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The social and service effects of cement and phosphate plants in Al-Qaim district

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Abstract---The research aims to know the social and service development effects of cement and phosphate plants in Al-Qaim district, and it became clear through the study that the size of families working in the cement plant is between (5-10), they constituted (83%), while the size of the family working in the phosphate plant is (82%). As a percentage of the total number of workers whose ages ranged between (30-50) years, which reached the stage of sufficient number of family members, as well as the increase in income levels that prompted them to increase the number of family members, As well as the role of customs and traditions in the district, which is reflected in the increase in the number of family members. As for educational services, the percentage of primary schools that were established after the presence of factories constituted (21%) of the total number of schools in the district, with a noticeable increase in the total number of students as well. (12%) students participating in district schools and (19%) the total number of teachers in district schools. As for secondary schools, the proportion of complex schools reached (16%) of the total number of schools within sub-districts, as the percentage of students (15%) As for the percentage of teachers, it reached (17%), and all stages of the study witnessed a development after the establishment of the two factories.

Keywords---developmental effects, social, service, Qaim district.

Introduction

Aspects of social influence stem from the recognition of a well-known fact that industrial enterprises are a process of change in the social, economic and cultural structure of the region, due to the changes they bring about in the structure of

the workforce, qualifications, composition of occupations, economic activity and change in human behavior as social actions are created through new industrial activity, Industrial factories also contribute to the development of health, educational, social and recreational services, housing services and markets. As for family jobs, most families were responsible for providing social and cultural services, but after the industrial activity that took place in the district and the resulting developments and technological progress that prompted the state to intervene to help families Through the establishment of cultural and social institutions such as clubs, schools and other services that serve everyone and raise the scientific and cultural level of the residents of Al-Qaim district.

Research problem

What are the developmental effects of cement and phosphate plants in Al-Qaim district?

Research hypothesis

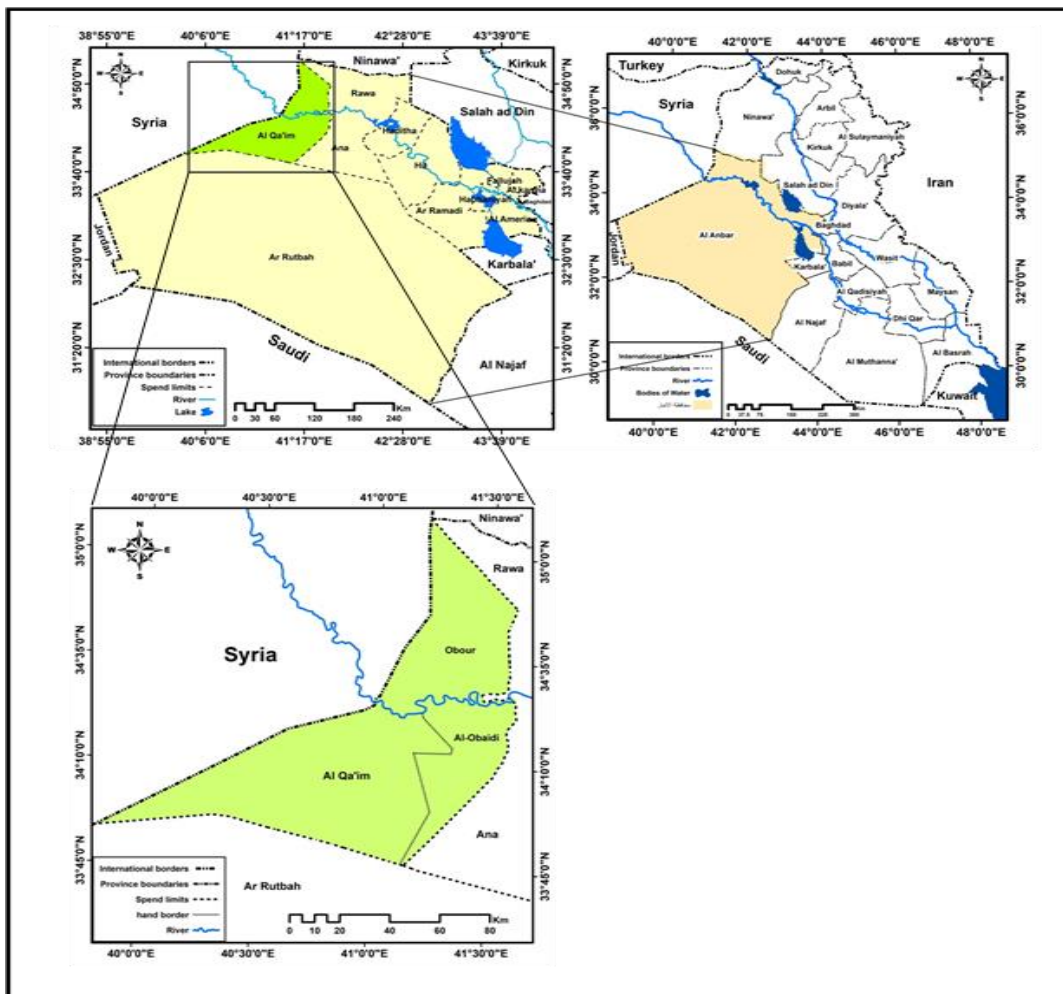
The cement and phosphate factories have developmental (social and service) effects on the Qaim district.

