

الأمن الإنساني العراقي وتحديات التضخم السكاني

Iraq's Human Security and the Challenges of the Rapid Population Growth

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Abstract: Iraq is going through a rapid population growth resulting from high birthrate and fertility compared to regional and international rates. Iraq's annual population growth is estimated at 2.55, while the country's fertility stands roughly at 3.5 births per woman. It is projected that Iraq's population will reach around 50 million by 2030. This increase in Iraq's population, especially when the majority of Iraq's population is youth, has perilous impacts on Iraq's human security. Challenges emanating from population growth and demographic transformation overlap and feed into an array of economic, social, security, and environmental problems that Iraq is already facing. Iraq's economy which relies almost entirely on oil revenues is not capable of creating enough job opportunities to accommodate the increasing number of Iraq's labour force. Also, the growing population is putting immense pressure on the country's debilitated infrastructure and limited public services. Population growth puts pressure on the authorities to keep up with the people needs of millions of citizens for housing, health, and education. Population growth is straining Iraq's natural resources when climate change and water scarcity are causing drought, destruction of arable land and demise of food crops. Finally, the loss of prospects for the future and lack of job opportunities are driving Iraqi youth to either migrate or resort to violence and organized crime.

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الخلاصة: يشهد العراق نمو سكاني متسارعا ناجما عن ارتفاع معدلات الخصوبة والأنجاب فيه الى مستويات تفوق في المعدلات العالمية والإقليمية، حيث يبلغ معدل النمو السكاني السنوي في العراق حوالي ٢.٥٥ في حين تقترب نسبة الولادات في البلاد من ٣.٥ ولادة لكل امرأة. ومن المتوقع ان يصل عدد سكان العراق الى حوالي خمسين مليون نسمة بحلول عام ٢٠٣٠. ولهذا التضخم في الكتلة السكانية، خاصة مع التنامي المضطرد لحجم الفئات العمرية الشابة، تداعيات واثار خطيرة على الأمن الإنساني العراقي. فالمشاكل الناجمة عن الزيادة السكانية والتحول الديمغرافية تتداخل وتتفاعل وتغذي حزمة المشكلات الاقتصادية والاجتماعية والأمنية والبيئية التي يعاني منها العراق في الأساس. فالالاقتصاد العراقي الذي يعتمد بشكل تام على ريع العوائد النفطية غير قادر على استيعاب الأعداد الكبيرة من القوى العاملة عن طريق توفير فرص عمل تتناسب مع هذه الأعداد. كما تضغط الكتلة السكانية في البلاد على البنية التحتية المتهاكلة والخدمات العامة. ويستدعي النمو السكاني المتسارع من السلطات مواكبة متطلبات التعليم والسكن والصحة للملايين من البشر. ويضغط التنامي السكاني أيضا على الموارد الطبيعية والبيئية في العراق في الوقت الذي يتسبب فيه التغير المناخي وندرة المياه في جفاف وموت الأراضي الزراعية وتراجع في المحاصيل الغذائية. وأخيرا، يدفع انسداد افاق المستقبل وفقدان الامل وانعدام فرص العمل بالشباب العراقي اتخاذ مسالك خطيرة مثل الهجرة او اللجوء الى العنف والجريمة المنظمة.

Introduction

Population growth and the exponential increase in birth rates are considered among the hardest challenges any state and a society can face, especially in developing countries. Effectively, the latter predominantly suffer from structural political, economic, and security problems and an institutional inability to devise public policies and developmental and economic strategies to accommodate the pressures and requirements of the growing population mass.

Iraq is one of those countries that face a real threat and challenge in the medium and long term induced by the increase in birth rates and fertility. Rapid population growth in Iraq has put an enormous strain on the deteriorating infrastructure and depleting natural resources. If demography is destiny as the French Philosopher Auguste Comte is often quoted to have said, then Iraq's human security is certainly

destined to encounter numerous challenges in the immediate future due to the rapid growth of Iraq's population.

Human security is concerned with providing decent living standards and tending to people's economic, social, and environmental needs. Given its overlap with and effect on human development, economic growth, and political stability, the rapid population growth in Iraq is considered one of the grandest challenges that Iraq's human security faces currently and in the near future.

The challenges of population growth do not only stem from the increase in the numbers of Iraq's population, as it is compounded by the existence of the large youth cohort whose age ranges between fifteen and twenty-four years old within this population and the lack of ways to accommodate the youth within an already dysfunction economic system.

