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Geographical Distribution and Strategic Importance of Iraq's Oil Reserves from 1980 – 2024 Using GIS

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Abstract

Crude oil was discovered in Iraq in 1927, with production and exports beginning in 1934, the Iraqi economy is heavily dependent on the oil sector, which accounted for 89% of the country's foreign exchange earnings between 2010 and 2024, in Iraq, oil is found near the Earth's surface and has been observed seeping through cracks in geological formations, the country possesses vast oil reserves, many of which are located close to the surface. Iraq's oil fields are among the oldest exploited fields in the world, extensive geological studies in Iraq have identified around 530 geological structures (or potential storage sites) with significant oil potential. However, only 115 of these sites have been drilled or developed, while 75 are believed to contain substantial reserves spread across multiple fields, Iraq ranks fifth in the world in oil reserves, with 162 billion barrels, accounting for 10.2% of the world's total reserves. these reserves are distributed across 75 fields, including 10 giant fields and 22 large fields. Geographically, the fields span the Tigris and Euphrates Basin, stretching from north to south and west to east. About 73% of the reserves are in the southern region, with a small percentage in the Western Desert.

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مجلة التربية للعلوم الإنسانية

مجلة علمية فصلية محكمة، تصدر عن كلية التربية للعلوم الإنسانية / جامعة الموصل



التوزيع الجغرافي والأهمية الاستراتيجية لاحتياطيات النفط العراقية خلال الفترة (1980-2024) باستخدام نظم المعلومات الجغرافية

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الملخص

معلومات الارشفة

اكتُشف النفط الخام في العراق عام ١٩٢٧، وبدأ الإنتاج والتصدير عام ١٩٣٤، يعتمد الاقتصاد العراقي اعتماداً كبيراً على قطاع النفط، الذي مثل ٨٩٪ من عائدات النقد الأجنبي للبلاد بين عامي ٢٠١٠ و٢٠٢٤، ومن بعض المكان في العراق يوجد النفط بالقرب من سطح الأرض وقد لوحظ أنه يتدفق عبر الشقوق في الهياكل الجيولوجية، وتمتلك العراق احتياطيات نفطية كبيرة، حيث حدد ما يقرب من 530 هيكلاً جيولوجياً أو موقع تخزين يشير إلى إمكانات نفطية كبيرة، ومع ذلك، لم يتم حفر أو تطويرا 115 موقعاً من مواقع تخزين النفطية في العراق، بينما يُعتقد أن 75 موقعاً تحتوي على احتياطيات نفطية هائلة منتشرة في العديد من الحقول النفطية، ويحتل العراق المركز الخامس عالمياً باحتياطي نفط يبلغ 162 مليار برميل، أي ما يعادل 10.2% من إجمالي الاحتياطي النفط الخام العالمي، وتتوزع هذه الاحتياطيات على 75 حقلاً نفطية، منها 10 حقول عملاقة و22 حقلاً كبيراً، يقع معظم موقع النفط العراقي في محافظات الجنوب، حيث توجد أكبر حقول النفطية في البلاد، كما توجد حقول نفطية مهمة في محافظات الوسط والشمال، وتمتد مكامن النفط من الشمال إلى الجنوب ومن الغرب إلى الشرق، وتقع حوالي 73% من هذه الاحتياطيات يتركز في المنطقة الجنوبية، مع نسبة قليلة في الصحراء الغربية

