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Analysis of the Vicious Circle of Education and Its Impact on Human Development in Iraq

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Abstract:
This research focuses on the complex relationship between education quality and human development in Iraq for 2005 to 2023, emphasizing how the poor conditions in education set in place a vicious circle restricting national progress. Utilizing both inductive and deductive realms, official data of the Ministries of Education and Planning were analyzed, along with comparative international experiences. Indicators analyzed include school density, student-teacher ratio, lack of infrastructure, and limitations of vocational training for primary, secondary, and vocational educational levels. The results show a constant mismatch between students' population growth and resource allocation to education, thus summarizing an overcrowded school environment, overworked teachers, and degradation of educational quality. Corruption, insufficient public investments, and governance inefficiencies are also cited as factors aggravating the sector's underperformance. The study reaffirms that education is an essential determinant of human development indicia and that urgent reforms are needed to invest in educational infrastructure, modern-day teaching methods, and fighting corruption. By documenting the interdependence between education and human development, this work advances evidence-based policy measures to break the original cycle for sustainable development.

Keywords: Education Quality, Human Development, Education Vicious Circle, Educational Infrastructure.

1.Introduction:

Education occupies special importance in all countries of the world due to the vital role it plays in the progress and advancement of people, as the human capital in any country of the world is the number of minds and brains that contribute to making real development in the country, and push the wheel of development forward, and this can only be achieved by paying attention to education and providing the various possibilities necessary for it. (Wood, 2012) The function of education was and still is to prepare the human being and develop his abilities, skills and energies to be creative and productive, capable of creativity, as it is the real wealth of nations and the secret of their renaissance and progress, it is able to acquire knowledge and capabilities and harness capital to serve it, and is one of the most important productive elements that contribute to achieving hence, the organic relationship between education and development has been confirmed, and therefore the human resource has become the most important and influential component in the development process, and since the presence of qualified human being is a necessary condition for the development and progress of any society, any obstacle that prevents him from activating his role and increasing his skills and efficiency in economic performance will negatively affect the progress and development of society, so that the human resource of natural resources are the basis of any development process and the course of this development and its size are responsible For achieving progress and development for this society Hence, the neglect or backwardness of education and depriving a large percentage of the population of it, is a negative indicator in the preparation and rehabilitation of the human element, which is the tool and goal of development, so that the inverse relationship between the level of education and the level and quality of the human development process for any society, and thus on its development and progress in all social and economic fields. (Ibe, 2012).

The research problem is that more than a weak education is needed to improve the qualification of human resources. It harms economic and human development, as it weakens human empowerment and limits the ability of individuals to interact positively with their social environment. Education has been and still is the gateway to economic and social progress for the individual and society. Countries - at different levels and developments - are rushing to provide educational opportunities for all their children and to continue their studies. However, things sometimes go differently than planned, especially in developing countries, including Iraq, where education indicators show the weakness of education through the weakness of the vicious cycle of education at all levels of general and vocational education. Hence, confronting and treating such a negative phenomenon is important, and this logic stems from the importance of the research topic.

2. Literature review and hypothesis development:

The lack of understanding considers the real nature of the transformations of society and the failure to adopt a real concept of development that has a significant impact on the lack of alignment between the labor market and the education outputs, so the research summarized in its analytical aspect that there are ways and strategies for development, especially in education in a country like Iraq, that this important development sector still lacks new policies. It was confirmed to reach a set of results and recommendations that enhance the role of education in human development in 2003 and 2021 (Prasetyo & Zuhdi, 2013).

The study (KIZILKAYA et al., 2015) clarifies how Iraq faced great difficulties reaching real development from 2003 to 2018, where the education sector played a major role at the human, economic, and social development levels. The study reached several recommendations, the most important of which was the need to develop the educational aspect qualitatively and quantitatively by reforming educational systems and completing the infrastructure of educational institutions.

The importance of the research (Nkoro & Uko, 2016) is evident through the topic it addresses, which is concerned with studying the significant role of the education sector at the level of human development. The infrastructure of educational institutions also works to benefit from the experiences of countries that have made a boom in progress in addition to education, curricula, and technological means.

