



Iraq National Population Commission (INPC)

Iraq Population Situation Analysis Report **2012**



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IRAQ NATIONAL POPULATION COMMISSION
(INPC)

IRAQ POPULATION SITUATION ANALYSIS- PSA 2012
THE SECOND NATIONAL REPORT ON THE STATE OF IRAQ POPULATION
IN THE CONTEXT OF THE ICPD AND MDGs



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This report was prepared within the continuous effort of Iraq National Population Commission (INPC) to develop strategic policy options related to population issues and to pave the way forward to prepare a national population policy. The report was prepared according to the Conceptual and Methodological Guide for Population Situation Analysis published by United Nations Population Fund (UNFPA).

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Preface

INPC seeks strategic policy options regarding population issues, therefore it has been envisaged in its plan for 2011 to prepare three thematic studies related to emerging population issues in Iraq namely population growth and fertility, reproductive health and displacement and migration. During the early stages of the planning to prepare these thematic studies; the research team decided that a comprehensive analysis of Iraq population is still important particularly the causal analysis and determinants of population dynamics. Therefore the team decided to prepare a comprehensive population situation analysis. The team decided also to utilize the conceptual and methodological guide for Population Situation Analysis (PSA) published by UNFPA.

Iraq needs to develop a national population policy supported with applicable executive programme to meet the challenges of the current population dynamics and the changing socioeconomic environment. Doubtless Iraq economic and social development in the future will be affected by population dynamics. The aim of population welfare and enjoyment of economic, social and cultural rights is a legitimate objective of development policies in Iraq. But the capacity of the national economy to absorb the growing population workforce and the consequent services required in the social sectors (education, health, housing, etc.) is determined by the population growth, population structure and distribution.

This report introduces a comprehensive analysis for population situation in Iraq and the determinants of population growth, structure and distribution. It focuses on basic health and reproductive health services, particularly the needs for youth and women. It discusses population situation within Iraq's political, national, economic and social context and their interaction with development plans. The analysis includes also the demographic transition in Iraq and its impact on achieving the MDGs particularly those related to comprehensive reproductive health services, education and nutrition, in addition to poverty aviation and environment challenges within sustainable development approach.

The report discusses population structure in Iraq, age structure, dependency ratios, and the growing number of women in the reproductive age with specific focus on adolescents and their needs and health risks, in addition to internal and external migration.

The analysis shows that economic reform and transition into market economy is still based on the assumption of mobilization and employment of population

competencies and skilled workforce to accelerate achieving sustainable development and to widen people's options and participation. But in real life, the implementation of such reform was accompanied with failures in certain population and social fields did not allow achieving the desired economic growth and the welfare of the population, particularly the poor people. In many cases unemployment continued to be high particularly among women and youth, and cost of living increased, while government expenditure decreased on health services, reproductive health and education which widened the gaps across different population groups.

The report provides analysis on social and economic rights inequalities particularly by gender and geographic distribution. It focuses on the rights mentioned in Iraq's new constitution particularly the right in health, education and social protection. The analysis revealed the need to bridge the gap between reality and the aspirations of the population and goals of the State to ensure a decent life. The analysis emphasizes the importance of awareness of indicators of child-bearing and control as variables associated with fertility and mortality levels for a proper understanding for designing population policies, health and social policies. The analysis noticed also that high unemployment rate, poverty, marginalization certain population groups and social exclusion of youth are mainly due to lack of wise and relevant population policy.

We hope that this report serves as an important tool to design a relevant population policy in Iraq, and a tool for monitoring the integration of population issues into development plans.

Dr. Mehdi Al-Alak
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Executive Summary

Demographic factor, through monitoring population growth, structure and distribution over the past three decades, formed the momentum for fundamental change in the attitude towards the official adoption of national population policies and programs integrated with sustainable development strategies in Iraq. This demographic situation was aligned with deteriorated economic and environment situations in the eighties which negatively affected the population welfare; and this is expected to remain as serious concern in the coming future. This report has indicated a number of these impacts such as high illiteracy rate, deteriorated health situation, high mortality rates, nutrition, high fertility and unemployment particularly among youth, in addition to low productivity in the rural areas and poverty as well as lack of water and food security, and international and regional conflicts.

This study looks at the situation of the population in Iraq exposing the current realities and their impact. The approach of the study is descriptive and analytical including some occasional quantitative analysis. The objective of the study is to highlight problems resulting from the absence of a development vision in dealing with population issues and even occasionally ignoring population altogether as a primary objective for the development. The findings stress the need for formulating a population policy guided by the principals of ICPD program of action.

A need for national breakthrough in regard to ICPD plan of action

The report noticed that slow demographic transition in Iraq accompanied with lack of political and economic stability challenged the achievement of MDGs, particularly those goals related to reproductive health and maternal mortality, education and nutrition. This is also expected to be a concern in the coming future for policy makers and those concerned with poverty alleviation.

The analysis of Iraq population indicted some challenges related to population structure, high dependency ratio, increased women in the reproductive age, and increased numbers of adolescents and youth. These population categories are more likely to be exposed to risks related to reproductive and sexual health morbidity including HIV AIDS and migration. Therefore, an outstanding effort is needed to integrate population emerging issues into development planning to ensure that people can enjoy their economic and social rights.

The analysis noticed that economic growth in late seventies exceeded 6% while declined during nineties and back to growth during the last decade, but the current

capacity of the national economy is still unable to absorb all needs of population welfare, particularly that the economy is basically dependent on oil revenues.

The analysis shows that economic reform and transition into Market economy is still based on the assumption of mobilization and employment of population competencies and skilled workforce to accelerate achieving sustainable development and to widen people's options and participation. But in real life, the implementation of such reform was accompanied with failures in certain population and social fields did not allow achieving the desired economic growth and the welfare of the population, particularly the poor people. In many cases unemployment continued to be high particularly among women and youth, and cost of living increased, while government expenditure decreased on health services, reproductive health and education which widened the gaps across different population groups. Moreover, the conditions of the state budget and the increase in spending on the security sector as well as the consequences of political conflicts and wars are a source of concern about the possibility of making additional gains in the areas of education, health and cultural rights.

In spite of the increase in the coverage of primary education, it is not clear if the government has the expansion to basic education stage on its agenda. It is noticed that dropout rates in secondary education are still high, especially among girls and in the rural areas and adult illiteracy is still high, particularly among females.

The proportion of spending on health sector seems to be modest when compared with spending on education or military spending. It also seems inadequate to the growing needs and generated from the obligations of the State to reach the goal of health for all and to expand reproductive health services and family planning. There is no doubt that the requirements to achieve reproductive health including family planning is on the top of the list of those needs. Therefore, more resources should be invested in the health sector to decrease mortality particularly maternal mortality and fertility rate which is still high as well. The analysis indicated the importance to meet the quantitative and qualitative lack of health and reproductive health services and to bridge the gap between rural and urban areas.

The report provided analysis on the inequalities in the enjoyment of social and economic rights and indicated the gaps by geographic areas and gender. Specific focus was made on right to health, education and social protection, the rights enshrined in the new constitution of Iraq. The analysis revealed the need to bridge the gap between reality and the aspirations of the population and goals of the State to ensure a decent life.

The decline in fertility rate does not seem to be realistic objective in the coming years due to impact of encouraging factors for high fertility. The expansion in the urbanization did not lead affecting household's tendency for more rational and realistic thinking to balance between number of intended children and quality of life. These factors need to be accompanied with increased educational attainment and cultural level, increased women wage employment and economic independence to make substantial decline in the fertility levels in the coming future. The increased income level which encourages people to attain more education and widen the scope of future cultural, educational and scientific options will encourage negative relationship between education level and fertility rates. Of course this analysis reflects one side of the problem; which is related to the individual characteristics. The other side of the coin reflects the impact of community factors on the fertility levels. For example, in Iraq and other Arab countries there is an important role for religious institutions which encourages early marriage and support the stereotyping of the traditional role of women in the society. These factors are deep rooted in Iraq and other Arab societies. These factors become more dominant in the cases of lack of security and political instability. Therefore, the analysis emphasizes the importance of awareness of indicators of child-bearing and control as variables associated with fertility and mortality levels to get to understand the true benefit when formulating population policies, health and social policies. The analysis noticed also some other related issues that should be tackled in any upcoming population policy including gender inequalities, unemployment and marginalization of some population categories.

On the basis of the above analysis, the report provided also a mapping of the official efforts in Iraq in regard to ICPD plan of action. Specific focus was given to selected themes including population and development, gender equality, reproductive health and reproductive rights. The report indicates the importance of drafting a population policy on the basis of this analysis. Such policy should be containing specific objectives and plan of action for implementation and tracking progress. Such policy should be right based and balances between population, development and environment.

The report suggested a vision for such population policy that accommodates ICPD plan of action. Strategic thinking should start by the relationship between population, development and environment within the context of Iraq's social and cultural value system. Such policy should focus on the rights of people toward achieving the MDGs and the objectives of the ICPD. The population policy need to be based on human rights, adopts reproductive health approach, and pay more attention for achievements of quality of life objectives including reducing poverty

rates and empowers women and gender equality and equity through integrating population related issues into sector plans and strategic planning in the country.

The key requirement for preparing Iraq's new population policy is already in place; there is a huge databank in Iraq. In addition the Government of Iraq has already established the needed structure including the population commission. But there is still a room for development to increase the capacity of the NPC and its technical secretariat particularly the technical capacity and the coordination mechanisms. NPC need to be supported with higher coordination body within the government structure to lead a national coordination effort for population policies and programs utilizing good practices for potential governance structure in other parts of the world.

Theme I: Health and Reproductive health

- “Health for all” should be the mainstream for the upcoming population and other relevant development policies; expansion of basic health services and focus on reproductive health, including family planning services and strategies for safe motherhood and childhood and to protect adolescents from infectious diseases, including sexual transmitted diseases (STDs), including HIV/AIDS. Population policy should give priority to improve maternal health and reducing maternal mortality rates.
- There is a need for more official efforts to deal with health challenges; including more resource mobilization and investment in health development, and to consider the public health services and reproductive health on the top of the priority list of the development plans towards human rights for all. This approach should include primary health care towards encouraging the transition of Iraq to a developed demographic stage.
- Emphasis on family planning within the important policy options, which aims to improve the health of mothers and individuals and the welfare of the family, and the protection from effects of complications of unwanted pregnancy and lack of spacing, and help couples to choose freely the number and timing of children they wish, and provide support to the provision of infertility services.

Theme II: Women empowerment and equality in rights and responsibilities

Important progress was achieved in narrowing gender gap in education, health services and political participation in Iraq. But there is still a lot to be done, particularly in the legislative and legal fronts. There is still a number of laws and bylaws to be reviewed.

- Despite of the achievement of narrowing gender gap in Iraq, the upcoming population and development policies should give more priority to women empowerment and gender equity, and improving women's health, culture, social, economic and political participation which are still linked to the women's household and community role.
- Need to improve female enrollment rate in particularly in the middle and secondary stages and address female dropouts from schooling and ensuring proper employment opportunities for women. The policy should mobilize resources and efforts to address all forms of discrimination against women, and gender based violence.

Theme III: Education, employment and confront alleviation

Iraq started to achieve progress in increasing literacy and universal primary education and expand secondary education and higher education since early sixties. But there have been educational gaps across ages, geographic areas and gender. With the high population growth and inadequate human and material resources and outdated technology during the nineties, Iraq was able to keep the educational process in quantity but with severe decline in the quality of education. The reduction in government spending on education, and high living cost during the sanctions led to marginalizing poorer people. Therefore, in the upcoming population and development policies the following should be taken into consideration:

- The government should manage very carefully, and with more attention the educational affairs and in particular the basic education and literacy, as legitimate human rights for males or females. Similarly, the government is required to direct the macroeconomic policies as well as development and population policies towards achieving the objectives of the education sector.

- This goal is possible if policies concerned with population and development make rational balance between the rate of economic growth and utilization rates and employment.
- In order to make economic growth, an effective tool to alleviate poverty, rational distribution of revenues, increase of wages and productivity for the poor and marginalized groups, it is necessary to make this growth less wasteful for the natural resources and more familiar with the basic human rights
- Population policy should focus on the disadvantages groups and provide support for poor people and to protect them from the consequences of modernizing economy.

Recommendations

There is a need for a national strategic framework for economic development and population welfare. Such a framework should be developed through wide consultation and provide enabling environment including partnership between national and international organizations towards achieving quality of life for all Iraqis. There is also a need to develop a national population policy as a tool for improving population welfare. This policy should be right based and culturally sensitive. It should lead to integrating population emerging issues (migration, displacement, urbanization, population growth, gender, youth, reproductive health and rights, etc.) into development plans at central and local levels.

It is quite important to take into consideration the interaction between population and development both at theoretical and operational levels, and translate it into practical machinery to design, implement, monitor and evaluate national programs and plans to integrate population related issues in the sectoral plans. The current NDP indicated the interaction between population and development in the employment policy, but this has to be widened to other policies including poverty alleviation strategy. Service delivery including reproductive health and care for elderly people and accommodating internal and external population mobility (migration and displacement) is essential.

Take measures to enable men to support these women rights and to take up the responsibility towards their sexual and reproductive health and that of their wives. It is important to develop policies to protect women rights and girls including equality and equity in education, and enjoying political and legal rights. Special attention should be given for female enrollment in the intermediate and secondary schooling. Gender based violence is an important area that has to be considered in the upcoming policies, strategies and plans. Also, it is important to take measure to enable men to support women rights and to take up the responsibility towards their and their wives sexual and reproductive health.

More efforts are still needed to protect and enhance adolescents' reproductive rights including access to information, education, and reproductive health services. RH components need to be integrated in the primary health care. RH should be also included in the health sector reform to increase access to high quality RH information and services. There is a need for actions to reduce morbidity and maternal mortality and to promote informed choice among a group of family

planning methods, and to take measures to address sexual violence, and amend penal laws to prohibit female genital mutilation, and action to address sexually transmitted diseases (STDs), including HIV and AIDS.

It is necessary to introduce the concepts of reproductive health in school curricula to provide reproductive health information for adolescents, and to take special measures to address sexual and reproductive needs of young people, particularly in rural and remote areas and slums, and dissemination of reproductive education through centers and health institutions, especially among girls, and promote life skills for young people through training programs and loans, and promote the participation of youth and adolescents in the development of policies and programs in various fields, and perhaps the experience of the Youth Parliament initiative deserves more support and encouragement. In addition to the coverage by the media for reproductive health issues, reproductive and gender rights.

Finally, it is necessary to take action and to develop information and communication strategies towards population and development issues, reproductive health and gender, and campaigns of learning and communication to change behavior and increase awareness of reproductive health, awareness about reproductive health issues, and to take measures to increase media coverage of the issues of reproductive health and reproductive rights and gender.

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Introduction

Development is a continuous structural process often accompanied by changes in production, distribution and consumption patterns, and presumably - based on historical development patterns – it has a big influence on the social and individual behaviors of the population. There are both direct and indirect impacts of such a change on the population growth, composition and distribution. However, the theoretical argument regarding the interrelation between population growth and development has never been settled neither by conclusive historical evidence nor proof. Population growth is more so the result of development rather than a driver of it, since such growth results from increase in birth rates, which in turn result from economic growth. Population may be considered as an external factor in the development process when the cause for population growth is lower mortality rates. Accordingly, the interrelation between development and population growth rates is positive and directly proportional in the initial stages. Based on that, population studies presume a pattern of demographic change that is consistent with the pattern of economic and social change, and stress the importance of marking the relative importance of several economic and social factors that are specific to certain fertility patterns or associated with them.

The International Population and Development Conference (ICPD), organized in Cairo in 1994, resulted in a very important shift in the understanding of relation between population and development, and also in terms of documenting the countries' interest in population policies. Iraq did not participate in this conference so as not to be committed directly or indirectly by the population policies foreseen in the action plan of the conference, which resulted in total absence of official population policies in Iraq. For several decades, previous development policies did not adopt the correlation between population and development, but rather neutralized such a relation both in terms of its positive influence in promoting investment, growth and improving life quality, as well as in terms of its negative influence in reviving unsustainable consumption and production patterns. All of this led to inappropriate allocation of economic resources and overconsumption of non-renewable resources (namely oil). The National Development Plan (2010-2014) indicates that "ignoring population and its functional interrelations as an influential variable of the macro-economy, the composition of the economic activities, the balance in the labor market and employment patterns and rates of unemployment have all contributed towards a conviction that any intervention in the Iraqi economy both under the current situation or the future cannot prosper outside the framework of a clear vision and subjective diagnosis of population issues in terms of qualitative and quantitative demographic indicators." The current

national plan seeks to translate this fact by representing the interrelation between population and development through adopting a development policy that reflects the correct understanding of those relations. This will enhance the choices of people and guarantee human rights based on the fact that development is “of the people, by the people, and for the people” and takes into account the current realities and their short and medium effects on Iraq’s long-term future. The most prominent development challenge for the national development plan will be its ability to meet the needs of current generations in terms of improving their quality of life without prejudice to the ability of the next generations to meet their own needs, while seeking opportunities that are capable of enhancing growth and addressing challenges of the individual, the society and the labor market.

The political and economic structure of Iraq has undergone several transformations since the country started development in the middle of the last century. For example, the expansion of the states’ role and its development policies, with the establishment of the Construction Council in 1952, whereby the state took up the task of building the country’s infrastructure led to an increase in public spending in the field of social services. This has, in turn, greatly improved health, education and living conditions for the general public, in addition to directly influencing the geographical, employment, environmental and professional movement and distribution of the population. Large numbers of laborers along with their extended families moved from the agricultural sector to the service sector. Although such movement, according to international criteria, is considered positive in terms of moving away from traditional employment patterns; in Iraq, it indicated an imbalance in the distribution of population and the deterioration of the agricultural production. Later when economic revenues increased as a result of oil exportation, the state ceased to participate in any activity in the local or foreign private sector, and turned into service and distribution institution, which increased the population’s dependency on the state to provide their needs.

The growth of the oil sector led to the structural transformation of the labor force, whereby it changed from agricultural into industrial and subsequently into services. The economic structure changed from being predominantly agricultural to being dominated by oil with a large expansion of the service sector, without going through the industrial development stage. This in turn has created substantial structural changes within the social and economic system that regulates the population growth, movement, positive behavior and economic activities. The militarization of economy during the 1980s and the economic retraction due to sanctions that continued from 1990 through 2003 delayed the integration of Iraq within the world economy. This left a negative impact on the production sectors taking into account the fact that exports were limited to oil, and the fragile relations of Iraq’s economy

with the world economy. The political and security instability that spanned over three decades blocked foreign investments from Iraq, despite the attempts to provide some incentives to attract them. Iraq was also a place where population set out to search for employment and decent life, escaping wars, political repression and the threat to personal security.

The political change that took place in Iraq in 2003 led to economic openness such that in recent years local prices were liberalized and all restrictions on imports including tariffs were removed. Tariff has been imposed at the rate of 5% to all imports excluding food and medications. Policies for administrative and economic reform were adopted but unfortunately their implementation was slow, even reluctant occasionally. These policies have hardly contributed to changing the economic and social structures so as to enhance the role of the private sector and minimize the role of the government as a primary generator of investment and employment opportunities. Consequently, the rates of unemployment and levels of poverty are still high. This is taking place in a context where civil society organizations are not closely involved in making policies or monitoring governmental performance in accordance with concepts of transparency and accountability.

Foreign investments often go for large markets, which does not refer only to the number of people in the market but also takes into account the purchase power and the marginal propensity to consume. Moreover, those investments prefer local markets that have large access to regional markets. Iraqi market is deemed a large and promising consuming market given the fact that there are more than 33 million people in Iraq, in addition to the fact that this market is almost totally dependent on the outside in meeting its needs. The large public spending and the need for reconstructing the infrastructure and the industrial plants that deteriorated due to decades of war and sanctions are promising facts in terms of improving employment opportunities and enhancing the quality of life for the population.

Positive results of the political change are seen in the freedom of expression, media, assembly, establishment of political parties, and civil society organizations. After decades of totalitarian rule, the population now enjoys their political rights and basic freedoms which is a fundamental guarantee for making interrelation between population and development existent and real. Acquiring rights and the will to exercise them impact the population’s sense of citizenship in terms of their rights and duties, in addition to their attitudes towards development and their active and oriented involvement in it.

Chapter I- Volume and distribution of population

1.1 Authentication of population size

Tracing the population growth manifests a number of facts that reflect the unique properties of population in Iraq, with the most important being the high growth rates and imbalance in geographical distribution. This topic will be discussed through analysis of the reasons, factors and results in the second and third chapters of this study. As for chapter one, it will investigate the growth of population and the geographical distribution.

Official Census

Census is the most prominent source of data related to the situation of the population. Population in Iraq used to be calculated unofficially during the Ottoman rule until the British mandate following the First World War. This can be explained by the lack of trust in the Ottoman rule and the revulsion of any government-initiated census at the time, in addition to the population's doubt that such a census might be a pretext for increasing taxes or to compulsory recruitment in the military. Moreover, large numbers of people were living the Bedouin style of life and did not settle in one place, even moving outside of Iraq at certain seasons. Therefore, conducting a full census was not possible, and official figures were estimates¹.

Iraq's population in the middle of the 19th century was estimated at around 1.25 million. In 1884, it grew to 1.4 million; 1.55 million in 1897; and finally reached 2.371 million on the eve of the First World War in 1913². When the British forces occupied Iraq during the First World War, they did a rough census of the population in 1920, where the population reached approximately 2.84 million³. Since the establishment of the modern state in 1921, 7 censuses⁴ have been conducted in Iraq, the first of which took place in 1934. However, it lacked expertise and knowledge of appropriate statistical methods. In this census, people were basically summoned by their Mukhtar (chieftain) to appear before specialized committees to give their information. Even though the collected information was not very accurate, its results were used for a long period of time for purposes of granting nationality carnets, military recruitment and elections⁵.

1 Mohammad Asfoor Salman, Iraq under Medhat Pasha 1869-1872, an unpublished master dissertation, Faculty of Arts, Baghdad University 1989, p78.

2 ThoriaFarouqi et al, Social and Economic History of the Ottoman State, v2 1600-1914K translated by QasemAbdo, Alamadar Al Islami, Beirut, 2007, table 6:IV, p519.

3 TosephI.Parfit M.A, Marvellous Mesopotamia :The world's wonderland, S.W. Partridge & CO., LTD., London, 1920, P. 15

4 In 1927, the Iraqi government made the first census without scientific basis, so the census proved a failure due to the lack of appropriate criteria. However, the population was estimated based on this census. See: Abdul Hussein Zeni, AbulMajeedRasheed Al Sawaf, Abdul Rahman Hassan Al Mashhadani, Applied Statistics, Al Huria Press, 1979, P 71.

5 Abdul Hussein Zeni, Population Census, second edition, Al Huria Press, 1974, p 347

The 1947 Census

The second census was conducted on October 19, 1947 using some foreign experience. The census, however, did not encompass the entire population, especially that in rural areas, nomadic tribes, and communities abroad⁶. Due to the application of the theoretical counting method, otherwise known as the realistic counting method, the final figure was believed to be less than the actual one.

The Census of 1957

This census is considered as an important landmark in the history of population censuses in Iraq. It took place on October 12, 1957 and although it was the third census, it was the most comprehensive and accurate. It was conducted based on a scientific method, and was inclusive of the entire population. However, the results were flawed to some extent in terms of age, classification of economic activities, professions, and the academic status⁷.

The Census of 1965

Although the fourth census was scheduled in 1967, it was done ahead of the schedule for political reasons. In 1965, the government conducted the census as preparations for elections that were scheduled to be held after unification between Iraq and the United Arab Republic. The census was conducted on October 14, 1965. This census was criticized for the following reasons⁸

- It was not inclusive of the entire population in all areas particularly northern Iraq due to military insurgency.
- There was not enough time for officials to prepare as it was decided on suddenly.
- Delay in preparing and publishing the results.

The Census of 1977

The census held on October 17, 1977, made a quantum leap in terms of the survey design, which was done in accordance with the requirements of the development plan, and with the potential to be internationally benchmarked on sound scientific basis. The census used the forms recommended by the UN population office, and the preliminary results were declared within one week only.

6 Mansoor Al Rawi, studies on population and development in Iraq, Ministry of Higher Education Press, Baghdad, 1989, p 352-353.

7 Previous source, p 73

8 Abdul Hussein Zeni, Population Census, p 377-378

The Census of 1987

Despite the Iraq-Iran war (1980-1988), the 1987 census was conducted on time and achieved a great success. The form that was used for the census contained 75 fields, and there was a noticeable improvement from the previous surveys, particularly concerning internal migration and the speed of declaring the results.

The Census of 1997

The 1997 census did not cover all governorates. It has excluded the population of Dahuk, Erbil and Sulaimania due to the impact of the second gulf war on those governorates. As the population of Kurdistan was not counted directly, the census was flawed. The census included new questions, and the preliminary results were declared within one day. This was seen as significant progress in terms of data entry and extraction of results.