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معلومات الاتصال

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1- introduction

Iraq is endowed with extensive reserves of oil and gas, underscoring its strategic importance in the global energy sector, making it one of the most promising sources of hydrocarbon resources in the world. These reserves remain largely undeveloped due to decades of low investment caused by wars and economic sanctions. The importance of oil in Iraq extends beyond its critical role in the country's development; it also has the potential to influence the global oil market significantly. This is due to the substantial oil reserves Iraq holds, which can be further expanded. Iraq is uniquely positioned to meet the growing global demand for energy, as it has the capacity to increase its oil production substantially. Iraq is projected positioning it as the world's fifth -largest source of oil and gas (Mohammad,2010, p.53). Iraq's proven oil reserves, defined as the estimated quantities of oil that geological and engineering data indicate with a high degree of certainty can be extracted in the future from known reservoirs under existing economic and technical conditions, have shown a significant increase, particularly in recent decades. As of 2024, the size of Iraq's proven oil reserves has reached approximately 162 billion barrels (Oil Ministry,2024). These reserves are distributed across 75 fields, including 10 giant fields and 22 large fields. It is expected that the share of the Western Desert will increase as exploration activities expand. The region has been divided into exploration blocks, which will be announced for investment purposes. The first oil field discovered in Iraq was Baba Gurgur, near Kirkuk, in 1927. Currently, there are 75 oil fields in the country, but only 25 of these are actively exploited for production, including 10 large fields (Iraqi Oil Calendar,2013,p.214), Iraq's large oil fields and production span from north to south. While the number of oil fields in Iraq includes those that have been discovered, developed, and are progressing toward commercial production, many areas may still contain undiscovered oil reserves. The majority of Iraq's large oil reserves are concentrated in the south, particularly in Basra Province, which has 15 fields. Of these, 10 are currently producing, while five remain undeveloped and await production. These fields contain over 90 billion barrels of oil reserves, accounting for 65% of Iraq's total reserves. In contrast, the reserves in central and northern Iraq are estimated at 71 billion barrels, representing 35% of the total. Iraq is the largest oil producer in the Middle East, with a daily production of approximately 4.5 million barrels. The role of oil in Iraq's economy is heavily dependent on production for exports (IEA,2012,p.46), this article presents the results and discussion of a study on the geographical distribution and strategic importance of oil fields and reserves in Iraq, utilizing Geographic Information Systems (GIS).

First - Importance of the Research: The importance of the characteristics and features of Iraq's oil reserves and fields is shown, and importance from the strong relationship between the percentage of oil reserves and the size of the oil fields discovered in Iraq.

Second - The core issue addressed by this study lies in understanding the impact of developing and using oil reserves on the future development of oil fields and their contribution to the growth of the Iraqi economy.

Third - Research objective: The research aims to highlight Iraq's significant oil potential in terms of reserves and emphasize the strategic importance of oil fields for the future of the Iraqi economy. Given that Iraq consumes only a small portion of its crude oil; the study suggests that production levels can be more than doubled from their current capacity.

Fourth - Research hypothesis: the same Oil reserves will remain the primary factor in shaping the development of oil fields on Iraq's future map.

Fifth - Study Methodology: The research employed a combination of inductive and deductive methods for analysis, utilizing Geographic Information Systems (GIS) to producing maps. the researcher also relied on the analysis and comparison method to examine the current state of oil reserves in Iraq and their impact on the geographical distribution of oil fields.

Sixth - The literature review includes numerous studies, some of which are related to the research topic (oil, its importance, reserves, and fields), while others focus on the research area (Iraq). Below is a presentation of studies relevant to both aspects:

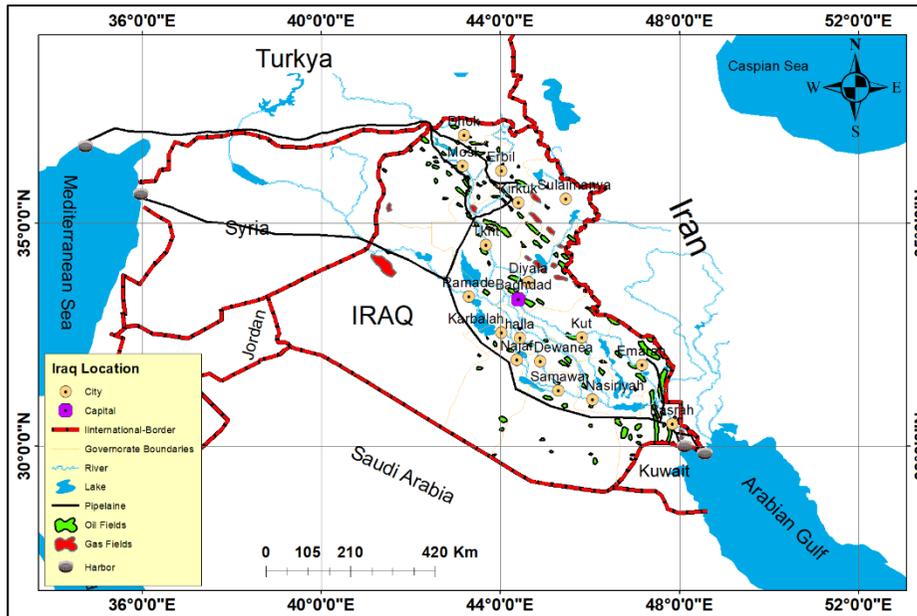
Table (1) , Previous Studies on Iraqi Oil Production and exports.