Search limits

Spatial boundaries

It is determined by studying the cement and phosphate plants that are endemic within the administrative boundaries of Al-Qaim district and their developmental effects at the level of Anbar Governorate. '22.603"E - 41°36'14.021" - E) east, and the western boundary of Al-Qaim district is part of the Iraqi-Syrian border, and from the north and north-east it is bounded by Rawa district, on the east it is bounded by the district of Anah, and from the south by the Rutba district, As shown in Map No (1).

Map (1) the location of the study area from Anbar Governorate and Iraq



Source: Republic of Iraq, Ministry of Water Resources, Directorate of Public Survey, Map of Iraq and Anbar, 2021, scale (1000000:1). , and the output of Arc Map 10.4.1

First: The social effects of cement and phosphate plants in Al-Qaim district family size :1

It was found in Table (1) and Figure (1) that the size of families working in the cement plant ranged between (5-10) and they constituted (83%), while the proportion of the size of families working in the phosphate plant was (82) out of the total number of workers ranging from their ages range from (30-50) years, and they have reached the stage of sufficiency in the number of family members, as well as the rise in the level of income that prompted them to increase the number of family members, as well as the role of customs and traditions that prevail in society in the district, which is represented by an increase in the number of family members .

As for the families whose members numbered from (1-4) in the cement factory, their number was (63) workers at a rate of (10%), while in the phosphate factory their number reached (441) workers at a rate of (10%) of the total number of workers whose ages range between (20-30) years and workers whose wives work in state utilities. As for the workers whose number of family members reached (11 or more), their percentage constituted (7%) in the cement factory and (8%) in the phosphate factory out of the total number of workers, and they are the workers who reached Their ages are (50) years or more and who have reached the stage of sufficiency in the number of family members in addition to their customs and traditions that prevail in that category by increasing the number of family members, and here it can be said that industrial facilities contributed to reducing the family size (1-4) for workers in cement factories And phosphates by increasing the rates of medium-sized families (5-10), and this is the result of the requirements of industrial work .

Table (1) Size of households for workers in cement and phosphate plants in Al-Qaim district

The ratio %	Phosphate plant	The ratio %	cement factory	family size
10	441	10	63	4-1
52	2300	55	360	7-5
30	1330	28	180	10-8
8	329	7	47	11 and more
%100	4400	%100	650	the total

Source: From the researcher's work based on the questionnaire form.