The study (Etikan, 2016) to know the impact of spending on education on economic growth in the Kingdom of Saudi Arabia, Measuring the causal relationship between education and human development in

Kingdom of Saudi Arabia for the period (2016-2022) The importance of research lies in studying the challenges of education on sustainable development. One of the most important recommendations reached by the research is the involvement of the parties to the educational process in the process of planning and developing education, which has good effects, such as that the objectives and procedures of planning are more accurate and the development of curriculum content in line with important scientific developments, which leads all parties to the educational process to keep pace with progress. Based on previous knowledge contributions, the following is assumed:

The research assumes that education and training are fundamental in actively preparing human resources to contribute to economic development. Any weakness in education indicates a negative condition, the effects of which are reflected in human development.

3. Research Methodology:

The research methodology is based on the deductive approach by identifying and analyzing selected experiences and trying to benefit from them in the reality of education in Iraq, as well as the inductive approach by analyzing private data derived from the official records of the Ministry of Education, the Ministry of Planning and its affiliated departments in Iraq. As for the period of the analyzed data, the period (2005-2023) was chosen. This period witnessed many changes in the conditions of the valley from the political and economic aspects, which was reflected in the reality of education in Iraq in general. Figure (1) shows the nature of the relationship between the research variables as follows:

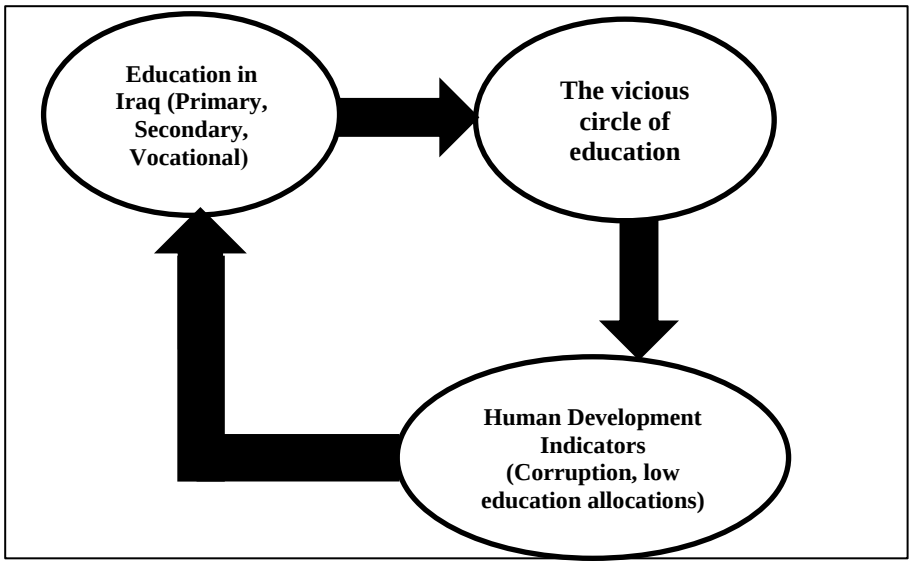

Figure 1: shows the nature of the relationship between the research variables.
Source: Prepared by the researchers

4. Results:

4.1 Education in Iraq (Primary, Secondary, Vocational)

It is worth noting that education in most countries of the world, including Iraq, has three stages: primary education, secondary education, and higher education. Accordingly, the student does not reach the second stage until after passing the first stage and does not reach the third until after the second. This indicates that education is a pyramid with different layers based on a single base. The more stable and stronger this base is, the more stable and lasting the building will be, and the more the state's attention to expanding and improving this base is greater and more comprehensive. At the practical level, Iraq follows an educational system consisting of two parts: the first part is affiliated with the federal government and is run by the Federal Ministry of Education in 15 governorates, except the Kurdistan Region and the second part is run by the Kurdistan Regional Government and is managed by the Ministry of Education in the Kurdistan Region of Iraq, and includes the governorates of Dohuk, Erbil, and Sulaymaniyah Primary education in Iraq is compulsory and starts from 6 to 11 years old. Basic educational education prepares students for the next secondary education stage. It consists of six stages, from the first to the sixth, lasting 6 years. The student begins studying the same basic curricula: Islamic education, Arabic language, Islamic education, mathematics, science, art education, the anthem, and physical education. In 2013, the English language was added to the curriculum and is now taught in the first grade of primary school. Monthly exams are held for all subjects, and each subject is worth 10 points. In January, mid-year exams are held, followed by a two-week vacation, and the semester begins the day after the vacation ends. In May, end-of-year exams are held. As for the sixth grade, it is no different from the previous one, but the difference is that the sixth grade of primary school has end-of-year exams that are ministerial, and the student must pass them to be able to enter the next stage. Table (1) shows the quantitative development of the number of schools, students, and teaching staff in the primary education stage (government) during the period (2005-2023):

Table 1: The quantitative development of the number of schools, students, and teaching staff in the primary education stage (government) during the period (2005-2023).

