The Development of Educational Services in the Al Qadisiya Subdistrict in Najaf, ''Al Ashraf'' Governorate, Iraq.

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Primary education is one of the important services in the prosperity and development of society. Therefore, it must meet a set of criteria such as the optimum distribution of educational institutions and be sufficient in numerical terms in comparison with population sizes. Primary education must also be functionally efficient in comparison to the standards prepared by the relevant authorities. This study attempts to diagnose the reality of the state of primary education in Al-Qadisiyah district in the Najaf governorate, and its compatibility with the planning standards prepared by the Ministries of Education and Planning and follow the best possible methods and mechanisms for their development. This study established that the population of the study area totalled 46,813 people in 2018. As for the population growth rate, it reached 3.2%, which is a high rate resulting from the rural nature of the region. The number of primary schools in the study area reached 38 schools, while the number of buildings allocated to them reached 31 buildings only, with a difference of 7 buildings, which resulted in the phenomenon of duplication in school hours . The decrease in the percentage of primary schools in the district centre compared to the countryside is due to the large area of the countryside and the increase in its population. This was reflected in the increase in the number of students enrolled. The number of primary schools for males and females is close, which is a good indicator that reflects the equality situation in giving learning opportunities for both sexes. It turned out that the indicator (number of pupils/school) was less than the approved standard. The researchers witnessed the convergence of the value of the index (pupil/division) and (pupil/teacher) with the schematic criterion. This is a positive indicator that facilitates the delivery of information to students. Qadisiyah, according to the 2030 Population Estimates, does not need additional primary schools according to the educational planning standard. The study ends with a

number of recommendations and proposals, such as the redistribution of primary schools in the countryside of the study area and attention to basic services in primary schools so that you can provide a good service to students.

Keywords: *Development, Primary Schools, Education Services, Population, rural, urban.*

Introduction

Educational services are considered essential services that should be provided to the population as they represent the cornerstone in societies development and progress. Therefore, this education is considered a basic service for both rural and urban areas since education is one of the essential services contributing to society's prosperity and progress through providing productive minds for the various sectors. In order to maximise the benefits of this service to the population, they must meet some standards to be able to fulfil their needs, such as the distribution of educational institutions in a manner that ensure accessibility. To be sufficient numerically comparing to the population size, it shall also be functionally efficient in regard to the standards set by the Ministries (Education and Planning). This is particularly pertinent to the primary education services. Primary education is considered the core stage of a student's upbringing and education, establishing their impact on society. Al Qadisiya subdistrict which is "one of the administrative units of Al-Najaf Al-Ashraf governorate" has been identified as the study's area.

The questions of the research are summarised in the following:

1- How primary education services are distributed based on the environment (rural and urban areas) is Al Qadisiya subdistrict?
2- How efficient is the primary education services in the study area according to the approved quantitative and qualitative standards?
3- How can primary education services be developed in the future?

In order to respond to the above questions, the researchers have set the hypotheses as following:

1- The distribution of primary education service institutions are characterised by being uneven by regions (rural and urban).
2- The primary education services at the study's area have witnessed variation of efficiency in terms of qualitative and quantitative perspectives according to the planning standards.
3- The primary education services can be developed and planned as per the 2030 population growth estimate in the study's area.

Research objectives are:

1- Identifying areas where primary education services are distributed in the at Al Qadisiya subdistrict.
2- Identifying the efficiency of primary education services at the study's area from both qualitative and quantitative perspectives as per educational and planning standards.
3- Improving primary education services through directing the care of both qualitative and quantitative areas through planning them according to population growth.

This research is important as studying the primary education services at Al Qadisiya will contribute to providing important quantitative information that could resolve service related problems. This can be achieved through detecting the poor geographical distributions of the educational institutions at the study's area and identifying the weakness of their functional efficiency will support the concerned parties to set the proper solutions for such problems.