The Census of 2009/ counting population and housing 2009

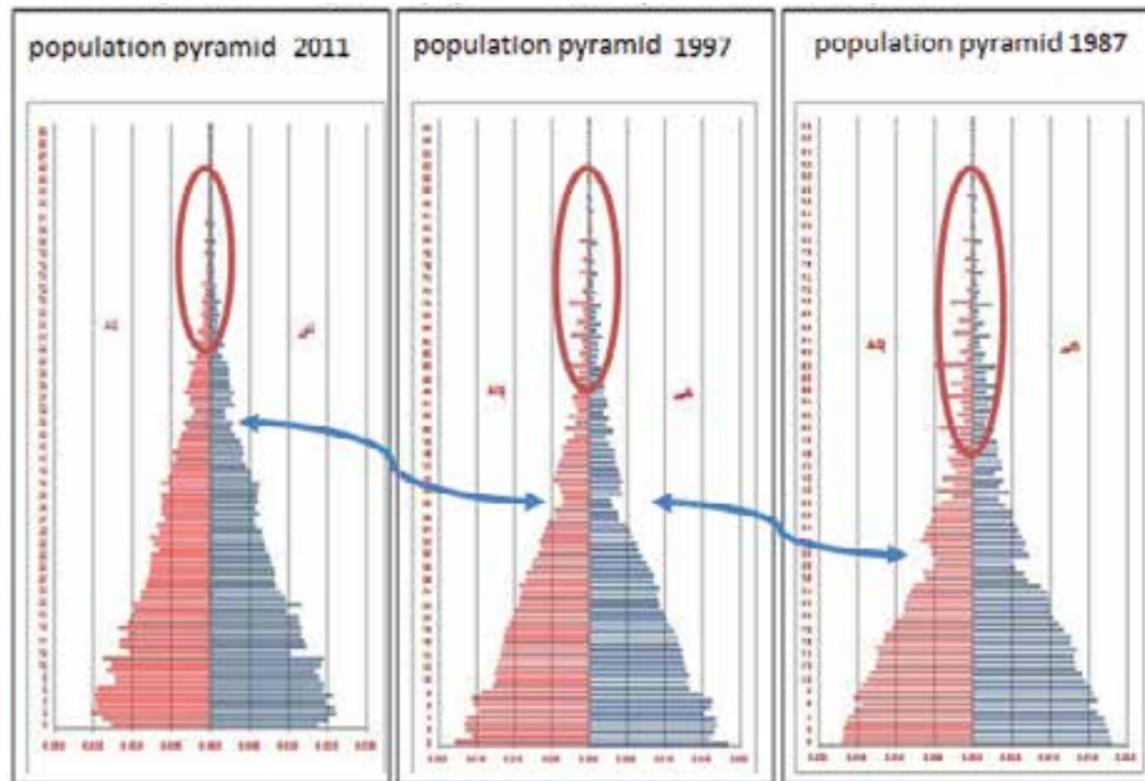
Iraq witnessed demographic, economic and political changes after the 2003 events including the change in the political regime. Taking into account the importance of the periodical implementation of the census, the eighth census was scheduled for 2007. However, due to the exceptional circumstances that followed the fall of the political regime, the escalation of violence, the political rivalry regarding the objectives of the census, and the potential of it being used for political purposes, the census has not been completed and no future date has been set. However, the higher authority for population census and housing, with the approval of the Iraqi government, decided to carry on with the process of numbering and listing including the population quick count and the housing and establishments, and as such, which was finally conducted at the end of 2009. The survey provided detailed data regarding the numbers of population, housings and establishments, as well as the characteristics of housing units, on the micro scale, and on data on administrative and local formations of governorates on the macro scale, for both the urban and rural areas.

Development of population size

Population growth in Iraq witnessed regular, continuous and fast development. The absolute figures for population growth were not affected neither by the progression nor regression of the Iraqi economy, or wars and conflicts, which was reflected in

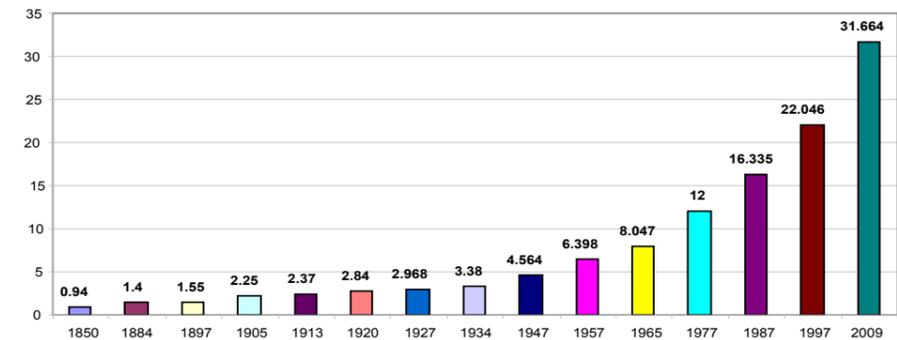
all five general censuses. In 1934, the population was approximately 3.38 million. It then increased to 4.82 million in 1947, and again in 1957 to 6.5 million. In 1977 the population was estimated at 12 million, which means that the increase in population in a period of 25 years was 7 million. Towards the end of the century (in 1997), the population was approximately 22 million, which indicated that the figure multiplied 12 times in the 20th century. Despite the fact that the census scheduled in 2007 has not been conducted, the estimated results of the 2009 listing and numbering including the population quick count estimated the population at 31.6 million, detailing its distribution at the levels of governorates and provinces. It is also noteworthy that the increase in the absolute numbers of population does not hide the fact that population growth rates tend to decrease in consistency with the natural pattern of the demographic change as will be shown in chapter 2.

Data for single years of age population in Iraq, evidence and improvement



Population census faces many registration problems and the term “age preference” is considered among the most common problems. In Iraq, individuals - especially with the advancement of age - tend to sometimes express age in as simple figure containing a zero or a five in the unit digit. Other nations might prefer other numbers or have “age optimism” associated with a personal or historical event. In Iraq improvement in registration grew more realistic in regard of the age variable in the course of censuses. The population pyramid for single-digit ages became more symmetrical as horizontal expansions receded in the pyramid of 1997 and receded even more in the pyramid of 2011. Despite the fact that the source of data for that year is sample based, compared to 1987, it reflects a decrease of zeros and fives in the unit digit foretelling more statistical awareness by all parties in the process - data collectors, supervisors and the public. This is considered a documented success of statistical and census work in Iraq. Looking again at the three pyramids, it is noted that there is a limit in population numbers in the last years of the third decade of 1987 pyramid, also seen in the 1997 pyramid towards the end of the fourth decade, and then at the beginning of the sixth decade, after one and a half decades approximately (the period from 1997 through 2011). Without going deep in analyzing the reasons behind this constriction, which covers persons born after 1958, there are two historical indications; the first is the transformation from a monarchy into a republic in 1958 and the accompanied social changes including moving to urban areas, and the second is the first Gulf War where the constriction was in the age group that was deemed for compulsory military recruitment in the 1980s, baring a large part of the human loss.

Figure 1: development of population volume in Iraq 1850-2009



1.2 Geographical distribution of population

Population is closely associated to nature as it is the environment that defines their settlement patterns and economic activity. Population lives on resources, particularly land and water, made available to them by nature. Resources – quantity and quality - often define the settlement pattern as most population settle close to rivers and other water resources. In addition to land and climate, other factors have an influence on geographical distribution and population density, such as trade, systems of administration, services and capital investment in the country. The variance in geographical distribution reflects the social structure of regions and cities as the basis of their unique historical functions or natural conditions. It is easy to note the different features of a commercial city such as Mosul, situated near a river, from a tribal city situated in the desert such as Souq Al Shioukh or from a sacred city such as Najaf or from Baghdad, which has been the center and capital for a long period of time.

1.2.1 Factors effecting the geographical distribution of population

In Iraq, as the case in other countries, the factors affecting the geographical distribution of population can be categorized as natural, historical and administrative.

1. Natural factors

Water

The Iraq civilization has been associated with water since early history. Population concentrated in large numbers in Mesopotamia and the narrow strip along side of Tigris and Euphrates rivers. The alluvial deposits of the two rivers gradually formed this fertile land, which motivated nomadic tribes since old ages to shift from pastoral pattern to settled life⁹ in a pattern similar to the population of Egypt, India and China. People who settled in Mesopotamia built cities, houses and temples and knew irrigation techniques and tools.¹⁰ The country prospered and a number of successive civilizations flourished.

The system of the two rivers played a vital role in settling the population. Tigris, in its high concrete banks and fast current used to overflow in the beginning of March and reach the peak in the first days of May, until mid June, thus creating swamps on its shores. Euphrates's water is two times less in volume so its flood would begin fifteen days after and would not end before September. Since the banks of Euphrates are lower, the water would spread easier over the plains. Earlier settlers preferred the banks of Euphrates for building their cities. The current stream of the river does not reach the ruins of most ancient cities although Babylon and Ur were located close to the stream, while other cities were on distance to the west of the plain¹¹. The Jazeera area located in the northern west side had a strategic importance, as it was a crossroad where a number of rivers and commercial roads intersected, and it also hosted the Nineveh and the Assyrian civilizations. In the Islamic era, the area gained a special place due to its agricultural corps, manual handicrafts and the Caravan trade. Between the 13th and 18th centuries, the number of population decreased and parts of the area turned into real desert because of the migration of nomadic tribes, which played a big role in this transformation¹². Water was the critical factor for the growth and distribution of population in this area; the area can be conceived as a triangle, where on each side of it there is sufficient water to support the permanently residing population and with its inner part of the triangle consisting of a dry area that supported very limited number of population. Nomadic tribes settled in this area in large numbers in the 19th century and their pastoral way of life satisfactorily used the limited resources of the desert. Two different types of nomadic tribes settled the Jazeera; nomadic Arabs who occupied wide parts of the Syrian Desert and other dry plains forming a group, and nomadic Kurds who settled at the northern foothills and formed the other group. At the same time, other

9 BdulAzeez Al Douri, the economic history of Iraq in the fourth Hejrah century, edition 3, Arab Unity Study center, Beirut 1995, p 26.

10 L. Della Port, Mesopotamia, edition 2, translated by Muharamkaram, the Egyptian general board for books, Cairo 1997, P 18.

11 Previous source, p 17-18.

12 John Fredrick Williams, the Shamar Arab Tribe, status and political history, translated aby Mir basri, Al Hekma Press, London 1999, p 13.

tribes that relied on agriculture settled and dwelled the shores of Euphrates, Tigris, Khabour and Bolaikh¹³.

Life of the population grew on the shores of two rivers, the Tigris and Shat El Arab, where commercial ships could sail, since navigation in the Euphrates was hard. Parts of the population who were not served by navigating ships continued to depend on themselves; they had their own towns, markets and countryside, which resulted in forming a huge gap separating them from other groups of population that settled away from rivers. The development efforts of the state in the 20th century failed to bridge this gap as economic and social differences remained an inclinational reality indicated by modern statistical surveys in terms of poverty, deprivation, and human development until now. The economic activity of the population that was concentrated on agriculture was divided into two patterns as per the type of irrigation used; artificial irrigation and rain irrigation. In rain irrigated lands in northern Iraq, rainfall played a vital role in deciding the levels of production of winter crops (mainly wheat), while the main crops in areas of artificial irrigation in middle and southern parts were usually summer crops such as vegetables. It was clear that the type of settlement was related to the nature of land and the agricultural system that was either based on rivers or on groundwater, fed by close river streams. It was this relation that shaped the life of population and its economic and social patterns. As a result, the social infrastructure had to bear the impacts of natural events such as devastating floods in the southern and middle areas, while the northern areas were safe from floods¹⁴, or the impacts of occasional drought. For example, Turkish water projects and climate change contributed towards the decrease in the levels of Tigris and Euphrates in 1990s to 47% and 31%¹⁵, which resulted in limited water resources available for agriculture, as well as the lack of energy as compared to the actual need.

Due to the unregulated usage and lack of water management, the irrational artificial irrigation, the contamination caused by waste water, and the evaporation of water from water bodies and reservoirs (estimated at 9 billion m³) the water problem is expected to have a negative impact. This is especially true during the period of drought, which would leave around 2.70 million hectares of arable lands without irrigation. All of this has led to the expansion of the desertification area, resulting from the loss of the living source. Water scarcity could affect the Ahwar reviving project, which started in 2004 subjecting the area once more to drought. All these factors affect, directly and indirectly, the agricultural production and push

13 Previous source, p 21.

14 Hana Batao states that "this has to do with relative prosperity and openness of social life forms in Baghdad and the rather more rigid nature of these forms in Mosul. This same factor combined with movement of tribal Arab farmers played a role in saving them from slavery form of life of non tribal Kurdish farmers", see his book "Iraq: social classes and revolutionary movements from the Ottoman rule until the establishment of the republic" first book, Arab researches institution, Beirut, second edition 1995, p 27.

15 Emad Ahmed Abdul Saheb Al Jawahery and Ridha Abdul Jabbar Al Shamary, Water issues in Iraq: realities and solutions, Al Qadesia magazine for science and law, first edition, second volume, July 2009, p 41.

large waves of people to leave rural areas towards cities. The cities have historically attracted migrants, primarily to Baghdad and other centers of governorates such as Basra and Karbala.

Environment

The total area of Iraq amounts to 434,128 km², forming 3.2% of the total area of Arab countries. However, 39.2% of this area is deserts located in Anbar, Muthana, Thee Qar and Basra, and 21% is mountainous areas located in Kurdistan region.

Iraq is characterized by the diversity of geographical environments. There are four environments; the first, alluvial plain area which is low and forms a huge plain penetrated by large rivers that lead to new alluvial lands, as is the case in southern Iraq. The plain area constitutes one third of Iraq (132,500 km²), is oblong shaped (length 650 km and width 250km), spans between Balad city on the shore of Tigris and Ramadi city in Tal Aswad on the Euphrates in the northern side, Iran borders from the east, and the desert plateau in the west and includes areas of Marshlands and lake areas. Taking into account the scarcity of rainfall and the high temperatures, the dry climates encourages certain types of fauna and flora to be formed. The abundance of food attracted population who adapted with such environments, so harmonized and related communities appeared and formed distinctive social and economic patterns. Population in this area is concentrated close to rivers, so two thirds of the population is in the alluvial plain settled in cities like Baghdad, Samarra, Tikrit, Kut, Diyala, Fallujah, Karbala, Diwaniya, Hilla, Amara, Nasiriyah, Basra and Najaf.

The second area is the plateau located in western Iraq, which forms around 39% of the total area (168552 km²). It is located 100-1000 m above sea level, and includes Jazeera area. The plateau is characterized by scarcity of rainfall and dry climate. This nature forced the nomadic type of life as in the case of Iraqi nomadic tribes which were also sustained during the 20th century. Nomadic population concentrated near cities neighboring the desert such as Ramadi, Karbala, Samawa, Nasiriyah, and Mosul.

The third area is the mountainous area, located in the northern and north-eastern part and spans the border with Syria, Turkey and Iran. This area constitutes 21% of the area of Iraq (92000 km²), and includes the governorates of Suliamaniah, Dahuk and Erbil. The high mountains, the cold climate and the abundance of water gave birth to distinctive patterns of urban, rural and nomadic lifestyles, such that cities in this area were no longer associated with river banks. The nature of the area helped the inhabitants in their isolation and thus preserving their ethnic and national distinction marking them unique as compared to other inhabitants of Iraq

in terms of their ability to bear harsh conditions while living in an area of cross-cultural diversity.

Between the low plains of the south and the high mountains in the north and north-east there is a transitional undulating area (forth area) that occupies half the area of the mountains (67000 km²). Part of it (42000 km²) lies outside the mountainous area (100-200 m) above sea level, while the remaining 25000 km² are located within the mountainous area at 200-450 m above sea level.

Climate

The climate is an important natural factor influencing the geographical distribution of the population because of its, on people's lives as well as its impact on the quality of soil, natural vegetation and agriculture. Iraq is dominated by the continental sub-tropical climate characterized by moderate cold winter and hot dry summer. In the north,, the Mediterranean climate prevails with its mild winter and moderate summer.

Iraq has two lines for rainfall; the line of 250 mm and 100 mm line. The first-line crosses the Euphrates passing south of Harran and Khabur along with Jebel Sinjar, bends bending to the south-east to cross the Tigris River south of Mosul and follow the line of the mountains east of Iraq. This line marks the end steppe, and is considered the meeting point of farming and nomadic life styles. The line of 100 mm crosses the Euphrates south of Deir Al-Zour, continuing towards the south east of the Tigris between the Little Zab and Diyala rivers, to follow south west of Baghdad, passing through to the Persian Gulf, and marks the beginning of the Sahara.¹⁶

The scarce winter rainfall (between the months of October - March), has forced the population to rely on surface water resources in agriculture within the plain region and the groundwater resources within the plateau region. There are four distinct ecological zones in Iraq¹⁷:

- Arid and semi-arid areas located in the Kurdistan region dominated by agricultural winter for nine months approximately, with winter rainfall over 400 mm per year, and mild and warm summer.
- The steppe area with wet winter characterized by high temperatures in summer and low temperature in winter.
- The desert region, characterized by high temperatures extending from the

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¹⁷

Abdul Azeez al Douri, the economic history of Iraq in fourth hejri century, third edition, Arab Unity Studies, Bierut, 1995, p 29.
FahmiBashai, towards sustainable agricultural development in Iraq: shifting from sustenance to development, FAO, 2003, p14-15.

north of Baghdad to the border of Jordan and Saudi Arabia, home to a small number of people.

- Irrigated area, which lies between the Tigris and the Euphrates north of Baghdad to the city of Basra. It contains more than 40% of arable land, and nearly 60% of the population. However, poor drainage and salinity are serious threats to this region, which is the source of most of the country's production of vegetables and rice.

The climatic conditions of these areas (being hot and dry in the summer while cold and wet in the winter), not very different from most Arab countries and neighboring countries, have impacted the economic activities and the nature of agricultural production. Overall, land and water were the main factors in the formation of communities and urban settlements and have created the distinctive features of cultural and social structures and economic activities associated with agriculture, herding and fishing. This was the case until the discovery of oil in the 1920s. The relationship between population and resources changed since then to its current shape; the principal dependence of the population on oil resources. The importance of the activities associated with the natural environment such as land and water is in being a source of people's lives and livelihood, maybe until resources are depleted.

The evolution of cities and their role in shaping the pattern of population distribution

The location of Iraq has been of importance for the trade route that connects the Mediterranean basin with Iran and Central Asia across Baghdad. Since the emergence of the Islamic era, Iraq was an important trading market for Bedouins of the Arabian Peninsula. Iraq's coast formed the end of the Arab Gulf sea lanes coming from China and India on one hand, and the Red Sea and south of the Arabian Peninsula on the other. In addition, the Euphrates connects Iraq with Syria¹⁸ whose sea outlets are open at Europe. Iraq has, therefore, always been important in attracting populations characterized by diversity and mobility throughout history.

In modern times, many factors played a significant role in shaping the pattern of population distribution in the Iraqi cities. Economic development and the increasing rates of foreign and domestic trade, urban prosperity and relative stability were factors that attracted population; while on the other hand, the years of instability and war were the foremost factors that drove the population away.

¹⁸ The historian Abdul Azeez Al Douri indicates in his book "elements of Iraq population in the fourth hejri century" that these elements were; Arabs, Persians, Dyalemah (Persians), Turks, Nabateans (Aramaic), Kurds, Jews, Zot (Indians), Jarameqa, and Zenji. The mixed nature is clear from these elements as those were not different only in their ethnic background but also in their professions, Arabs of the cities worked in trade, Nabateans in agriculture, Bedouins in herding, Turks and Daylams were soldiers, some Christians worked in translation and medicine, Jews worked in trade and banking. Thus the diversity of population was proportionate with work and production and this regulation helped in organizing the society into an economic unit. This convergence and competitiveness made the Iraqi society full of vitality and crackers at the same time. Abdul Azeez al Douri, the economic history of Iraq in fourth hejri century, third edition, Arab Unity Studies, Bierut, 1995, p 32.

Factors Attracting Population

First: Economic factors contributed to prosperity of a number of cities in Iraq. Economic development since the sixteenth century helped in building stores of grain, wool, coffee shops, and mosques, while a number of cities evolved on the borders of the desert, including the Suq Al Shioukh whose name indicates its economic function as the elders Almentafek frequented it. It was a market for trading Bedouin and a major center along with Nasiriyah and Alkhamisah to supply the North of Najd as tribes flocked make their purchases¹⁹. The need to protect the caravan route led to a boom of small villages that have expanded around the route, which then transformed into commercial villages in the early nineteenth century, including Mahmudiyah, Alexandria and Mahaweel²⁰. The strong economy of Hilla and its fertile agricultural land and abundant water played an important role in attracting more people to the business as the city was connected to land and river routs, in addition to the antiquities trade which prospered at that time.

The commercial factor also had a role in the establishment of a number of river towns during the nineteenth century, such as: Amarah, QalatSaleh, Ali Al Gharbi, SheikhSaad, and the QalatSukar, Shamia, Abu Sukhair, Musayyib and Mahmudiya. The common feature of these cities is that they are commercial centers, as well as administrative on a narrower scale²¹. The commercial factor also played an important role in the prosperity and growth of the people of Baghdad and Basra during the late Ottoman rule as both became transit centers. Even after opening of the Suez Canal, which influenced Iraq's trade, both cities dominated foreign trade leaving the function of other cities limited to local distribution. On the other hand, Mosul would get its goods from Europe via Aleppo, and with the shift toward Baghdad by Mosul merchants, who provided new merchandise, the importance of Baghdad increased. The emergence of industrial enterprises played an important role in attracting population as these industrial enterprises were concentrated in large cities- Baghdad, Basra and Mosul -until conformity appeared clear among the cities, particularly in terms of industrial distribution and urban inhabitants²².

Second: The religious factor played an important role in the distribution of the population and their movement towards the holy cities (Najaf, Karbala, and Samarra). The emergence of the first two cities was clearly associated with the existence of holy shrines, to the extent that this can be considered the key factor in the expansion of the city of Najaf²³, and its development from small town into a full governorate in the 1970.

¹⁹ HameedHamad Al Saadoun, Al Montafak Emirate; its impact in Iraq's history and the region 1546-1918, p 288.
²⁰ Previous source, p23-24.
²¹ Kamel Alawi and HssanLateef, Iraq; economic history.
²² SameeraKazem Al Shamaa, industrial zones in Iraq, Ministry of media and culture, Baghdad, 1980, p 268.
²³ JafarBaquerMahboub, past and present of Najaf, Part 1, edition 2, Aladab press, Najaf, 1986, p 28.

Population dismissal factors

One historical fact is that Iraq enjoyed stability only in exceptional cases. In modern times, invaders frequently attacked the country, which became a battleground for great powers seeking to dominate the East. For centuries, the Ottoman and Persian empires competed to control it, and in the twentieth century Iraq was occupied by British troops. Iraq lived through years of turmoil and crisis during the period between 1914 and 1921 to the extent that the new nation-state did not bring stability to this land. The national rule was characterized by instability as successive political crises and military coups continued, significantly impacting the population and especially their geographical distribution.

Following the period after World War II which was characterized by some political stability, the economic situation began to deteriorate due to the high cost of living, the intensification of the economic crisis, and the increased burden of poverty. The situation escalated until Kadhimiya rose up on September 17, 1947 demanding food for the people in the wake of food shortages in the local markets²⁴. The interaction of a number of social and economic factors led to the migration of peasants to the city in order to escape the injustice of feudalism and the Sheiks. Rates of unemployment also increased because the situation of laborers was neglected while they were being exploited by employers. In addition the competition on the labor market increased with the increasing number of expatriate workers²⁵ coming in. Therefore, rural areas turned into population dismissal places especially with the increasing power of the Sheiks and Aghas who were endowed with wide powers in their areas. Adding to the problem the government put at their disposal large areas of agricultural land, at the time when some laws prevented farmers from leaving the territory of feudalism until all debt was paid²⁶.

Years of wars and poor stability, especially the eight-year war (1980-1988) contributed to changing the population composition a number of cities, villages and towns close to the war zones, forcing the residents to migrate to safer places while giving up their social and economic realities. Cities of the south and center swelled with large numbers of Iraqis displaced from conflict-affected areas²⁷. The proportion of the population of Basra decreased to about 5% of the total population of Iraq in 1987, as compared to 8% in 1977. For example, the number of arrivals from Basra to Najaf reached 48,703 people, according to results of a census in 1987, constituting 47% of the total newcomers to Najaf.

²⁴ Mohammad Hamdi Al Jafari, the guardian's coup in Iraq, p21.

²⁵ Previous source, p 28.

²⁶ Previous source, p 35.