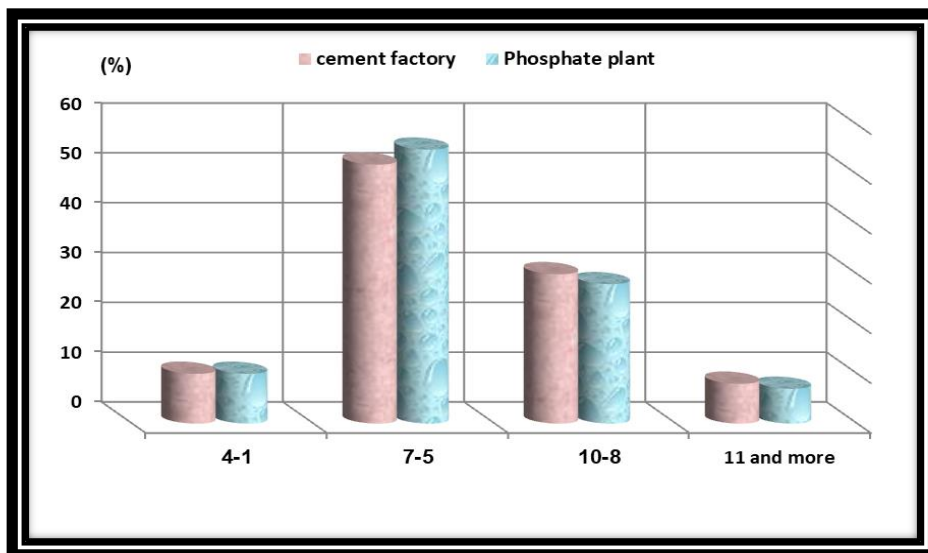


Figure (1) The size of families for workers in cement and phosphate plants in Al-Qaim district.

Source: Based on Table (1).

Gender composition of workers in cement and phosphate plants in Al-Qaim district

The study and analysis of the gender composition of workers is necessary to know the extent of workers' participation in industrial activity in relation to the study area, and this is evident from Table (2) and Figure (2). In the cement factory, the percentage of males occupied (99%), while in the phosphate factory, the percentage of males was (98%), while the percentage of females in the cement plant was (1%) and the percentage of females in the phosphate plant was (2%) how much is the total number of workers, and through this we can conclude the weak participation of women in the industrial activity located in the study area.

Table (2) The gender composition of workers in industrial establishments

The ratio %	Phosphate plant	The ratio %	cement factory	gender
98	4306	99	641	Mention
2	94	1	9	feminine
%100	4400	%100	650	the total

Source: From the researcher's work based on the 2021 questionnaire.

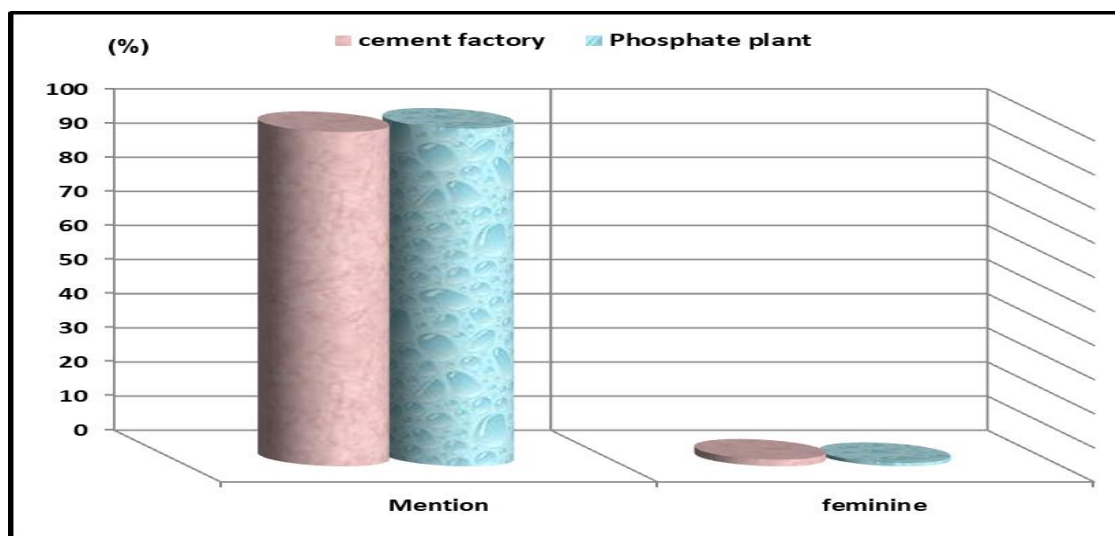


Figure (2) The gender composition of workers in industrial establishments

Source: Based on Table (2)

The lack of women's participation in productive work is due to several reasons, including the social situation in the study area, which does not allow women to go and work in economic fields, and this matter depends on the cultural aspect. and the social level of the family, which is often an obstacle to women's participation in the labor market. In addition, working in industrial enterprises is delicate work and requires high-level scientific specializations in all stages of production, which does not correspond to the low cultural level of women in the region, where it is known that the work force of women is oriented towards service aspects, warehouses, packaging work and technical aspects The other, so that it may be

necessary to develop a strategy for work to raise the cultural, social and scientific level of women to the extent that they can free themselves from customs and traditions that prevent women from participating in production, and that the nature of work in the two factories is hard and tiring work that requires great effort and this is difficult for women (1)

As well as working long hours in the two factories, which starts from seven in the morning to four in the afternoon, which contradicts the social role of women and the lace of female workers, especially after the factories turned into investors, which reduced the female workforce.