First: The Geographical and Demographical Features of Al Qadisiya Subdistrict

1- Astronomical and geographic location: Al Qadisiya subdistrict is one of the administrative units of Al Mishkhab district, located at the southeastern part of Al-Najaf governorate (Map 1).
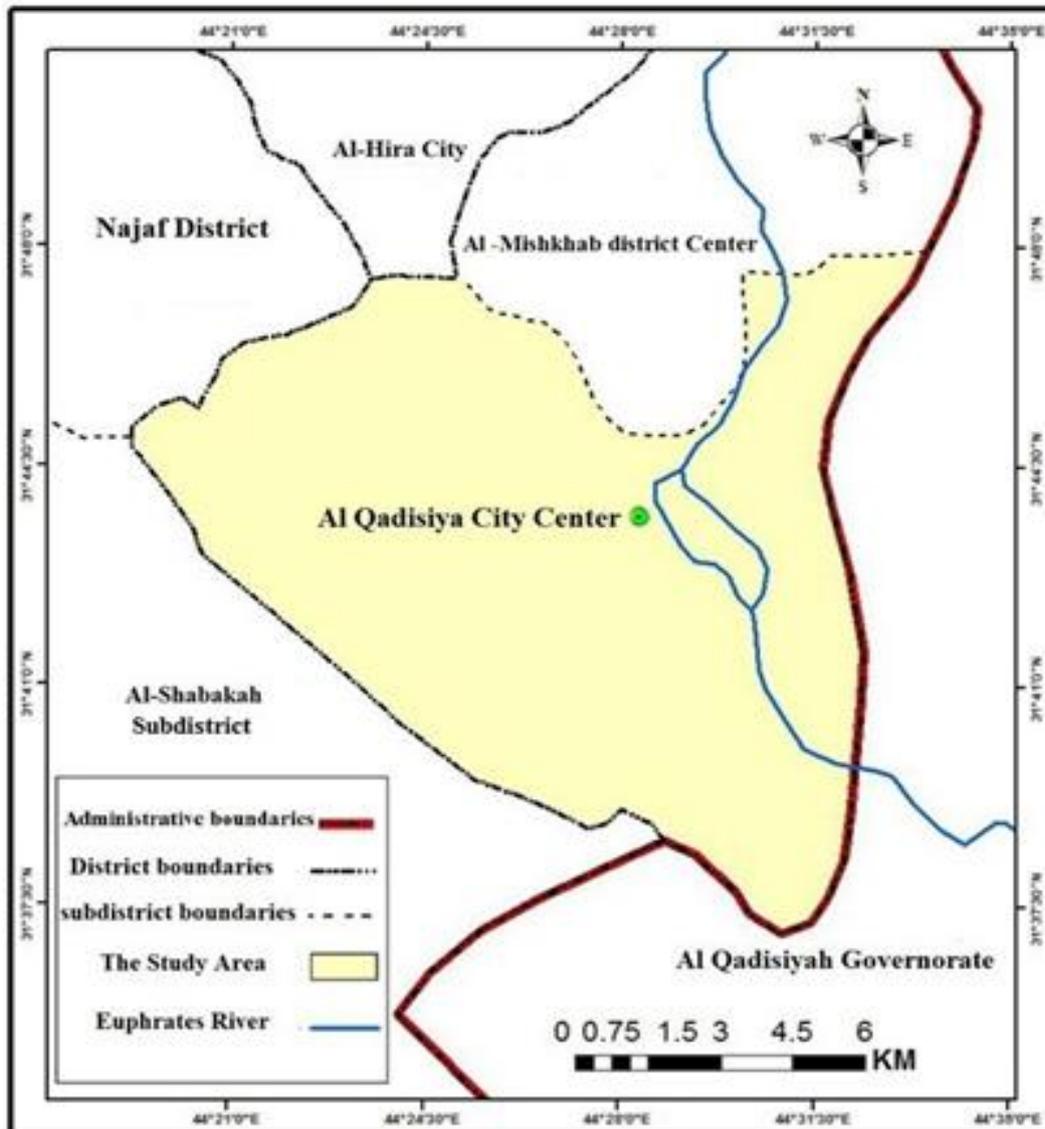
Map 1. Location of the Al- Qadisiya Subdistrict of holy AL- Najaf governorate
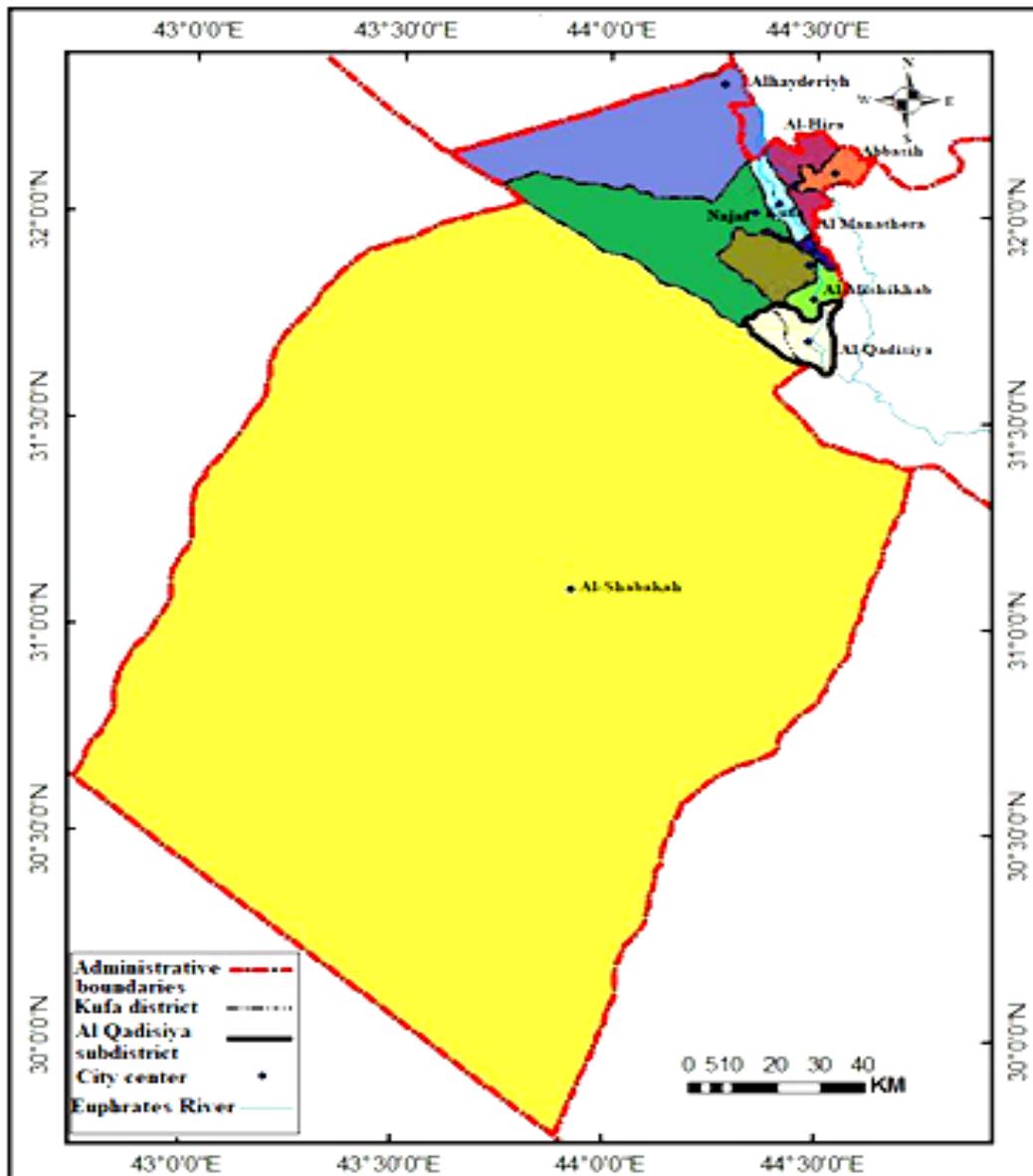
Source: Ministry of Water Resources, General Authority for Survey, Iraq Administrative Map, 2016.