²⁷ Ali Hanoush, Iraq, present problems and future choices, p 215.

In 2003, the country again witnessed exceptional circumstances that led to unprecedented population movement due to deterioration of security, forcing thousands of families to leave their areas of residence and move to safer areas in southern and northern Iraq. Furthermore, the environmental degradation and climate change imposed serious challenges for the population, particularly in the southern regions, with the fragility of ecosystems and the lack of appropriate protection frameworks. For example, Hour Alhoweizeh used to cover an area of 750 km², before the South Oil Company drained 350 km² in early 1980 in preparation for investing in the Majnon northern fields. Since then, the remaining area was subjected to corrosion due to receding water. In 2009, the interception of the tributaries that feed the southern Marshlands and diverting the course of the Karun River, which flows and passes through Iran into the Shatt al-Arab, led to serious environmental consequences in the provinces of Basra, Maysan, resulting in the deterioration of living conditions, forcing entire families to migrate to other regions.

Marshlands Inhabitants; expulsion and attraction factors

Marshlands are one of the largest wetlands in South West Asia, and extend to an area of 35.6 thousand km². Marshlands comprises three main systems; Howaiza, Hammar and Qurna, as well as eight secondary or seasonal Marshlands that represent a system biologically important for nature and human life in the region. Until 1990s, the Marshlands provided about 60% of fish production, located in the provinces of Basra, ThiQar and Maysan²⁸.

During the period 1970-2003, about 90% of the Marshlands dried up or were ruined, and most of the human settlements in the Marshlands faded away, particularly in Hur Alhoweizeh., Approximately, 170 000 inhabitants were forced to flee or resettle in other regions. For those who stayed, most of them live in poverty and misery²⁹. After 2003, the revitalization of marshlands was encouraged, and many societies, institutions and international organizations supported this move. About 38% of the area was restored successfully, and work is still under way to restore the remaining 70% as compared to what it was in 1970.

²⁸ United Nations Integrated Water Task Force for Iraq, Managing Change in the Marshlands: Iraq's Critical Challenge, United Nations White Paper, United Nations, 2011.

²⁹ Previous source.

Table 1: permanent marshlands in Iraq between 1973- 2011

	Governorate	Area (km2) in 1973	Area (km2) in 2011	%
Hour Alhwiza	Maysan	1055	714	68
	Basra	322	19	6
Middle marshlands	Maysan	1230	198	16
	Basra	155	41	26
	DhiQar	1035	320	31
Hour Al Hammar	Basra	563	337	60
	DhiQar	1200	887	74
Toltal		5560	2516	45

Marshlands population is estimated at about 350-410 thousand people, of whom 59% live in a rural or semi-rural territories. Sixty five percent of the Marshlands population lives in Basra about 30% in Maysan and 5% in DhiQar governorate 45% of them live in Chabaish and Hmmar, and more than 19% in Majar Al Kabeer. After 1993, a lot of people left their areas in the marshes and did not return to them, especially people who were internally displaced, while those who returned after 2003, were not accustomed to the life of the marshes and the pattern of living. Between 2006- 2007, the marshes were affected by a wave of forced displacement forcing 1884 families (about 11 thousand people) to return to it. Preliminary estimates reported in the 2009 household survey indicate that the population in the marshes does not exceed (150) thousand people. Despite the lack of human development indicators for the region; comparison between the national and provincial levels reveals deterioration in the welfare of the people in the marshes. Life expectancy in those areas is lower than the national level, while the rate of child mortality under the age of five could exceed the national level by more than a half. Enrollment levels of education are the lowest in the country as well, especially for females as 40% of villages do not have primary schools. Official reports by Ministry of Education show that the number of primary schools in the marsh areas stands at 467 primary schools with only 100 high schools³⁰. Such a low number of schools could be a precursor for a majority of students to leave school.

³⁰ Ministry of Education, Marshlands Statistics in southern Governorates for the academic year 2010/2011.

The area also suffers from high rates of unemployment and poverty compared to other regions, as well as a very limited access to public services. More than 91% of the villages in the marshes do not have a medical clinic, and a third of the villages use river water or marsh to drink. In 2007, 21% of the villages were not linked to the national electricity grid while those connected with the network got less than 6 hours of electricity per day³¹.

2. Administrative factors

Administrative centers attract population

The administrative element was strong in establishing a number of cities as sub-regional administrative centers, especially during the Ottoman rule. For example, Diwaniya was established in the eighteenth century on the Euphrates River to be a house of hospitality for the heads of Alkhazael clan and home to their tax agents. The Government of the Mamluks took it in the beginning of the nineteenth century as an administrative center to establish a vice-governor who oversaw tax levying in an area stretching from Hilla to Basra. Kuysanjaq also turned from a small village to a city because of its location overlooking Shehrazoor. Also, the cities of Al Hai, Kut, Samawa and Numaniya grew from small villages clustered around Qalat Sheikh to become towns especially after the second half of the eighteenth century³².

The Ottoman authorities established the city of Ramadi in 1872 at the time of Midhat Pasha, who ordered the construction of Khans and military barracks, and the city became the center of a governorate³³. The city of Nasiriyah in Almentafak was also established at his time where a Government House khans, cafes and markets were built³⁴.

With the change and development of the state and management system, during the twentieth century, the prosperity of the provincial towns grew as they became administrative centers housing government institutions. These centers expanded at the expense of other cities whose administrative role decreased. For example, the importance of cities such as Shamia, Souq Al Khioukh and Samarra was substituted by other rival cities such as Diwaniyah and DhiQar, and Salah Eldeen.

³¹ United Nations Integrated Water Task Force for Iraq, Managing Change in the Marshlands: Iraq's Critical Challenge, United Nations White Paper, United Nations, 2011, p.22

³² An elite of history professors , studies on the history and civilization of Iraq, the city and city life, volume 3, Baghdad, 1988, p18-24.

³³ Mohammad AssforSalaman, Iraq under Midhat Pasha 1869-1872, p 90.

³⁴ Previous source, p89.

The development of administrative mechanisms and local governance and their impact on population distribution

The emergence of local government institutions in Iraq, as it was the case in most countries of the Middle East, was associated with the era of colonialism, and the institutions of local governance were tools to implement the policies of the central government. Since the mid-nineteenth century, the Ottoman authorities began to classify cities into administrative units according to their importance and size of population area³⁵. Under the national governance, these institutions were developed centrally, on the basis of the need and preferences of the center predominant rule pattern, and mechanisms of state-building. Therefore, local government institutions were subjected to the will of the central authority, and the state remained central³⁶. Upon the establishment of national government in 1921, Iraq was divided into 14 administrative units (Liwa): Baghdad, Kut, Dulaimi, Diyala, Basra, Hilla, Diwaniyah, Almentafak, Amarah, Mosul, Kirkuk, Sulaymaniyah, Erbil and Karbala. The administrative governor of each Liwa was called "Mutasaref" reporting directly to the Ministry of Interior. The administrative governor for "Qadaa" was called "Qaemaqam", while the administrative governor for "Nahia" was called "Nahia Administrator". The Mutasaref office in each Liwa used to have a large bureau to form an administrative body in a number of departments. Each Liwa used to have a board of administrators formed in accordance with Liwa Administration Law No. 16 of the year 1945, tasked with ratifying some decisions and presided over by the Mutasaref. The law remained in force until it was replaced by Governorates Law No (159) in 1969, which abolished Liwa and introduced governorates "Muhafza". Article (77) of the latter Law provided for the division of the Republic of Iraq into administrative units organized and managed in accordance with law. Article (78) asserted the role of the administrative units in following on all matters relevant to each specific unit while at same time representing and contributing to the implementation of the general plan of the State. The administrative units were able to establish and manage economic, social, health and educational facilities and projects according to law. In the context of the evolution of the state's administration system, some aspects of decentralization in governance were adapted since the Constitution of 1970, which remained in force in Iraq until 2003, stipulating the division of the Republic of Iraq into administrative units organized and managed on the basis of a decentralized structure (Article 8/b). The Constitution also granted Kurdistan the autonomous status as determined by law.

The local people's Councils Law No. 25 of 1995 established the formation of local people's councils in all of the governorates, Qadaa and Nahia. According to article

³⁵ JameelMousa Al Najjar, Ottoman administration under Midhat Pasha to the end of the Ottoman Rule 1869-1917, Madbouli Library, Cairo, 1991, p 88.
³⁶ Bait Al Hekma et al, supporting decentralism and local governance to help in service delivery in Iraq, ESCWA, 2011, unpublished study.

2 of the Law, the local Parliament was to be composed of appointed ex-officio and elected members with the number of elected to be twice the number of appointed representatives. However, the actual practice was far from decentralization., During this period the members appointed in the councils dominated the executive affairs of local units, while governors who represented the central administration in the provinces assigned to them, were the real actors in charge of local affairs and executors of the central laws issued in the capital. Heads of local departments in the governorates were appointed and dismissed by the central authority, and their role was limited in reporting to the governors on matters that fall within the jurisdiction of their constituencies. Therefore, the administrative system at that time reflected the philosophy, orientations, and will of the political system in governance³⁷. As part of the changes in the system of government in 2003 and the transition to democracy, article 116 of the new constitution of 2005 states that "the federal system in the Republic of Iraq is composed of the capital, provinces, decentralized governorates and local administrations". Article 117 provides for "this Constitution, upon coming into force, approves that the Kurdistan region hold its powers as a federal region", while Article 122 of the Constitution states that governorates that are not incorporated within a certain region are to be granted wide administrative and financial permissions to be able to manage their affairs in accordance with the principle of administrative decentralization. In order for local administrative body to exercise such broad powers, it is essential that it is elected by the citizens of the administrative unit. This change in government mechanisms and local governance has been an important fact in population movement and geographical distribution.

At present, Iraq is composed of 18 governorates that vary in terms of area and population size. The three governorates of the Kurdistan have an administrative status (Federal governorates) different from the rest of the governorates of Iraq. The governorate of Anbar is Iraq's largest governorate in area but the least densely populated, Karbala is the smallest governorate in area, while Baghdad has the largest population. Governorates, in turn, are divided into a number of Qada totaling 118 within all governorates, "Nawahi" are the smallest administrative units. There are 393 "Nahia" administratively connected to governorates³⁸. The adoption of administrative criterion to distinguish rural and urban areas has led to the concentration of public services and institutions of governance, which encouraged people in the surrounding countryside to move for work in the urban center in order, enjoy the services. This has, in turn rendered urban settlements as regions of attraction for people coming from nearby rural areas, has the access health

³⁷ Bait Al Hekma et al, supporting decentralism and local governance to help in service delivery in Iraq, ESCWA, 2011, unpublished study.

³⁸ The central organization for statistics, annual statistics 2010-2011, table1/1.

centers, hospitals, schools, libraries, cinemas, clubs, as well as police and army units (compulsory for all males at the age of 18).

3. Economic factors

In terms of development plans, programmes and policies the past four decades in Iraq witnessed the adoption of distorted central mechanisms in the geographical allocation and distribution of investment. This has resulted in the deepening of structural imbalances and thus the concentration of development in certain governorates, increasing inequality in the levels of economic, social and urban development, and reinforcement “special duplicity” in Iraq. Indicators of the Development Plan 1970-1974, showed that most investment allocations were concentrated in Baghdad (23.9%) and Basra (14.8%), meaning that 38.7% of the total allocations were concentrated in only two governorates. This pattern of spatial continued the plan of 1976-1980 with the emergence of new growth poles as exceptions (such as the governorates of Salahuddin and Anbar)³⁹, as well as during the development plan of 1986-1990.

1.3 The impact of the pattern of population distribution on population density

The relationship between the different natural environments, and population distribution and density in Iraq is obvious. Population density increases in governorates located in the steppe region, as is the case in Baghdad, Babil, Diyala, Qadisiya, and decreases in governorates located in the Plateau like Anbar. The impact of the environment extends to specific governorates. For examples in governorates located on the banks of rivers, the plain stretches along it making it a suitable place to encourage human settlement, since rivers, tributaries and fertile agricultural plains are favored by the population. The estimated density of the population in Iraq is about 73 people per km², which is moderate when compared to international standards. However, this figure does not reflect the actual population density as cities are concentrated in Mesopotamia with high population density -excluding deserts- where the population density goes up to 119 people per km².

³⁹ National development plan 2010-2014, ministry of planning, 2010, p243-244.

Figure 2: Population density per governorate 1997-2009 (person/km2)

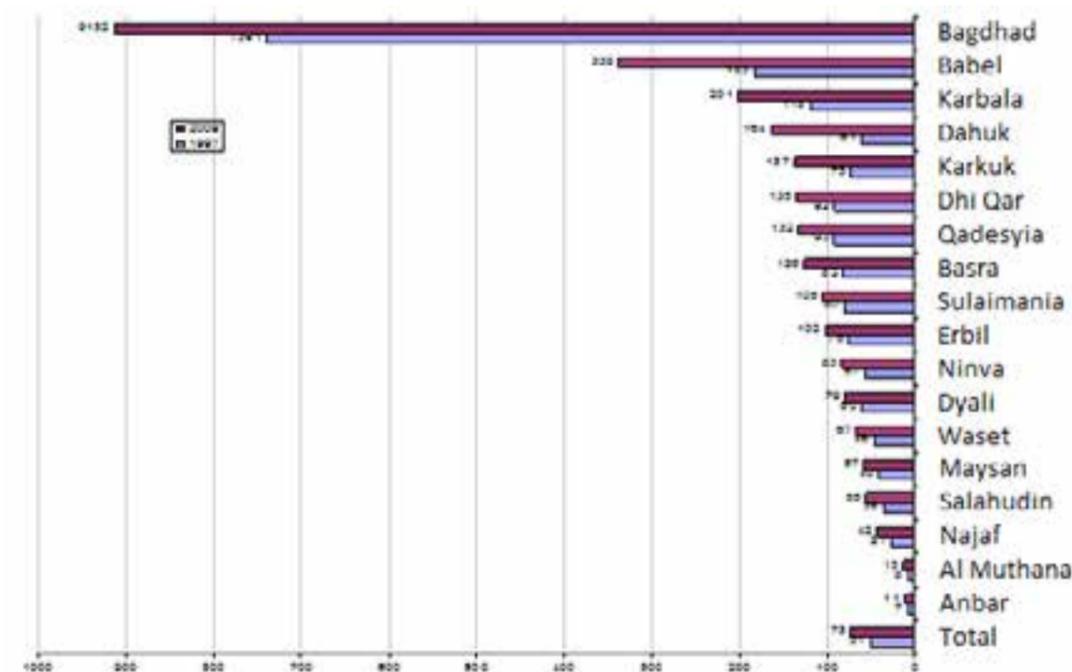
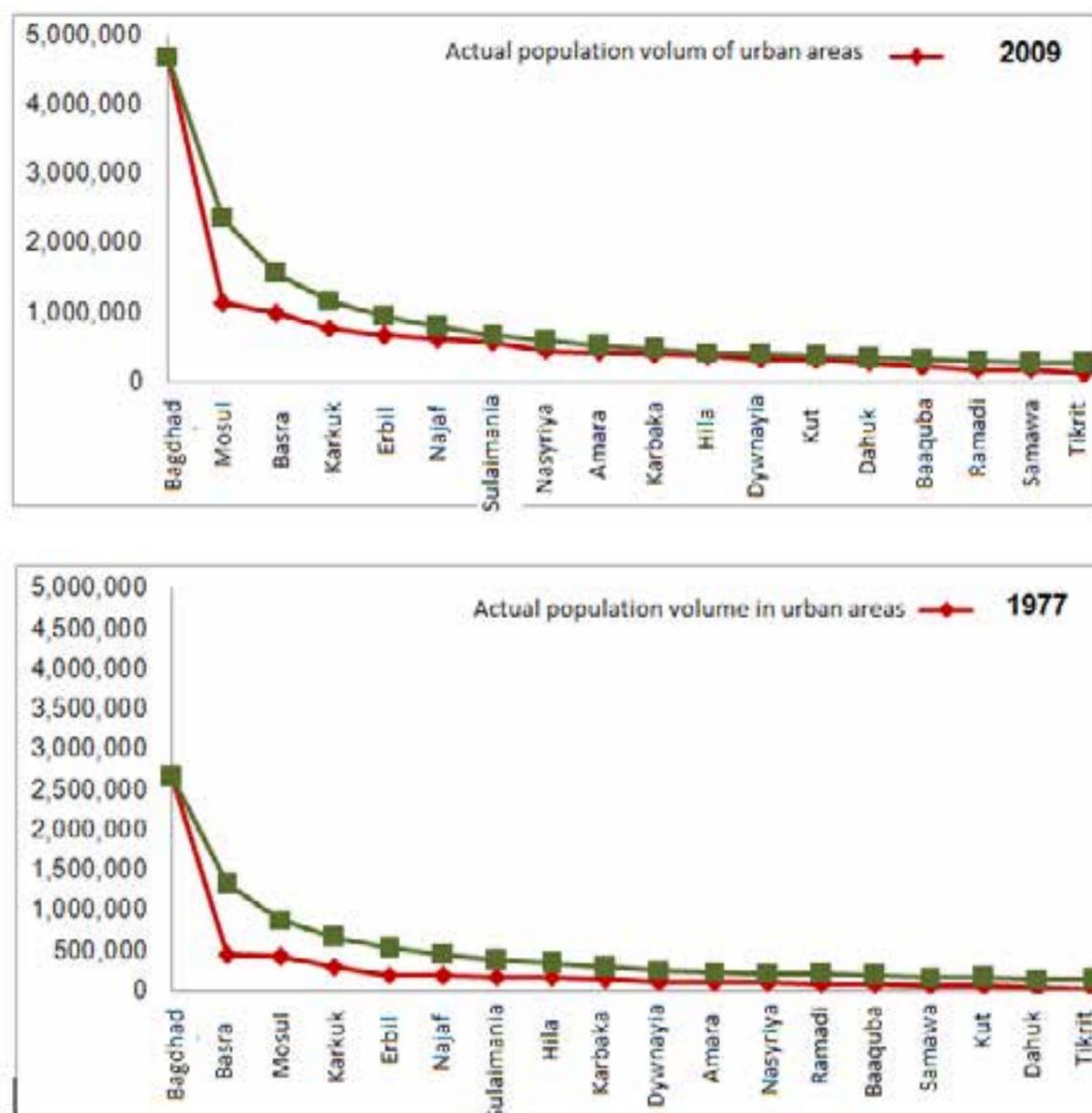


Figure 2 shows variations in the rates of increase in population density between 1997 and 2009. The density increased in Dahuk by 168%, Kirkuk by 88%, Babylon by 85%, and Karbala by 71%, Muthanna by 65% and by 57% in both Najaf and Salahuddin reflecting the influence of other factors in addition to environmental on the concentration of population.

The most significant indicator is the functional density (physiological) i.e. the number of people who benefit from a certain area of arable ground. Therefore, one square kilometer of arable land in Iraq accommodates 10,427 people, while in Egypt it accommodates 2,167 people, and in the United States, 140 people per square kilometer⁴⁰. This in turn can lead to increased population pressure on available natural resources, particularly land and water.

⁴⁰ Barry Mirkn, population levels and trends and policies of the Arab region: challenges and possibilities, a series of papers for the Arab Human Development Report, UNDP, 2010, p 11; For Iraq, the data has been calculated by researchers.

Figure 3: Ziph's Law, indicates hierarchal disproportion in population in major cities



Within the framework of studying the presumed proportionality of sizes of large cities (governorate centers), Ziph curve was applied, indicating gradual proportionality between the size of the largest city with the next city. Therefore, the second city constitutes $2/1$ of the population of the largest city, and the following city constitutes $3/1$ of the population of the next city, and so on. A quick look at the real curve for 1977 and 2009 indicates the continuation of the gap between the sizes of the three largest cities with the approach of the presumed curve to the realistic curve after the fifth city.

2.1 Population growth

Rates of population growth depend on the total change in birth rates and mortality rates, which are resultant from the impacting factors. Notably, based on available official data, these rates explain the slow demographic transformation as will be discussed in chapter 3. The mechanical growth rate is the net for immigration and emigration movement, noting more focus on emigration. The lack of official registered data in this respect will complicate measuring the impact of the dynamic on the population in Iraq. The 20th century witnessed unprecedented growth rates. At early stage of the century (1905-1913) Iraq needed 45 years to double its population, yet in the second half it needed only 22 years. In the middle of the century Iraq's population counted threefold the figure it had at the beginning of the century, and by the end it reached 11 times the figure of 1905. It is clear that the rate of population growth increased by less than 1% during the period from 1920-1927, then increased to 3.4% -the highest in the history of Iraq- for the period 1947-1957. Despite the decrease in later years, the rate remained very close to 3% and continued in this range from 1980s until 2009. The unsound estimation of population during the first half of the 20th century negatively affected the consistency of data to the extent that it appears illogical in certain years.

Table 2: Population growth rates (1920-2009)

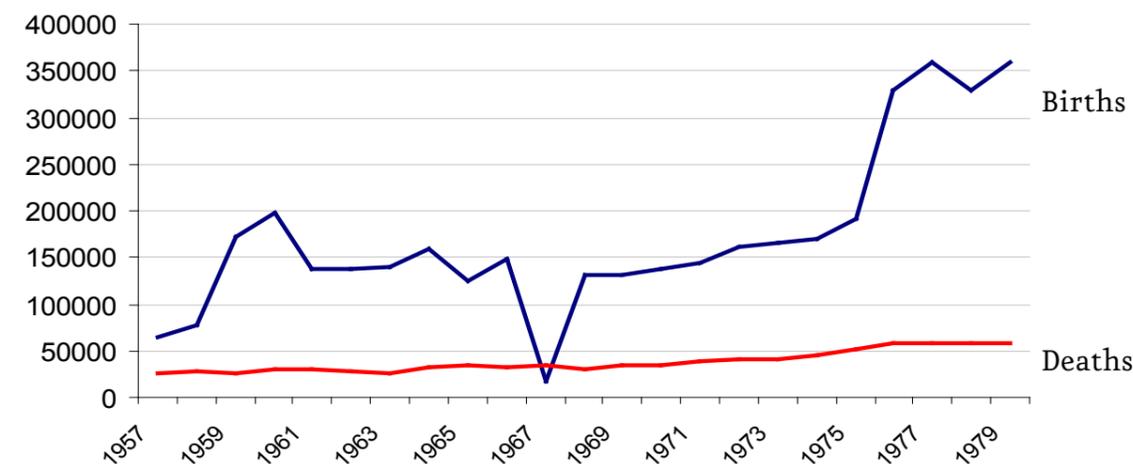
Period	Growth rate %
1920 - 1927	0.6*
1947 - 1957	3.4
1977 - 1987	3.1
1987 - 1997	3.0
1997 - 2009	3.0

* Perhaps the weakness of statistical recording of the population is the reason for the non-realistic growth rate for the period (1920-1927). Since it is not reasonable to have a decrease in population growth of 45 years (as previously passed) to 22 years, the foundation of the estimation process clearly lacks proper registration.

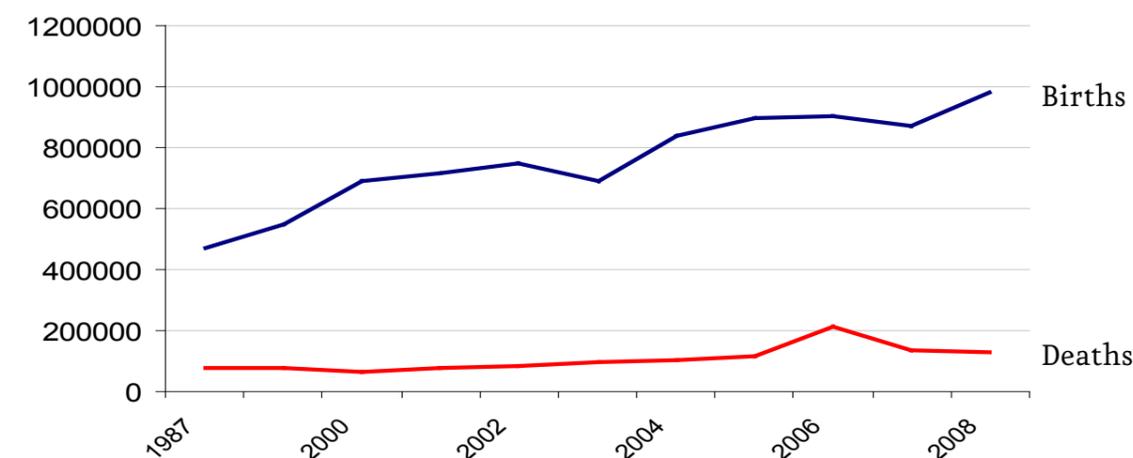
The effects of accurate statistical registration of biological events (birth, death) on the consistency of population growth rates

Lack of statistical awareness, the registration of mortality and fertility being free of any legal or organizational follow ups, and the inconsistent implementation of some laws and legislations, resulted in registration of bio-data being marked with inconsistency and incompleteness. Historically, the registration of newborns, particularly in rural areas, was only made for civic, administrative or legal purposes such as enrolling children in schools. This was clearly reflected in the inconsistent registration process of newborns over a number of decades. The process of registering death cases was less perplexing as most of those were documented using a death certificate issued by hospitals and health centers, in addition to other implications such as some civic rights or inheritance. For example, there were no events affecting a decrease in birth below death cases in 1967 or 1968. The application of the sustenance carnet in 1990 played a positive role in completing the registration processes especially the registration of newborns. The findings of multiple indicators cluster survey for the years 2006 and 2011 indicated that the rate of registering newborns in those years was (95.8 and 99.1) respectively.