This paper discusses the impacts of Iraq's population growth and how the increase in youth numbers contributes to the rise of new social and economic challenges and exacerbates the existing challenges.

Research Questions:

How is Iraq's rapid population growth affecting the country's human security? And what are the challenges that arise from the increase of Iraq's population and how do these challenges interact and feed into Iraq's inexorable crises?

Research Hypothesis:

Iraq's population growth is creating a new set of challenges for the country's human security as Iraq's authorities find it extremely difficult to meet the demands of millions of their citizens, especially the young cohort of the population, and might in the near future lead to more discontent and unrest.

Research Methodology:

Analyzing demographic data and relevant statistics is used throughout the study to establish a correlation between Iraq's rapid population growth and the challenges for human security.

Research Structure:

The research is divided into two main segments. The first part covers Iraq's population composition and demographic transitions. The second chapter discusses the impacts of Iraq's rapid population growth on social and political security. The second part is subdivided into four segments covering the effects of population growth on Iraq's debilitated infrastructure and the way in which population growth

contributes to the rise of poverty and unemployment. Additionally, these segments discuss how the population's rapid growth is destabilizing social cohesion threatening local and international security and placing immense stress on the country's dwindling natural resources.

1. The current state of population composition and demographic transitions in Iraq.

Iraq's population stands currently at around forty-one million. Iraq's population is projected to reach roughly fifty million by 2030. Iraq's annual population growth rate is 2.55. According to this rate, Iraq's population is expected to double during the next twenty-seven years, exceeding the threshold of eighty million by the year 2050¹. The total fertility rate in Iraq is estimated at 3.5 per woman in 2021 according to the World Bank indicators, which is a relatively high rate compared to other countries across the Middle East and North Africa², where the fertility rate stands at 2.5 per woman according to 2019 estimations. Meanwhile, global replacement level fertility - the average number of children born per woman- at which a population exactly replaces itself from one generation to the next is 2.1 children per woman³.

As for Iraq's population composition in terms of gender, the numbers of females and males are almost equal, with a little tilt in favor of the males' numbers according to 2021 statistics. Whilst, in terms of age range, Iraq's population is predominantly youthful. The number of young people aged 5 to 29 exceeds twenty million, roughly half of Iraq's population, which makes Iraq among the countries with the highest percentage of youth population⁴.

Iraq's population index in terms of population distribution shows that the majority of Iraq's population lives in urbanized regions (70%). Whereas only (30%) of the people dwell in rural areas. Iraq's capital city, Baghdad, is the most densely

¹ For more details see, Iraq's Central Statistical Organization Website, Ministry of Planning, <https://www.cosit.gov.iq/ar/> , consulted 10 July 2023.

² See Fertility Rate-Iraq, the World Bank Data, <https://data.worldbank.org/indicator/SP.DYN.TFRT.IN?locations=IQ> , consulted 10 July 2023.

³ Pourreza, A., Sadeghi, A., Amini-Rarani, M. et al. Contributing factors to the total fertility rate declining trend in the Middle East and North Africa: a systemic review. *J Health Popul Nutr* 40, 11 (2021). <https://doi.org/10.1186/s41043-021-00239->

⁴ See, Central Statistical Organization- Iraq, https://cosit.gov.iq/ar/?option=com_content&view=article&layout=edit&id=174&jsn_setmobile=no , consulted 10 July 2023.

populated city in Iraq as it hosts eight million and seven hundred eighty thousand people, followed by the city of Ninawa whose population stands at four million¹. It can be inferred that the main aspect of Iraq's demographic trends is the high rates of population growth compared to the states of the region and internationally, and the high percentage of youth among the population, along with the concentration of the majority of the people in urbanized areas².

2. The impacts of population growth on Iraq's social and political stability

Having a youthful population can be a source of strength for any nation, provided that these youth are empowered, healthy, highly trained and with modern education and skills. Along with that, there should be a vibrant economy to accommodate and avail from the productivity and the capabilities of this segment of the population. Yet, the optimal conditions needed to yield the demographic dividend in Iraq are either absent or disrupted.