Al Qadisiya is an astronomical subdistrict located between latitudes (31^{o-} 36^- and 31°-48^-) north and longitudes (44° 18^- and 44° 32^-) east. The region is boarded from the north by administrative borders of Al Manazra district, from east and northern east the administrative borders of Al Qadisiya governorate and from west Al-Najaf district (Map 2).

Map 2. The Geographical location of Al Qadisiya Subdistrict

Source: Ministry of Water Resources, General Authority for Survey, Iraq Administrative Map, 2016.

The total area of Al Qadisiya is (322) kilometers^2 (Ministry of Planning, 2017, p.16). Regarding the temporal dimension, it's primary education services for the academic year (2017-2018).

2- The Natural characteristics of the study's area:

The study's area is located within the alluvial plain that consists of most of its area. For this reason, Al Qadisiya can be characterised by its low elevation, land flatness, and general

steepness toward the south, especially lands located on the Euphrates' sides that penetrate the area from the northern to the southern borders.

Climatically, the area is characterised by high temperatures during summer with an average temperature of 42.3^{o}, and low temperature during winter with an average temperature of 7.1^{o} (Al-Jabri, Ihsan Abdul-Kadhim, 2019,pp. 29-30). The area lacks rain. The area generally rains only in winter, with predominantly dry summers, giving the region an average rain fall of16.1 millimeters (Al-Jabri, Ihsan Abdul-Kadhim, 2019, p. 41).

The s area contains several types of soils, the most important of them are river levee soils, river basin soils, silted Haur and Marsh soils, and gypsum desert land (Al-Jubouri, Najah Abdul Jaber, 2006, pp. 39-45).

The Euphrates River and its streams, which consist of 24 streams provides the main water source for the study area , constituting an integrated water network that most of the study's area population use for their daily needs and irrigating their crops (Helou, Sarah Adnan Shanin, 2010, pp. 16-17).

3- Demographic characteristics of the study's area:
The population of the study's area includes 46,813 people as of 2018 (Ministry of Planning, 2018). Of this total population, the urban population consists of 6,354 people, while the rural population consists of 40,459 people. The population growth of the study area reached 3.2% during this time. This is an evidence of the high growth rate caused by the nature of the people from the countryside who prefer early marriage and increasing the number of family members.

The study area's hierarchy is characterised by high levels of teenagers and youth within the age groups of 0-10 and 15-65 years, which represents 44,704 people. The old elderly population of the area decline within the age group of 64-80 to 2109 people only.

Of the foregoing, we can conclude that there are several people of the study's area are within the school age. Therefore, attention shall be paid to the primary education services subject, its' related requirements, and in the best manner in which it could achieve progress and development of such services.

Second: The Realty of Primary Education Services and It's Geographical Distribution at Al Qadisiya District

1- Primary education schools:

Primary education is considered an important educational stage. There is a major concern as it represents the base of the educational hierarchy. It is considered the base of other stages, hence, good primary education will lead to improvement of other stages. Primary education includes the 6 year school system, from grade 1 to grade 6 and is attended by students within the age range of 6-12 years. Enrolling and the continuation of the primary stage is an important factor to the acquisition of reading and writing skills. In order to achieve these goals, this stage must have the quality elements that assure the student's acquisition of such skills at the desired level. If the education quality is poor, this will weaken the educational achievement of the students and increase fail levels and student dropout,. This may lead to illiteracy even after spending several years at school (Al-Mousawi, Ohood Abdul-Zahra Mohsen, 2018, p. 89).

The numbers of primary education schools in Al-Qadisiya is 38 schools, which is indicated in Table 1. The dedicated premises is only 31 premises with a difference of 7 premises which generate the phenomenon of dual school attendance. When distributing the premises according to gender, 11 schools are for boys, representing 29% of the schools and 9 schools are for girls, representing 24%. There are 18 co-educational schools representing 47% of the total schools. At the urban side, there are 5 schools representing 13%, 3 for boys and 2 for girls representing 60% and 40% respectively. There is no co-educational school at the urban side. In the countryside, there are 33 schools, representing 87%. Of this total, there are 8 for boys, and 7 for girls, representing 24% and 21% respectively. There are 18 co-educational school representing 55%.

Table 1: Number of Primary Schools according to the Environment and Their Percentages in Al Qadisiya subdistrict for the academic year 2017-2018

The environment	Boys	Girls	mixed	Total	%
Urban	3	2	-	5	13
The Countryside or Rural	8	7	18	33	87
Total	11	9	18	38	100

Source: Republic of Iraq, Ministry of Education Al-Ashraf, Statistical brochure for the academic year 2017-2018**.**

Reviewing Table 1 reveals the following:

* There is a low percentage of primary schools at the urban side, compared with the percentage of such schools in the countryside. As a result, the wide countryside area and the increase of its population causes an increase in the enrolment of students.
* The convergence of the number of schools for boys and girls is a good indicator of equal educational opportunities for both genders.
* The existence of co-educational schools in countryside and absence of these facilities in the urban side provides more evidence of the increasing number of enrolling students in the countryside, compared with the urban area.