Academic year	Number of schools 1	Number of students 2	Number of teachers 3	student per school 1/2	One teacher per school 1/3	One student per teacher 3/2
2005-2006	11828	3941190	234139	333	20	17
2006-2007	12141	4150940	236968	340	20	18
2007-2008	12507	4333154	237130	347	19	18
2008-2009	13124	4494955	256832	328	20	18
2009-2010	13687	4672453	264604	341	19	18
2010-2011	14048	4864096	263412	346	19	18
2011-2012	14674	5124257	271734	352	19	19
2012-2013	15156	5351319	277792	353	18	19
2013-2014	15807	5558674	287502	352	18	19
2014-2015	10779	4283044	223310	357	21	19
2015-2016	12973	4997052	247919	356	19	20
2016-2017	14024	5473997	259836	269	19	21
2017-2018	15965	6197870	286097	394	18	22
2018-2019	17235	6501053	290664	400	17	22
2019-2020	17945	6637127	291904	402	16	23
2020-2021	18393	6454872	292251	372	16	21
2021-2022	18658	6598394	288174	354	15	23
2022-2023	18933	6654872	296550	341	16	22
Averages				352	18	20

Source: Prepared by the researchers based on data:

Republic of Iraq, Ministry of Education, General Directorate of Educational Planning, Statistics Department, columns (1-2-3)
Columns (4-5-6) Prepared by the researcher based on data for columns (1-2-3).
2014/2015 did not include data for the governorates (Nineveh - Salah al-Dim - Kirkuk - Anbar) due to their occupation by ISIS.
2015/2016 did not include data for the governorates (Nineveh - Anbar).
2016/2017 did not include data for Nineveh Governorate.

The data in table (1) indicate that there was a significant increase in the number of students during the research period, as the number at the beginning of the period 2005/2006 was (3,941,190) male and female students, and increased significantly to become (6,654,872) male and female students in 2022/2023, with an increase of (2,713,682) male and female students, and a compound annual growth rate of (3%). This increase is due to population growth and educational enrollment rates. As for the number of teachers, it also witnessed an increase, but it was poor, as the number of teachers at the beginning was (234,139) teachers and the number increased to become (296,550) teachers at the end of the period, with an increase of (62,411) teachers, and a compound annual growth rate of (0.99%), which is an increase that is not consistent with the large increase in the number of students at this educational stage, as the increase represented (one teacher for every 61 students 1:61), which is a large number that limits the efficiency of the teacher and disperses his effort.

In order to identify the internal efficiency of the educational system in the primary stage due to its direct impact on (the quality of the final output), the student index for each school, the teacher index for each school, and the student index for each teacher are relied upon based on the data in the Table above, as the student index for each school shows the number of students in one school. It is also possible to know the number of students in each class by dividing the number of students in one school by the number of classes in that stage (6 classes) and comparing it with the ideal number for an ideal educational environment. We note from the Table above that this indicator did not improve during the period. However, on the contrary, it was at the beginning of the period (333 students per school 1:333). The number of students increased to (372 students in the school 1:372), with an average of (357 students in one school 1:357), then decreased at the end of the study period 2022/2023 to (341 male and female students in one school 341:1), which is a large number attributed to the growth in the number of students at a rate greater than the growth in the number of schools, which was reflected in On the overcrowding of schools and from there to the overcrowding of classes, if we want to know the number of students in one class, we can divide the average (357) by the number of classes (6), and the result will be (60 students in one class). This number represents the general average in Iraq, as it rises and falls according to the population density of the governorate and city where the school is located. We find it extremely high in governorates such as (Baghdad-Babylon-Karbala-Najaf-Basra), and less in other governorates. For example, the number of students in a single school in Baghdad is approximately (100 students per class). It reaches approximately (130 students per class) in the schools of Al-Rusafa II.

In comparison, in Maysan Governorate, the number reaches approximately (27 students per class). Thus, the numbers vary from one governorate to another and from one city to another according to the population density of that stage category. In comparison, the general average in Iraq is (60 students per class), which is a very large number compared to the ideal number that studies indicate is (16 students per class for the primary stage), and this will inevitably affect the educational structure, which will negatively affect the performance of the teacher and students and thus negatively affect the quality of education.