Iraq's overpopulation has become a burden and a cause of variant problems and structural challenges that the country is facing. Over the last few years, consecutive Iraqi governments have failed to deploy efficient public policies to improve the population quality by addressing basic social needs such as housing, medical care, education, job opportunities, ending poverty and improving life quality in general. Therefore, it is evident that Iraq's rapid population growth has become a multi-layered problem that feeds into the existing crises and dysfunctionalities. For instance, Iraq's economic system and labour market are incapable of accommodating a large number of young people, let alone fulfilling their needs and aspirations. The effects of the population growth and the increase in number of the young people in Iraq can be traced by following their impacts on human, health, educational, and environmental indications and the pressures they exert on the debilitated infrastructure and the diminishing and devaluating natural resources. Further, the loss of hope for the future among a large number of young people in Iraq will inevitably push many of them to join militant groups, get involved in

¹ Ibid,

² The rise in fertility rates in Iraq is attributed to an array of reasons like early marriages, short intervals between pregnancies, low infant and child mortality rates, women's illiteracy and women's weak participation in the labor market. See, the National Document for Population Policies, Higher Population Council, 2014, <https://iraq.unfpa.org/sites/default/files/pub-pdf/National%20Population%20Policy.pdf> , consulted 10 July 2023.

organized crime or migrate outside the country through risky routes. All these outcomes mean wasting the potential of millions of young people and pose a genuine threat to the peace and security of Iraq's society.

2.1 Straining an already debilitated infrastructure

Decades of war, sanctions, internal strife, corruption, and systematic plundering have contributed to the deterioration of Iraq's infrastructure, including road networks, ports, power grids, communications, health institutions, water desalination plants, and sewage systems. Estimations put forward by experts suggest that the share of infrastructure per person in Iraq today in light of the demographic changes and population growth is one-fifth of what Iraqi people used to get before the Iraq-Iran war in the early eighties. According to these estimations, Iraq's infrastructure sector needs around 250 billion worth of investments to restore the same level it had four decades ago¹. Further, Iraq is burdened by the cost of reconstructing the areas liberated from ISIS that were affected by the military operations between 2014 and 2017. The Iraqi government estimated this cost prior to the Kuwait International Conference for the Reconstruction of Iraq to be \$ 88 billion².

Population growth will strain public services. This will worsen an already bad situation. Public services in Iraq are already suffering from massive shortages by international standards. Iraq's public services lag even when compared to Iraq's neighbors. For example, in 2011, Iraq's consumption of electricity per individual was 1.340 kWh when Iraq's population was 33.338 million. When the increase in Iraq's population during the period from 2011 to 2020, almost seven million, is considered, the immense pressure on the facilities that are responsible for generating, transmitting and distributing electricity can be felt easily. This growth has led to a decrease in individual share of electricity and duration of power supply per day³.

¹ Mudhar Muhammad Saleh, "Iraq's Infrastructure Problem: Funding and Guaranties", 22 September 2012, <https://cbi.iq/static/uploads/up/file-152214677838258.pdf> .

² Frank R. Gunter, "Rebuilding Iraq's Public Works Infrastructure Following the Defeat of ISIS", *Foreign Policy Research Institute*, 21 November 2018, p. 5, <https://www.fpri.org/article/2018/11/rebuilding-iraqs-public-works-infrastructure-following-the-defeat-of-isis/> , consulted 20 July 2023.

³ Ahmed Jassim Muhammad Al-Mutawwari, and Ahmed Jebur Salim, "Suggested ways to finance infrastructure sectors in Iraq", *Administrative Studies Magazine*, volume 9, issue 18, 5 April 2017, p. 30, <https://portal.arid.my/en/Publications/Details/11588> , consulted 22 July 2023.

Another vital sector that is being affected by the rapid growth of Iraq's population is the health sector. The latter has been struggling for decades. And the increase in Iraq's population means an automatic rise in the demand for health services. Today, health services reach only 33% of the population, leaving 67%, almost 26 million Iraqis, without access to health services¹.

Iraq struggles with evident inadequate health services in terms of the ratio of health workers (doctors, dentists, nurses) and medical institutions to the population in comparison with the rates in neighbouring countries². Hospital bed density in Iraq stands at 1.2 per 1000 people. Also, Iraq's physician density is fairly low as it has 0.83 physicians per 1000 people. These numbers are way lower than countries like Jordan whose physician density is estimated to be 2.3 per 1000 people³. As Iraq's population will reach almost 44 million by 2025, shortages of hospital beds and physicians will increase to reach (140273) beds and (125858) doctors⁴. The outbreak of the coronavirus pandemic has exposed the systemic weakness of Iraq's health sector. COVID-19 has revealed how rampant corruption and negligence have undermined the ability of this sector to stave off the pandemic and the lack of preparedness to accommodate the large numbers of coronavirus carriers. Public hospitals and makeshift quarantine facilities that authorities have set up for COVID-19 patients and their companions lacked basic safety standards which was shown when two quarantine centers in Baghdad and Nasiriyah caught fire, leading to the death of hundreds of people⁵.