No	Name	Topic Name	Years
1	Ahmed Jassim Jabbar	Oil and the Future of Development in Iraq	2009
2	Ayid Wali	Geographical history of exploration and drilling for oil in Iraq	2013
3	Kamil Al-Mehaidi	Geographical Distribution of Iraqi Oil Fields and Its Relation with the new Constitution	2006
4	Salwa Tofeq Muhammed	Oil extraction and refining industry in Kirkuk Governorate	2010
5	Mohammed Azhar Al Samak	Iraqi oil	1981

2. Methodology and Data Collection

2.1. Study Area

Iraq is located in Southwest Asia, geographically positioned between latitudes 29°43'28"N and 37°11'44"N, and longitudes 37°48'69"E and 48°10'87"E. The country has a total area of 437,072 km² (Karem,2012,p337)



Map.1, Geography location of Iraq.

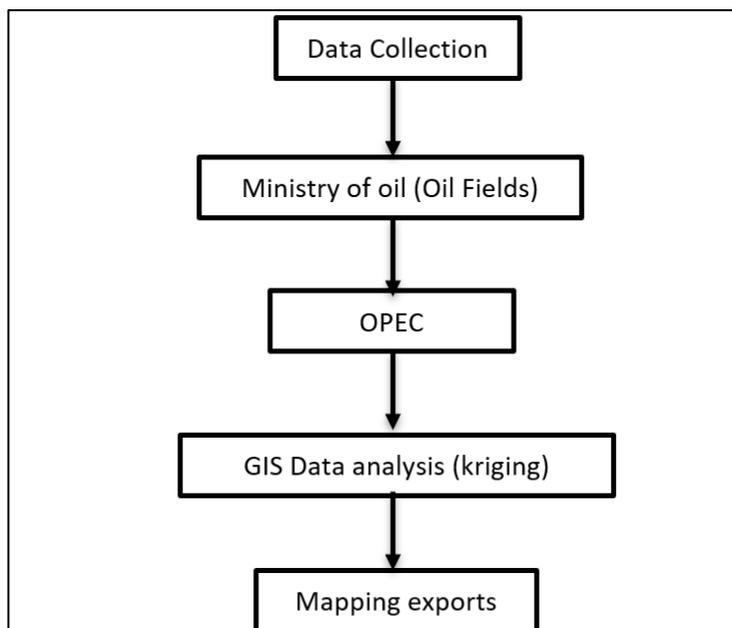
Source: Al-Mehaidi, K. (2006). Geographical Distribution of Iraqi Oil Fields and its relation with the new Constitution. Revenue Watch Institute, p16.

The northern border with Turkey has a length of 367 km, and the eastern (Iranian) border is 1599 km. Saudi Arabia forms most of Iraq's southern border, with a length of 811 km, and Jordan, to the west, borders Iraq for 179 km. Kuwait also shares a border with southern Iraq direction for 254 km, and Iraq's Arabian Gulf coast measures 60 km (Alsalamy,2021,p111) see map .1.

2.2. Data Collection

GIS analysis reveals Iraq's oil wealth is concentrated in two main clusters (north and south) by extracting maps, (Emelie,2013,p6). analyses can be made big information data with Geographical Information Systems (GIS) over a large region and a long meantime, data collecting and saving processing, and treatment for the analyze and visualizing geographical data in difference a place and times, this includes analysis

maps, data statistics and images satellite, GIS-Technologies software have to be able to add and combine data from other different data sources(Fleming,2014,p7) .



Figures 1. Data Collection and analyses.

The data for this research was collected in two ways. the first of method involved gathering data from the Iraqi Ministry of Oil, focusing on the study area. The second method included mapping Iraq's oil fields and analysis the data using Geographic Information Systems (GIS).

3. Results and Discussion

Iraq is one of the oldest contras in the Middle East where oil was discovered. the eternal fire of Baba Gurgur, known since ancient times, is a testament to the region's long history of natural oil and gas seepages (Hsam,2005,p1), Some people collected the liquid oil scattered around the eternal fire of Baba Gurgur, using it as a source of fuel and lighting and selling it for profit, this development was further solidified when oil was discovered in large quantities in October 1927, with the dramatic eruption of Well No. 1 in the Baba Gurgur field near Kirkuk, Iraq. This event marked a turning point in Iraq's oil industry and its significance on the global stage(Hmad,1997,p167), One of the most striking features of Iraq's oil field is the widespread presence of convex dome formations with distinct characteristics, these geological structures are considered ideal traps (reservoirs) for petroleum accumulations (Mohammad,1981,p.127), the most important features of Iraqi crude oil are as follows:

1. **The oil reservoirs in Iraq** are located near to the Earth's surface, at depths ranging between 250 and 3,600 meters (Zaher,2018,p213), the ease of oil extraction and production, particularly in crude oil field zones, makes these regions economically vital.
2. **Low Extraction Costs:** The cost of oil extraction in Iraq is relatively low, averaging around \$6 per barrel.
3. **Good and suitable Geological and Geographical Characteristics:** The oil fields in Iraq benefit from advantageous geological and geographical features, which have contributed to reduced costs of discovery, production, and development. the oil varies in nature, ranging from light to heavy.
4. **Rich and High-Production Oil Fields:** Iraq is one of the most important countries with a wide distribution of oil fields. in the world, known for their massive production capacity. these fields are among the most prominent globally.
5. **Proximity to Consumption Sites:** The oil fields in Iraq are strategically located near major consumption markets, such as European and East Asian countries.
6. **Large Oil Reserves:** Iraq possesses substantial oil reserves, with confirmed reserves estimated at 162 billion barrels of crude oil.
7. **Diverse Oil Fields:** Iraq has a total of 75 oil fields, of which 25 are currently producing, while the remaining 50 explored fields are under development (Oil Minisrty,2013,p.240). to illustrate the geographical distribution of oil fields in Iraq, and the most important oil fields in Iraq are as follows:

3.1. Oil Fields of Northern Iraq

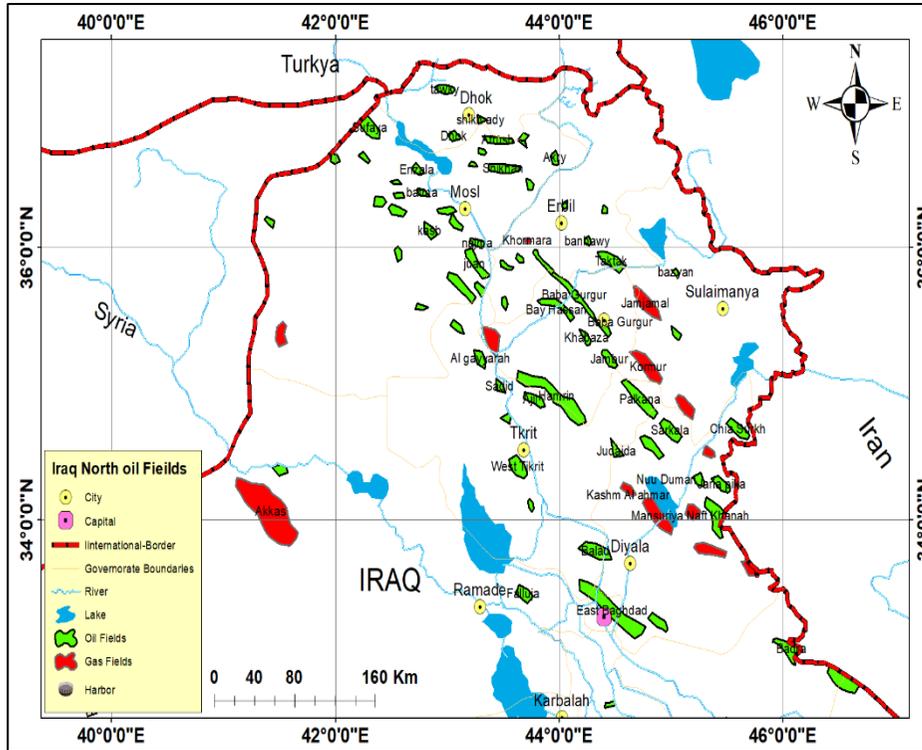
The first history of oil exploration and extraction in Iraq date comes back of the northern parts in 1927 in northern Iraq, there are a number of fields in production with a significant reservoir of crude oil(Alsamak,1981,p124): these form part of the large oil sink that covers a vast area of the state's land. oil is found in Iraq in large areas extending from the northwest to the southeast of the country (Bewar,2005, p21), the oil-producing fields in Iraq, as illustrated in Table 2 and Map 2.

Table (2): Important Oil Fields discovered Between 1927 and 2009 and their Oil Reserves.

