

التوزيع الجغرافي لمحطات الوقود داخل المناطق العمرانية بمدينة جدة (حي الصفا)

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المستخلص

تهدف هذه الدراسة لمعرفة توزيع محطات الوقود داخل حي الصفا بجدة، بالإضافة إلى دراسة مدى تطبيق الاشتراطات اللازمة عند إنشائها، ومعرفة استخدامات الأرض المحيطة بها. اعتمدت هذه الدراسة على المنهج الوصفي والأسلوب الخرائطي حيث قامت الباحثة بجمع عدد من البيانات من مصادر مختلفة وتمثيلها على شكل خرائط وتحليل النتائج الصادرة منها.

تُظهر نتائج التوزيع المكاني أن عدد محطات الوقود في حي الصفا ٢٨ محطة، يتركز أكبر عدد من محطات الوقود في حي الصفا ٧ وحي الصفا ٨، ويمتد توزيع هذه المحطات تجاه المحور الشمالي الغربي نحو الجنوب الشرقي تماشيًا مع شارع أم القرى وطريق الأمير متعب، ويتبين من تحليل المسافة المعيارية ميل الظاهرة للتشتت؛ إذ بلغت قيمة الدائرة المعيارية (١,٥) كيلومتر يقع داخل دائرة المسافة المعيارية ١٥ محطة من أصل ٢٨ أي أن ما نسبته ٥٤٪ من محطات الوقود في منطقة الدراسة. تبلغ قيمة صلة الجوار (١,٢٣١٥٧) مما يدل على سيادة النمط المتباعد المنتظم، وأن مسافة المتوسط الفعلي وصلت (٤٣٨,٢١٢١) مترًا، وهي أكثر من المسافة المتوقعة بـ (٣٥٢,٤٩٩٣) مترًا، ويشير هذا النمط إلى وجود عوامل وقوى بشرية ساهمت في هذا التكتل وأنه لم يأت بمحض الصدفة.

تظهر دراسة مدى تطبيق اشتراطات الشؤون البلدية والقروية بأن هناك ٣ محطات وقود قريب من المدارس بمسافة أقل من ١٠٠ متر، و ٣ محطات وقود قريبة من المراكز الطبية و ٣ محطات وقود قريبة من قصور الأفراح، كما تقترب جميع محطات الوقود من الاستخدام السكني بشكل واضح ماعدا محطة السيارى في حي الصفا ٧، مما يجعل هذه المحطات تشكل تهديدًا على صحة السكان القريبين.

توصي هذه الدراسة بإضافة شرط لاشتراطات محطات الوقود يوضح المسافة المناسبة بين محطات الوقود والاستخدام السكني، وتخصيص استخدام تجاري صناعي يتناسب مع محطات الوقود عند تخطيط الأحياء. ويعود السبب في زيادة انتشار محطات الوقود في مدينة جدة إلى الاعتماد التام على السيارات في التنقل داخل المدينة؛ ولذلك يجب نشر ثقافات مختلفة للتنقل كالسير على الأقدام أو استخدام النقل الجماعي، ويفضل كذلك استخدام بدائل للبنزين والديزل كالوقود الهيدروجيني للتخفيف من الانبعاثات الضارة، وهذا ما تعمل عليه خطة المملكة عشرين ثلاثين.

Geographical distribution of gas stations within urban areas in Jeddah city (Al-Safa district)

REEM KHALED ALDOGEL

The supervision of Dr. MORSHID AL SULAMI

Abstract

The aim of the current study is to determine the distribution of fuel stations within Al-Safa district in Jeddah, in addition to studying the extent to which the necessary requirements are applied when establishing the stations and recognizing the uses of the surrounding land. This study applied the descriptive approach and the cartographic method, where the researcher collected a number of data from different sources, representing them in the form of maps, and analyzing the results out of this data.

The results of the spatial distribution show that the number of fuel stations in Al-Safa district is 28 stations. The largest number of fuel stations is concentrated in Al-Safa 7 and Al-Safa 8. The distribution of these stations extends towards the northwest towards the southeast, in line with Umm Al-Qura Street and Prince Miteb Road. The standard distance analysis shows that there is a significant tendency of dispersion, as the value of the standard circle was (1.5) km, 15 stations out of 28 are located within the circle of the standard distance, meaning that 54% of the fuel stations in the study area. The value of the district relation is (1.23157), which indicates the dominance of the regular spaced pattern, and that the actual average distance reached (438.2121) meters, which means that more than the expected distance by (352.4993) meters. This pattern indicates that there are factors and human forces that contributed to this overcrowding, and that it did not come about by chance.

A study of the extent to which the requirements of municipal and rural affairs are applied shows that there are 3 fuel stations close to schools with a distance of less than 100 meters, 3 fuel stations close to medical centers, and 3 fuel stations close to wedding palaces. All fuel stations are clearly close to residential use except for Al Sayari station in Al Safa 7 district, which makes these stations a threat to the health of the nearby residents.

This study recommends adding a condition to the requirements of gas stations indicating the appropriate distance between gas stations and residential use and allocating commercial and industrial use that is commensurate with gas stations when planning neighborhoods. The reason for the increase in the spread of gas stations in the city of Jeddah is due to the complete reliance on cars for transportation within the city. Therefore, different cultures of movement must be spread, such as walking or using mass transit. It is also preferable to use alternatives to gasoline and diesel, such as hydrogen fuel, to mitigate harmful emissions, and this is what the Kingdom's 2030 plan is working on.

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