Figure 4: Number of births and deaths in Iraq 1850-1979



Number of births and deaths in Iraq 1987-2007



Despite the stability of the population growth rate during the previous years (due to relative decrease in fertility rates and increase in net migration rates), the annual increase of population has been ascending and steady. The average annual increase for the period 1905 -1913 was 15 thousand; it grew between the censuses of 1947 and 1957 to reach 183 thousand per annum, then reached 571 thousand between the 1987 and 1997 censuses. Currently the number amounts to more than 800 thousand according to the results of counting and enumeration process of 2009, which means that the population increases one person every 40 seconds.

2.2 Mortality rate and determinants

Historians of Iraq would come to discover that this country –to the extent of its near past- witnessed a series of wars, famines and epidemics such as plague and cholera that used to sweep over in the form of close epidemic cycles. Iraq also witnessed the spread of infectious diseases such as plague, smallpox and tuberculosis, resulting in huge increases in mortality rates particularly among children, fewer chances of survival for the infected, and consequently the incidence of critical demographic collapses. This demographic status for the last three centuries, for which there are relatively sufficient documents and studies regarding the social and political life, has led in many cases to retraction in population numbers, showing that large areas of Iraq became uninhabited.

Since the middle of the 20th century and after the launch of the development program following the increase in oil exports Iraq became open to modern development tools. Some of the health techniques, preventive and treatment methods used at the time entered Iraq. The vaccination system against the worst diseases such as tuberculosis, smallpox and other childhood diseases, was put to use, eliminating some diseases altogether in a short period. The health care system and increase of awareness in prevention and disinfection methods led to fast and substantial decrease in mortality rates and gradual increase in life expectancy.

General mortality rate decreased, due to the improvement in healthcare services, at a fast rate from 20 per 1000 persons in 1960 to 14 per 1000 persons in 1975, and then to 8 per 1000 persons in 1987 and 10.9 in 1997, 4.9 in 2006 then to 4 in 2009 and 2011.

Mortality rate among children under five amounted to 62 per 1000 newborns until 1990, 122 in 1999, 41 in 2006, then decreased in 2011 to 38 deaths per 1000 newborn for Iraq in general and 34 in Kurdistan.

Infant mortality rate amounted to 50 per 1000 living newborn until 1990, 101 in 1999, and 35 in 2006 and decreased to 33 per 1000 living newborn in 2011 for Iraq in general and 30 in Kurdistan.

It is noted that the change in mortality rates reflects a tendency that is not consistent with the natural pattern for the demographic change. The increase in child mortality rate in 1999 is a refraction that cannot be explained by demographic factors, it rather reflects the results of economic sanctions and health deterioration that added to the problems of the population situation during the 1990s.

Iraq has entered successive wars since 1980, which resulted in huge demographic impacts. According to the results of 1977 census and 1987 census, the population increased from 12 million to 16.3 million respectively. Although the population growth rate decreased below the previous one in a way that is not consistent with the rising patterns of growth rates of previous years; however, it is not consistent with the increase in birth rates and the decrease in mortality rates in the years following the war. This forms belief that the actual population growth rate could have been much higher if it wasn't for the impact of the war. Therefore, the population of Iraq could have been in 1987 more by 836 thousand. This figure has been forced out, migrated, or killed during the period between the two censuses⁴¹, which is what we refer to in population literature as “population shrinkage”⁴².

The economic sanctions (1990-2003) led to a profound impact on the population due to the deterioration for human development, living standards, decline in health and educational status. This was because of the institutional disability caused by the State's failure to meet its obligations in all fields that it used to handle before.

Epidemic diseases spread rapidly in the absence of appropriate protection. Malaria, which was very limited before 1990, began to appear in 1992 and took the form of waves in different areas of Iraq to the extent that infected people increased by more than 12 times in 1994 as compared to 1989 in central and southern governorates, and more than 20 times in the three northern governorates. Birth genetic diseases increased drastically, and so did skin diseases and intestine infections. Regarding Cholera and Typhoid, the first doubled nearly eight times while the second by more than 12 times. Pediatric diseases such as polio, whooping cough, diphtheria, measles and meningitis increased highly at rates comparable to the rates of increase in previous diseases⁴³.

⁴¹ Mohammad Ali Zeni, Iraq's economy: past, present and future choices, p 191.

⁴² (The total deficiency in population volume during the war taking into account the total volume that would have reached had the war not taken place). Mansour Alrawi, "relation between population and war", a paper by the Iraqi economists association to the first conference of the higher council for scientific associations, Bagdad, May 1985.

⁴³ Previous source, p 153.

2.2.1 Rates of infant mortality

The rate of infant mortality is measured by the number of deaths of children under one year old as compared to the total number of births. Statistics of infant mortality show that Iraq has made considerable progress in reducing these rates during the decades of development 1950-1980. Rates of infant mortality decreased from 290 per thousand live births during the period (1927-1935) to 162 per thousand live births for the period (1935-1947). The increase in infant mortality rate is due to the spread of epidemic diseases on one hand, and on the other because most children suffered from weakness of structure and weight loss resultant of malnutrition that both the pregnant mother and infant suffered from. This severe shortage of food exposed the child to many diseases often neglected and left untreated. In particular female infants, since they were sometimes excluded from health care. However, in the period (1950-1955) infant mortality rates recorded a substantial decline and amounted to 130 per 1000 and then fell by more than half in the period of (1973-1975) until it reached (69) per 1000 for the period (1985-1990), 50 per thousand live births for the period (1990-1995). Infant mortality rates continued to decline to reach (35) per thousand in 2006. The rate of infant mortality amounted to (33) deaths per 1000 live births in 2011⁴⁴. It is understood that this decline in the rate of infant mortality took place due to the relative improvement of healthcare and increased attention to mother and child health.

Data show that the rate of infant mortality in Iraq has fallen to (33) deaths per 1000 live births in 2011. However, this rate is still the highest compared to neighboring countries; 11 per thousand in Kuwait, 26 per thousand in Saudi Arabia and Jordan, 15 per thousand in Syria, 35 in Iran, 22 in Palestine, and 23 per thousand in Turkey.

In spite of the continued decline of the mortality rate of children under-five (38) deaths per 1000 live births in 2011, it is still high compared to some Arab countries; in the UAE it amounted to (11) per 1000, and Qatar (11.5) per thousand, excluding Yemen where the rate reaches (105) per thousand.

44 Multi indicators cluster survey, 2011, preliminary report.

2.2.2 Mortality rates for children under five

Infant mortality rates constituted 85% of death cases of children under five, the rates which continued to decline since 1990, when it amounted to (62) per 1000 live births. During the first four years of economic sanctions, mortality rates among children under five doubled at the end of the fourth year⁴⁵ and then dropped to (41) in 2006, and continued to decline to reach (38) per 1000 live births in 2011.

2.2.3 Maternal mortality rates

Maternal mortality indicators are one of eight indicators for the Millennium Development Goals (goal five, target 6), as this goal seeks to reduce the maternal mortality rate by (75%) for the period (1990-2015).

Rates of maternal mortality in Iraq amounted to (117) per hundred thousand live births in 1990, rose to (291) deaths in 1999, influenced by the circumstances of the siege and the deterioration of the health situation in Iraq. However, they decreased to (84) in 2006. It is noted that this rate is high compared to the UAE where it reached (0.01) per hundred thousand live births, Saudi Arabia (1.8), and Jordan (41).

To achieve this goal, mothers should be given good health care during pregnancy and a trained doctor or a qualified midwife should perform births. There should be a system to provide good services for emergency delivery, because the death of a mother during pregnancy or childbirth is considered a human tragedy on individual, family and community levels. When mother dies, the chances of survival substantially weakens, not only for the newborn, but also for the rest of her children. Women face risks that may threaten their lives in pregnancy, childbirth and postpartum. They suffer complications such as hemorrhage, uterine rupture and severe high blood pressure. If we adopted the average of 84 deaths per 100,000 live births with the possibility of new decrease from that of 2006, where the rate of births under a medical supervision increased by (72%) in 2000 to about (88%) in 2011, according to the results of multiple indicators cluster surveys (MICS) implemented in the years mentioned, this means that 756 women die in Iraq every year because of complications of pregnancy and childbirth; 2.1 women die every day for the

45 Ali Hanosh, Iraq: current problems and future solutions, p 150.

same reasons. The distance between the place of residence and service locations, with high transport costs, rugged roads and poor means of communication and transportation, are of the main reasons that prevent women, especially rural women, from seeking appropriate care during pregnancy and childbirth. The efforts to address these constraints in accessing the right place to receive appropriate medical care and in a timely manner are considered crucial to reducing maternal mortality and to save the lives of mothers and newborns.

2.2.4 Life expectancy rates

Life expectancy at birth index summarizes the overall impact of health factors on the health and survival of the individual as it estimates the average number of years the individual is expected to live if exposed to the risks of death in successive stages of life from the moment they are born. The life expectancy of the population of Iraq did not exceed thirty years of age before the fifties of the past century; it then increased to (48.5) years in 1960 and then to (65.0) years in 1990. The increase was up to (17.5) during thirty years, with an average increase of a half year per year. This reflects the improvement in the standard of living and health for the people in Iraq during the period mentioned. The increase then declined to (0.2) year because of the conditions of crisis, wars and violence. The life expectancy at birth in Iraq declined though it reached (58.2 years) in 2006 because of the decline in health and nutrition during the period of economic sanctions (1990-2003).

The life expectancy rate is still low in Iraq compared to developing countries, such as Mexico (69.7) years, China (70.1) years, and is less than neighboring countries, as seen in Kuwait (77.3) years, Jordan (71.9) years, Syria (73.6) years, Bahrain (71) years and the State of Qatar (69) years.

According to Human Development Report in Iraq 1996, life expectancy dropped to 60 years in 1993, a level that was close to the levels expected at birth in 1975. The Human Development Report in the Arab world estimated the average life expectancy at 57 years in 1997, while other estimates foresaw a decline in life expectancy to 55 years at the end of the twentieth century. This is close to the rate of human life average at birth for the year 1965, and that was lower than the average of the population of

the Arab world by about seven years⁴⁶. If life expectancy rates and the case mortality rate that continued to decline before the economic sanctions, were compared with the prediction that it would reach 68 years at the end of the last century, and between falling to less than 60 years with the continuation of economic sanctions, we see that the time difference reaches up to nearly three and a half decades of decline. In order to return rates as they were before 1990, an annual increase should be, in accordance with the rates of developing countries, estimated at 0.48 years in life expectancy in normal conditions i.e. it needs to be at least 18 years. With total losses that include the decline of time and what is required to compensate it, the cost of the total decline exceeds half a century. This reflects the critical situation of human development and its sensitive element - life expectancy at birth⁴⁷. However, the change in political situation in 2003, the end of the economic embargo and the improvement of the standard of living, reflected positively after nine years, despite the violent incidents. According to estimates from two different sources, one being the number of deaths registered in the Ministry of Health, and the other being mortality rates for infants and children under five years, life expectancy at birth has risen to 68 years.

Factors affecting the high mortality

Famines and food shortage

Iraq in modern history witnessed periods of economic recession due to lower production in various economic sectors. During its long history there have been many famines, exemplified by the drought years in the mid-twenties of the last century, which were termed by the people of Iraq (year Lofa) in 1926, and year of supply in 1941. Such incidents left a significant impact on all segments of society particularly the poor which constituted the vast majority of the population. The flood in 1954 is among the black marks in the history of Iraq as it almost destroyed the features of life in it. This was followed by the spread of locusts that almost covered the sun in 1955 in the southern regions. These disasters were accompanied by backwardness in the use of automatic methods in agriculture and production leading to widespread poverty and famine in most parts of Iraq as a result of the acute food shortage. Although acute shortages of food do not kill directly or immediately they are indirectly responsible for many cases of deaths that occur prematurely.

⁴⁶ Previous source, p156.
⁴⁷ Previous source, p156-157.

Diseases and epidemics

Iraq suffered through successive periods of many fatal diseases such as plague, malaria, tuberculosis and smallpox. The lack of medicines and treatments has made these diseases a permanent disaster causing the extinction of large numbers of the Iraqi population. Dr. Ali Al Wardi describes the nature of epidemics which decimated the population through successive periods: "The plague, which infected Baghdad in 1831, was the most terrible epidemic in Iraq through its long history as the elderly of Baghdad talked about its tragedies for a long time. There is a market in Baghdad now called the market of corpses because it was filled with the dead during the plague, where stunk to unbearable levels. The first plague case appeared in March 1831 in Baghdad, then it swept over and the number of funerals that were taken out of the gates of the city in late March amounted to a thousand, later in mid-April the number was three thousand funerals daily in accordance with the personnel records, after which no one was left in Baghdad to record. The population then surrendered to fate and it was said that the number of dead in one day reached nine thousand."

The British evangelist Groves, who was in Baghdad then, said that death became ordinary for people so they buried the people closest to them in apparent indifference. Then people fell in the streets with no one to bury them, but they were rather left to dogs to ravage their bodies. The most painful scene is "where hundreds of young children in the streets crying their dead mothers, and their crying mingled with the snarling of dogs ravaging the bodies of the dead." The bodies of the dead were still lying at homes, markets and roads, and the rotten air reached unbearable level. Dawod Pasha appointed soldiers to clean up the bodies and gave a certain amount of money for moving each body; as a result thousands of bodies were thrown in the Tigris River without shrouding or processing.

War, violence and terrorism

Iraq is a country that has been fatigued by wars, sanctions and violence during the last three decades. It goes without saying that these crises would leave behind a society suffering from serious challenges to its human safety. Crises hit most of social structures in the country and bore social imbalances that constituted an accumulation of chronic dilemmas. The most prominent manifestations of it have been the destruction of infrastructure and the low human development indicators. The crises' deep effects and variables, along with the previous imbalances accumulated at all levels, caused the number of victims to exceed millions, with most of them being children and women. The number of the wounded and martyrs

resulting from terrorist attacks increased. For example the number of martyrs in 2007 amounted to around 16,563 with 38,609 wounded. These rates declined in the years that followed because of the relative stability in security. Meanwhile, the rates of vulnerable groups, orphans, disabled, displaced persons, families headed by women and others increased significantly.

Mortality because of the profession and the environment

Some professions play an important role in the incidence of death because of the risk it posed on the workers, which led in some incidents to death either directly or indirectly. Deaths due to environmental factors, the mortality rate in general, and the rate of infant mortality in particular are the highest for rural residents as compared to urban population. This is mainly due to low level of health care services in the countryside, the low level of education and the spread of illiteracy resulting in poor health awareness, as well as low economic level and living standards for farmers and the lack of hygienic conditions in their homes. Cluster Survey has shown that the 2012 mortality rate of children under five goes up in the countryside to (42.3) per thousand as compared to (35) per thousand in urban areas, and the rate of infant mortality is found at (35.5) per thousand in rural areas as compared to (31.1) in urban areas. In addition to the above mentioned, there are also daily deaths due to other reasons of various kinds. The total number of injuries due to accidents in 2010 was about 462,383 mostly by traffic accidents which amounted to 65,277 incidents, followed by falls from high places which amounted to 46,282 incidents, and then attacks with sharp objects which amounted to 19,655 incidents.

Lack of medical and human resources

According to statistics from the National Health, there are around (24,533) doctors, of whom (7,626) are specialists in various fields of medicine in all parts of Iraq. The proportion of doctors is about 7.8/10,000 of the population. The dentists amounted to 1.8/10,000 of the population. The rate of pharmacists is 2.0/10,000 population, while the percentage of nursing staffs and those with health care professions beings 16.4/10,000 of the population.

Non-communicable diseases

Non-communicable diseases are one of the most important health problems that are impacting mortality in Iraq today and there is a national concern because of the increase in this type of diseases. Figures from statistics of the Iraqi Ministry

of Health show that six of the top ten causes of death are attributed to non-communicable diseases, with heart and blood vessels diseases being the highest. Cancer, on the other hand, is ranked third or fourth. The data shows that about 22,000 thousand people die every year due to heart disease, 7000 due to cancer, 4000 due to diabetes, and 1,500 due to other non communicable diseases such as asthma.

Morbidity caused by non-communicable diseases

Despite the lack of information on the spread of non-communicable diseases, the report of the Ministry of Health said that more than 20,000 cases of high blood pressure, 16,000 cases of diabetes, 7,000 cases of heart disease, more than 4,500 case of asthma, and about 1000 cases of brain and vascular diseases are recorded annually. Heart disease is the main reason for the rates of hospital stays. According to the indicators of cancer recorded during the last decade, more than 14,000 new cases of cancer are recorded annually, with breast cancer being ranked at first place among ten types of cancer in Iraq, followed by lung cancer, then leukemia, bladder, brain, lymph glands, colon, stomach, skin and throat cancer. A national survey revealed that there is escalation of behavioral and biological factors that affect the rates of morbidity and mortality in Iraq and the statistical data indicates the risk of non communicable disease among adults (25-65 years) in Iraq 2006 through extrapolation of the following rates:

Behavioral risk factors	Females	Males	Both
• Smokers	6.9	41.5	21.9
• Eating fruits/vegetables less than 5 times a day	91.5	91.2	91.4
• Physical inactivity	52.7	61.8	56.7
Biological factors			
• Weight gain	31.4	37.4	34.1
• Obesity	38.2	26.2	32.8
• Blood pressure	38.3	43.1	40.4
• High blood sugar	9.9	10.9	10.4
• High cholesterol	36.5	38.5	37.5

SOURCE: CHRONIC NON COMMUNICABLE DISEASES RISK FACTORS SURVEY 2006

Smoking:

Smoking is one of the most serious threats to human health, yet that can be easily curbed to avoid morbidity and mortality. The diseases that are associated with tobacco use are cancer, respiratory diseases and diseases of the heart and arteries. The spread of these diseases increases in developing countries, as well as between low-income groups. Women smokers of childbearing age face additional negative impacts that threaten their lives and the lives of their children. Also, women smoking during pregnancy are more vulnerable to problems at birth. Data from the Iraqi Family Health Survey 2006/2007 show the results of smoking habits by age, sex, region, residence, education and wealth, and of the total sample, it was found that 14.8% of family members currently smoke, and additional 3.4% smoked at some time in the past.

The prevalence of smoking among the adult population is 21.9% and the proportion of males is six times more compared to females. The average age at initiation of smoking is 20 years and many studies show that initiation among males is at an age less than that of females. Studies also revealed that the problem is apparent among adolescents (13-15 years), where cigarette consumption is up to 3.2%.

Obesity:

According to statistics from the Ministry of Health, two-thirds of adults (67%) in Iraq suffer from increased weight and obesity. Rates of obesity are high, with them being (38.2%) among females compared to (26.2%) among males. High blood pressure: measurements revealed that the prevalence of medical high blood pressure is up to 40.4%, with higher rates among males than females.

High blood sugar:

laboratory tests showed that the percentage of people with blood sugar in adults is (10.4%), with a marked increase after the age of 45 years. There are higher rates of cases among males than females.

High cholesterol in the blood:

high total cholesterol ratios amounts to 37.5%, higher among males than females, and appear even among young adults.

Communicable diseases:

A report of the Ministry of Health for the year 2010 showed the following statistical indicators for some cases of communicable diseases including: echinococcosis (1,286), Brucellosis (7399), all types of Meningitis (1,240), Basil dysentery (1568), tuberculosis

(6826), typhoid (49,139), immune deficiency/ AIDS (12), Schistosomiasis (5) and cholera (2). Regarding the whooping cough, the rate of infection amounted to (0.67) in 2010 per 10,000 of the population, and the rate of incidence of mumps and tetanus amounted to (0.57) in 2010 per 10,000 of the population. As for leishmaniasis, the rate of infection amounted to (0.96) in 2010 per 10,000 of the population, additionally, the rate of infection of acute flaccid paralysis amounted to (0.15), and viral hepatitis amounted to (6.13) in 2009 which increased to (8.81) per 10,000 of the population in 2010.

2.3 Fertility and birth rate

Facing the continuation of high fertility rates despite the slow decline and the significant reduction in mortality rates, we have to focus on the demographic results. They indicate a high rate of population growth and the presence of a young population structure, considering that these two phenomena constitute a pressure factor affecting the development process in Iraq. Their direct results are:

- a) Weakening the ability to secure a good standard of living for family members because most families have limited resources.
- b) Reducing the possibility of opening areas of socioeconomic interactions for women outside the family.
- c) Reducing the possibility of securing quality health care for children and youth and the elderly in the family.

It is worth noting that developing countries face the consequences of the high fertility in different ways. Some of them take supportive measures to accelerate the reduction of fertility, such as Egypt, Tunisia, Iran, while others take a stand encouraging high fertility such as Gulf oily countries. In Iraq, in the 1970s, trends reflected by state procedures indicated the State's aim at increasing (or maintaining) fertility of Iraqi women in the context of economic and social developments and political changes⁴⁸.

⁴⁸ Hana Al Aqyli "determinants of women fertility in Iraq", the first Arab conference on population policies, Tunis, 1987. Arab demographic association and the unit of population researches/ Arab league. Mansour Al Rawi, "demographic impacts of wars and preventive measures in the light of Iraq- Iran war", national defense magazine, edition 2, Baghdad 1984.

2.3.1 The theoretical analysis of fertility

The Economic thought, starting from Malthus, left a clear effect in the theoretical studies concerning fertility.⁴⁹ Fertility was assessed through its impact on the resources available to the country and the subsequent economic and social pressures that could be pointed in three elements. The first one is natural fertility, which limits the possible number of children per couple, and it stands for concept of supply. Second, is the element of personal choice which determines the desired number of children per couple, and this number stands for the concept of demand. Third, is the cost of fertility regulation that determines the possibility of choices in the number of children desired, when the demand for children is seen equivalent to the consumption of commodities. Therefore the desire for children is compared with their desire for other commodities. Since the resources available to the household are limited in most cases, that imposed a serious assessment for the benefit of children based on the elements of benefit and cost. The benefit of children in developing communities was determined by their economic participation and help for parents in old age and in economic crisis, while the cost includes direct and indirect costs in terms of missed opportunities as a result of having children. Some studies focused on measuring the level of economic benefit of children and their costs, while other studies went to assess individuals view and their understanding of these concepts. These studies were known as studies of the value of children or of the economic importance of children. As for the supply of children, the number is determined by two factors, namely:

1. The level of natural fertility defined as the fertility that occurs in the absence of any initiative to control reproduction.
2. The level of children survival which depends on the health and growth of children.

Theoretical analysis has focused on a simplified picture of the direct factors affecting fertility known as the median variables, which are limited in scope to the micro-level properties of any family or individual. This level of analysis is not fit to explain the reproductive behavior of the family in Iraq and the Arab countries in general, let alone finding ways to influence them. The behaviors and decisions of individuals and families are not rational in the sense of referring to purely economic criteria: cost/ benefit, so in our analysis that will focus on the factors affecting fertility in Iraq we will particularly assess indirect factors that represent the properties of the surrounding.

⁴⁹ Easterlin 1975; Leibenstein 1975; Becker 1960

2.3.2 Indirect determinants of fertility

There are two types of indirect determinants of fertility⁵⁰. First, the social and economic characteristics of the individual, and secondly, the characteristics of the intermediate factors related to social institutions and societal values, economic conditions and the environment. Studies of fertility tended earlier on to pay attention to individual behavior. They soon focused, with the development of the concepts of supply and demand for children, on the relationship between individual characteristics and the characteristics of the surroundings that affect the elements of these concepts. The place of residence- rural/ urban- and the characteristics of the women are in close relation to reproduction and fertility.

2.3.3 International stands

Global perspective on ways to address the rise in fertility rates in third world countries have changed over time. During the sixties, developed countries supported the spread of family planning programs in the Third World. But developing countries changed their strategy when considering the determinants of fertility during the World Population Conference (Bucharest, 1974) through focusing on the importance of the social-economic development process in influencing fertility factor. The International Conference on Population, (Mexico City, 1984), formed another turning point for the policies facing the high fertility in developing countries. Attention to family planning programs shifted to support the idea of accelerating social and economic development through ways that maintain the balance and diversity in the treatment of high fertility. These ways are to be linked to the development process as a whole.