Second: The service effects of the cement and phosphate plants in Al-Qaim district:

The process of locating industrial activities and developing levels of spatial development is linked to the availability of the necessary services, whether they are public services or infrastructure services, as the level of development of these services represents economic savings, which will enhance the role of the economies of mass in attracting industrial activity, and thus improve opportunities for developing levels of spatial development Within the regional space, regarding the importance of cement and phosphate plants in the development of community public services, the following can be noted :

Educational services

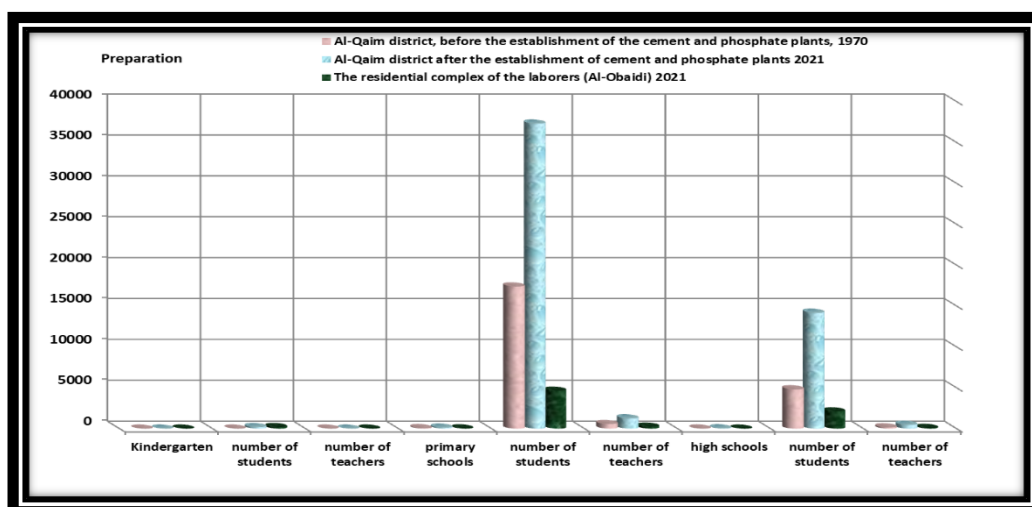
Educational services are among the most important community services provided by the residential complex to its employees, workers and non-workers, and education represents the basic infrastructure in the development of industrial activities due to services in the field of training and technical qualification of workers, as providing educational services is very important and necessary to develop the productive capacity of workers (2), And the development of services and educational opportunities for the children of workers in the industrial field and other fields, From the analysis of the data in Table (3) and Figure (3), it became clear that there is a clear development in educational services compared to what it was before the establishment of the factories, as the percentage of primary schools that were established after the presence of the two factories constituted (21%) of the total number of schools in the district, with an increase Notable in the total number of students as well, they represented (12%) students participating in the schools of the region and (19%) the total number of teachers in the schools of the region, as for secondary schools, the percentage of the schools of the complex amounted to (16%) of the total number of schools within the sub-districts where That the percentage of the number of students (15%) and the percentage of teachers amounted to (17%) and that all stages of the study witnessed a development after the establishment of the two laboratories, and this is a clear developmental indication for the laboratories in the educational field, and the development of the service through the development of social, cultural, civilized and behavioral reality, so it will create a clear society, who is trying to be developed.

Table (3) Educational services before and after the establishment of cement and phosphate plants

number of teachers	number of students	high schools	number of teachers	Number the pupils	primary schools	number of teachers	Number the pupils	Kindergarten	the year	Institution type
156	4810	13	570	17385	57	—	—	—	1970	Al-Qaim district before the establishment of cement and phosphate plants
473	14173	38	1261	37310	122	3	191	1	2021	Al-Qaim district after the establishment of the cement and phosphate plants
81	2111	6	243	4642	26	3	191	1	2021	The residential complex belonging to the laborers ((Al-Obaidi
%17	%15	%16	%19	%12	%21	-	-	-		The ratio of the complex from the judiciary

Source: Republic of Iraq, Ministry of Education, General Directorate of Education in Anbar Governorate, Department of Educational Planning, Statistics Division, 2020-2021 unpublished data.

