of the order of Industrial site selection factors in the Hail region of variable size depending on the industry

Site selection factors	Less than 10 workers	10 to 29 workers	30 or more workers
Proximity to market	7.24	6.2	4.30
Market demand for its products	4.3	3.5	5.60
Proximity to transport routes and transport	6.2	6.4	5.2
Availability of raw materials	5.2	4.3	6.2
Availability of labor	3.4	3.8	2.4
Availability of land and cheap rent	2.1	1.4	2.3
A gathering industrial	2.01	2.4	2.5
The presence of integrated industries	2.4	2.5	1.6
State policy	1.3	1.4	2.5
Proximity to sources of energy and fuel	3.4	3.2	4.5

## Is clear from the data table:

- 1 with regard to industrial establishments the number of its workers less than 10 workers, factor came close to the market in the first place and average was (7.24), because most of these industries produce consumer products tend to resettle near the market.
- 2 The medium industries, which ranges from the number of employment in which (10 -29) worker, the form factor Proximity to transportation the most important in determining the location, and narrowly on the proximity of the market, with an average arithmetic (6.4) (6.2), respectively, and perhaps the reason is that most of these industries are handicraft industries that need to benefit from proximity to transportation to reduce the cost of transporting raw material and product.
- 3 for industries with large size (30 or more workers), the factor provides the most important raw material in determining the location, arithmetic average of (6.2), and this category includes metal industries that have a basis in the region close to the raw materials.

## The third hypothesis:

Provided for this hypothesis: that there is no statistically significant differences at the level of (0.05) between the variables of the study (the proximity of the market, the market need for their products, gathering industrial, proximity to transportation, land prices and rent, proximity to sources of raw materials, proximity to sources of energy and fuel, the presence of integrated industries, and the policy of the state) in the industrial facility location selection and variable size of the industry.

After examining this hypothesis using analysis of variance (one – way Analysis Anova), it was found that the values of (F) calculated for the variables (the market need for their products, availability of raw materials, proximity to transport and communications) is the largest of the value of (F) spreadsheet, which

amounted to (2.41), which means rejection null hypothesis and accept the alternative hypothesis, which states that there are significant differences at the level of (0.05) between these variables when Choose a location Industry depending on the size of the industry, industries are small affected primarily need the market for the product, and availability of raw materials, and proximity to transport routes and transportation.

### **Results:**

Analysis of the industrial structure and the factors affecting the Choose a location Industry in the Hail region, the following results:

- 1 account for the food industry at the highest rate in the region, by (26.5%), followed by Manufacture of construction, Manufacture of wood and its products by (23.5%) Each of them.
- 2 The results of statistical analysis of the factories that the proximity of the market, is one of the most important factors influencing the selection of sites food industries, wood industries and handicrafts sub-metallic.
- 3 Is the factor of proximity to raw materials, the most important factors influencing the Location selection construction industries.
- 4 Such as the proximity of raw materials and proximity to transportation and communication the most important factors in the Location selection Metal industries.
- 5 -he most important factor in choosing a Location industries, small size (less than 10 workers) is the proximity of the market, the industrial establishments medium-sized (10-29 employees) may be greater than proximity of transportation and communication on the proximity of the market in determining the location, While playing proximity of raw material an important role in determining the location of industries large (30 or more workers).

- 6 was rejected first null hypothesis and accept the alternative hypothesis, by showing the existence of statistically significant differences at the level of (0.05) between the variables (proximity to the market, the market need for its products, proximity of transportation and communication, and availability of raw materials) at the Location selection industry depending to the variable geographical location.
- 7 was rejected the second null hypothesis and accept the alternative hypothesis, by showing the existence of statistically significant differences at the level of (0.05) between the variables (proximity to the market, the market need for its products, proximity to transportation and communication, availability of raw materials, and proximity to sources of energy and fuel ) at the industrial site selection variable depending on the type of industry.
- 8 was rejected the third null hypothesis and accept the alternative hypothesis, by showing the existence of statistically significant differences at the level of (0.05) between the variables (proximity to the market, the market need for its products, proximity to transportation and communication, and availability of raw materials) at the Location selection industry depending to the variable size of the industry.

## Recommendations

Based on previous results, the study recommends to:

- 1 continued in the public sector to play its role in the development of Hail to supplement the programs of development, such as the establishment of industrial estates and the establishment of infrastructure and provide jobs for the people of the region, so as to create a market attractive to industries.
- 2 Conducting a scientific study to explore the extensive comparative advantages of the region, and try to promote them to attract the media industries, while providing incentives for such emerging industries.
- 3 attention to infrastructure in the region, and the development of methods of transportation and communications, in order to facilitate access to neighboring markets, thus increasing the size of the market.
- 4 Make serious study to find out reasons for the low proportion of national employment in the industrial sector in the region, so that the worker abundance of labor did not play any role in the selection of industrial

location in the region, because of the reliance on expatriate labor.

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#### Reference

- 1 Aramco, published reports.2012
- 2 Ministry of Trade and Industry.2012, Annual Report, pp. 12-26.
- 3 Ministry of Trade and Industry.2012, Annual Report, pp. 12-26.
- 4 Secretariat of Hail.2012, Unpublished reports, p. 13
- 5 Ismail, 2009, a geographical analysis of the factors affecting the selection of industrial sites in the district of Khabat, Journal of Kuysanjaq, the Kurdistan Region of Iraq, No. 2011.18
- 6 Sharifi,1993, craft industries in the district of fertile father (a study in industrial geography), Journal of the Faculty of Arts, Issue 19, pp. 23-35, Basra University.
- 7 Alsalia,2001, small-scale industries in the Kingdom of Saudi Arabia, Journal of King Saud, Volume 17, Issue 2.
- 8 Al-Ansari, Abdul Rahman Tayeb, and Yusuf, Ahmad Faraj,2005, Hail Deira Hatem, convoys House: Riyadh. Page 11
- 9 Al-Ansari, 34, Previous reference.
- 10 Department of Statistics, 2010, Statistical Yearbook, pp. 52-67.
- 11 Department of Statistics, 2010, Statistical Yearbook, pp. 52-67.
- 12 Industrial City in Hail, information and data published on the website of the city, 2012.
- 13 Ismail, 2009, p 5, Previous reference.
- 14 Samak, Muhammad Azhar and Al-Tamimi, Abbas Ali. (1987). The foundations of geography and industrial applications, Mosul University Press, p 84.
- 15 Mohamed, Saad Jassim. (2002). Geography of industry (founded, applications, and spatial distributions), i 1, House of Candles culture, Libya, p 34.
- 16 Rassol, Habib Ahmed. (2008). Geography of the industry, the Arab Renaissance House, Beirut, pp. 104-111.
- 17 Rassol. (2008). P 104-111, Previous reference

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