The most evident impacts of population growth in Iraq are reflected in the critical crisis of Iraq's housing sector. Population growth, along with decades of the absence of urban planning, limited achievement in housing projects, and the government's inability to provide essential services, such as electricity, roads and sewer systems,

¹ Khudair Abbas Ahmed Al-Nadawi, "Poverty in Iraq and the transformation from an economic phenomenon into a socio-political predicament", *Al Jazeera Centre for Studies*, 7 December 2022, p. 11, <https://studies.aljazeera.net/ar/article/4863>, consulted 22 July 2023.

² Iraq has 2808 medical centers, 719 of which specialize in family health and 54 are dental centers. See, Ahmad Khudair Hussien, "The state of health security in Iraq", *Al-Bayan Center for Planning and Studies*, 2021, p. 11, <https://www.bayancenter.org/wp-content/uploads/2021/05/984y8tg4.pdf>, consulted 25 July 2023.

³ Ibid, p.11.

⁴ Ibid, p.11.

⁵ Massaab Al-Aloosy, 'Iraq's Health System: Another Sign of a Dilapidated State', The Washington Institute, 15 July 2021, <https://www.washingtoninstitute.org/policy-analysis/iraqs-health-system-another-sign-dilapidated-state>, consulted in 25 July 2023.

to the areas far from city centers have created a severe housing crisis across the country. This crisis is manifested in the high record real estate prices which could be inflated by money laundering¹.

Waves of internal displacement caused by military operations in the cities once controlled by ISIS and the continuing displacement from rural areas to urbanized centers due to climate change have exacerbated Iraq's housing crisis². Iraq's city centers are experiencing an unprecedented rise in the fragmentation of residential units. That is, Iraqi families have no choice but to divide their houses into smaller units to accommodate their extended families. This constant fragmentation of houses is exerting immense pressure on mostly debilitated infrastructure.

Iraq's acute housing crisis has led to the spread of slums within and around city centers. These slums have distorted the urban fabric of those cities and induced numerous social problems; slums turn into pockets of poverty where crime rates soar. According to 2017 estimations, there are 521974 housing units in the slum areas across Iraq, the majority of which are in Baghdad and Basra provinces, accounting for 16.5 per cent of Iraq's total housing units. While there is not an accurate estimation of the shortage of housing in Iraq, the National Development Plan (2018-2022) introduced by Iraq's Ministry of Planning stated that at the end of 2015, Iraq needed 2.5 million housing units, half of them in Baghdad and Nineveh³. The education sector has come under the pressure of the growth in the school-age population (aged 6-23). This pressure has been worsened by the absence of any sort of modernization and investment in education infrastructure. Demographic statistics indicate that the proportion of Iraq's population whose age corresponds with educational levels (primary, secondary, and tertiary) accounts for 47% of Iraq's population, which is a very high ratio and poses a serious burden and challenge for

¹ "Housing Crisis in Iraq: The quest for solutions through international initiatives", *Al-Bayan Center for Planning and Studies*, 2021, pp. 3-4, <https://www.bayancenter.org/wp-content/uploads/2021/06/878yuh.pdf>, consulted 2 August 2023.

² Seventy per cent of Iraq's population live in urban areas, while the remaining thirty per cent live in rural areas. See, Iraq's Central Organization for Statistics and Information Technology website.

³ Ministry of Planning, *The National Development Plan (2018-2022)*, June 2018, p.158, <https://andp.unescwa.org/sites/default/files/2021-05/National%20Development%20Plan%202018-2022.pdf>, consulted 2 August 2023.

educational institutions' capacities to accommodate these numbers¹. As there has been a noticeable increase in the number of kids enrolling in elementary schools in Iraq in recent years, the government has started to face a challenge related to meeting these students' needs. The limited number of school buildings and the inadequacy of the existing buildings, along with staffing shortages could not keep up with the large number of students driven by the population boom².

Figures listed in the National Development Plan 2018-2022 indicate that the deficit in school buildings is estimated to be 6484. In addition, there are 1380 school buildings were affected by terrorist acts: 674 totally damaged and 706 damaged partially. Surely, this shortage in school buildings leads to that most schools suffer from crowdedness, reaching 37 students per classroom in primary education, 41 students per classroom in intermediate education, and 37 students per classroom in secondary education³.