The teacher per school indicator shows the number of teachers in each school. We notice from the Table above that this indicator witnessed a decrease during the period, as it was at the beginning of the period (20 teachers per school 1:2) and decreased at the end of the period (16 teachers per school 1:16), while the general average during the period was (18 teachers per school 1:18). The reason for the decrease in this indicator is due to the increase in the number of schools (students) more than the increase in the number of teachers, and this is likely to increase the pressure on teachers by increasing their study periods, which negatively affects their efficiency and giving, and thus the quality of education. While the student-per-teacher indicator shows the number of students per teacher, the data in Table (11) indicate an increase in this indicator during the period. In the 2005/2006 academic year, the number of students per teacher was (1:17). The number of students increased to (1:22) at the end of the period, with a general average during the period of (1:20). This indicates a growth in the number of students at a rate greater than the growth in the number of teachers during the period, and this is likely to negatively affect the performance of teachers and burden them, thus affecting the quality and type of education.

The secondary education stage comes after the basic education stage (primary) and starts from the age of (12-17 years). This stage consists of two stages (intermediate and preparatory), each of three years. The intermediate stage means discovering the students' abilities and inclinations, directing them, paying attention to the foundations of knowledge, skills, and trends, working to achieve their integration, and following up on their applications in preparation for the next stage or productive, practical life. The preparatory stage means consolidating what has been discovered about the student's abilities and inclinations and enabling them to reach a higher level of knowledge and skill while diversifying and deepening some intellectual and applied fields. This stage aims to develop the student's skills and prepare him for the university education stage. To identify the development that has occurred at this stage, the data included in Table (2) should be analyzed:

Table 2: Quantitative development of the number of schools, students, and faculty members in the secondary education stage (government) during the period (2005-2023)

Academic year	Number of schools 1	Number of students 2	Number of teachers 3	student per school 1/2	One teacher per school 1/3	One student per teacher 3/2*
2005-2006	3920	1389017	111483	354	28	14
2006-2007	4109	1491933	113556	363	28	13
2007-2008	4364	1603623	114745	367	26	14
2008-2009	4756	1750049	128477	368	27	14
2009-2010	5182	1877434	135964	362	26	14
2010-2011	5472	1953766	136446	357	25	14
2011-2012	6041	2211421	141355	366	23	16
2012-2013	6425	2394678	146276	372	23	16
2013-2014	7083	2528133	160323	357	29	16
2014-2015	4953	2032880	128667	410	26	16
2015-2016	6022	2442935	141300	406	23	17
2016-2017	6605	2624140	148832	397	23	18
2017-2018	7485	2933539	164744	392	22	18
2018-2019	8139	3140110	168330	386	21	19
2019-2020	8399	3258718	173805	378	20	19
2020-2021	8446	3462902	164251	452	21	22
2021-2022	8612	3258718	173805	378	20	19
2022-2023	9003	3612281	182491	401	20	20
Averages				379	24	17

Source: Prepared by the researchers based on:

Republic of Iraq, Ministry of Education, General Directorate of Educational Planning, Statistics Department, Columns (1-2-3).
Columns (4-5-6) based on data from columns (1-2-3).
2014/2015 did not include data for the governorates of (Nineveh-Salah al-Din-Kirkuk-Anbar) due to their occupation by terrorist groups.
2015/2016 did not include data for the governorates of (Nineveh-Anbar).
2016/2017 did not include data for Nineveh Governorate.

The data in table No. (2) indicate that there is a significant increase in the number of students during the research period, as the number at the beginning of the period 2005/2006 was (1,389,017) male and female students, and increased significantly to become (3,462,902) male and female students in the period 2020/2021, with an increase of (2,073,885) male and female students, and it increases at the end of the study period 2022/2023 to (3,462,902) with a compound annual growth rate of (6%). This increase is due to population growth in addition to the increase in secondary education enrollment rates. As for the number of teachers, it also witnessed a clear increase, as the number of teachers at the beginning of the period was (111,483) teachers, and the number increased to become (1,173,805) teachers at the end of the period, with an increase of (1,062,322) teachers, and a compound annual growth rate of (2.6%), or almost half the growth rate of the number of students, which is an increase that is not consistent with the large increase in the number of students at this educational stage, as the increase represented (one teacher for every 39 students 1:39), which is a large number that limits the efficiency of the teacher and disperses his effort, as studies indicate that the ideal number at this stage is (20 students for every teacher 1:20).