Field	Year of exploration	number of wells	Reserve
Baba Gurgur	1927	433	9 billion
By Hassan	1953	194	2.4 billion
Jambur	1954	61	680 million
Khabaza	1955	37	2 billion
Ain Zala	1939	28	800 million
Batma	1952	17	400 million
Sufiya	1974	40	300 million
Taq taq	1978	22	1.5 billion
Garmian	2008	12	4 billion
Naft khana	1925	42	30 million
Tawke	2005	26	1.9 billion
Atrush	2005	8	3 billion
Shekhan	2009	13	2billion

Source; Naji Mazhar Abdul Rahman and Hadi Abdel-Zirj, *The Oil Industry in Iraq* , 2009.

highlight the diversity and abundance of these fields. there are 13 producing fields in total, including the Baba Gurgur field, discovered in 1927, it is located in the Kirkuk governorate in northern Iraq, for two decades, It was considered the largest oil field in the world until the discovery of the Ghawar field in Saudi Arabia in 1948, the field spans 100 kilometers in length and 12 kilometers, in width. The wells in the Kirkuk field are situated at depths ranging from 242 to 1,054 meters. As of 2024, the estimated oil reserve in this field exceeds 9 billion barrels, with a total of 433 wells, of which 330 are actively producing oil (Oil Company,2024).



Map 2. oil and gas field in north Iraq.

Source: Talyb.Jaza Twfik&Siyan , Serwan (2019), The Role of Oil in The Political Weight of the Kurdistan Region – Iraq , Govary Zanko ,Vol.23, p.220.

The Bai Hassan oil field stands as one of the most productive oil fields. located 32 kilometers northwest of Kirkuk city(Mohammad,2007, p.127) , the discovery of oil in the Bai Hassan field dates back to 1953, with commercial-scale production beginning in 1960, the field has 194 wells, with depths ranging between 1,200 and 1,500 meters. The estimated oil reserve in this field is 2.4 billion barrels. Jambur Field: Located 45 Kilometers southeast of Kirkuk city, oil was discovered at a depth of 1,400 meters in 1954. As of 2024, the estimated oil reserves in the Jambur field exceed 680 million barrels.and Khabaza Field: Situated in the Kirkuk Governorate, 18 kilometers southwest of Kirkuk city, the Khabaza field lies between the Bai Hassan and Jambur fields. Its oil reserves are estimated at 2 billion barrels , Khana Field: Located in east Iraq, 32 kilometers south of Khanaqin city, the Khana oil field extends along the border of the Krg of Iraq with Iran. The oil basin measures 15 kilometers in length and 2 kilometers in width(Jaza,2005,p.127) , the oil reserves in the Khana oil field are estimated at 30 million barrels (Salah,2008,p.7) , the Batma field is located 45

kilometres north of Mosul city and 5 kilometers southeast of Ain Zala (Hawre,2013,p.207), the Safiya field is located 120 kilometers west of the Ain Zalah field, northwest of Mosul city, near the Syrian border. The Karmian field, discovered in 2008, spans approximately 16 kilometers in length and 1 to 5 kilometers in width (Jaza,2019,p229) , the Taq Taq field is located in the Koya district of Erbil Governorate, 75 kilometers southeast of Erbil city. The field measures approximately 12 kilometers in length and 11 kilometers in width (Oil and Gaz,2013,p.64).The Tawke field is located in the Zakho district of Dohuk Governorate, 31 kilometers northwest of Dohuk city. Oil was discovered in the Tawke field in 2005 by the Norwegian company DNO(Jaza,2019,p228), and Atrush oil field is located 24 kilometers southeast of Dohuk city. Oil exploration operations in this field began in 2005, with oil discovered in 2012 at a depth of 3,400 meters. The oil pool spans 26 kilometres in length and 2 to 3 kilometres in width: three wells were drilled in the Atrush field, with two producing wells operational in 2012. The wells range in depth from 1,700 to 3,400 meters, and the field produces approximately 15,000 barrels per day (KRG,2013,p.64).