2- Student's distribution:

The total number of students in the primary stage at Al Qadisiya is 9,107 male and female students for the academic year 2017-2018 out of total area population of 46,813 people. As per the 2018 population estimates, this sample size represents 19% of the subdistrict population. This is a small percentage compared with the population size of the subdistrict, among them are 4,970 male students and 4,137 female students. There is also another student distribution according to the environment where they live, indicating that total urban students consist of 1,623 male and female students, representing 18%. Of this, there are 892 male students representing 55%, and 731 female students representing 45%. In the countryside, the total number of students were 7,484, representing 82%. 4,078 of this population were male students, representing 54% and 3,406 female students representing 46%. For more details, please refer to Table 2.

Map 3. Geographical distribution of primary education services in Al Qadisiya Subdistrict
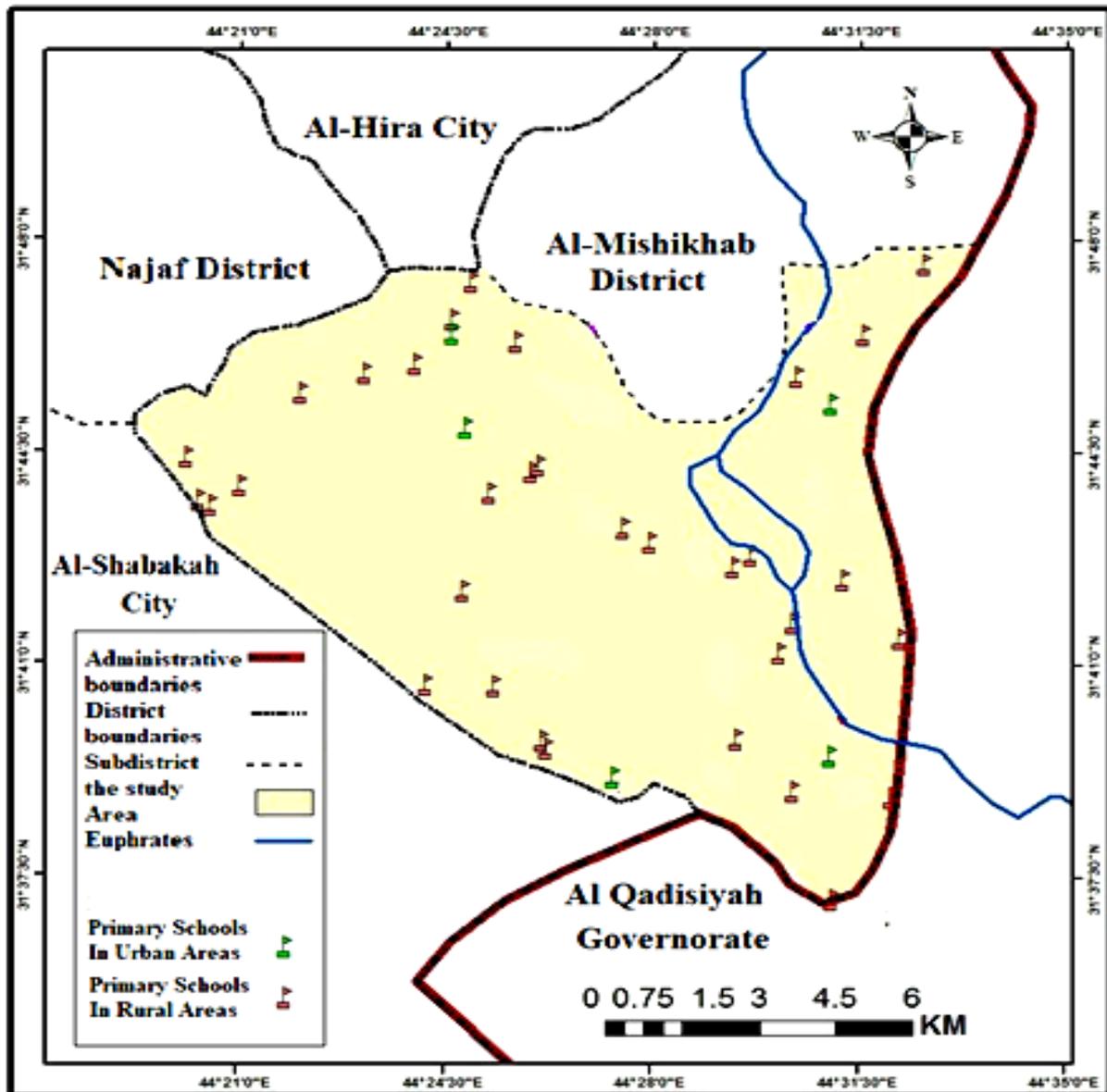
Source: Researcher based on Ministry of Education, General Directorate of Education in Najaf, Statistical Yearbook 2017-2017.