Figure (3) Educational services before and after the establishment of cement and phosphate plants



Source: Based on Table (3)

Religious services

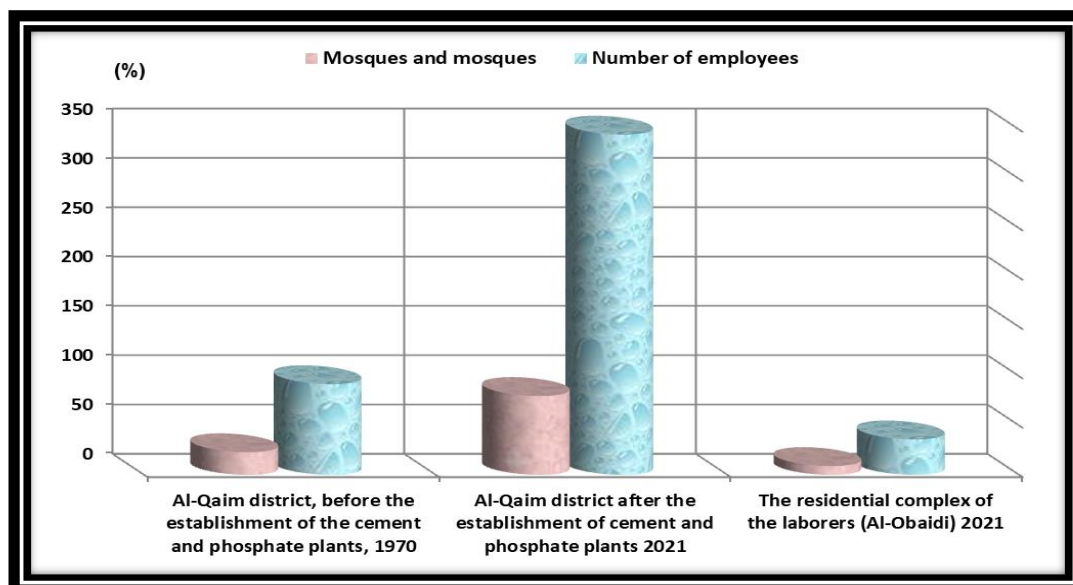
Religious services are of great importance, as is the case in other communal services provided by the residential complex to its workers and non-workers, as we realized through the analysis of the data in Table (4), Figure (4), that there is a development in religious services compared to what it was before. The presence of two factories, as there are 9 mosques and a mosque in the residential complex, and 11.3% of them are from the total mosques and mosques in the district, and for this it can be said that religious services are sufficient to provide services, and there was a clear development after the establishment of the two factories at the level of the district and the residential complex, and this It meets the needs of the people and shows us the clear developmental importance of the two factories.

Table (4) Religious services before and after the establishment of cement and phosphate plants

Number of employees	Mosques and mosques	the year	Institution type
92	23	1970	Al-Qaim district before the establishment of cement and phosphate plants
345	80	2021	Al-Qaim district after the establishment of the cement and phosphate plants
36	9	2021	The residential complex belonging to the laborers (Al-Obaidi)
%10.4	%11.3	-----	The ratio of the complex from the judiciary

Source: Directorate of Sunni Endowment, Anbar Governorate, Survey and Land Unit, unpublished data, 2021.

Figure (4) Religious services before and after the establishment of cement and phosphate plants



Source: Based on Table (4).

Recreational services 3

Recreational services are among the important social services for workers, as they contribute to revitalizing human activities mentally and psychologically, and this helps to restore human activity and thus increase production in quantity and quality. Therefore, state institutions have paid great attention to this aspect in order to entertain workers (3). It is clear that by analyzing the data of Table (5) and Figure (5), the youth center reached (50%) of the total number of youth centers in the district, followed by internet services, swimming pools and cafes with (40%) of the total number of services in the district. As for the playgrounds Sports accounted for (20%), which represented the percentage of the complex, in addition to its importance in providing job opportunities for workers in the field of recreational services, as it represented (40%) the percentage of workers in the recreational services of the complex, despite the presence of most of the recreational services after the construction of the residential complex for the workers. However, there is a clear lack of efficiency in recreational services.