The International Conference on Population and Development (ICPD), 1994 in Cairo, formed a milestone in international stands. This conference set forth the international action plan which called for the need of States to prepare, develop and implement national policies for the population which emphasized the needs of individuals, families and communities rather than merely focusing on the reduction of fertility rates. It also focused on broadening the base of comprehensive reproductive health services and improving its quality and provision without emphasizing the implementation of family planning programs in their narrow sense. It also called to take appropriate measures to improve public health, reproductive health and family planning within the framework of responsible family and parenthood, safe motherhood, safe childhood, empowerment of women,

50 Huda Zreiq "review of development of fertility studies", the population bulletin, ESCWA, edition 32 year 1987.

promoting gender equity, balancing between economic and social growth and the population growth. It aimed to secure the level of well-being and reduce the spread of poverty, as well as the reduction of non sustainable production and consumption.

2.3.4 Analysis of fertility levels and tendencies

Iraq is a country characterized by a very high fertility rate even when compared to other countries with high levels of fertility. Total fertility rate for the period (1950-1955) was estimated at (7.2). The rate decreased to (6.7) children per woman for the period (1980-1985), then to (6.0) for the period (1985-1990) It reached reaching (5.7) for the period (1990-1995). Then the total fertility rate declined for the year 2011 to reach (4.6) children per woman in Iraq in general and (3.5) in the Kurdistan region.

Population growth rate in Iraq remained at a high rate of 3.1% during the 1970-1980 followed by an urgent desire by the government at that time towards increasing it. The governmental policy was translated in adopting a range of programs and actions aimed at increasing childbearing. This was implemented through providing material and moral privileges, such as encouraging early marriage, and increasing the benefits for government workers families that have four children and above. In addition they limited control imposed by the state on the sale and circulation of contraceptives that prevented the sale of such means without medical prescription. However, this pace declined for the first time after 1990 as official estimates declared a fall of Iraq's population growth rate to 2.8% that was influenced by the conditions of war and economic sanctions. Then the population growth rate rose again despite the marked reduction in mortality rates after 2003, yet, the population growth rate in Iraq maintained its pace and it is expected to maintain a growth rate close to 3% in the medium range enhanced by high birth rate and low death rate. This is the result of the expansion in the provision of preventive and curative services, but at the same time, it is this rate that causes the delay of Iraq entering the demographic window.

Crude birth rate which was 49 per thousand births in 1960 dropped to 45 per thousand births in 1989 and to 36.5 births per thousand in 1990, then to 31.3 per thousand in 2006, the second highest rate among the countries of the ESCWA after Syria.

Factors affecting the fertility levels

The reproductive behavior in any society represents the outcome of the interaction of all factors related to the historic path. This impacts the demographic development of a society, the level of economic and social development of individuals, familial belonging, as well as religious beliefs and cultural factors of the individual, all of which determine their social and family behavior including reproductive behavior. The dynamics of fertility in Iraq are subject to a number of variables including religion, which dictates a particular position of fertility. In second place there is culture, which includes social practices that are not always linked to religion and affect the individuals' perceptions of fertility. Fertility is also linked to the ways women deal with the situation, and then with the family who do economic and social needs require to identify its own fertility level.

Culture and fertility

High fertility rates have been nurtured over the centuries through a cultural system aimed at raising reproduction. High fertility is considered a religious duty on which the continuation of a given collective, identity and values, depends, would ultimately strengthens the nation by supplying new members able to defend and protect it. Also the imbalanced demographic situation contributes to high fertility rates. High mortality rates associated with low health status and living conditions – prompt the population to early marriage, and the adoption of intensive reproductive behavior. On the other hand, the system increases the value of males at the expense of females. Males were preferred for many reasons, including ensuring an honored place within the group, the future in case of disability or old age, availability of labor to contribute to economic production, and providing warriors to defend the honor of the group and its structure. The desire to have a son leads to increase the number of children, because the male alone represents the strength of the family.

We noted in Chapter 2 that the demographic transition from high fertility and mortality status to the status of low fertility and low mortality is not yet complete. This means that the demographic consequences of the current levels of fertility and reproduction will remain efficient and effective until after the middle of the century, as the components of the cultural heritage are still active - for different reasons – in playing a catalytic role for the continuation of high reproductive rates. Apparently, the reproductive behavior and the increasing in the average family size reflect the prevailing values of the Iraqi family, which thinks of the large number of children as a symbol of strength, position of family pride.

Therefore, the monitoring and follow up of the impact of religious values and perceptions and the impact of socio-cultural system on fertility in Iraq require the tracing of the cultural practices that are a legacy rooted in history, which promotes a behavior that stimulates reproduction. This, in turn, interacts with the ecological hosting the collective to which the individual belongs. It is influenced by economic values crystallized by means of production methods and methods of exchange that are known to the community⁵¹.

Socio-cultural practices and fertility

In the history of communities, there are cultural contexts of cumulative attributes inherited and socially re-produced specifying the features of the identity of that group. The psychological, cultural and social aspects that individuals derive from their understanding of their relationship with the society undoubtedly affect fertility, as well as other different areas of their personal lives and family. Whether it is related to the pattern of family structure, or the status of women and children, or the position taken towards the issue of family planning, in all that there are orientations and justifications that translate the relationship of individuals with the resulting systems of values and cultural principles. Behavioral practices of individuals, whether related to urban areas or rural, are a clear reflection of the cultural frameworks, and are affected by living situation and social ties, eventually affecting their relation to fertility; attitude and practice.

Religion and reproductive behavior

Religion plays a key role in influencing reproductive behavior. Islam in its social and legislature dimension includes an integrated vision of fertility and reproduction. The legislative provisions include provisions of celibacy and marriage, divorce and polygamy⁵². Islam also encourages marriage of widows and divorced women, and facilitates the marriage of slaves and the poor. The Holy Quran devoted 27 verses for the provisions related to sex and procreation. The Quran also set conditions for the selection of a wife in addition to prohibitions (Al-Nisa verse 23), and it also urges early childbearing and stresses the importance of fertility within marriage. Fertility for Islamic legislation is the purpose of family formation. The Quran also urges the propagation of birth and forbids means that reduce the reproduction such as abortion or deliberate abstention from marriage. The Quran also does not favor the separation between the spouses except in cases of extreme necessity.

⁵¹ MukhtarHaras and Edris Ben saeed, culture and fertility, study on the reproductive behavior in Morocco, Altalea Press, Beirut, 1996, p7.
⁵² This legislation is seen in a number of Quran verses; Al Omran 14, Al Rom 20, Al Noor 32, Al Esraa 31, Al Kahf 45.

The extended family structure and fertility

The type of family is one factor that influences the type of fertility. Extended family often contributes to stimulating high fertility, by encouraging early marriage, reduction of spacing between births, by strengthening symbolic economic and political competition between families, as well as the reduction of the cost of the child as a result of sharing economic and educational responsibilities. Even for working mothers within a family, when they find substitutes to care for their child when they are absent, they do not feel the need to compromise between work and childbearing, and thus do not feel the need to limit births. Many sociological and demographic studies linked high fertility to extended family structure. In addition to the importance represented by increasing the number of children in the family especially in our traditional societies as the high number of members is a source of strength and proof of social status, the low cost of the child by sharing responsibilities constitutes an additional incentive to bear children without taking into account any planning.

There is no doubt that the coexistence with relatives in the framework of the extended family provides a family environment where the warmth and mutual support encourages the raising of an increased number of children as collective consumption of family resources reduces the cost of the child, and thus encourages to continue to have children without any planning. It is noticeable in Iraqi society that even when a new nuclear family is formed and separated in residence from the extended family, this new family remains characterized to a large extent with the original trends of solidarity, so it is unlikely, especially in rural areas and slums that we expect such a social change as has happened in Western societies regarding their attitude towards fertility. It is worth noting the difference between the average family size in urban areas of Iraq which was 6.8 members and its counterpart in the countryside 7.9 members, which explains to some extent the difference in the tendency towards fertility between rural and urban areas.

The status of women and fertility

Socialization processes for the female often tends from early childhood to teach the idea that being a married woman is better than unmarried, that women with children, compared with barren women have greater respect, and that women who give birth to the largest number of males enjoy the highest degree of happiness and protection. The culture which does not recognize women's existence other than within the frame of their traditional roles as wives and mothers and reproduces patriarchal authority, impedes women's awareness of other social choices that can give them the ability to employ their capabilities. As a result nothing can be

expected other than the women's tendency to motherhood, through raising the level of fertility, and having a male to enhance their status in society. Women's economic subordination to men makes them, when thinking about the future risks and ways to secure their old age, more predisposed to have male children. This pushed them to making their fertility higher than if future safeguarding is equally expected from both sexes. Also, male children for women in Arab societies in general not only constitute a social insurance, but also a valuable tool to gain social respect and recognition within the family and the community at the same time⁵³.

Women's work and fertility

One factor that has a close relationship with the fertility rate is the work of women outside the home. Work of women outside home leads to a lack of desire to have a large number of children. The link between fertility and women's work includes two aspects. The first one is the time allocated to work and the time devoted to childcare and upbringing. In Iraq, as long as the women find substitute in their absence to assume the responsibility for raising children, then the work outside home does not generally lead to a significant reduction in fertility. This behavior is associated with the pattern of prevalence of extended family. The second is to estimate the costs allocated to their care and the interest or benefit to the family from having more children, and if the costs were more than the benefit then the family tends to reduce reproduction. It is important to note that there is no doubt that family reproductive behavior in Iraq is still far from this rational in the calculation of cost/ benefit. In any case, rates of economic participation of women, other than in rural areas, are still low, where the social and agricultural production system does not contradict with increased fertility, but on the contrary urges it. However, deduction of results not supported by statistical analysis is not acceptable given the lack of studies on the micro level. Also, a simple correlation between the variables of labor and birth rate in Iraq and the Arab countries in general is not able to accommodate the many influences on these two variables so there is a need to resort to multi-factorial analysis.

The impact of income on fertility

There are other factors related to fertility rates including the level of income. Income has a significant influence in deciding the level of fertility and reproduction, it must be recognized that the impact of indirect income is more

⁵³ Nadia Y. Youssef, "The status and fertility patterns of Muslim Women", in: *women in the Muslim World*, Ed. By Lois Beck and Nikki Keddie Harvard university Press, 1979, p.85.

effective than the direct effects, in economic or cultural areas. Accordingly, the rate of population growth in Iraq is expected to decline in light of the increase of per capita gross domestic product. Based on the economic analysis of the relationship between fertility and income, the higher the per capita income the lower the level of fertility, because an increase in per capita income leads to an improved social status and education of individuals that is reflected in expanded aspirations and interests and a change in the vision and assessment of the number of children.

Indicators of factors affecting fertility

The fertility levels in Iraq continued to decline to lower levels during the past two decades, where the total fertility rate decreased from (5.7) for the period 1990-199 to (4.6) in 2011. But in order to reach the level of fertility of 2.1 births per woman throughout her life by 2015, i.e. to achieve demographic transition, then the total fertility rate must fall to half the present level in the remaining years of the two decades following the Cairo Conference 1994, a goal that is unrealistic and not possible in such a short period in view of the effectiveness of the impact of the determinants. In addition factors used in the extrapolation of its impact on fertility do not indicate big change as will be clear from the following analysis.

1. High percentage of married people

High proportion of women of childbearing age are married in Iraq (62%), higher than in most Arab societies. The percentage of married couples in Iraq in 2011 amounted to (61.8%) of the total population of (15) years and over, and the proportion of married females amounted (62.4%) of the total females in the same age. The number of people who have never married amounted to (4) million i.e. an increase by (39.2%) of the total population in age (12) years and over, and the number of males (2.3) million at a rate of (44.3%) of all males of the same age. This means that less than half of the males have never been married (I-WISH Survey/2011).

2. Early marriage and fertility

Perhaps one of the most important factors in high fertility impeding the achievement of demographic transition at a faster pace is the early marriage of females. Generally when taking the variable age in the first marriage, especially in rural areas is not only early but also partially contradicting the legal age for

marriage in Iraq, which is set by the law of personal status at 18 years (for males and females) in general, the age of marriage for both sexes and in both environments ultimately responds to the requirements of economic and social surroundings. All the international conventions such as the Universal Declaration of Human Rights and the Convention on the Elimination of All Forms of Discrimination against Women and the Convention on the Rights of the Child called for the protection of children of both sexes from marriage given its disastrous effects. The age (18) years are the legal age of marriage in Iraq, but it is allowed to younger persons to marry with the consent of guardian. This is despite the adverse effects of early marriage on women and family; Girls at an early age might not have the right opinion in order to decide to marry, and cannot bear the burdens of family and procreation, especially as customs and traditions demand childbearing upon marriage which poses risks to both mother and baby.

Average age at first marriage and the start of reproductive life

Iraq is characterized by the prevalence of relatively early marriage. However, the situation is different between the rural and urban areas as early marriage is more common in rural areas. This happens for many reasons such as less marriage costs and it also often occurs among relatives (cousins). Also, women in rural areas generally do not continue their studies like in the city. On the whole, these reasons contribute to increasing rates of fertility among the rural population.

The results of the Multiple Indicator Cluster Survey for 2006 indicate that 5.4% of women of reproductive age were married before the age of 15 while about 23% of them married before the age of 18, and this percentage goes above this level among women older and less educated in the governorates of Muthanna and Dahuk in particular⁵⁴. The finding also indicated that one-fifth (19%) of girls in the age group 15-19 were married, and this percentage is almost the same in urban and rural areas, and it drops to 10% in the governorates of the Kurdistan region, compared with 21% in central and southern governorates where the highest being 32% in Najaf and 31% in ThiQar⁵⁵. The results of Multiple Indicator Cluster Survey IV of 2011 (initial report) showed that the marriage rate for girls less than 15 years is (5.7) in Iraq and about (5.5) in the Kurdistan region. The percentage of girls between (15-19) years of age currently married is (18.7) for Iraq and (9.1) in the Kurdistan region.

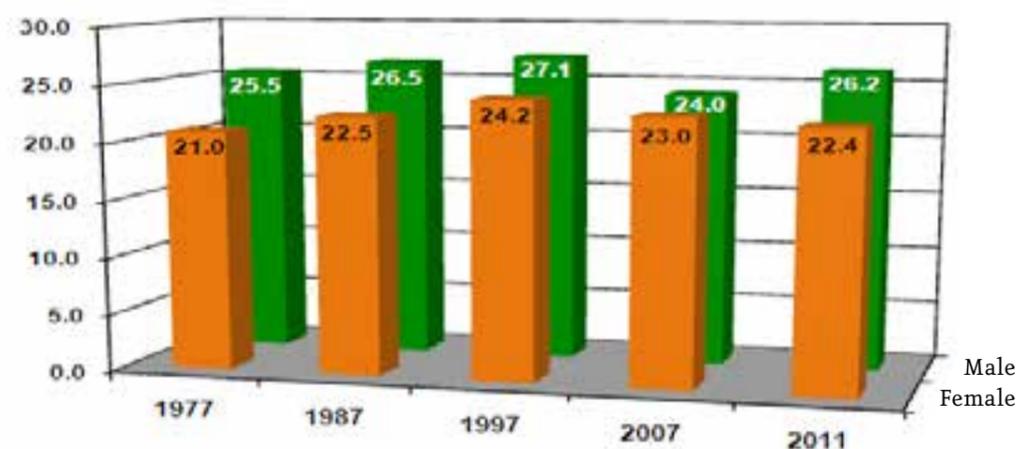
The results of the recent survey (I-WISH/ 2011) confirm this trend, noting that of three women out of ten interviewed, ranging from 15-49 years of age are married

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Central organization for statistics and IT and Kurdistan statistics board, MICS in Iraq, annex 1, final report, October 2007, p163.
Central organization for statistics and IT and Kurdistan statistics board, MICS in Iraq, annex 1, final report, October 2007, p163.

women or have been married. They started their reproductive lives and married for the first time before the age of eighteen. It also reinforced the fact that females in general in Iraq, on average, are marry at the age 22, and that this average increases in the Kurdistan region to about 26 years. In general, these indicators reflect on the tendency of having a slow change in the patterns of social behaviors and consequently on their demographic impact.

Figure 5: Average marriage age for both males and females



SOURCE: CENTRAL STATISTICAL ORGANIZATION, IRAQ SOCIO-ECONOMIC SURVEY 2007, AND THE IRAQI WOMEN INTEGRATED SOCIAL AND HEALTH SURVEY 2011.

Table 3: Percentage of early marriage among females

Indicators	Rest of governorates	Kurdistan region	Iraq
Percentage of married females before the age of 15	5.0	4.5	4.9
Percentage of married females before the age of 18	22.1	19.2	21.7

SOURCE: IRAQI WOMEN INTEGRATED SOCIAL AND HEALTH SURVEY (I-WISH) 2011.

3. The effect of rural and urban residence on fertility

According to surveys results, fertility rates in Iraq are still high compared to the global average (2.6), amounting to (4.6) births in 2011 (4.3 births in urban areas), and to up to (5.3) births. There are also local variations in fertility, whereby the rates are lower in the governorate centers than in other urban areas (3.8) versus (4.2). Levels of fertility also vary among governorates, where the highest levels are in the governorates of Maysan and Nineveh (5.4) and lowest in the governorates of Sulaymaniyah and Kirkuk (2.9 and 3.3 respectively). Other governorates such as Diyala, Anbar, Baghdad, Babil and Erbil recorded fertility levels lower than the national level, while others recorded fertility levels higher than the national level such as Dahuk, Salahuddin, Karbala, Wasit, Qadisiyah, Najaf, ThiQar, Muthanna and Basra.

These indicators give a clear indication of the disparity in the level of fertility between urban and rural areas, where the increase in latter is due to considerations relating to the social values, traditions and customs. In the rural areas marriage takes place at an early age, particularly for females. In spite of the reasons given above for the high rates of fertility and birth, there is another important reason that is polygamy in the countryside. Polygamy is acceptable and common since men in rural areas prefer to marry more than one wife even if the women they want to marry for the second time had been married previously, (which leaves no room for the remaining of widows and divorced women without marriage for a long time). The desire for polygamy and early marriage are driven by the motive of having a lot of children because they are the future workforce to help parents in agricultural work, which often require hard efforts and hard work. In addition, more children are considered a source of security and protection for parents and strengthen the prestige of the family and clan; as such they constitute a financial and moral gain for the rural family. However, the case is different in urban areas where marriage is postponed for a desire to continue education or due to the high cost of living in general.

The results of I-WISH Survey- 2011 indicated that 14.3% of all girls in the age (15-19 years) have begun their reproductive lives already as they are either mothers or pregnant for the first time, and this percentage in rural areas (15.3%) is higher than in urban areas (13.9%), and in the rest of the governorates (15.8%) significantly higher than those in the Kurdistan region (5.9%).

4. Knowledge of reproductive health issues

What draws attention when exploring the theme of motherhood and reproductive health is a cultural context in which practices and rituals inherited from older generation still prevail and are still deeply rooted within the social fabric of Iraq. It is the knowledge passed down to the generations since long times and it is carefully preserved even after the developments in medicine and the opening of the modern health institution that entrusted its supervision to midwives and to a lesser extent to previous mothers with expertise and experience. Such traditions have become an integral part of social relationships and belief system. I-WISH Survey/2011 results showed that more than half of the girls in the sample (54.3%) have knowledge of signs of puberty in females, but this percentage is slightly less in Kurdistan (52.4%) from the rest of the governorates of Iraq (54.6%). The main source for this information is home, followed by friends and school with a wide margin. About fifth of the girls indicated that they have knowledge of signs of puberty in males, and the source of this information was mainly from home and was followed by school. It was noted that the importance of school increases as a source of knowledge for signs puberty in males for females. As for the menstrual cycle and how girls should deal with it, 52.3% of girls indicated their knowledge of this matter, and the main source of information was home. In general, home was the main source of knowledge on reproductive health of girls, but low level of this knowledge was noted in general, especially among males.

5. Pedagogic behaviors and reproductive health

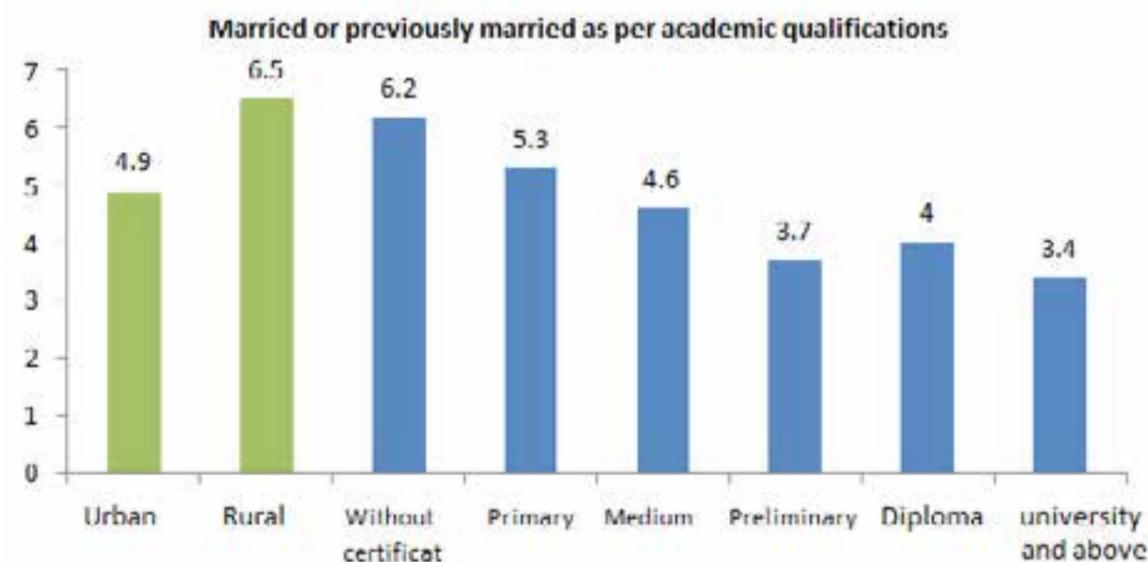
Pedagogic behaviors represent an important element in the upbringing of girls and preparing them to enter the reproductive stage of life in a healthy and sound manner. The results of I-WISH Survey 2011 indicate that Iraqi girls generally did not feel equal with their male peers as the percentage of girls who felt they were always equal with their brothers in the family was 51.0% and ratio in the Kurdistan region was (62.7%) higher than the rest of Iraq's governorates (49.2%). This also applied to the dealing of both fathers and mothers with their children, where there were 30.6% of girls who felt that their mothers always or sometimes differed in the treatment of boys and girls in terms of privileges, while 29.8% felt that about their father. With regard to reproductive health issues, half the girls of 10-14 years stated that their mothers had already talked with them about their puberty, that percentage is lower in the Kurdistan region and was about (38.0%) compared with the rest of the governorates of Iraq which amounts to (51.8%).

6. Effect of education on fertility

The impact of education on fertility rates is reflected in two aspects; first one is the desire to complete the studies, which requires the individual to postpone marriage in order to achieve the desired academic qualifications. On the other hand, the educated are more calculating than non-educated, in other words, they better understand the consequences of a higher number of children to the extent that is not commensurate with their monthly income.

Fertility has an inverse relationship with education, where the rate drops from 4.8 among women with no education or who received only primary school certificate to 3.5 among women who received the medium certificate at least⁵⁶. High levels of fertility and birth rate (31 births per thousand inhabitants in 2006) resulted in large Iraqi families with an average size of 6.9 people⁵⁷. I-WISH Survey 2011 notes that 13.2% of respondents were pregnant at the time of the survey and the ratio rose gradually with age. The average number of live births to women in the age group (45-49 years) as a measure of completed fertility was about (5) births. It was observed that rural women on average gave birth to two children more than their counterparts in urban areas, and women without any degree gave birth to 3 more children than those who had a university degree or higher education.

Figure 6: Average number of live births for women of age group (45-49) years



SOURCE: I-WISH SURVEY 2011, FIGURE 4-2

⁵⁶ Central organization for statistics and IT and Kurdistan statistics board, MICS in Iraq, annex 1, final report, October 2007, p10-11.
⁵⁷ Social and economic survey of Iraqi family 2007, table 1-6, p59.

7. Family planning

The idea of population control is historical idea adopted by people in order to make a balance between their numbers and the wealth of natural resources that surround them. Iraqi families utilize some of the tools that reduce number of children. Women may resort to prolong the period of breast feeding for the purpose of spacing pregnancies, and in specific cases resort to induced abortion when necessary. However, the Iraqi families do not resort to the contemporary birth control methods, in a way that those are utilized in many other countries. The use of family planning is important for couples to achieve their reproductive desires in terms of preventing the occurrence of early or late pregnancy, to influence the interval between births or to limit the number of children if they so wish. The Program of Action of the Cairo Conference 1994 and subsequent revisions acknowledged the importance of meeting the need of married couples for family planning and the importance of providing a full option of family planning methods for achieving desired fertility by couples and in meeting their reproductive rights. As such it indicated that governmental goals related to family planning must be determined in accordance with the needs of the unmet information and services on family planning. The conference further concluded that, all countries should estimate unmet national needs for quality services in family planning and take steps to meet them as soon as possible through decreasing them to half by 2005. This could be done by means of providing information and service for all couples to prevent early or late pregnancies or repeated pregnancies within very short intervals. Regardless of individual cases the overall goal of specifying the unmet need for family planning is to allow married women who do not use any birth control methods to avoid pregnancy or postpone the arrival of a new baby.