Against this backdrop, authorities have opted to adopt temporary and impractical solutions such as a double-shift system and adding "prefabricated classrooms' in overcrowded schools⁴. The number of schools that adopted the double-shift system is 6373, while 961 schools use the triple-shift system. Further, the rise in the number of enrolled students has not been met by an increase in the number of teachers in all educational levels; the student-to-teacher ratio increased to 20 students per teacher

¹ The Government of Iraq, The National Strategy for Education and Higher Education in Iraq 2011-2020, April 2012, p. 12, <http://iraqieconomists.net/ar/wp-content/uploads/sites/2/2013/07/3-5-2012-strategy-1.pdf>, consulted 4 August 2023.

² Out of the total of 14,615 public schools in Iraq, there are 6306 schools that need renovation. Meanwhile, there are 1972 school buildings that are unfit for purpose. In other words, one in two schools in Iraq either requires renovation or is unfit for use. See, the United Nations International Children's Emergency Fund, *The costs and benefits of Education in Iraq: Analytical study about the Education sector and strategies to maximize the benefits of education*, August 2017, p.35, <https://www.unicef.org/iraq/media/251/file>, consulted 5 August 2023.

³ Ministry of Planning, *The National Development Plan (2018-2022)*, June 2018, p.193.

⁴ Double-shift systems and prefabricated schools are beset with flaws. First, the double-shift system places immense pressure upon both students and teachers due to the inevitable shortening of lessons and break periods. On the other hand, prefabricated schools are unfit and not a healthy studying environment. That is, these prefabricated schools lack suitable playgrounds, ventilation, air-conditioning, sanitation facilities, laboratories, and multi-sports courts. See, Jabbar Swaies Al-Zahabi, *The crisis of school building shortage- A study in the efficiency of prefabricated schools*, *Al-Bayan Center for Planning and Studies*, 25 April 2018, <https://www.bayancenter.org/2018/04/4470/>, consulted 7 August 2023.

in elementary schools and around 17 students per teacher in secondary and high schools according to 2016 estimations¹.

Finally, other sectors that are in direct contact with the daily life of the Iraqi people are not in a better state. Roads, bridges, tunnels, railways, water treatment plants and sewage systems have not undergone radical modernization for many years and therefore they are all strained and pressured by population growth.

Rapid population growth and the increase in the number of vehicles have made traffic congestion a normal occurrence in densely populated cities like Baghdad, especially during peak hours.

2.2 Increasing poverty, unemployment and illiteracy rate

Iraq's overpopulation crisis is feeding into other problems that Iraq is already struggling with such as poverty, unemployment and illiteracy. The rapid leaps in population growth are undermining the feasibility of whatever solutions and policies Iraqi authorities are enacting to address these problems, therefore rendering these policies effectless.

One of the most difficult challenges that a society can experience is poverty. Poverty is the midwife of endless social problems. Effectively, many characteristics of poverty lead to the rise of birthrates. Poverty's correlation with population growth has evident Malthusian² aspects; that is, the population growth rate outpaces Iraq's economy's ability to meet its people's needs. Suppose poverty is the inability to fulfil basic needs like food, clothes, education, health, and housing. In that case, large segments of Iraq's population are experiencing difficulties meeting those needs. This issue has been shown in all the indexes of human development discussed earlier³. Years of sanctions, wars, civil strife, displacement, bad governance, corruption, and cyclical economic crises have all contributed to the rise of poverty in Iraq to unprecedented levels, reaching 22.5% according to the estimates referred to in the strategy for the Reduction of poverty in Iraq 2018-2022. The majority of the poor people in Iraq are children, accounting for 57% of all the poor people in Iraq⁴.

¹ Ibid.

² Related to the theory of the English economist Thomas Robert Malthus whose contentions is that population tends to increase faster than

³ Khudair Abbas Ahmed Al-Nadawi, "Poverty in Iraq and the transformation from an economic phenomenon into a socio-political predicament", *ibid*, p. 5.

⁴ Ministry of Planning, Strategy for the Reduction of Poverty in Iraq 2018–2022, January 2018, p. 37, https://mnpcd.gov.iq/assets/files/poverty/prs_ar_2018.pdf, consulted 15 August 2023.