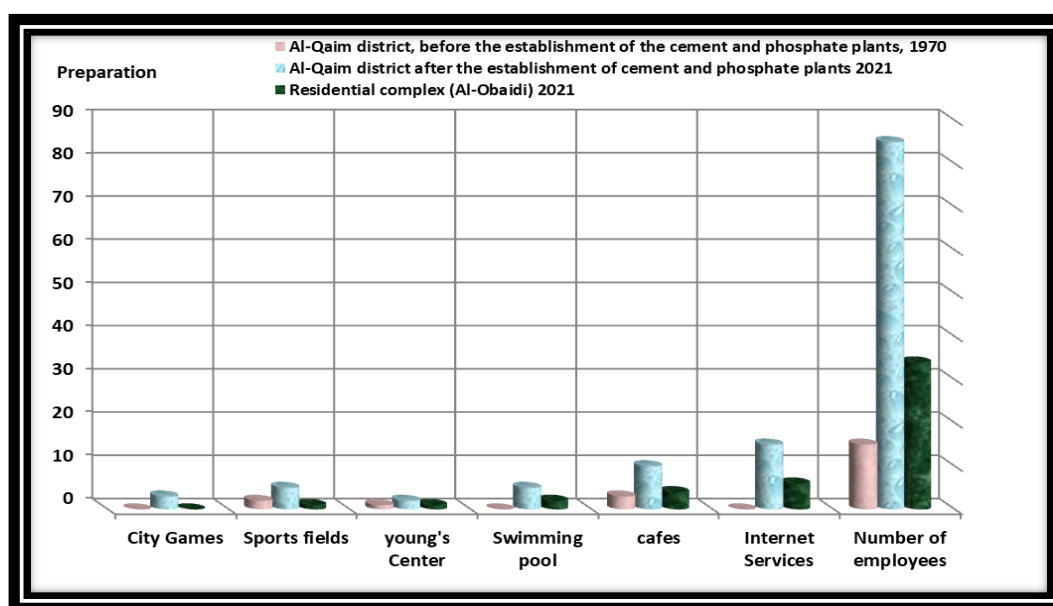
Table (5) Recreational services before and after the establishment of cement and phosphate plants

Number of employees	Internet Services	cafes	Swimming pool	young's Center	Sports fields	City Games	the year	Institution type
15	—	3	—	1	2	—	1970	Al-Qaim district before the establishment of

								cement and phosphate plants
85	15	10	5	2	5	3	2021	Al-Qaim district after the establishment of the cement and phosphate plants
34	6	4	2	1	1	----	2021	Residential Complex (Al-Obaidi)
%40	40%	%40	40%	%50	%20	----	----	The ratio of the complex from the judiciary

Source: Based on the field study on December 28, 2021.

Figure (5) Entertainment services before and after the establishment of cement and phosphate plants



Source: Based on Table (5)

Commercial Services

By analyzing the data of Table (6) and Figure (6), it was found that there are various commercial services activities at the level of Al-Qaim district and the residential complex, and this is a natural aspect in response to the needs of citizens. It is clear to workers in the field of developing the level of commercial services for all its employees, so the importance and percentage of developing commercial activities varies, as evidenced by the data of the aforementioned table, as we realize that there is a clear and more attractive development for workers in