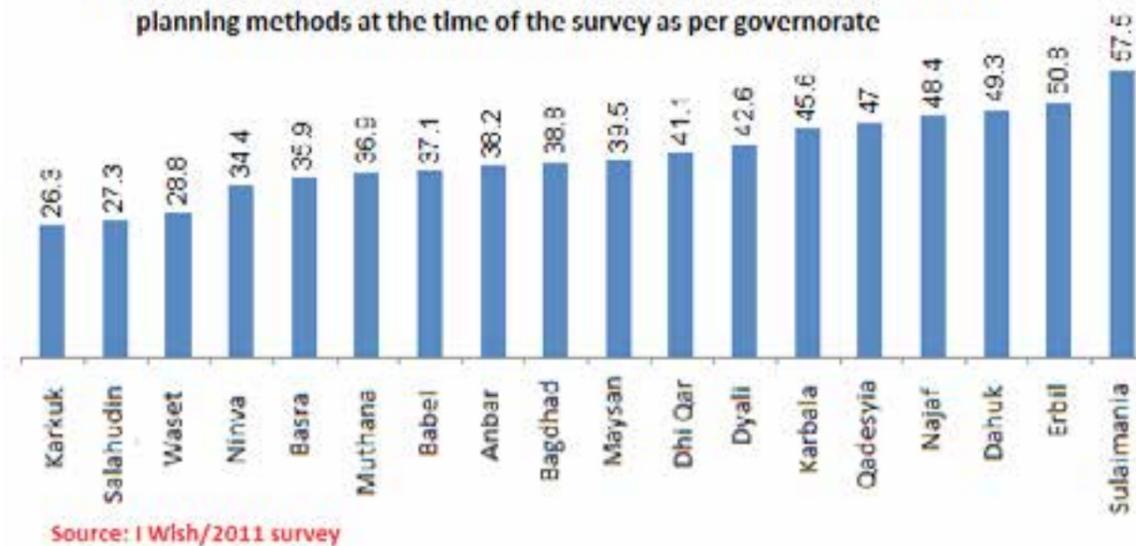
Available data on the unmet need for family planning in Iraq for the year 2006 indicate that it amounted to 11% of married women of reproductive age (12% in rural areas compared to 10% in urban areas). This is close to the level in Jordan, for example, but it is expected to rise with the increasing trend toward small family and with the rising rates of development in Iraq. Levels of unmet need vary by governorate with the highest recorded in Dohuk (18%), possibly due to the low use of family planning methods if any at all, while the lowest percentage of unmet need is in the governorate of Basra (6%)⁵⁸. It seems that the unmet need is increasing as shown by I-WISH Survey 2011 to 25%. Looking at pregnant women, more than 25% of them did not want the pregnancy, and a few could not determine if they wanted it or not.

⁵⁸ Previous source, p 48-49

8. Use of family planning methods

Despite the absence of a national program for family planning, there is limited use of family planning methods. The results of the third Multiple Indicator Cluster survey in 2006 indicated that half of women in reproductive age and married women (or husbands) use some family planning method. 33% of them use modern methods, especially contraceptive tablets (14.6%), then IUD (12.2%), female sterilization (2.6%), injection (2%) and condoms (1.1%). The traditional means are prevailed by the withdrawal method (7.5%), breastfeeding (7%) and rhythm method (2.1)⁵⁹. The Multiple Indicator Cluster Survey 4 of the 2011 reveals no significant progress in the use of family planning methods as it indicates (51.2%) use of contraception in Iraq and (61.9%) for the Kurdistan region. I-WISH Survey 2011 results also indicate that 40% of married women in the age group (15-49 years) use family planning methods, and 34.6% of them use modern methods. Women's needs of these methods are met by the private sector, as the governmental sector does not provide these tools in spite of its importance in pregnancy spacing and thus in improving maternal health and reducing mortality among women. The results also show that 25% of women want to use means of family planning, but are not able to get them and so they unwillingly get pregnant.

Figure 7: percentage of married women in the age group (15-49) who use family planning methods at the time of the survey as per governorate



The results also showed that almost four out of ten married women in the age (15-49 years) were at the time of the survey using family planning methods and that about three out of four women used modern methods. Tablets came as the most widely used means of (34.6%), followed by IUD (19.2%) followed by the traditional means

⁵⁹ Multiple indicator cluster survey in Iraq 2006, annex 1, final report, October 2007, p 46

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“withdrawal” in third place at (17.3%). Figure (7) shows that the women of Kirkuk are at the last place in using means unlike the case in Sulaimaniya, which reached a maximum usage rate of (57.5%).

Table 4: Family planning and reproduction preferences for women in the age group (15-49) who had been married previously

Reproduction preferences	Rest of governorates	Kurdistan	Iraq
Percentage of married women using any method	37.6	53.2	39.8
Percentage of married women using any modern method	28.4	27.5	28.3
Percentage of married women desiring another child	38.1	33.9	37.5
Percentage of pregnant women desiring pregnancy on time	75.3	63.1	73.9
Average number of children desired	4.2	3.6	4.1
Average number of children desired for a girl	3.6	3.1	3.6

SOURCE: IRAQI WOMEN INTEGRATED SOCIAL AND HEALTH SURVEY (I-WISH) 2011

Rates of using family planning methods by governorate vary. The governorates of Sulaymaniyah (66%) and Erbil (62%) in the Kurdistan region recorded highest rates with preference of IUD to the other means, while the lowest rates were recorded in Qadisiyah (40%) and Dohuk (41%). Rates of contraceptive use go in parallel with educational levels of married women. The most quoted reasons for not using means of family planning among married women, especially young women with a small number of children, is the desire to have more children, health reasons or lack of conviction of the husband⁶⁰. There is a small contribution in the provision of modern methods of family planning by the governmental sector, while the private sector is ranked first (especially the doctor then pharmacy) in contributing more than half of these services. Other sources not including non-governmental organizations (relatives and friends) contribute about a third of services⁶¹. These indicators reflect an important fact that the level of use of family planning methods in Iraq still has a long way to reach the level that helps in reducing fertility to the replacement level or near it.

60 Multiple indicator cluster survey in Iraq 2006, annex 1, final report, October 2007, p 46-48, 139

61 Multiple indicator cluster survey in Iraq 2006, annex 1, final report, October 2007, p137

The theory of demographic transition is based on the historical experience of developed countries during the 19th and 20th century, where these communities gradually shifted from the slow and low population growth rates due to high rates of mortality and reproduction, to low and slow population growth due to lower fertility and reproduction. According to historical evidence, all communities may test the transition process with the presence of differences in the operation speed and sequence for developing countries as the transition process in the case of developed countries went slowly over the past two centuries due to increased food supplies, improved living conditions, housing and access to medical care that are developing steadily. The developing countries needed a few decades to take advantage of medical and technological advances, which came as a result of interaction with the West.

3.1. The demographic transition and its relationship to development

Demographic transition is the transition of fertility and mortality rates from high to low levels due to health, social and economic factors. Demographic transition is associated with a change in the concepts of reproduction, family and interrelations of generations. The shift of societies from traditional life and simple economy to developed ones is also associated with the demographic transition. Demographic transition occurs on four connected stages.

Phase 1: High reproduction and high mortality

This phase is characterized by high rates of births and deaths in the community. Therefore, the natural increase of population is low population leading low growth and slow increase in the number of people. Primitive societies went through this stage when man relied on fishing and nature for living. Human life was greatly affected by natural conditions and the agricultural revolution led to the stabilization of these communities.

Phase 2: Mortality decreases and birth rate remains high

During the industrial revolution in the eighteenth century the world witnessed a remarkable development in industry and the multiplicity and diversity of livelihoods, the means of living and income rates improved significantly. Accordingly, public health and personal hygiene improved leading to lower mortality, while fertility remained high. This resulted in an increase in the rate of natural population growth, leading to a significant and sustained increase in the population. The industrial revolution, development and population growth were also related to migration across the Atlantic Ocean and colonialism in the nineteenth century. The world witnessed a development in foreign trade and population movement across the continents.

Phase 3: Deaths continue to decline and reproductive rate begins to decline

This phase represents the beginning of the human ability to control reproduction through the use of modern contraceptive methods and the high rates of education, especially among women. The introduction of contraceptives and modern technology to family planning led to reducing fertility in European countries. Moreover, modern contraceptive use led to limiting childbearing and spacing between births, which helped a lot in reducing maternal mortality and child mortality. This led to a decline in population growth rates in all developed societies and in many communities that are in the process of progress.

Phase 4: Rates of fertility and mortality continue to decline to the lowest level

This is the stage of completion of demographic transition. At this stage, the fertility rate drops to or below replacement and mortality declines to its lowest level. Therefore, population growth drops to its lowest level leading to reduction in the number of the population. All the developed countries and many developing countries have achieved this stage. The demographic transition in Europe took 150 years, while less than half a century in some countries such as South Korea and Taiwan.

Stages of demographic transition in Iraq

Iraq has achieved three stages so far:

First: Phase of slow growth

It is a stage close to Malthusian description, which Iraq went through during the nineteenth century, and was characterized by calamities, disasters and epidemics. Bubonic plague continued to burst in each decade until the fifties of the nineteenth century in Iraq. In Baghdad in 1831, about 7,000 people died in two weeks and the plague helped to end the rule of the Mamluks. Before that, the Asian cholera hit Iraq in 1821, and killed about 20,000 people in Baghdad in 1832, followed by four other waves during the fifties of the nineteenth century. Iraq also suffered from mass famine in the years 1801, 1827 and 1831⁶². The population remained low in the early twentieth century, then the gap widened between the number of births and deaths in preparation for Phase 2. It is clear that the average rate of population growth during that period did not exceed (1.5%), indicating low population growth rate in Iraq. It took approximately (45) years to double the population, which reflected the deteriorating economic and social conditions.

Second: Phase of rapid population growth

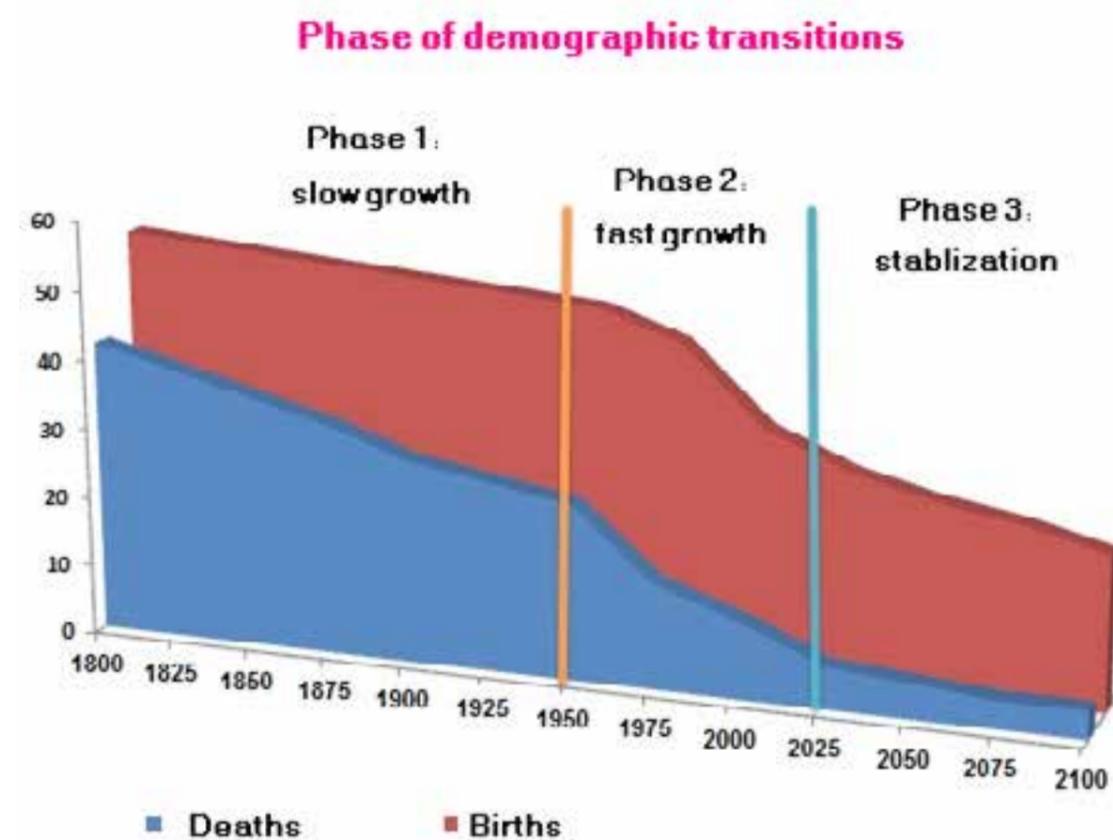
This phase starts from 1947 until the present time. In this period, size of the population in Iraq increased from the 4.816 million people in 1947 to 6.299 million people in 1957. The rate of annual increase was high compared to some other developing countries. Then the volume of the population amounted to (8.047) million in 1965 with an average annual increase of (3.1%). In 1977 the volume of the population amounted (12.0) million with an annual increase of (3.3%) and the volume of population was (16.335) million people in 1987 and an average annual increase was (3.1%). This means that the increase in the size of the population in Iraq was almost five times more than that of the period (1947-1987). This resembles the pattern of population explosion after World War II, as is the case in most developing countries where mortality rate declined significantly, while reproduction rates remained high with recorded slight drop.

⁶² ThoryaFarouqi et al, economic and social history of the Ottomans, p528-530.

Third: Phase of population stabilization

Despite the marked decline in the fertility rate and birth rate, population growth continued to mount and will, according to UN estimates, amount to (48.9) million in 2025. Furthermore, the growth rate is expected be ranging between (1.3 to 7.2%) for the period 2010-2025⁶³. The continuation of population growth rate at this pace, and the existence of values and social norms that push in this direction, will be the factors of a likely doubling of population, which may amount to more than eighty million people during the next fifty years. Iraq will not enter in population stabilization unless it follows a population policy that aims to reduce the size of the population and that is supported by social awareness of the consequences of population pressure in this century. Figure (8) describes the stages of demographic transition in Iraq and the likely scenario until the year 2100.

Figure (8) describes the stages of demographic transition in Iraq 1800-2100



⁶³ Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2010 Revision, http://esa.un.org/unpd/wpp/unpp/panel_indicators.htm

It is noted that despite the volatility of growth rates, the absolute increase in the size of the population took a consistent and upward trend. The rate of population growth reached its highest in the seventies, but declined due to Iran-Iraq war. The confluence of two curves expresses that the rate of population growth reached stability point, after which it will gear towards stability and then decline i.e. the decline of the rate of population growth with the continued increase in the absolute size of the population. It seems that Iraq has been a little late to enter into a population stabilization phase compared with other Arab countries, and the Iraqi society took a gradual inconsistent demographic shift as an effect of several factors. In this regard, it can be claimed that there are some factors that accelerated, while others held back population growth and affected the population dynamics. Improvement was made in population health, especially in urban areas. Here the state- supported with the availability of oil resources- improved the means of health care and comprehensive health system for the various regions of country. In addition it facilitated public access to free health services that positively impacted the natural dynamics of the population and the rate of natural increase. The most important factor that has slowed population growth has been security and stability, social and political unrest, and periods of conflict. Iraq's population shift was delayed for about a quarter of a century of what happened in Syria, and about half a century compared to that of Egypt and the Maghreb countries. It should be noted that Tunisia is the first Arab country to undergo a demographic shift. This shift has been accompanied by a significant change in the population pyramid as seen by comparing the population pyramid in 2010 with the one of 1980.

3.2 The demographic window

The attention of researchers since the eighteenth century focused on studying the impact of population growth on the economic growth. Despite the pessimistic start of these studies since Robert Malthus published his theory of population growth and its association with economic resources, the growth experiences in a number of world regions, especially in the last quarter of the last century, shifted focus towards the impact of the change in age structure resulting from population growth and its impact on economic growth. Historical experience of many communities proved that the change in population age structure is the most influencing change- resulting from demographic transition- on economic growth. This is due to variation in the economic behavior of groups of younger age, working age and the elderly population. Younger age group is outside the labor force and is considered a

consuming group, and fulfilling their consumption requirements needs allocation of significant investments in social sectors such as education and health. In this sense, it is very close to the category of older people that are consuming and depleting of previous savings, and need the community to allocate more investment in the health sector, hence the impact would be a disincentive to growth in the short and medium term. In contrast to these two age groups, the category of the population of working age play a positive role in supporting economic growth through their contribution to economic activity and increase in income, accumulation of wealth, and national savings.

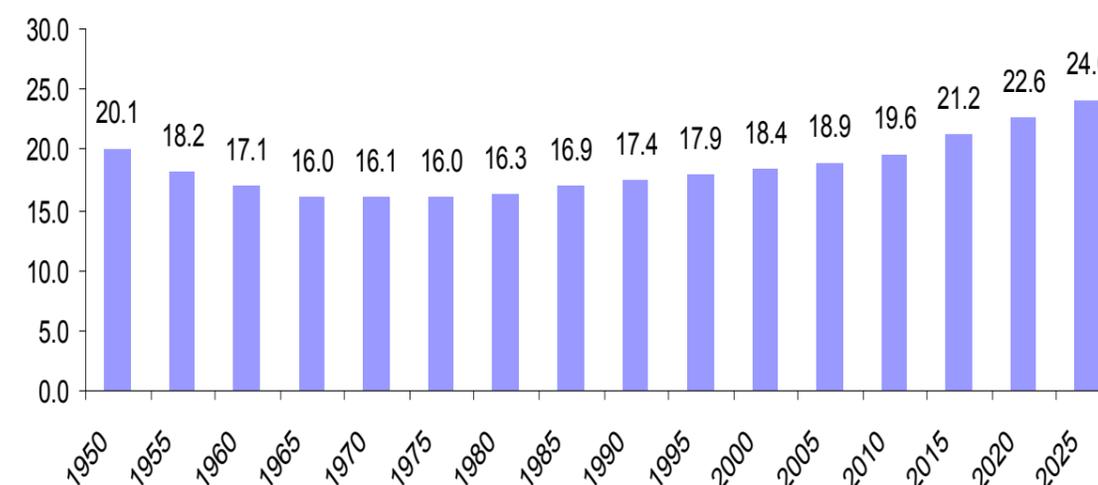
Iraq is undergoing a demographic shift in terms of decreasing population growth rates, but the momentum of the increase (derived from previous years) if population growth was high, will continue to play an important role in bringing about the expected population increase. The annual growth rate in population of (3.3%) between 1965 and 1977 then dropped to (3.1%) between the censuses of 1987 and of 1997⁶⁴, and is expected to fall to (1.1%) between 2045-2050, but will remain among the top four rates of Somalia, Palestine and Yemen, and is equivalent to three times the rate achieved in developing countries⁶⁵.

The relationship between population and development indicates that population growth may be a catalyst for economic and social growth when associated with changes in the qualitative composition of the population, particularly for economically active population. The median age is one of the indicators that show changing age structure of population as it measures age in which the population is divided into two age groups. The first is younger than the median age and the second is older than it. The society that has an age median less than 20 years is considered a young society, while a society with age median between (20-29 years old) is considered a medium age society, and if the median was 30 years or more, the society is considered an old society. Available estimates indicate that the age median of Iraqi society makes the society young one until 2010, to become a medium aged society after the year 2015 due to the increased number of youth population.

⁶⁴ Calculated based on data extracted from censuses

⁶⁵ Barry Mirkin, population levels and trends and policies in the Arab world: challenges and available potentials, a series of research papers for the human development report, UNDP, 2010, p33

Figure 9: Median age in Iraq 1950-2025



The dynamic of changing demographics arise with low fertility rates which lead to a transformation of society with vast dependants of children and young people to a community where the population of working age (15-65 years old) is a greater proportion. This means that the rate of population growth in the economically active category will be higher than dependant groups and this is termed as “demographic window”. It constitutes a development opportunity appearing in societies characterized by a wide based population pyramid and opens the way for the process of demographic transition. So it is an opportunity offered by the process of changing age structure of population. It is just a possibility and not the inevitable result of these changes and therefore a blessing if they have been dealt with positively by building human capacity and investing in the development process⁶⁶.

The change in population age structure

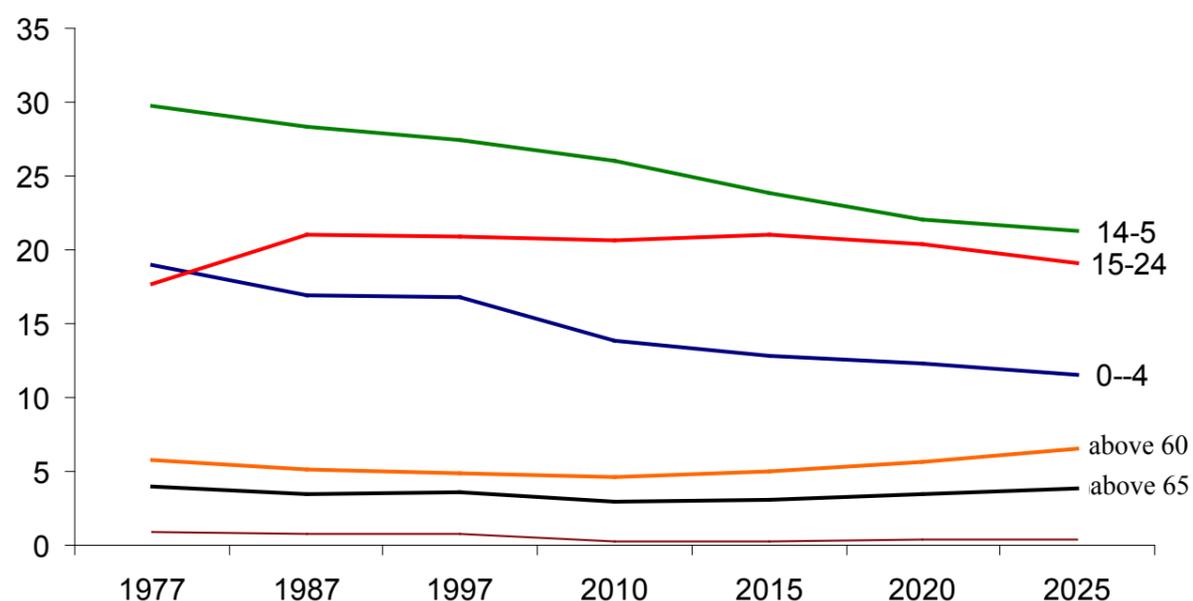
The changes that occur in the age composition of the population are most important demographic developments that accompany the stages of demographic transition. Change occurs in the population age structure as a result of the demographic transition in fertility and mortality, as well as a result of selective migration of the age groups 20 to 40. Age is considered a temporal measure of human life, where birth is the starting point and death is the end point. The form of this measure appears in the population pyramid, which reflects the age groups of the population by gender (male-female). The population pyramid in its real-time image

⁶⁶ National committee for population policies, the status of Iraq population 2010, UNFPA- Iraq's office, Baghdad, February 2011, p 27.

is considered a constant cross-sectional picture that explains and summarizes the population and demographic changes in the past. The form of the population pyramid reflects a lot of situations and social relations and the changes that occur. In order to understand and know the consequences, the population pyramid can be converted into a motion picture that reflects the past, present and future. Despite the likelihood of raised life expectancy of the population in the future, the projected trends for the age composition of the population show an increased proportion of youth until 2020, that will then begin to gradually decline due to the decline of young groups, while there will be increase in old groups.

and some studies expect that the number of young people in the age group (15-24 years old) will amount to 8.6 million in 2025⁶⁷. So Iraq's young people will play a vital role in social, political, economic and cultural life in the foreseeable future. As a result of the decline in fertility rates, there has been a shift in the age and quality pyramid of the population, as the proportion of young people declined between 1977 and 1997 by 4.3% for the younger two age groups. The youth of two higher categories (15-19 and 20-24) increased by 3.2%. The proportion of older persons, the proportion of those aged 65 years and over has decreased by 0.4% as a direct result of the decline in life expectancy.