The outbreak of COVID-19, the following global recession and the plunge in oil prices have played a critical role in pushing vulnerable groups in Iraq, especially children, below the poverty line. According to a study conducted by Iraq's Ministry of Planning, the World Bank, and UNICEF, the poverty rate in Iraq increased to 31.7% as a result of the Coronavirus pandemic compared to 20.0% in 2017-2018¹. Each year, Iraq's population growth adds an enormous number of people to the already bloated unemployed workforce that has no place in Iraq's economic system. In Iraq, today, there are around 10 million people whose median age ranges from five to fourteen years, and those people are to enter Iraq's pool of workers within the next ten years. In other words, this segment of the population is joining the army of the unemployed people in Iraq whose unemployment rate is estimated to be 15.5% according to the World Bank's 2022 estimations².

Iraq's unemployment crisis is no less determinantal than poverty. Unemployment has serious economic, social and political impacts. Further, unemployment squanders human capital and it wastes the chance of availing of the demographic dividend. Finding solutions for the unemployment crisis in Iraq is made difficult by the private sector's weakness and the over-employment in a bloated public sector. Another aspect of Iraq's unemployment predicament is manifested in the fact that a huge segment of the unemployed are college graduates, especially humanities graduates, who have not acquired useful skills that can be utilised within the labour market. However, these graduates believe that they are entitled to be employed within the public sector. As there is no ability to accommodate some 160 thousand who graduate annually from Iraq's universities³, the sense of injustice and grievance grows among these graduates and becomes an incentive to partake in any protest movement emerging in the country. This sense is spurred by systematic corruption and the lack of equality of opportunity, which was

¹ Ministry of Planning, UNICEF, & World Bank, Assessment of COVID-19 Impact on Poverty and Vulnerability in Iraq, July 2020, p. 22, <https://www.unicef.org/iraq/media/1181/file/Assessment%20of%20COVID-19%20Impact%20on%20Poverty%20and%20Vulnerability%20in%20Iraq.pdf> , consulted 17 August 2023.

² World Bank, <https://data.worldbank.org/indicator/SL.UEM.TOTL.ZS?locations=IQ>

³ Central Statistical Organization- Iraq, Education indicators, <https://www.cosit.gov.iq/ar/2013-02-25-07-39-31> , consulted 20 August 2023.

evident during the October 2019 protests wherein college students and graduates were at the vanguard of the demonstrations.

Finally, the challenges of poverty and unemployment correlate with another devastating and ubiquitous problem, i.e. the problem of illiteracy. Although Iraq had once managed to eradicate illiteracy in the past, the issue has reemerged in alarming ways during the last few years. Illiteracy has significant consequences that affect all life's aspects from health to work and the involvement and attitudes toward social and political issues. For instance, educated families participate more in national development processes, because education level is inherently linked to poverty reduction, individual health improvement, gender equality, and social stability. Throughout the 1970s and up till the late 1980s, Iraq had almost managed to eradicate illiteracy and increase education enrollment rates. Also, by the year 1987, the rate of illiterates dropped down to a mere 20%. However, sanctions, wars and civil strife that ensued exacerbated illiteracy among Iraqis and increased school dropout rates. Nowadays, although there have not been official statistics in this regard, the number of illiterates in Iraq is estimated to be around 11 million people¹. Many children have been pushed out of school due to economic hardships as they are forced to join the labour market to make ends meet. With regard to the areas that fell under ISIS control in 2014, many kids and youth missed the opportunity to pursue their education; some of the youth had no choice but to join the militant groups. In 2018, Iraq has recorded the highest rate of illiteracy as it has reached 31% among the age group (15-49)².

The rate of illiteracy in Iraq varies according to gender and geographic location. The highest rates of illiteracy are recorded among women and girls, and in rural areas as compared to urban areas and cities³.

2.3. The pressure of population growth on the dwindling natural resources

Iraq's economy relies almost entirely on oil production. The revenues of oil exports are the basic finances that fund Iraq's annual budgets. And as long as oil at worst is

¹ '11 million illiterates, for these reasons, Iraq cannot address the illiteracy phenomenon', *Aljazeera*. Net. Qatar, 15 September 2022, <https://www.aljazeera.net/politics/2022/9/15/12-مليون-أميون-لهذه-الأسباب-يعجز-العراق>, consulted 25 October 2023.

² Kamil Allawi Kazim, *Ibid.*, p. 28.