In order to identify the internal efficiency of the educational system in the secondary stage, due to its direct impact on the quality of education, we rely on indicators (student index per school, student index per teacher and teacher index per school) based on data in table (2):

Through the student-per-school indicator, we note that this indicator did not improve during the period. However, on the contrary, it was at the beginning of the period (354 students per school 1:354), and the number increased to (401 students per school 1:401) with an increase of (47) students. The general average during the period was (379 students per school 379:1), i.e., at a rate of (65 students per class), a number that rises and falls according to the population density of the stage category in the governorate or city in which the school is located, as mentioned previously. At the same time, studies indicate that the ideal number should be at most (20 students per class) for the secondary stage. This is a large number attributed to the growth of the number of students (population) at a rate greater than the growth of the number of schools, which was reflected in overcrowding of schools and from there to overcrowding of classes, and this will inevitably affect the educational environment, which will negatively affect the performance of the teacher and the student and thus affect the quality and type of education.

The student-per-teacher indicator shows the number of students per teacher. The data in the Table above indicate a decrease in this indicator. In the 2005/2006 academic year, the number of students per teacher was (13 students per teacher 1:13). This indicator increased by (70%) to become (1:20) at the end of the 2022/2023 period, with a general average during the period of (1:17). This indicates a growth in the number of students at a rate greater than the growth in the number of teachers during the period, which would negatively affect the performance of teachers and burden them, thus negatively affecting the quality of education.

While the teacher per school indicator shows the number of teachers in each school, we note from Table (13) that this indicator witnessed a decrease during the period, as it was at the beginning of the period 2005/2006 (28 teachers per school 1:28) and decreased by (70%) to become at the end of the period (21 teachers per school 1:21), while the general average during the period was (24 teachers per school 1:24). The reason for the decrease in this indicator is due to the increase in the number of schools at a rate greater than the increase in the number of

teachers, and this is likely to increase the pressure on teachers by increasing their study periods, which negatively affects their efficiency and giving, and consequently the quality of education (quality of human capital).

Vocational education in Iraq studies general theoretical and applied technical, vocational, and technical subjects: agriculture, industry, commerce, applied arts, tourism, computers, and information technology. The duration of education is three academic years after the end of the basic education period (intermediate education), and the student obtains a vocational preparatory certificate. Table (3) shows the quantitative development of the number of schools, students, and faculty members in the vocational education stage during the period (2005-2023).

Table 3: the quantitative development of the number of schools, students, and faculty members in the vocational education stage during the period (2005-2023)

Academic year	Number of students 1	Number of schools 2	Number of teachers 3	Student per school 2/1	Teacher for each school 2/3	Student to teacher 3/1
2005-2006	66317	276	10776	240	39	6
2006-2007	58707	277	11023	212	40	5
2007-2008	63069	276	11161	229	40	6
2008-2009	61091	288	11932	212	41	5
2009-2010	56902	289	12426	197	43	5
2010-2011	56169	294	12464	191	42	5
2011-2012	56301	295	12553	191	43	4
2012-2013	58689	298	12745	197	43	5
2013-2014	56048	304	12787	184	42	4
2014-2015	44696	223	10527	200	47	4
2015-2016	51138	267	11371	192	43	5
2016-2017	53003	280	11159	189	40	5
2017-2018	50039	305	11245	164	37	4
2018-2019	50603	314	10976	161	35	5
2019-2020	52131	316	10741	165	34	5
2020-2021	108155	322	11011	336	31	11
2021-2022	51480	329	10037	175	31	5
2022-2023	64670	333	10447	194	31	6
Averages				202	39	5

Source: Prepared by the researcher based on data from the Republic of Iraq, Ministry of Planning, Central Statistical Organization, Directorate of Social and Educational Statistics, Annual Statistical Totals (2005/2006 - 2020/2021), Columns (1-2-3)
Columns (4-5-6) Prepared by the researcher based on data from columns (1-2-3).
2014-2015 did not include the governorates of (Nineveh - Salah al-Din - Kirkuk - Anbar) due to their occupation by terrorist groups.
2015-2016 did not include data from the governorates of (Nineveh - Anbar)
2016-2017 did not include data from Nineveh Governorate.

The data in table No. (3) indicate that there was a significant increase in the number of students during the research period, as the number at the beginning of the period 2005-2006 was (66317) students and increased significantly to become (108155) students in 2021, an increase of (41838) students. At the end of the period 2022/2023 (64670). As for the number of teachers, it also witnessed an increase, as the number of teachers at the beginning of the period was (10776) teachers and the number increased to become (10447) at the end of the period, an increase of (329). To identify the internal efficiency of the educational system in the vocational education stage due to its direct impact on the quality of education, three indicators are relied upon (a student per school indicator, a teacher per indicator, and a student per teacher indicator).