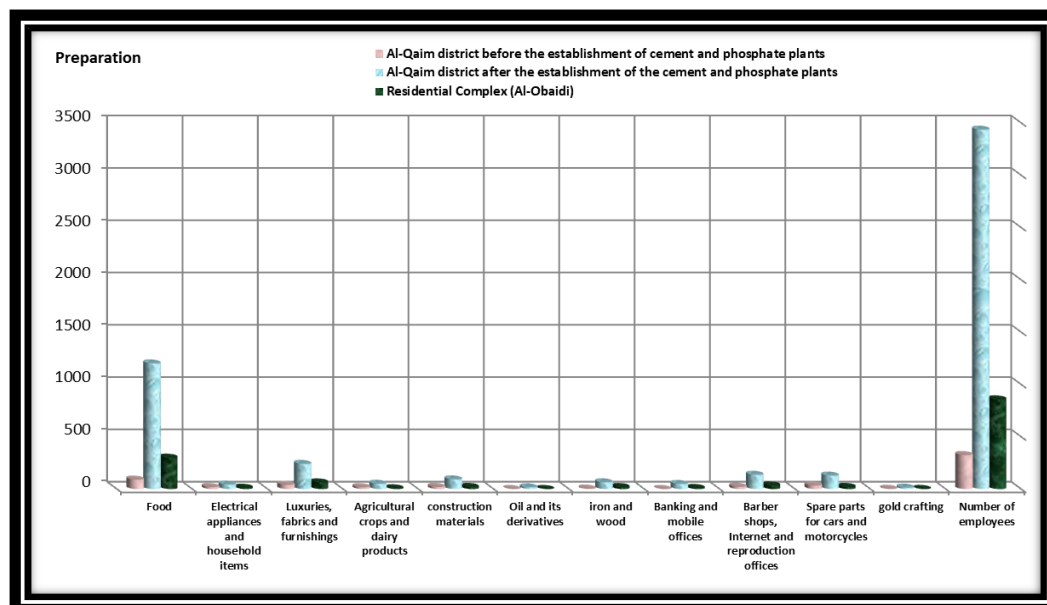
collecting commercial activities, specifically (food) and electrical and household appliances luxury goods, fabrics, furnishings, mobile offices and banking services) and this is of great importance in increasing the economic returns generated by the owners of these facilities and in providing job opportunities for a group of workers, especially unskilled labor within the district, which is suitable for workers without experience and training, in order to reduce the unemployment rate among residents of the district and achieving interconnection between the areas of other districts, and in general it can be said that after the establishment of a residential complex belonging to the two factories, it was found that here As a noticeable increase and more than half of what was before the existence of the factory, and this shows us the developmental importance of the two factories, and this is evident in the field of developing commercial institutions.

Table (6) Commercial services before and after the establishment of cement and phosphate plants

The ratio of the complex from the judiciary	Residential Complex (Al-Obaidi)	Al-Qaim district after the establishment of the cement and phosphate plants	Al-Qaim district before the establishment of cement and phosphate plants	Institution type
	2021	2021	1970	the year
%25	300	1200	90	Food
%28.6	12	42	19	Electrical appliances and household items
%26.3	63	240	40	Luxuries, fabrics and furnishings
%14	7	50	17	Agricultural crops and dairy products
%21.7	20	92	20	construction materials
————	————	16	————	Oil and its derivatives
%29.7	19	64	4	iron and wood
%20.8	10	48	————	Banking and mobile offices
%25.7	35	136	22	Barber shops, Internet and reproduction offices
%23.4	20	128	34	Spare parts for cars and motorcycles
%7.7	1	13	2	gold crafting
%24.9	857	3435	325	Number of employees

Source: Based on the 2021 field study.

Figure (6) Commercial services before and after the establishment of cement and phosphate plants



Source: Based on Table (6)

Health services

It is evident from the data of Table (7) and Figure (7) that the level of health services in the residential complex of the two factories has witnessed a clear improvement in the number of hospitals, health centers and medical staff at various levels. The developmental impact of large industrial facilities in this field is evident through the presence of a number of centers. The health services and medical clinics, as well as the general hospital, which is located within the residential complex of the two factories, as the percentage of the contribution of health services in the complex was very large compared to the district of Al-Qaim, and these health services contributed to providing services to the population within the residential complex as well as the population within the administrative boundaries of the district Al-Obaidi and some areas of Al-Qaim district, especially after the security events that the governorate has witnessed since 2014.

Table (7)

It shows the health services before and after the establishment of cement and phosphate plants in Al-Qaim district

Number of employees	private laboratories	Doctors clinics	Number of health centers	Number of Hospitals	the year	Administrative unit
95	1	2	6	1	1970	Al-Qaim district before the