Figure 10: Distribution of population by broad age groups

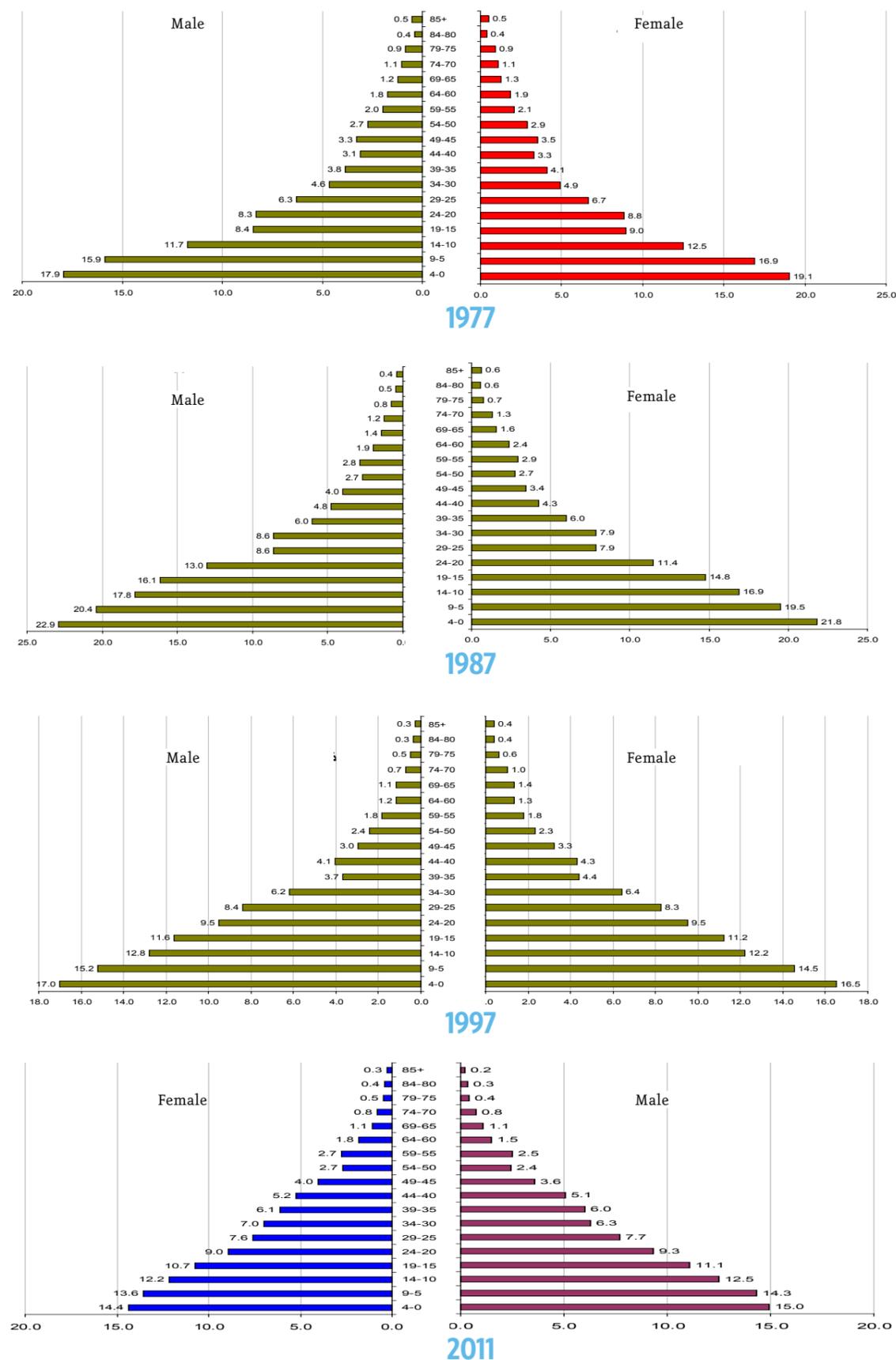


UNITED NATIONS, DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS, POPULATION DIVISION, *WORLD POPULATION PROSPECTS: THE 2006 REVISION VOLUME I: COMPREHENSIVE TABLES*, NEW YORK, 2007, P. 276

Along with the accelerated decrease in infant mortality rate since the seventies with the continued high rates of fertility, the base of the population pyramid began to widen, increasing the proportion of children and then the younger group (15-24 years). The percentage of age group (15-29) in Iraq is 28%, according to estimates in 2006, and this means that there are eight million young people, which is equivalent to all the people of Iraq in 1965. It can be expected that the number of young people in Iraq will increase over the next two decades in the light of the high fertility rate,

⁶⁷ Raji Assad and FarazanaRodiFahimi, Youth in middle east and north Africa: opportunity or challenge, brief 13, p2. www.prb.org

Figure 11: Population pyramid for 1977, 1987, 1997, and 2011



3.2.1 Young people

Associated with the shift in population age structure is the emergence of the age groups 15-29 in the population pyramid as a result of low fertility which is known as demographic window that sometimes occurs when fertility drops close to replacement rate. This phenomenon represents an opportunity to take advantage of directing resources to build capacity of young people and exploit their potential in development. The rapid increase in population of working-age is often associated with the increase of production capacity. It can enhance gross domestic product (GDP) and economic growth presuming right policies in the field of social development are in place. The proportion of young people aged 10-14 is high compared with the two higher groups, this means that most young people are at the stage of adolescence. This group requires the state and society to provide programs and specific projects to prepare them in terms of health, education and psychology. They should also provide them with life skills which are necessary increasing the capacity of young people and enabling them to contribute to the development process. While we find that the needs of the higher age groups (15-19 and 20-24 years) are different because they are on threshold of a new phase that requires a choice between work and the completion of the study and family formation.

Options for handling the demographic window

The existence of such a large proportion of young people in Iraq (demographic window) means that the country is on the verge of opening its population window, which leaves two development options for the country:

- The first option: dealing negatively with this demographic window and continuing to waste it.
- The second option: dealing positively with this demographic window by investing more in this category of youth in terms of education, training and health.

Experience in Iraq, which adopted the first option proved that it is an easy way for wasting human and losing development, while other countries that adopted the second option, launching development simultaneously with Iraq, has excelled proving that investing in youth is in essence an investment in a better development and more capable to advance.

SOURCE: DATA FROM CENSUSES OF 1977, 1987, 1997, DATABASE OF IRAQ KNOWLEDGE NETWORK 2011

The low rate of dependency enables societies to achieve better social and economic results due to low burden on the resources, and enables a larger proportion of the population to contribute to the savings and investment produced. So the adoption of appropriate population policy targeting the activation of the role of youth can strengthen this trend and enhance demographic returns through policies and programs aimed at increasing the number of young producers in the economy. The demographic window is not limited to the role of population in the labor force as it involves supportive mechanisms of economic growth. They come mainly from the decrease in the number of dependents in the community and impact on increasing income and lowering consumption needs (for education and health in particular) which works on raising the inclination to save. Individuals in the age group (40-65 years old) tend to save a larger proportion of their income in preparation for the retirement stage, which contributes to the economy savings and enhances its ability to finance further investment.

The demographic window cannot show the positive impact in development unless a relevant policy is followed that achieves the integration between the supply side represented in the open window and between the demand side that is supposed to be represented by the markets vitality and equitable distribution of opportunities and human capacity building. It can be most futile when reaching the age to work and when the proportion of population who are outside the labor force shrinks as compared to the population in the labor force, it becomes possible to increase productivity and increase the size of income. This is what we call in the demographic literature “the demographic window”, which will be followed by lower rates of fertility after 15-25 years. The age of the population starts rising and dependency ratio rises as well. Therefore, some experts indicate that the length of time that extends between 30-40 years is characterized by a high proportion of working-age population that is a demographic opportunity for economic growth even with it being conditional on the response of social and economic policies in the country⁶⁸. Expectations indicate its prospects for in about 2050 according to the assumptions of medium scenario of population growth. In fact, it can be delayed beyond that date in accordance with the high population growth scenario and in case of the low growth scenario it expires in about 2040. In latter case dependency ratios start to rise again when the age groups that formed the manpower move after becoming outside the labor force without replacements with equal number. This leads to economic and social outcomes experienced by elderly communities in terms of pressure health insurance and health services systems and shrinking proportion of the population in the age of work. This highlights the importance of knowing the timing of the opening of this window and dealing with it positively

68 Previous source, p3

through intervening developmental population policies in the light of a future vision of the prospects for the complementary relationship between population and development⁶⁹.

Table 5: population growth, fertility and life expectancy in Iraq 1995-2025 (Medium scenario)

Years	Population growth	Fertility	Life expectancy on birth		
			Total	Male	Female
1990-1995	3.1	5.8	70.3	67.6	73.2
1995-2000	3.2	5.4	71	68.3	73.7
2000-2005	2.7	5.1	70.1	67.6	72.6
2005-2010	2.9	4.9	67.3	63.4	71.7
2010-2015	3.1	4.5	70.2	67.6	72.6
2015-2020	2.9	4.2	71	68.4	73.4
2015-2020	2.7	3.9	72	69.4	74.4

SOURCE: POPULATION DIVISION OF THE DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS OF THE UNITED NATIONS SECRETARIAT, WORLD POPULATION PROSPECTS: THE 2010 REVISION, [HTTP://ESA.UN.ORG/UNPD/WPP/UNPP/PANEL_INDICATORS.HTM](http://esa.un.org/unpd/wpp/unpp/panel_indicators.htm)

The fact that Iraq is on the verge of a demographic window means that there is an increase in young people of working age, which means it should become a priority to take advantage of them. This should be done through the formulation of development strategy for the preparation of the human capital in terms of knowledge, information and skills. The strategy should expand the participation of young people at work, increase productivity, and achieve real cuts in the rates of economic dependency, because not benefiting from this demographic window would be a waste.

Number of determinants for this window includes:

- High fertility rates in the countryside.
- Low contribution of economically active women or what is known as “women’s loss” in paid work outside home.

69 National committee for population policies, the status of Iraq population 2010, UNFPA- Iraq’s office, Baghdad, February 2011, p 28.

3.3 Scenarios of demographic situation in the future

Population projections are a number of accounts aimed at exploring the evolution of the total population in the future based on a set of assumptions about the factors governing this development, namely: fertility, mortality, and migration. Usually the population projections are built on the belief that the population is a key variable in development when developing plans, programs and policies. In turn it forms the starting point towards achieving the economic, social and political goals in a manner which leads to investment of human and material resources currently available and those available in the future. So the population projections are an important element in the preparation of development plans by identifying the future needs of educational opportunities for all levels and the size of the workforce which will enter the labor market.

Factors affecting the future growth

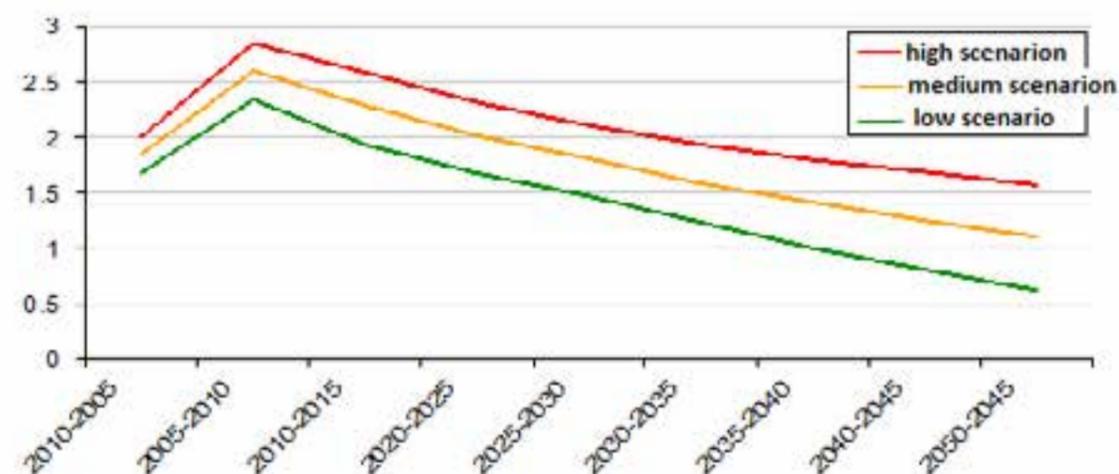
Specialists in population studies divide factors affecting the growth of population into two groups: the first is linked to natural growth resulting from the increase derived from the births and fewer deaths, while the second set of factors is associated with net migration. According to the scenarios contained in the report of the National Committee for Population Policies, it is expected that the population would amount to 66 million in 2040 according to the low scenario, i.e. the population would double in 2033. The population would reach 71 million people according to the high scenario, meaning that the population would double after 2027⁷⁰. According to UN projections Iraq's population would increase from about 32 million people in 2010 to 43 million people in 2025 despite the tendency of population growth rate to decline to about 2.6% during the first half, and to about 2% during the second half. It is also expected to continue falling beyond that⁷¹. Even so, Iraq will contribute about 10% of the population increase in the Arab world⁷².

⁷⁰ Previous source, p 33.

⁷¹ United Nations, Department of Economic and Social Affairs, Population Division, World Population Prospects: The 2006 Revision Volume I: Comprehensive Tables, New York, 2007, pp. 276.

⁷² Calculated based on the data of the previous source

Figure 12: population growth projections 2005-2050



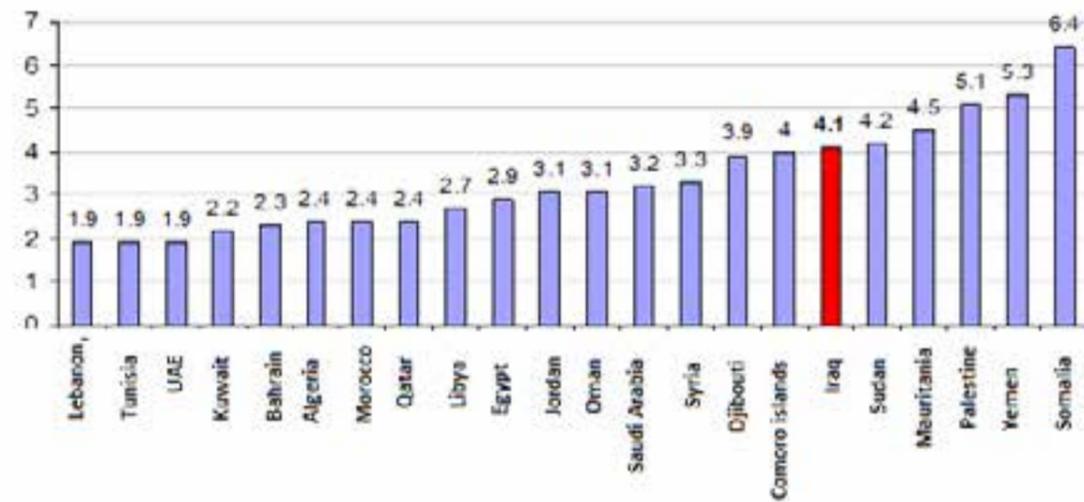
Fertility

Fertility rate is high by global standards and is at estimated 4.1 children per woman in 2010⁷³, noting that recent national surveys estimated it at 4.3 and 4.6 children per woman⁷⁴. It is still high in rural areas compared to urban areas (5.1 children per woman in rural areas compared to 4 children per woman in urban areas). The high fertility rates continued until the early nineties to fall after that during the years of sanctions, despite the relative decline in fertility rates since the middle of last century. However, this rate is still high compared to developing countries and developed countries, and as a result changed the age composition of the population of Iraq. It is still at a slower rate than that of the countries of the region, because of the exceptional circumstances experienced by the country and in particular the Iran-Iraq war. High fertility rates are expected to continue for at least two generations. In addition unfair distribution of population density between different regions, between governorates where the population density is high others with disproportionate number of people with the resources available, Population projections indicate that the proportion of women in fertile age (15-49 years old) will be more than half until 2050.

⁷³ World bank, development indicators

⁷⁴ Iraqi Women Integrated Social and Health Survey (I-WISH) 2011 and MICS. 2011.

Figure 13: fertility rate in Arab countries 2010



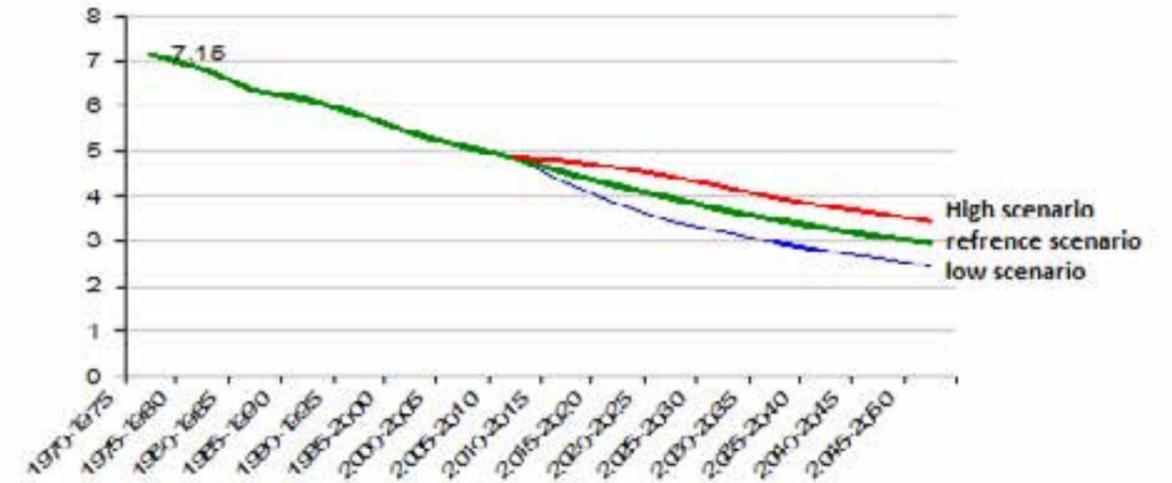
If we adopted the national index 4.6 according to the results of Multiple Indicator Cluster Survey for the year 2011, three Arab countries have fertility rate higher than the total fertility index for Iraq; Palestine, Yemen and Somalia.

Fertility assumptions

That fertility rates set by the United Nations Population Fund stem from the historical paths of population growth in each country during the previous phase (1950-2010). This is related to fertility rate during the period of time attributed to the expected average decline in this rate during the subsequent period. Those expectations are usually compared to recent trends of fertility in each country, and when there are clear differences between them, future scenarios are re-drawn on the basis of a period ranging between 5-10 years on based on more recent data.

Iraq has high fertility among the Arab countries and most developing countries. The fertility rates are expected to decrease in fertility rate to about 4 children per woman in 2025 and to about 3 children per woman in 2050 according to the reference scenario. However, it should be noted that the decrease in fertility rates will be very slow in Iraq compared to other the Arab countries and fertility rates in Iraq will only change after 2050 from its current level. The persistence of high fertility rates and the very slow decline can be explained by the relatively low age of marriage among women and men, early pregnancy, the lack of availability of family planning methods and the continued decline in women's education and their low participation in the labor market.

Figure 14: fertility rate for the period 1970-2050



SOURCE: POPULATION DIVISION OF THE DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS OF THE UNITED NATIONS SECRETARIAT, *WORLD POPULATION PROSPECTS: THE 2010 REVISION*, [HTTP://ESA.UN.ORG/UNPD/WPP/INDEX.HTM](http://esa.un.org/unpd/wpp/index.htm)

Fertility rate affects age structure, because the gains in terms of life expectancy due to reduction in the levels of mortality affect all age groups. Yet they are more important for the lower classes in the population pyramid and women in fertile age, and consequently contribute more young people. While the lower fertility rate curbs the increasing age of the population, achieved reduction in mortality becomes less important in its impact on fertility levels and accelerates access to age pattern appropriate to achieve the decline in fertility rate. Reducing fertility rate is one of the conditions necessary to reduce population growth in the future, and therefore, Iraq has to reduce fertility rate from its current level to the replacement level equivalent to 2.1 of children. The available data indicates that Iraq will only be able to achieve this replacement after 2050 and that because of this disparity in time between the decline in fertility rates and declining the rate of natural growth that generations will contribute to the growth of the population.

International Migration

United Nations estimates of migration are based on the assumption that the normal immigration, which is determined on the basis of the previous estimate of international migration, takes into account the policy of each country for the future of migration flows. Generally it is assumed that the levels of net migration will remain constant throughout most of the scenario years in Iraq without expecting substantial changes in the mobility of the population.

Population and health

The proposed projections indicate improvements in the rate of life expectancy at birth resultant from the expected improvement in health status. It is also expected that the rate would increase from about 67 years in 2010 to 70.2 in 2015 and then later to 72 years in 2025 and lastly to 76.8 in 2050, being up to 79.2 among females compared to 74.3 for males .

Table 6: life expectancy scenarios

Years	Low scenario			Medium scenario			High scenario		
	Total	M	F	Total	M	F	Total	M	F
2005-2010	67.3	63.4	71.7	67.3	63.4	71.7	67.3	63.4	71.7
2010-2015	70.2	67.6	72.6	70.2	67.6	72.6	70.2	67.6	72.6
2015-2020	71	68.4	73.4	71	68.4	73.4	71	68.4	73.4
2020-2025	72	69.4	74.4	72	69.4	74.4	72	69.4	74.4
2025-2030	73.2	70.6	75.6	73.2	70.6	75.6	73.2	70.6	75.6
2030-2035	74.3	71.7	76.7	74.3	71.7	76.7	74.3	71.7	76.7
2035-2040	75.2	72.6	77.6	75.2	72.6	77.6	75.2	72.6	77.6
2040-2045	76	73.5	78.5	76	73.5	78.5	76	73.5	78.5
2045-2050	76.8	74.3	79.2	76.8	74.3	79.2	76.8	74.3	79.2

SOURCE: POPULATION DIVISION OF THE DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS OF THE UNITED NATIONS SECRETARIAT, WORLD POPULATION PROSPECTS: THE 2010 REVISION, [HTTP://ESA.UN.ORG/UNPD/WPP/INDEX.HTM](http://esa.un.org/unpd/wpp/index.htm)

Future age structure of the population

We pointed out that the country's population is closer to the age of youth as population under the age of fifteen make up more than 40% of the population, and youth aged 15-24 years make up about 20% of the population, which means that the majority of the population (about 60%) are under the age of twenty. Given that that 54% of the population in the Arab countries is under the age of 25, and 48% for developing countries, it can be concluded that Iraq is more youthful and is going through a demographic window now. The average age amounts to 18.2 years and is expected to rise slowly to 19 years in 2015 and to 20.8 years in 2025 and to 25.9 years in 2050. This means that the number of children and youth in Iraq will increase in an unprecedented manner to 6.7 million and 9.6 million respectively in 2025, and to 8.9 million and 14.9 million respectively in 2050. This places serious challenges on the government in terms of its ability to provide educational and employment opportunities for large numbers of children and young people, and because of the numbers of young entrants to labor market, unemployment is expected to continue with high rates for the youth category in the future.

As for the working age population (25-59 years) it is also high and will rise in the future, with the rate of 32.5% in 2010 and is expected to reach to 37% in 2025 and to 41.4 in 2025 according to the Reference Scenario.

The expected population increase could be an opportunity for economic growth in case the provision of productive employment opportunities for this large number of people of productive working age. However, this will increase pressure on the labor market more than ever which requires a move towards diversification of the country's economy and sources of income, focusing on productivity trends rather than consumer trends that have characterized previous eras.

The transition from high fertility rates associated with lower mortality rates as a result of the demographic transition will inevitably lead to increasing the proportion of the population older than 65 years from 3.3% in 2010 to 3.5 in 2025 and then to 6.8% in 2050, which is a new phenomenon for the Iraqi community. That means there is a need to adapt health institutions to meet this shift towards the elderly, in accordance with the reference scenario where the elderly would amount to 1.7 million in 2025 and about 5.7 million in 2050. This increase poses new pressures on society to support them as the economic burden will increase from 14.3% in 2025 to 24.1% 2050.

Chapter 4 - Dynamics of Population Mobility

Migration pattern in Iraq

Demographic studies related to the movement of the population talk about two forms: residence migration, and labor migration. Despite the fact that each of them has different results as both are governed by different considerations, they both illustrate the movement of population within the framework of the concept of relocation which can be voluntary or compulsory. The separation between them theoretically happen on the basis that forced relocation forces a lower level of living standards for the immigrant - lower labor wages - while voluntary movement results in improvement in the location and level of living standards of immigrant.

In economic theory, the difference in income levels between different countries is considered a key motive for the flow of migration, a claim supported by historical evidence: the flow of migrations from southern Europe to the United States before World War I; and the flow from India, Pakistan and the West Indies to Britain after World War II. Internal migration is considered on the same basis: Moving between regions is driven by better material gains⁷⁵.