3.2. Oil Fields of Southern Iraq

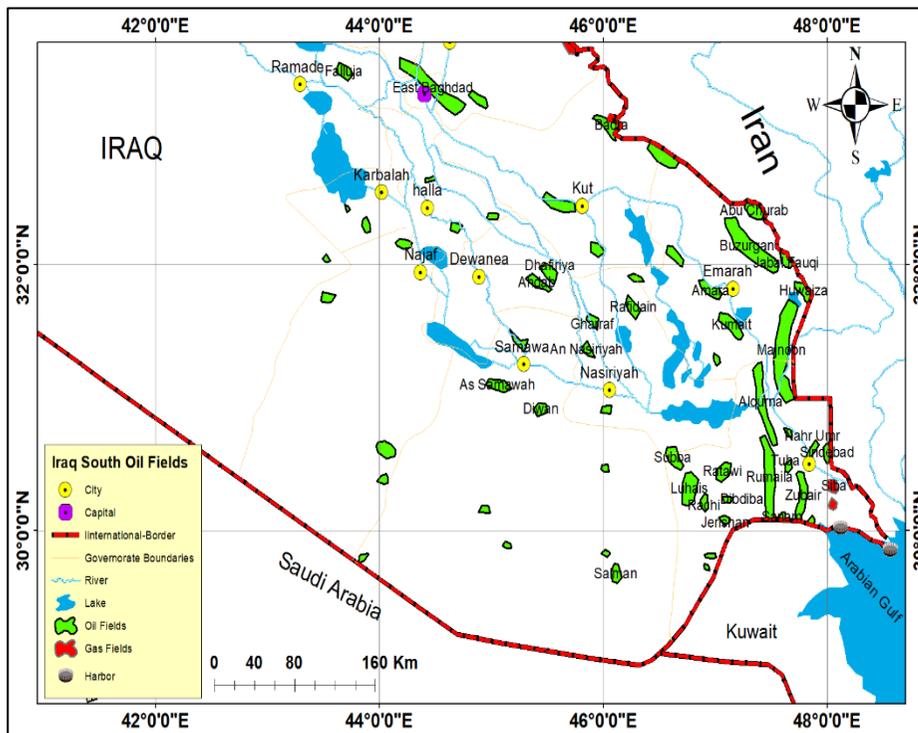
The major part of the Iraqi oil reserve is primarily concentrated in the south.in Basra Governorate, where 15 fields are located. ten among which are producing fields whereas Five fields remain undeveloped and untapped, holding oil reserves estimated at over 85 billion barrels, accounting for nearly 59% of Iraq’s total hoards(Zaher,2018,p227).

Table (3) , The Nambur of Oil Fields and Oil Reserves of Southern Iraq

Field	Year of exploration	Number of wells	Reserve
Al- Ahdib	1979	219	1 billion
Badra	1977	17	3 billion
Majnoon	1975	25	13 billion
Rumaila	1953	663	17.7 billion
East of Baghdad	1976	97	8 billion
Nahr omar	1940	15	6.5 billion
Qurna	1973	247	23 billion
Rumaila	1954	820	17 billion
Zubair	1948	178	8 billion
Artawe	1948	12	1 billion

Source/ Republic of Iraq, Oil Ministry, Iraqi Oil Calendar, 2013.

Table (3) shows, The Zubair field is one of the most important large oil fields and a major discovery in Basra, made in 1948. Its reserves are estimated at 8 billion barrels of oil, and the Majnoon field, located in the north of Basra Governorate, extends northward toward Maysan Governorate along the Iraqi-Iranian border, 60 kilometres northwest of Basra city, the field consists of five oil reservoirs: Al-Hartha, Al-Mushrif, Al-Ahmadi, Bin Omar, and Al-Zubair. In 2023, the average daily oil production reached 1.250 million barrels per day (Hamid, 2012, p.63). The Qurna oil fields are classified as a large giant field and rank as the second-largest very giant field in the world, after Saudi Arabia's Ghawar field. Located 65 kilometers in northwest of Basra city, the Qurna Field was discovered by the Iraqi National Oil Company in 1973. It is an extension of the Rumaila field to the north (Abdullrahman,2009,p.142), The Qurna field has proven reserves estimated at 23 billion barrels (Oil Ministry,2013,p.242).



Map 3. oil and gas fields in south Iraq.

Source: Yahya Mahmoud Hassan , Basra oil between huge reserves and waste of resources , Al-Bayan Center for Planning and Studies , 2014.