³ Ahmad khudair et al, 'The reality of Illiteracy in Iraq: Visions and Policies, *Al-Bayan Center for Planning and Studies*, 2 October 2021, <https://www.bayancenter.org/wp-content/uploads/2021/11/97yetg1.pdf>, consulted 28 October 2023.

depleting, and at best is vulnerable to the fluctuation of international demand, Iraq's economy will remain fragile and vulnerable to external factors that Iraq cannot control. As it is known, economic structure dictates the nature of economic activity in any given country; therefore, rentierism and the absence of other sources of income have made the Iraqi state the largest formal employer upon which huge segments of the population rely. Today, the Iraqi government accounts for 40% of all jobs¹. The numbers of civil servants, pensioners, along with those who benefit from the country's Social Safety Net, have grown to unprecedented levels, rendering Iraq's public sector into one of the largest public sectors in the world. The finances that the government spends on salaries, subsidies and welfare consume a great deal of the annual federal budget funds.

The possibility of the state's failure to fund the salaries of its bloated public sector is not far-fetched. In fact, in 2020, Iraq was unable to allocate the sufficient funds for the salaries of public sector employees because of the financial crisis that hit the country due to the collapse in oil prices.

Iraq's rapid population growth crisis overlaps with the water and desertification crises that Iraq has been experiencing over the last few years. Iraq, whose very civilizational existence is tied to the flow of the two great rivers, the Tigris and Euphrates. Today, Iraq faces a serious challenge related to the lack of sufficient quantities of water to irrigate its agricultural lands and likely, in the near future, to provide potable water to its population. As Iraq's upstream countries continue pursuing systematic policy of damming and redirecting the paths of shared rivers, along with Iraq's mismanagement of water resources, climate crisis, and declining precipitation, water levels in Iraq have dwindled, bringing water reserves to their lowest records. Further, Iraq is ranked among the most water-stressed countries in the region, standing at 3.7 points on the 5-point scale of the Water Stress Index².

¹ Massasb Al-Aloosy, Barriers to Reform in Iraq, *Carnegie Endowment for International Peace*, 29 March 2022, <https://carnegieendowment.org/sada/86761> , consulted 5 November 2023.

² Rahma Ryihd, How did wars and climate change contributed in the water scarcity in Iraq?, *Scientific American*, 30 June 2019, <https://www.scientificamerican.com/arabic/articles/news/how-did-wars-and-climate-change-contribute-to-water-scarcity-in-iraq/> , consulted 5 November 2023.

Iraq's water reserves receded from 175 billion cubic meters to almost 50 billion cubic meters in 2015¹, and estimations suggest that the decline in the water flows will continue threatening to dry up the Tigris and Euphrates by 2040².

On the other hand, the rise in saline concentrations in the Tigris and Euphrates rivers to 500 PPM and 930 respectively has had negative impacts on arable land and agriculture production efficiency, posing a serious threat to the country's food security³.

The current state of Iraq's environment reveals the risks Iraq is facing as a result of climate change, desertification, and the receding of green landscape. Iraq's annual loss of arable land due to desertification and soil erosion is estimated at 155 miles⁴. Water bodies and marshlands in the south of Iraq have been hit by severe drought, resulting in the death of livestock, fish, and migrating birds, which are considered the main livelihood of hundreds of people in the region. Moreover, the drought in Iraq's wetlands has driven waves of displacement and migration to urban areas. All the aforementioned elements and factors indicate the immense pressure and strain on Iraq's natural resources, those resources will not be sufficient to meet the demands and needs of the rapidly growing population mass.

2.4. Destabilizing social cohesion and threatening local and international security.

There is no risk that a society can face greater than the lack of prospects for the future and loss of hope among its youth. The options and opportunities for Iraqi youth to achieve their potential and to live a dignified life are limited. Economic challenges, political clientelism, and rampant corruption are all factors that have contributed to pushing many Iraqi youth to pursue risky paths that pose a threat to the society's cohesion and might threaten both regional and international security.

¹ Ibid.

² Mina Aldroubi, Iraq could have no rivers by 2040, government report warns, *The National*, 2 December 2021, <https://www.thenationalnews.com/mena/iraq/2021/12/02/iraq-could-have-no-rivers-by-2040-government-report-warns/>, consulted 8 November 2023

³ Ministry of Planning, *The National Development Plan (2018-2022)*, June 2018, p.132, <https://andp.unescwa.org/sites/default/files/2021-05/National%20Development%20Plan%202018-2022.pdf>, consulted 8 November 2023.

⁴ Ruth Sherlock ‘‘ In Iraq's famed marshlands ‘climate change is upending a way of life’’ ‘*NPR* 7 November 2021 ‘<https://www.npr.org/2021/11/07/1051468823/iraq-marshes-climate-change-cop26>’, consulted 10 November 2023.