Table 2: Number of Pupils in Primary Schools according to the environment and its proportions in Al Qadisiya subdistrict for the academic year 2017-2018

The environment	Boys	Girls	Total	%
Urban	892	731	1623	**18**
The Countryside or Rural	4078	3406	7484	**82**
Total	4970	4137	9107	**100**

Source: Ministry of Education, General Directorate of Education in Najaf, Statistical Yearbook 2017-2017.

3- Distribution of Academic Divisions:

The number of academic divisions for the academic year 2017-2018 at Al Qadisiya subdistrict was 294 divisions (for further detail, refer to Table 4). This figure is distributed per gender into 88 divisions for male, 81 for female, and 125 for coeducational, representing 30%, 28%, and 43% respectively. The number of divisions at the urban side was 43 divisions, representing 15%, (25 for male and 18 for female), with a percentage of 58% and 42% respectively. The divisions of the countryside included 251 divisions representing 85% (63 for male, 63 for female and 125 for coeducational), representing 25%, 25%, and 50% respectively.

Table 3: Number of Classes in Primary Schools according to the environment and their proportions in Al Qadisiya Township for the academic year 2017-2018

The environment	Boys	Girls	Mixed	Total	%
Urban	25	18	-	43	15
The Countryside or Rural	63	63	125	251	85
Total	88	81	125	294	100

Source: Ministry of Education, General Directorate of Education in Najaf, Statistical Yearbook 2017-2017

4- Distribution of educational staff

The total number of education staff at Al Qadisiya was 495 teachers, with 350 male teachers and 145 female teachers. Of this population, 67 were assigned to the urban area, representing 14%, among them, there were 37 male teachers representing 55%, and 30 female teachers, representing 45%.In the countryside, there were 428 teachers, representing 86%. Among them, 313 were male teachers, representing 73%, and 115were female teachers, representing 27%. For more information, see Table 4.

Table 4: Number of Teaching Staff in Primary Schools According to environment and percentages In Al Qadisiya subdistrict for the academic year 2017-2018

The Environment	Teachers	Parameters	Total	%
Urban	37	30	67	14
The Countryside or Rural	313	115	428	86
Total	350	145	495	100

Source: Ministry of Education, General Directorate of Education for the Najaf Governorate, statistical pamphlet for the academic year 2017-2018.

From the data presented in Table 4, the researchers conclude the following:

* There is a high level of male teachers at the urban area and low level of female teachers, which may be attributed to the preference of employing male teachers over female teachers in

the city for considerations related to the lack of educated females and their families desire to allow them to practice education in the urban environment.

* The high levels of male teachers in the countryside and the relatively low level of female teachers may be attributed to the preference of employing male teachers in the countryside rather than female teachers, due to their ability to go to distant countryside places and educate there.

Third: Evaluating the Efficiency of the Primary Education Services at Al Qadisiya Subdistrict and Developing it in Future

Using the planning criteria as a tool allows the researchers to identify the potential proposed services needed to be founded within the urban environment to become a balanced and sustainable environment (Ghunaim, Othman Muhammad, 2011: 44).To improve the status of educational services, these services are to be evaluated in the study area according to the criteria to identify the level of the services' development or underdevelopment (Qalada, Fouad Suleiman, 2005, p. 260). Educational functional efficiency at a certain area can be understood through measuring the efficiency of services according to the number of indications and educational criteria related to population size, and the numbers of students, teachers, instructors, and the population. The criteria are mainly based on the educational objectives that the state aims to achieve and available sources and how it could be used in appropriate technical means (Al-Dulaimi,

Khalaf Hussein, 2009,p. 94).