The South Rumaila Field was discovered by the Basra Oil Company in 1953 and is classified as a large giant field, ranking as the fifth-largest giant oil field in the world (Fath,2013,p.54), and reserves amount of 17.7 billion barrels,the Nahr Omar eld stands as one of the significant oil fields in southern Iraq. located 30 kilometers northwest of Basra city Centre, it is intersected by the Shatt al-Arab River. Discovered in 1949, this field contains three reservoirs: Al-Yamamah, Al-Zubair, and Al-Mushrif, in 2023, its average daily crude oil production reached 83,000 bb (Huda,2024,p.85) , Moreover, map (3) shows, the Artawi field is located 70 kilometers west of Basra city Centre. Discovered in 1948, it contains one reservoir: Al-Yamamah. A total of 12 wells were drilled, including 6 oil-producing wells and 6 evaluation wells. Its production rate reached 55,000 barrels per day(Iraqi,2017,p.110), The Al-Ahdhab field is one of the productive oil fields. Located 180 kilometres southeast of Baghdad, Its oil reserves are estimated to be around 1 billion barrels.(Oil Ministry,2013p.237) the Badra field is located near the Iranian-Iraqi border and has oil reserves are estimated at approximately 3 billion barrels.

3.3.Iraqi Oil Reserves

Iraq is one of the richest regions in oil resources due to its favorable geology and geography, which are highly suitable for the presence and exploitation of oil, One American study confirmed that only a limited number of oil fields have already been developed in Iraq, and that many more can be discovered and developed to advance the future of oil in Iraq(Iraqi oil,2012,p.22) , The Iraqi Ministry of Oil recently announced that proven oil reserves in Iraq are 142 billion barrels. Additionally, Iraq's oil reserves were approximately 34 billion barrels in 1980. A significant portion Much of this increase in estimates took place during the 1980s. as illustrated in the graph on the right (Rebin,2018,p.87),

Table 4.The Development of oil reserves in Iraq.

IRAQ Oil Reserves			
Year	OIL reserves	Year	OIL reserves
1980	34	2000	112
1982	59	2011	115
1987	72	2015	118
1996	100	2023	142
1999	103	2024	162

Source: Iraq Oil Ministry, Annual Statistical Bulletin 2024.

During this period, there were four significant leaps in the estimate of Iraq's oil reserves: In 1982, early in the decade, Iran-Iraq War, Iraq's oil reserves nearly doubled, rising from 32 billion barrels to 59 bb . By 1987, during a period when the Iraqi economy struggled under the prolonged war with Iran and OPEC prepared To align production quotas with stated reserves, the figure surged from 72 billion barrels to exactly 100 billion barrels. Later, in 1996, as the United Nations finalized the Oil for Food Program—permitting Iraq to resume oil exports after a prolonged ban—the estimate rose further, from 100 billion barrels to 112 billion barrels.

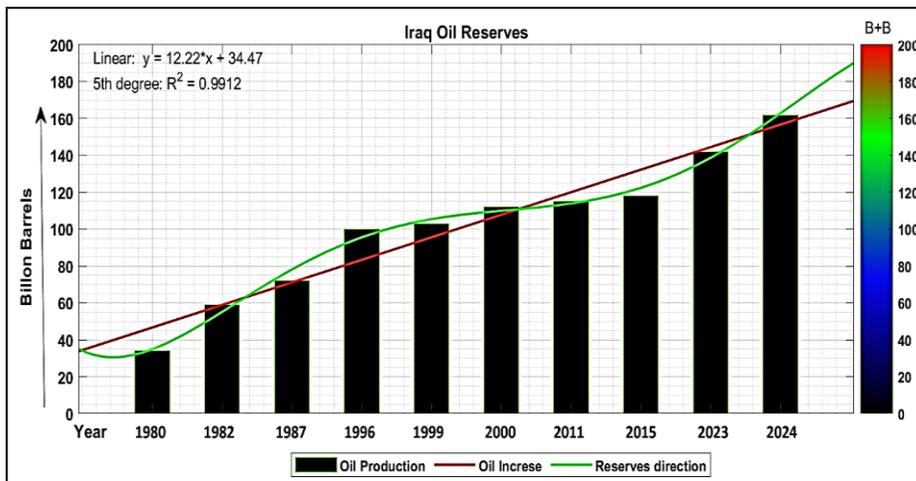


Figure 4. Iraq oil reserve percentage.

Source: Table 4.

in 2023 Iraq's proven Crude oil reserves have increased to 142 billion barrels (bbl). Iraq continues to be one of the least explored oil-rich nations, with widespread speculation about vast untapped reserves—potentially reaching hundreds of billions of barrels. For example:

- The respected Petroleum Economist magazine estimates that Iraq may hold up to 200 bbl of oil.
- The Federation of American Scientists estimates 215 bbl.
- The James A. Baker III Institute for Public Policy at Rice University suggests claims Iraq could have as much as 360 bbl of undiscovered crude oil.