Through the student-per-school indicator and based on the data in Table (3), we note that this indicator did not witness a noticeable improvement during the period. On the contrary, at the beginning of the period 2005-2006, it was (240 students per school 1:240), then at the end of the period 2022-2023, it reached (194 students per school 1:194), i.e., at a rate of (65 students per stage), a number that rises and falls according to the population density of the stage category, governorate or city in which the school is located. Studies indicate that the ideal number should not exceed (20 students per class), which is a large number attributed to the growth of the number of students (population) at a rate greater than the growth of schools, which was reflected in overcrowding of schools and from there to overcrowding of classes, and this will inevitably affect the educational environment, which will negatively affect the performance of schools and students, and thus will negatively affect the quality and type of vocational education.

The teacher per school indicator shows the number of teachers in each school. We notice from Table (3) that this indicator witnessed a decrease during the period, as it was at the beginning of the period 2005-2006 (39 teachers per school 1:39) to decrease at the end of the period 2022-2023 to (31 teachers per school 1:31). The reason for the decrease in this indicator is due to the increase in the number of schools at a rate greater than the increase in the number of teachers, and this is likely to increase the pressure on teachers by increasing their study periods, which negatively affects their efficiency and giving and thus the quality of education (quality of human capital). While the student-per-teacher indicator shows the number of students per teacher, the data in Table (3) indicates a decrease in this indicator during the research period. In 2005-2006, the number of students per teacher was (6 students per teacher 1:6). This indicator increased in 2021/2022, as the number of students increased at the end of the research period to (11 students per teacher 1:11) and at the end of the period it decreased (6 students per teacher 6:1). This indicates that the growth of students is at a rate greater than the growth of the number of teachers during the period, and this is likely to negatively affect the performance of teachers and burden them, thus negatively affecting the quality of education.

4.2 Human Development Indicators (Corruption, low education allocations):

The danger of corruption lies in the dire effects it has on both the development and reform process, as it leads to an increase in the deficit in the general budget of countries and to an increase in the cost of services that individuals need, in addition to hindering economic development, wasting public money, and increasing expenditures at the expense of revenues. The education sector in Iraq is particularly vulnerable to corruption, as education's great importance makes it an attractive target for manipulation and exploitation by those who can provide educational services, with their strong powers and authorizations that enable them to blackmail for their interests. Since each educational system has material requirements to continue the educational process, it needs buildings, offices, textbooks, water, electricity, and human cadres, which are among the inputs that schools require at all levels in their daily operations. The government is often responsible for providing them through the various administrative layers. Experiences have proven that the results of spending on education are almost weak. The reason is that the funds allocated by governments do not reach schools in full to achieve the desired goal due to financial corruption, as corruption increases public expenditure.

Apart from the need for education and health finance, these expenses, compared to other project expenses, make it less easy for officials to extract rent. Undoubtedly, the huge mutational expenses increase the risk of corruption in education.

From a development perspective, corruption disrupts opportunities for productive investment accumulation in human and material assets. It strengthens the values and behavior of quick profit by employing rent instead of productive work that achieves the public interest, as the spread of corruption helps to increase the severity of social polarization through the deterioration of the fair distribution of income and wealth, which reduces societal efficiency and disrupts development opportunities. In addition, corruption harms human development, a developmental value model that does not stop at the increase or decrease of national income but measures the quality of life and opportunities available to all people from education. Since human development is measured by educational achievement, health, and income, high levels of corruption weaken human development levels by affecting all these indicators. Table (4) shows the ranking of Iraq and some selected countries according to the Global Corruption Perceptions Index, Transparency International Reports (2012-2021).