1- Educational Criteria:

The main objective of assessing the level of the educational services at the study's area according to the educational criteria is to identify how adequate educational services are in relation to the population and their degree of convergence to Iraqi standards approved by the Ministry of Education. Thus, a group of criteria have been identified by the Ministry of Education (planning department) that was collected from several sources, including the absorption percentage for each age group, identifying the number of students at school and division, and the number of educators. For more information regarding these criteria, see Table 5.

Table 5: The Planning Standards Approved by the Ministry of Education in Iraq

	Age	Pupil / School	Pupil / class	Pupil / Teacher	Enrolment ratio
Primary school	11-6	480	30	17	**90%**

Source: Republic of Iraq, Ministry of Education, Directorate General of Educational Planning National Strategy for Education (2009 - 2010/2019 -2020) Iraq, 2009, Table 14, p. 76.

A. Indicator of the number of students at school:

The importance of this indicator can be realised when comparing the number of students at the school with the criteria approved by the Ministry of Education, which is 480 students/ schools, since the total average at the study's area was 240 and this number is lower the approved criteria by 240 students. This decline was at both the urban and rural areas since it was 325 students/school at the urban area and, lower than criteria by 175 students, while it was lower at the countryside area consisting of 227 students, which is lower than criteria by 253 students.

The researchers were able to conclude that this is a good indicator. If one is to consider it from the general perspective of the study, one can notice that the general average is lower than the criteria of the Ministry of Education. This is a good indicator from the existing school data, the variation of level decline on areas level in both urban areas and the countryside is noticeable from the educational criteria. This is due to the small number of schools in the urban area and their increase in the countryside, in a manner that makes this level varied between urban areas and countryside.

B. Student/division indicator:

The general average of the number of students in academic divisions of the study's area is 31 students/division. It is close to the approved criteria of 30 students/division. This means that Al Qadisiya subdistrict hasn't recorded a negative indicator for these criteria, which in turn, positively reflects on the level of educational services. Regarding the levels of urban area and countryside, the level was high in the urban area and was recorded at 38 students/ division, which is higher than the criteria by 8 students/ division. In the countryside, the average was also close, as it was 30 students/ division.

It was discovered that the study area "both urban area and countryside" hasn't witnessed an increase of this indicator, compared with the planning criteria, except the little increase of the urban area due to the small number of schools. This has a good impact on the education process, since the more the schools, the less the students within the division, which in turn

increase the level of control over the educational process and facilitates it while also transmitting information in an effective manner.

C. Student/ Teacher indicator:

The overall rate in the Al Qadisiya subdistrict was 18 students/ teacher which is close to the approved criteria of 17 students/teacher. As for levels of urban area and countryside, the urban area has recorded a high rate of 24 students/teacher, which is higher than the criteria by 7 teachers. In the countryside, the rate was close to the criteria of 17 students/teacher, which is a good indicator.

Of the aforementioned, the researchers conclude that there is convergence in this indicator in general, however, it varied between the relatively higher than the criteria at the urban area, and close to the criteria in the countryside. In general, the elevation of this indicator over the criteria, especially in urban areas, will represent a core of a problem, since the educational staff will not be sufficient for the numbers of students that will exist which will generate a problem in the educational status in future.

D. Number of schools compared with the number of population criteria

Compatibility of the distribution of educational services with the distribution of the population is of high importance to the educational process since the equitable distribution of these services contribute in allowing more of the population to get access this service at low cost and efforts. The increase in the population rate will impact the educational services negatively, and in turn will weaken the students' achievements (Al-Mousawi, Muhammad Arab Nima, 2013,p. 395),. The researchers will review the criteria of population/school for each primary stage school at Al Qadisiya subdistrict and then will compare it with the criteria approved by the Iraqi Ministry of Education. As per the age group, the criteria are 6-11 year per each 2,500 population.