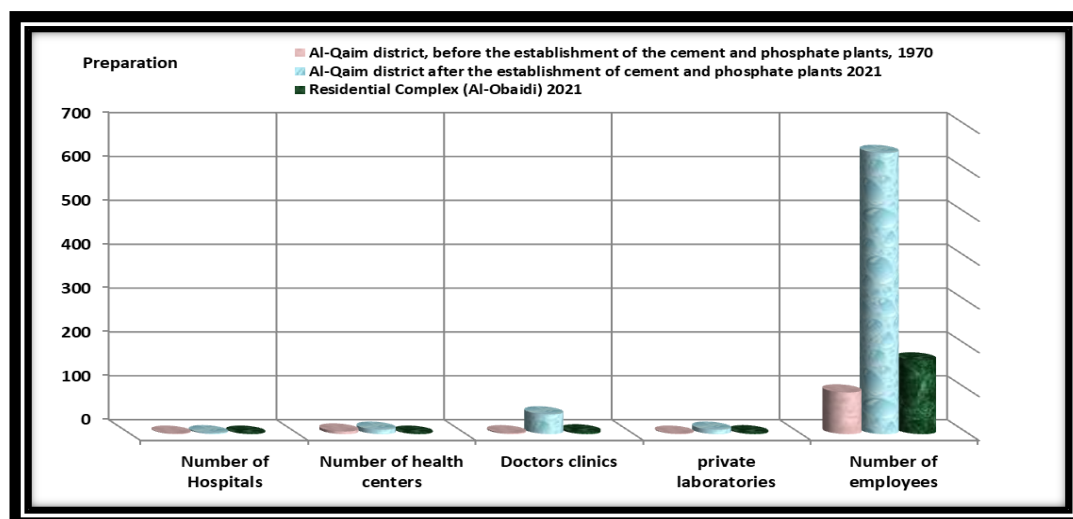
						establishment of cement and phosphate plants
641	10	45	10	2	2021	Al-Qaim district after the establishment of the cement and phosphate plants
168	2	4	1	1	2021	Residential Complex (Al Obeidi)
%26	%20	%9	%10	%50		The ratio of the complex from the judiciary

Source: The table is from the researcher's work, with accreditation:

1 - Ministry of Health, Anbar Health Department, Al-Qaim General Hospital Directorate, unpublished records for the year 2021.

. - Field study, questionnaire form 2021 2

Figure (7) shows the health services before and after the establishment of the cement and phosphate plants in Al-Qaim district



Source: Based on Table (7).

Transportation services

Transportation services are among the important infrastructure services that serve factory workers and non-workers, and roads are of great importance, no less important than the previous services, as well as their role in transporting

inputs and products from factories and reducing production costs by providing an effective means. The main roads are found within the Qa'im district.

Main roads

The main roads are represented by the vital roads that connect parts of the district to the road (No. 12), which has a single lane and an unpaved (dirt) road before the construction of the two factories. The construction of the Baghdad railway line - existing after the establishment of the two factories, so it became clear to us the developmental importance of the laboratories in the field of developing main roads as well as the role in transporting raw materials, products and workers to and from the two factories, and this led to reducing production costs.

The internal road network

The internal road network was represented by a group of roads linking the administrative centers, which helped to facilitate the communication between the two factories' residential complex with the neighboring city, and thus the developmental importance of the factories in the field of internal roads, which was represented by the streets of the residential complex belonging to the two factories (Al-Obaidi district) and its streets appeared with the same chssie system which has paved roads, which have a developmental importance for the workers in the field of transportation development, is clear to serve the workers in the factories and the residents of the district, as it is characterized by ease of passage and the width of these roads ranges between (8-20 meters).

Conclusions

1. As for the social effects of the size of families working in the cement plant between (5-10), they constituted (83%), while the size of the family working in the phosphate plant was (82%) as a percentage of the total number of workers whose ages ranged between (30-50). years, which have reached the stage of the adequacy of the number of family members, as well as the increase in income levels that prompted them to increase the number of family members, as well as the role of customs and traditions in the district, which is reflected in the increase in the number of family members.
2. The study revealed the existence of a residential complex belonging to the cement and phosphate factories in Al-Obaidi district, with the allocation of residential plots for workers, which had a role in solving the residential problem for workers and its management, as well as the factories' contribution to increasing community services (education, religion, entertainment, roads, transportation and water), especially within the complex Residential for workers.

Recommendations

- a. Opening up to universities and research centers on a larger scale, benefiting from their scientific and technical expertise, and cooperating with researchers to develop industrial activities in Al-Qaim District.

- b. Work to develop all services for the residents of Al-Qaim district, through the development of the social, cultural, civilizational and behavioral reality of individuals, and this will generate a clear society that aspires to scientific and cultural development.

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