Table 4: Ranking of Iraq and some selected countries according to the Global Corruption Perceptions Index, Transparency International Reports (2012-2021)

Country	2012	Degree 2012	2015	Degree 2015	2018	Degree 2018	2021	Degree 2021
UAE	27	68	23	70	23	70	24	69
Qatar	27	68	22	71	33	62	31	63
Saudi Arabia	66	44	48	52	58	49	52	53
Oman	61	47	60	45	53	52	56	52
Jordan	58	48	45	53	58	49	58	49
Tunisia	75	41	76	38	73	43	70	44
Kuwait	66	44	55	49	78	41	73	43
Morocco	88	37	88	36	73	43	87	39
Egypt	118	32	88	36	105	35	117	33
Algeria	105	34	98	34	105	35	117	33
Djibouti	94	36	111	31	124	31	128	30
Mauritania	123	31	123	28	144	27	140	28
Lebanon	128	30	161	16	138	28	154	24
Iraq	169	18	136	26	168	18	157	23
Comoros	133	28	165	26	144	27	164	20
Sudan	173	13	161	12	172	16	164	20
Libya	160	21	154	16	170	17	172	17
Yemen	156	23	154	18	176	14	174	16
Somalia	174	8	167	8	180	10	178	13
Syria	144	26	154	18	178	13	178	13

Source: Prepared by the researchers

Table No. (4) shows the Corruption Perceptions Index for the year (2012-2021) issued by Transparency International, which ranks 180 countries and regions around the world according to the perceived levels of public sector corruption. It follows a scale from zero (most corrupt) to 100 (least corrupt). According to the index, the level of global peace has been deteriorating for 19 years, with corruption remaining the main cause resulting from this. It is also clear from the table that Iraq is in the first ranks in terms of the most corrupt countries, as it has maintained its level in the Corruption Perceptions Index during the years 2012-2015-2018-2021, with a transparency score of (18-16-18-23) respectively.

When corruption exists, the main factors in combating poverty and ignorance, such as political accountability, transparency, and awareness, are restricted and sometimes absent. The comparison between top countries such as the United Arab Emirates shows Qatar, Saudi Arabia, Oman (along with the bottom countries) Somalia, Iraq, Syria, and Yemen (from Transparency International's Corruption Perceptions Index) are a starting point for linking poverty, inequality, and corruption. When a country's Corruption Perceptions Index is compared to its Human Development Index, a strong relationship appears between corruption and human development, as measured by the HDI. Countries that are less corrupt tend to rank higher on the HDI, and vice versa.

Spending on education is an important indicator to monitor the extent of the government's interest in education, compared to other aspects of spending. In general, the global average for spending on education is about 5.3% of the gross domestic product in the years (2005-2023. The state's public expenditures are important for it to perform its necessary duties and obligations, especially educational expenditures, as they reveal the amount of educational effort of a state, especially if we consider the Iraqi state's commitment to free education at all levels. However, Iraq's unstable conditions (economic, political, and social) have affected many aspects of life, and the percentage of educational spending has received its lion's share of it, which has affected the irregularity of the indicator and its fluctuation between improvement and deterioration. This is clearly confirmed by the following table:

Table 5: Development of public spending on education in Iraq for the period (2005-2023) in million dinars

Year	GDP (current value $) (1)	General Agreement (2)	Public spending on education (3)	Annual growth rate of education spending (4%)	Percentage of spending on education from the total GDP (5)	Percentage of spending on education from total public spending (3%)
2005	50065104	3083114	1622273	--	2٫2	5٫3
2006	65147051	3749445	2236287	37٫8	2٫3	6
2007	88837057	3930834	2891257	29٫3	2٫6	7٫4
2008	131614434	67277197	5250308	81٫6	3٫3	7٫8
2009	111657580	55589721	5650973	7٫6	4٫3	10٫2
2010	138516722	70134201	6871578	21٫6	4٫2	9٫8
2011	185749664	7875766	1011596	47٫2	4٫7	12٫8
2012	218002476	105139575	9804497	-3	3٫9	9٫3
2013	234637675	119127556	10574821	7٫9	3٫9	8٫9
2014	228415656	125321074	9983244	-5٫6	3٫7	8
2015	166774104	84693524	9089124	-9	4٫7	10٫7
2016	166743557	73571002	9695721	6٫7	4٫9	13٫2
2017	187217660	75490115	10239586	5٫6	4٫6	13٫6
2018	227367469	80873188	12689434	23٫9	4٫7	15٫7
2019	233636097	111723522	12687082	-0٫01	4٫6	11٫4
2020	180898797	76082443	10396270	-18	4٫7	13٫7
2021	209691945	36440348	11976000	15	2٫2	12٫8
2022	286640340	29047300	13252008	10٫6	2٫8	17٫7
2023	250842782	11141480	16119208	21٫6	1٫4	22٫4
Averages				%15٫6	%3٫7	%11٫4

Source: Prepared by the researchers based on data:

World Bank data
Ministry of Planning, Central Statistical Organization, National Accounts Directorate, Column (1).
Ministry of Finance, Economic Department, unpublished data, Column (2).
Ministry of Planning, Central Statistical Organization, National Accounts Directorate, Column (3).
Ministry of Planning, General Investment Programs Department, Actual expenditure for investment projects, Column (3).
Column (4) from the researcher's work based on the table data.
Column (5) from the researcher's work based on the table data according to the law (Column 3/Column 1*100%).
Column (6) from the researcher's work based on the table data according to the law (Column 3/Column 2*100%).