That is, the convergence of poverty and unemployment may lead thousands of Iraqi youth to join terrorist and armed groups, and organized crime networks or to simply migrate abroad through illegal and dangerous routs.

After 2003, not only has Iraq become a route for international drug trafficking but also it becomes a place where drugs are manufactured, consumed and exported to other countries¹. In recent years, drugs have entered Iraq from its land and maritime borders. Although there have not been precise statistics on drug addiction and numbers of substance users in Iraq, the available data suggests that in the year 2020 there were 3.555 drug users, the majority of them, 628, were in Basra city. Those numbers represent roughly a 212.25% rise from the year 2019. As for the number of detainees for issues related to the drug trade, the highest number was recorded in 2018, which was 9.328 detainees².

The spread of drug use and drug trafficking has detrimental social, security and health effects. The victims of addiction are more inclined to resort to violence and commit crimes. Also, drug-trafficking networks attract unemployed and poor youth to their ranks as a mean to gain money within a short time. On the other hand, the widespread of drug poses a serious security challenge for the state apparatus as considerable human and material capital is needed to be allocated and mobilized to counter drug gangs. In addition, the treatment of drug addicts requires sizable financial resources in form of building proper facilities specialized in rehabilitating drug addicts.

The loss of hope for the future, economic hardships, low quality of life, and the lack of job opportunities have pushed scores of Iraqis to leave the country. A large part of immigrants that have entered Europe in the last few years are Iraqi citizens. Despite the fact that there have not been accurate statistics on the numbers of Iraqi immigrants, estimations suggest that some 100-120 thousand Iraqis made

¹ Ali Ahmed Rahim, 'The toll of Iraq's growing drug trade', *Washington Institute*, 8 March 2022, <https://www.washingtoninstitute.org/policy-analysis/toll-iraqs-growing-drug-trade> , consulted 27 November 2023.

² See, Ghufraan Younis, "Drugs trafficked into Iraq are destroying its youth", *the Independent Arabia*, 12 April 2021, <https://www.independentarabia.com/node/211511/-تحقيقات-مطولات-المخدرات-المهربة-إلى-الداخل-العراقي-تفتك-بشبابه> , consulted 27 November 2023.

their way to Europe in 2015, almost 10% of the total number of immigrants¹. Correspondingly, Iraq's domestic migration and displacement from rural to urban centers has increased induced by environmental deterioration, water scarcity, and loss of livelihood. As studies have shown, the majority of climate induced immigrants settle in poor neighborhoods. Those neighborhoods become a breeding ground for crimes, insecurity, and armed groups. Also, domestic migration has increased the pressures in urbanized areas and strained the local authorities' ability to provide sufficient services².

The absence of economic security drives many young Iraqis to partake in illicit activities in a way that helps armed groups to gain support and recruit new personnel. For instance, when ISIS controlled large swaths of Iraq, the terrorist group took advantage of the lack of food and water to acquire support within certain communities in Iraq. ISIS awarded support and loyalty with providing services that the state could not provide. In southern Iraq, joining security forces and armed groups is the only viable option for young men to make a living as environmental degradation and the lack of economic opportunities render it extremely difficult to find a job³.

Conclusions :

1. Iraq is experiencing a rapid growth of its population and a rise in birth rates compared to regional and international fertility rates.
2. Iraq's population growth and high birth rate are likely to continue to rise in the immediate and near future.
3. Iraq's bulging population has detrimental impacts on all aspects of life in Iraq as it places immense pressure on the ever-dwindling natural resources and debilitated infrastructure due to decades of conflict, negligence, corruption, and systematic blundering.

¹ International Organization for Migration, "Migration flows from Iraq to Europe: Reasons behind migration", 16 August 2016, pp. 1&11, <https://reliefweb.int/report/iraq/migration-flows-iraq-europe-reasons-behind-migration-enarku> , consulted 2 December 2023.

² Elisabeth L. Rosvold, "Climate, Peace and Security Fact Sheet: Iraq", *The Norwegian Institute of International Affairs*, 5 April 2022, <https://www.nupi.no/en/publications/cristin-pub/climate-peace-and-security-fact-sheet-iraq> , consulted 2 December 2023.

³ Ibid.

4. Iraq's current economic structure which depends entirely on oil ravenous is unable to keep up with demands and needs of the growing population mass like job opportunists, welfare and education.

5. The absence of developmental vision in governments' programs when it comes to dealing with issues related to improving human life.

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