Primary education school for each (2500) population:

As per the population criteria, there is an emphasis on the importance of providing one primary school for each 2,500 people of the total population. Applying this criteria on the Al Qadisiya schools, we found that one school/1510 population in the subdistrict. This means that the number of schools is higher than the planned as per these criteria by 12 schools, which leads to decreasing the rate of population/school than the specified criteria. It has been noticed that this decrease of the rate in both urban area and the countryside is due to the surplus of existing schools. The urban area has recorded a slight increase in the number of schools over the criteria by 1 school, and rate of 1,589 population/school, as for the countryside it has witnessed a significant increase in the number of school over the specified criteria by 11 schools and rate of 1,498 population/school. For more information, see Table 6.

This decreasing of the (population/school) rate in the whole area is considered a positive indication for the primary education in the subdistrict, if it should be combined with the efficiency of the other criteria.

Table 6: Average person / primary school for both urban and rural in Al Qadisiya area for the academic year 2017-2018

Administrative Unit	Population	Number of Current schools	Number of the required schools According to Standard(*)	Person / School	The Amount of difference from the approved standard School 2500 Person / School
Urban	6354	4	3	1589	911-
The countryside	40459	27	16	1498	1002-
Total	46813	31	19	1510	990-

Source: The researcher based on the Ministry of Education standard of 2500 inhabitants/school.

 (*) This is extracted by dividing the population by the specified criterion.
 (-) The negative sign here indicates the average population/school is below the standard which is a good indicator. That is, the school serves a population that is less than the proposed standard.

3- Primary education services development at Al Qadisiya subdistrict in 2030:

Evaluating the populating size is an important factor in any future development, it's importance is due to the role it plays in social and economic planning, through evaluating the population size we can estimate the future population size and understand the main characteristics from the age and qualitative composition (Al-Abdali, Raheem Muhammad Abdul Zaid, 2014,p. 163).

The Al Qadisiya population is estimated to reach 62,884 by 2030 (Ministry of Planning, 2019) with8,536 in the urban areas and 54,348 in the countryside. Through this estimate, the researchers can determine the demand volume on the future educational services according to statistical and educational criteria mentioned above.

Relying on the local criteria, the urban area will need 3 primary schools. The rationale is that since the urban area contains 4 schools, it won't suffer any deficit in school number, as for the countryside, it needs 22 primary schools. Since the countryside contains 31 primary schools, it won't need additional primary schools.

The researchers, however, note that adequacy of the number of primary schools in the future isn't evidence of their efficiency from the performance perspective. There are several standards that should be taken into consideration to develop the education in future, such as school premises independence, providing the main services at school, and providing good roads that will link these schools with students homes.

Conclusions

1. The number of schools in the study area was 38 schools, where the dedicated premises was 31 premises only, with a difference of (7) premises that generates the phenomenon of dual school attendance.
2. Decreasing of primary school rate at the urban area comparing with the countryside, due to the large area of countryside and its high population size which has been reflected on the increasing number of enrolling students. The convergence of numbers of primary schools for boys and girls, which is a good indicator reflecting the equity of offering educational opportunities for both genders.
3. The existence of co-educational schools in the countryside and the absence of them in urban areas provides more evidence of the increase of enrolling students in the countryside comparing with the urban area.
4. The increase of male teacher rates in an urban area at the study area and decreasing the female teachers rate could be due to the preference of employing male teachers at the city than female teachers for considerations related to lack of educated females families' desire to practice the education profession in an urban area. While we notice the increase of male teachers in the countryside environment and relative decreasing of female teachers, this is due to the preference of employing male teachers at countryside due to their ability to work at far countryside places.
5. It has been noticed that (students number/school) indicator was lower than the approved criteria, while we find a convergence of both (student/division and student/teacher) indicators with the planning criteria, which is a positive indicator that leads to facilitating information delivery to the students providing that other quality criterion are met.
6. Population/ primary school indicator has recorded a significant increase of the existing schools than the planned limit as per these criteria, which lead to a decreasing (population/school) rate than the specified criteria. It has been noticed that this decrease in the rate was in both urban areas and the countryside due to the surplus of the number of schools as mentioned above.
7. Al Qadisiya isn't in need of additional primary schools as per population estimates of the year 2030, according to the educational planning criteria.

Recommendations

1. Re-distributing the primary schools in the study's area countryside in a manner that assures the accessibility by a student living in far villages.
2. Attempting to cancel the dual attendance in some of the primary schools to enable the educational staff of these schools to do their works on the best, this could be achieved through building more primary schools.
3. Directing care to main services at primary schools to be able to provide good service to the students.

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