Iraq holds proven oil reserves totaling 162 billion barrels. Accounting for 10.2% of the global total oil hoards. This places Iraq third globally, behind the Kingdom of Saudi Arabia. Experts predict that Iraq's oil reserves could surpass other Gulf countries if exploration and survey operations are completed in geologically unexplored areas. Large portions of the Western Desert remain unmapped in terms of petro-geology, and initial estimates suggest the potential presence of up to 200 billion barrels of crude oil, with approximately half of that amount potentially becoming proven reserves (Meah,2012,p.211), The most important factors affecting crude oil reserves are:

1. Search and Exploration Operations
2. Modern Technology
3. Production Size

Regarding the first factor, there is no doubt that oil became a source of energy only after humans discovered it. As the demand for oil increases, so does the exploration for it. Notably, oil exploration and drilling activities in Iraq have significantly increased since 2005, Concerning the second factor, technological progress plays a critical role. Iraq relies on importing modern technology. After 2007, Iraq signed a series of service contracts (licensing rounds) with international companies to acquire the latest technologies. These agreements aim to develop producing fields and increase oil reserves (Rehem,2019,p.105), Some oil experts estimate that Iraq's oil reserves could potentially range from 300 to 450 billion barrels (Almuthna,2019,p.58) .

Table(5), Proven oil reserves in Iraq, OPEC and the world (2011- 2024 billion barrels)

Years	2011	2018	2019	2020	2021	2022	2024
Iraq	141.350	145,019	145,019	145,019	145,019	145,019	162.203
OPEC	1.2001979	1,182,528	1,241,281	1,242,377	1,241,819	1,243,523	1.260.707
IRAQ from OPEC	%11.7	%12.2	%11.6	%11.6	%11.6	%11.6	%12.8
World	1.4651813	1,493,631	1,553,386	1,544,233	1,547,168	1,564,441	1.579.809
Iraq's from world	%9.6	%9.7	%9.3	%9.3	%9.3	%9.2	%10.2

OPEC, Annual Statistical Bulletin, 2024, p.22.

Iraqi possesses a large proven oil reserve, which have secured it a distinguished position among oil-producing nations. According to British Petroleum (BP), proven reserves are defined as the volume of oil that, based on geological and engineering evidence, can be recovered with reasonable certainty from known reservoirs under existing economic and operational conditions. both now and in the future (Hammarm2016,p.207), Table (5) illustrates Iraq's reserve potential compared to OPEC countries and the world. From the table, it is evident that Iraq's proven oil reserves averaged 162.203 billion barrels during the period 2011–2024. The reserves peaked at 141.350 billion barrels in 2012 and reached 162.203 billion barrels in 2024. These fluctuations are attributed to factors such as oil extraction rates and the addition of extractable oil quantities—determined by available technical methods and commercial principles—to the total oil present in reservoirs, during the same period, OPEC's proven reserves averaged 1,260.707 billion barrels, with Iraq accounting for an average of 12.8% of OPEC's total proven oil reserves. In 2024, global proven oil reserves stood at 1,579.809 billion barrels, with OPEC countries contributing 79.8% and Iraq contributing 10.2% of the global reserves, The quantities and percentages in the table demonstrate that Iraq holds a strong position in terms of oil reserves, both within OPEC and globally. It is worth noting that potential estimates of Iraq's reserves far exceed the current figures, potentially reaching 300 billion barrels, as large portions of the country remain unexplored or insufficiently explored compared to other major oil-producing nations.

4.CONCLUSION

Iraq's oil fields are among the largest and most resource-rich world, with substantial and giant oil reserves, however, when comparing the size of these fields to the number of oil wells, the wells are relatively few, indicating significant potential for field development and increased oil production, Iraq possesses large reserves of oil and gas, making it one of the most promising sources of hydrocarbon resources globally. Despite this potential, much of its reserves remain undeveloped due to decades of low investment caused by wars and economic sanctions, US Energy Institute experts estimate that Iraq's oil reserves may range between 300 and 450 billion barrels. Iraq ranks fifth in the world in oil reserves, with 162 billion barrels, accounting for 10.2% of the world's total reserves. these reserves are distributed across 75 fields, including 10 giant fields and 22 large fields, assuming a production rate of 6 million barrels per day, this would mean the depletion period for Iraqi oil could range from 139 to 208 years, this supports the assertion that the last barrel of oil produced in the world may come from Iraq.

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