It is noted from table (5) that public spending on education has witnessed a remarkable development during the research period (2005-2023), which is consistent with the development of public spending of the state during the same period, as spending on education in 2005 was (1,622,273) million dinars, after which it witnessed a steady increase at different growth rates until it reached (5,250,308) million dinars in 2008. This came from the increase in current spending because of the new salary scale that improved the salaries of employees and workers in the sector and continued to rise until it reached (10,574,821) million dinars in 2013. This increase came as a result of the improvement in the security and political situation in addition to the approval of some decisions and laws that improved the salaries of employees of the Ministries of Education and Higher Education, such as the law granting lump sum allowances (150,000) dinars for employees of the Ministry of Education, which was approved in 2011, and the university service law for employees of the Ministry of Higher Education and Scientific Research, which was approved in 2012, which This has led to a significant increase in current education expenses. After that, the years (2014, 2015, 2016) witnessed a clear decline in spending, as it decreased in 2014 to (9983244) million dinars with a negative growth rate of (5.6-) and in 2015 it reached (9089124) million dinars with a negative growth rate of (9-) and in 2016 it reached (9695721) million dinars. This decline came as a result of the repercussions of the war on terrorism and the accompanying decline in oil prices and the rise in the war bill in addition to the austerity policy that the Iraqi government implemented at that time, to return and rise again in the years after the war on terrorism (2017-2018-2019) as spending in 2019 reached (12687082) million dinars. This improvement came because of the end of the war, the restructuring of public spending, and the end of the austerity financial policy. As for 2020, as a result of the repercussions of the Covid 2019 virus (a decrease Global crude oil prices) in addition to the popular protests that erupted in October 2019 and continued until 2020, which resulted in a change in government and its inability to prepare the state's general budget, which forced it to work according to Financial Management Law 1/12, all of which led to a decrease in public spending on education, which amounted to (10,396,270) million dinars, with a negative growth rate of (-18). Then it began to rise and improve until 2023. The Table also shows that total public spending on education during the period (2005-2023) amounted to (16,119,308) million dinars, with an average annual spending of (8,112,400) million dinars and an average annual growth rate of (15.6%).

5. Conclusion:

Human development in Iraq has become a cause for concern, as it is worth noting that its indicators have deteriorated, especially in the field of health and education, not to mention the widening scope of unemployment and poverty, despite Iraq's human and material capabilities and natural resources, and in addition to the importance of the human element in the production process, it has not received sufficient attention in development, training, and rehabilitation, which has negatively affected economic efficiency and raising productivity levels. It has become clear that Iraq suffers from a defect and deficiency in the infrastructure of schools, and this creates a defect in the societal structure, which is based on a set of economic, social, cultural, educational, security sectors, and other fields, which are considered an environment that repels students. Therefore, this problem must be confronted, and decisive solutions must be found. Through the reality of the study, it becomes clear to us that despite the importance of vocational education in supporting the market with scientifically and practically trained professional cadres, vocational education constituted a small percentage of secondary education, only 3% of the total preparatory stages during the study period (2005/2023). This is a negative matter affecting the educational system in Iraq due to its role in preparing and developing human capital for what the market requires or demands. Iraq suffers from overcrowding in schools and classes and an annual increase in the population growth rate. Iraq also suffers from a decline in the quality of education because the methods followed by teachers and educators do not encourage creativity, innovation, and the development of self-capacity, as the educational system inherited complex problems and the separator of the educational process is the teacher, as the College of Basic Education accepts the lowest rate, and this adds a new and fundamental burden to the problems of education.

Authors Declaration:

Conflicts of Interest: None

-We Hereby Confirm That All The Figures and Tables In The Manuscript Are Mine and Ours. Besides, The Figures and Images, which are Not Mine, Have Been Permitted Republication and Attached to The Manuscript.

- Ethical Clearance: The Research Was Approved by The Local Ethical Committee in The University.

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