Once again, the historical evidence from the experience of economic development in Western Europe and the United States in the eighteenth and nineteenth centuries and in developing countries after World War II emphasizes strong links between the movement of population from the countryside to the city and the movement of labor from agriculture to industry in particular. Historians cite evidence from the Arab economic history, which emphasizes the relationship between economic growth and migration of communities. The economic shift of "Mecca" from a Bedouin economy into commercial economy and the economic shift of turning the "Medina" from a Bedouin economy into an agricultural economy were accompanied by the concentration of population coming from other parts of the desert. The later development of Arab economy resulted in the emergence of new areas of life - that is the multiplicity of economic activities - in the cities and the emancipation of the peasants from their connection to land, which encouraged the immigration to the cities thus extremely expanding them. For this "Hajaj" the ruler of Iraq (between 696 -714 AD) said about migration that "...it reached an extent that formed a social and economic crisis impacting agriculture in the countryside and agricultural production in general resulting in confusion to city life"⁷⁶. In any case, the subsequent centuries witnessed a boom largely affected by economic activities and urban expansion of cities and increasing population.

⁷⁵ Marshall A., Money, Credit and Commerce, 1923 p. 7-8, Hicks, J.R., The Theory of Wages, 1932, p.76
⁷⁶ Al dori, Abdul Azeez (introduction to the history of Arab economics, Al Taleea press, Beirut, 1984, 940

Movement to the countryside and the settlement of nomads

Estimated population of Iraq in the mid-nineteenth century was about 1.25 million people, including about half million people of nomadic tribes that work in the protection and transport of commercial goods, and there was little more than half a million inhabitants in rural areas (agricultural and pastoralists) who were dependent on land for agriculture or grazing. The rest were people living in cities and towns and working in handicrafts, and domestic and foreign trade and management. At the beginning of the twentieth century the population rose to 2.25 million with only 17% of them living in the desert, and about 59% in rural population, and about 24% in urban population⁷⁷.

In the mid-century this trend escalated as out of the high population size of 6.3 million people, only about 1% was of Bedouin "nomads" population, while the percentage of rural population was 58%, and the percentage of urban population was 41% of the total population of Iraq⁷⁸ as shown in the census in 1957. The pattern of population movement between different areas of Iraq was not universal. The Bedouin population has fallen more clearly in the central region than in the southern and northern regions. In the central region the number of Bedouin dropped from 115 thousand in 1867 to 25 thousand in 1947, and about 17 thousand in 1957. While the number in the southern region dropped from about 260 thousand to 155 thousand between 1876 and 1947, then the number fell to about 10 thousand in 1957. But the number of the Bedouin population in the northern region remained high with slight fluctuations, until 1947, when it amounted to 70 thousand, and then fell to 39 thousand in 1957⁷⁹.

On the other hand the rural population has increased during the same period from about 170 thousand in 1867 to 855 thousand in 1930 in the central region, and from 215 thousand to 872 thousand in the southern region, and 140 thousand to 519 thousand in the northern region. But the relative increase was clearer in the southern region. After 1930, the rural population continued to increase at a time their rate regressed in all parts of the country after the rise in the proportion of urban population⁸⁰.

⁷⁷ Mohamad Salman Hasan, the economic development in Iraq, p51-52.
⁷⁸ Mohamad Salman Hasan, the economic development in Iraq, p55.
⁷⁹ Mohamad Salman Hasan, the economic development in Iraq, p56.
⁸⁰ Mohamad Salman Hasan, the economic development in Iraq, p57.

4.1 Currents of internal migration

The internal migration of the population is an influential factor in population growth, changing their size, and re-distributing them among the various regions. This migration also has important effects on the nature of economic and social activities performed. Modern history of Iraq witnessed internal migration caused by specific circumstances in each governorate over the second half of the twentieth century. The unregulated and unplanned population movement resulted in an evident imbalance in the concentration of population and negative consequences on development. And it will become clear in this chapter that the movement of population in Iraq between the first and last official census (1947 and 1997) showed a two-way flow of internal migrants: the first and the main one was from rural to urban areas, and the second was from the urban to other urban areas.

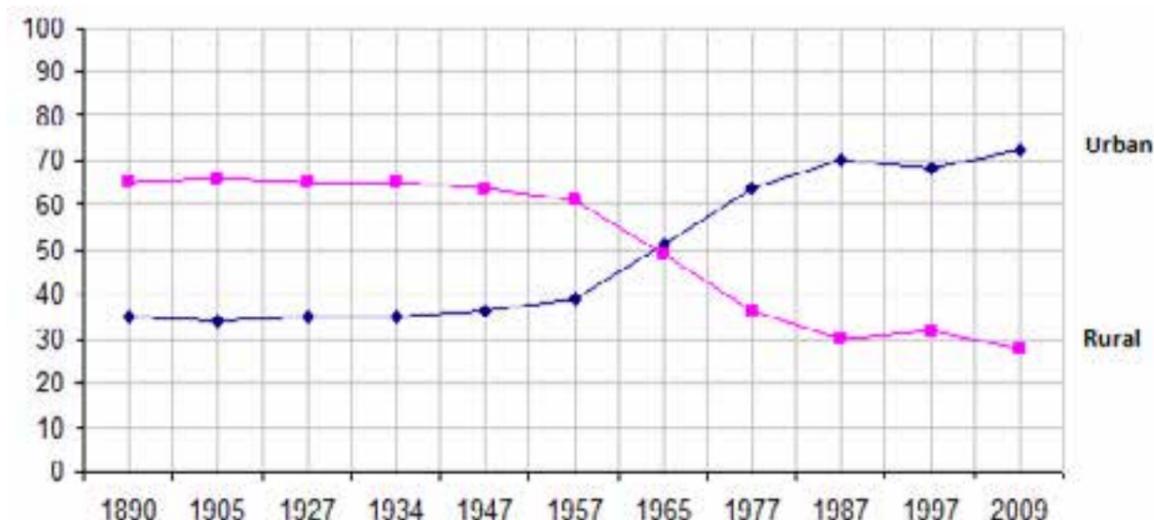
Migration from the countryside to the city

Migration from rural to urban areas is the most important form of internal migration in Iraq, which rose in the second half of the twentieth century. Various economic and social conditions and the variability of distribution of services between the countryside and the city played an important role in the emergence of migration between populations in a pattern similar to many third world countries since the middle of the last century.

Rural migration takes place as a result of the presence of two forces; an expelling force that pushes population, especially people of working age, for the migration towards the city, and a magnet force in the city that attracts them not only for getting jobs but also for reaping the benefits of urbanization and enjoying life's pleasures offered by the city. This pertains especially to the quality of life and living opportunities, as well as access to educational institutions, factories, and government institutions, which are concentrated in urban centers.

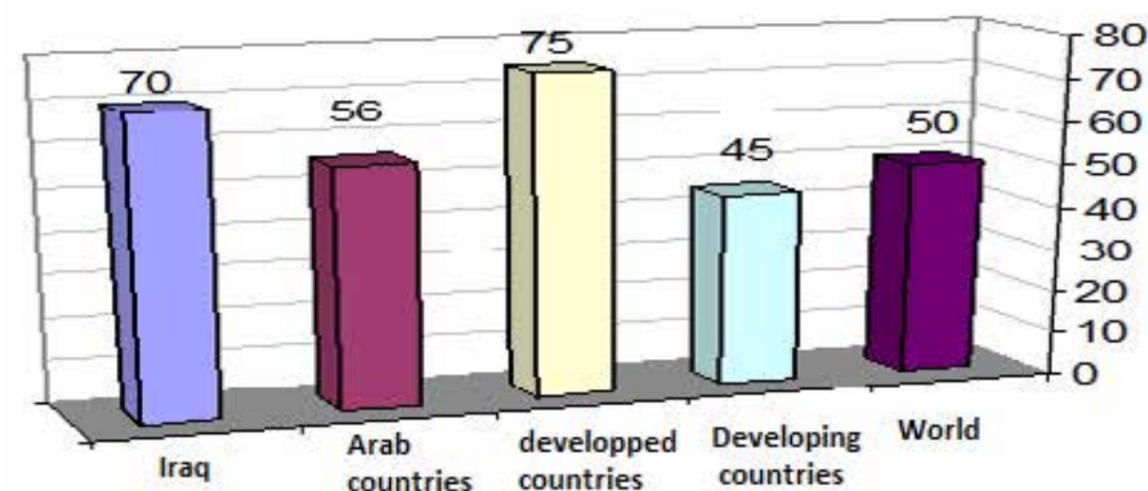
Available statistics indicate that the proportion of urban population to total population has jumped from 36% in 1947 to 64% in 1977 and to 72% in 1997, to decline again in 2009 to about 70%.

Figure 15: the increase of urban population and the decline of rural population in Iraq (%)



This percentage is high compared with other countries as the global average is about 50%, and about 45% for the least developed countries. While in Arab countries, the ratio is 56% according to data of 2009. Noting that the concepts of rural and urban in Iraq involve defining each based on the administrative criterion since an area is classified urban if located within the municipal boundaries.

Figure 16: percentage of urban population in Iraq and the world in 2009



SOURCE: UNFPA STATE OF WORLD POPULATION 2009, P 91

The rural population decreased by more than 1%, which is high compared to rates of migration from the countryside to the city in Arab countries and the world. Rural governorates are constantly experiencing a decline in the rates of population density and the southern and central governorates are the most affected victims of expulsion of the population⁸¹. The increase in the movement of population from the countryside to the cities is not only due to the increase of population in rural areas according to the theory of “surplus agricultural labor”, but also resultant from the weak attention to the countryside by the state; limited arable land, limited economic activity in rural areas, as well as poor yields of agricultural work and this is clearly the advance of the Iraqi economy in modern history when the economy shifted from an agricultural economy to an oil one biased to urban development at the expense of the countryside.

Agriculture used to form a source of livelihood for about 64% of the population of Iraq in the 1940s and 1950s. This percentage has decreased over time and reached its lowest levels in the mid-nineties (28.5%) and then began to rise until it reached 40% upon the census of 1997⁸², because of the conditions of economic sanctions and the changing structure of economic activity. The movement of population to cities was parallel with the decline in the importance of agriculture, and was then accompanied by changes in the geographical distribution of the workforce. This is according to the results of the census in 1977, which showed that the workforce in the countryside ranked second at a rate of 29% of the total labor force following the services. According to the census of 1987, the percentage of the workforce in rural areas was 13% of the total labor force and occupied the third place after the services and industry⁸³, but rose again to 33% in 1997⁸⁴ because the State’s interest in agriculture under the pressure of the need to secure food for the population during the years of economic sanctions (1990-2003).

Agrarian reform and its impact on migration from rural areas

The situation of rural areas in Iraq was degraded, especially with the powerful grip of the state and its ability to impose its authority on all parts of the country since the late Ottoman rule and the formation of the national government in 1922. Writers, despite their different orientations, are almost unanimous that the main reason for the poverty of peasants and the deterioration of their situation is because of the system of land lease, known as “feudalism”, which enabled large number of landowners - many of whom live far from the rural area - to own land which they

81 Ali Hanoush, Iraq: present issues and future options, Dar Al Konoz Al Adabyia, Beirut 2000, p129
 82 Republic of Iraq, Ministry of planning, National development plan 2010-2014, p69.
 83 Ali Hanoush, Iraq: present issues and future options, Dar Al Konoz Al Adabyia, Beirut 2000, p129.
 84 Calculated based on the census of 1997.

had obtained from the state on concessional terms and forced a large number of peasants to work for a small share of the crop close to the subsistence wage. The monarchy began what could be considered large projects to reclaim land and to control the flood waters considered necessary to increase agricultural production and improve the conditions of farmers and improve farming methods. But the results of these projects are variously reflected on the situation of the community in rural areas as landlords piled wealth while peasant’s poverty escalated because of the price hike and other requirements not met by an appropriate increase in farmers’ income⁸⁵.

After the overthrow of the monarchy and the formation of the republican system in 1958, the new political elite found that the mere issuance of the agrarian reform law 30 for year 1958 was a termination of the feudal system. The law aimed at fragmentation of large estates by placing an upper limit of land ownership by 1000acres of irrigated land and 2000acres of rain fed land, and distributing the excess beyond to the peasants, as the government was thereby authorized to acquire and distribute lands governed by this law. Although the next few years witnessed some increase in agricultural production, it did not last long because of continued acquisition of land, inability to improve efficiency and management, as well as the inability of small landowners to cultivate their land on the basis of the new relationship between peasants and landowners. Agricultural policy makers at that time did not realize that improving the conditions of the countryside was not only by the application of the agrarian reform law, but that it extended to making of a radical change in economic and social conditions in the countryside, and providing educational opportunities, improving technical methods of production, and initiation of real development efforts in the countryside. Peasants were unable to repay the annual duties for the land they acquired and their need for capital to invest forced them to leave their land and migrated to the cities, which increased appeal to the population because of the increased demand for workers for new projects. Perhaps one of the most important features of the new deterioration of the country is the import of agricultural crops that were exported in previous years⁸⁶.

Despite the tightening of procedures for the expropriation, the reduction of the upper limit for land ownership increasing of public spending in rural areas and strengthening the cooperative movements in the countryside, the agricultural production could not keep up with the increasing demands resulting from rapid population growth, Migration from rural areas to the city continued despite the actions taken to encourage farmers to stay on their farms. The government’s industrial plans were requiring more workers, and peasants believed that work in

85 MajedKhadouri, Socialist Iraq, p 190.
 86 MajedKhadouri, Socialist Iraq, p 192.

industry brought higher income than work in agriculture, especially when other members of their families are able to earn additional income in the industry⁸⁷.

The census of 1997 revealed the phenomenon of reverse migration of labor, migration from the city to the countryside, due to of the declining growth in non-agricultural economic activities and dependence on imports. This encouraged large numbers of unemployed city workers to work in the countryside and even move to live there. Increased reliance on women in agricultural work was also evident, as their share in agricultural work amounted to more than 50% of the total workers in agriculture in 2000⁸⁸. However, after 2003, it seemed that many aspects changed the phenomenon of immigration to the city because of hardship as a result of erosion or desertification, drought or poverty. According to estimates by the Food and Agriculture Organization, more than 79% of the land resources in Iraq suffer from degradation, which is a repulsive and stimulating environment for Migration⁸⁹.

87 MajedKhadouri, Socialist Iraq, p 199.

88 Republic of Iraq, Ministry of planning, National development plan 2010-2014, p69.

89 Republic of Iraq, Ministry of planning, National development plan 2010-2014, p69.

Table 7: distribution of governorate population as per environment (%)

Governorate	1977		1987		1997		2009	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Nineveh	54.2	45.8	67.6	32.4	61.9	38.1	60.8	39.2
Salah al-Din	43.4	56.6	40.2	59.8	45.0	55.0	44.2	55.8
Kirkuk	70.1	29.9	75.4	24.6	70.5	29.5	71.7	28.3
Diyala	41.2	58.8	46.2	53.8	42.2	57.8	48.9	51.1
Baghdad	91.5	8.5	100.0	0.0	89.4	10.6	87.2	12.8
Anbar	54.9	45.1	57.6	42.4	52.7	47.3	48.4	51.6
Babylon	48.7	51.3	46.5	53.5	47.9	52.1	47.2	52.8
Karbala	63.1	36.9	71.0	29.0	66.0	34.0	66.5	33.5
Najaf	67.8	32.2	72.8	27.2	69.9	30.1	71.1	28.9
Qadisiyah	46.2	53.8	56.4	43.6	52.9	47.1	56.5	43.5
Muthanna	40.7	59.3	49.3	50.7	44.8	55.2	43.7	56.3
ThiQar	39.7	60.3	53.3	46.7	59.1	40.9	62.9	37.1
Wasit	44.2	55.8	52.8	47.2	53.2	46.8	57.9	42.1
Maysan	44.5	55.5	61.6	38.4	66.1	33.9	72.4	27.6
Basra	79.4	20.6	72.3	27.7	79.8	20.2	79.9	20.1
Erbil	53.2	46.8	77.4	22.6	77.4	22.6	83.2	16.8
Dohuk	42.9	57.1	74.6	25.4	74.6	25.4	73.4	15.1
Sulaymaniyah	47.2	52.8	71.5	28.5	71.5	28.5	84.9	28.9
Total	63.7	36.3	70.2	29.8	68.4	31.6	72.4	27.6

SOURCES: CALCULATED BASED ON THE CENSUS OF 1977, 1987, 1997, AND 2009

Variation of urbanization among governorates

The proportion of urban population varies from one governorate to another, so that it can be divided into two groups:

- Rural governorates: The governorate where the proportion of rural population exceeds the urban population includes five governorates: Muthanna, Salaheddin, Babil, Anbar, and Diyala. These governorates accommodate about 43% of the total rural population of the country.
- Urban governorates: The governorates where the proportion of urban population exceeds the rural population, and this group can be divided into four sub-categories:
 - Governorates with very high urbanization where the rate exceeds 80% and these include Baghdad, Sulaymaniyah and Erbil. These accommodate about 40% of the total urban population in the country.
 - Governorates with a high urbanization rate, where the rate of the urban population is between (71-80%) and include: Basra, Dohuk, Maysan, Kirkuk and Najaf. These accommodate about 24% of the total urban population in Iraq.
 - Governorate with moderate urbanization and include Karbala, ThiQar and Nineweh, where the proportion of urban population is between (60-70%). These accommodate about 17% of the total urban population in the country.
 - Governorates with low urbanization that include Wasit and Qadisiyah where the proportion of urban population is 58% and 56% respectively.

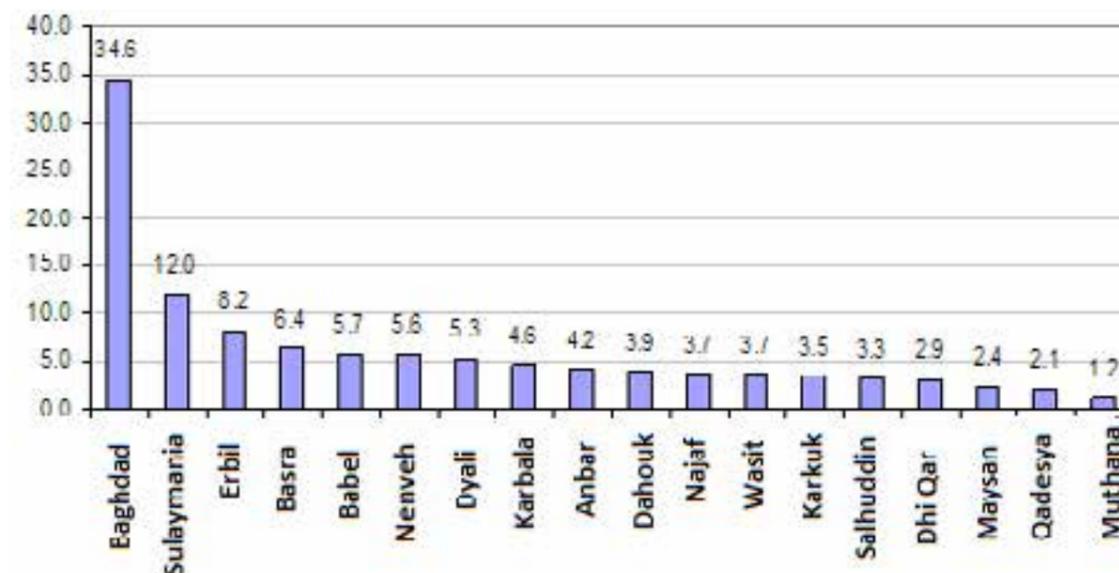
Migration between governorates

The mobility of population led to growth in numbers of the urban population. Between 1914 and 1975 the population of the city of Baghdad increased 25 times and that of Basra 34 times⁹⁰. At the end of the twentieth century major Iraqi cities contained nearly half the population of the country. According to the results of a census in 1957, the 3 governorates of Baghdad, Basra and Kirkuk were the most receiving of migrants. While in 1977, Baghdad and Basra, Kirkuk, Erbil and Sulaymaniyah, received the most of migrants from other governorates⁹¹. In the census of 1987, the four governorates: Baghdad, Sulaimaniyah, Erbil and Basra attracted 61% of immigrants from other governorates.

⁹⁰ Ghassansalameh, society and state in eastern Arab states, edition 2, Arab unity center of studies, Beirut, 1999, p 216.

⁹¹ Mansour Al rawi, studies in population and development in Iraq, p 252.

Figure 17: percentage of population migrating to other governorates in 1987



SOURCE: CENTRAL STATISTICAL ORGANIZATION, 1990, TABLE 2/15, P 74-80

The statistical data shows that the governorate of Baghdad leads among the country's governorates in attracting population as the immigrants' number amounted to 476,282 people constituting 46% of the total volume of migration inflows. This is due to the power of attraction of employment opportunities in all areas as well to the high level of social services and for being the capital. Karbala comes second after Baghdad because of the religious factor of attraction, as the rate of immigration amounted to about 7%, followed by the governorate of Basra as a result of the return of its population after the end of the Iran-Iraq War and the Gulf War in 1991. Then come the governorates of Najaf, Babil and Diyala in fourth, fifth and sixth place at a rate of 5.7% and 5.0.3% and 5.2% respectively. The religious factor plays an important role in the case of Najaf, while Babil's and Diyala's proximity to the capital played an important role in attracting people.

Regarding the net migration, in nine out of fifteen governorates the net migration was negative because of migration the population (the number of entrants is less than those leaving), while six governorates were receiving more immigrants (net migration positive): Baghdad, Karbala, Kirkuk, Salah al-Din, Najaf and Babil. The governorates where emigration was prevalent include Maysan, ThiQar, Qadisiyah, Wasit, Nineweh, Diyala, Anbar, Muthanna and Basra. The reason for the migration of population of those governorates can be ascribed to the severity of the push factors, including economic and social, or because of exceptional circumstances, represented by the war and other factors.

Table 8: distribution of in and out migration in Iraqi governorates in 1997

Governorate	Incoming		Outgoing	
	People	%	People	%
Nineveh	22503	1.5	62001	4.0
Kirkuk	71647	4.6	38712	2.5
Diyala	82111	5.3	117615	7.6
Anbar	47471	3.1	57694	3.7
Baghdad	718208	46.3	241926	15.6
Babylon	83379	5.4	78345	5.1
Karbala	113761	7.3	30952	2.0
Wasit	59473	3.8	117061	7.6
Salah al-Din	65504	4.2	35701	2.3
Najaf	88413	5.7	66021	4.3
Qadisiyah	39742	2.6	104802	6.8
Muthanna	18853	1.2	27245	1.8
DhiQar	20430	1.3	181009	11.7
Maysan	24549	1.6	238714	15.4
Basra	93660	6.0	151906	9.8
Total of 15 governorates	1549704	100.0	1549704	100.0

SOURCE: CENTRAL ORGANIZATION OF STATISTICS, CENSUS OF 1997, TABLE 24, P 83

Displacement and forced migration

According to United Nations documents, “internally displaced persons” are defined as persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of, or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized State border.”⁹². The period post 2003 witnessed substantial population mobility as a result of migration and forced displacement of population due to growing violence in what has been termed in the media as “hot zones”. This can be an important factor in changing the geography of population distribution. Added to natural and geographical factors, which historically contributed to the resettlement of population, and the economic factors that led to migration to urban areas, the mapping of population becomes clearer. Figures related to monitoring the movement of IDPs vary and estimates range between quarter of a million and two million people.

Statistics of the Iraqi Red Crescent indicate the number of internally displaced persons amounted to nearly 2,198,804 by the end of October 2007. “The displaced persons suffer from the quasi-absence of health services, education and housing, as well as the deteriorating economic conditions; because of the loss of their livelihoods”⁹³. The results of the survey on human security in the national report of the state of human development in Iraq, 2008 indicated that a large proportion of respondents were considering moving to other places inside Iraq in order to avoid the problems of insecurity in their areas, especially in governorates where violence was high. As an example, the ratio in the Diyala amounted to 60.4% of total respondents and 57.3%⁹⁴ in Salahudin. According to a report by the Ministry of Displacement and Migration, published in mid-2009, the number of displaced families was 231,038 and amounted to 249,704 families by the end of 2008. According to recent data, there are 193,942 displaced families until late 2011 constituting about 4% of the total population of the country. The estimates of the United Nations High Commissioner for Refugees in February 2012 indicated that the number of displaced and internally displaced people is still more than 1.3 million. It should be noted that 51% of the displaced families have settled in governorates other than their original ones, while we find that 49% of households had returned to the governorates they descended from them.

⁹² Un document Add.2/53/1998/E/cn4, 1998.

⁹³ Iraqi Red Crescent, The Internally Displaced, Arab Unity study center, Arab future, edition 352, 2008, p 110-113.

⁹⁴ Bait Al Hekma and the Ministry of Planning, National Report on Human Development in Iraq, p67.

Characteristics of the migration pattern in Iraq

The effects of migration are long-term and cumulative and the present data reveal that it is the result of inherited factors:

1. The immigration took place in increasing rates for each of the periods of migration as described in official censuses of immigration: (1947-1956), (1957-1965), (1965-1977) and (1987-1997): each census revealed the escalation of migration compared to the previous one. For example, in the census of 1977 it was shown that the number of immigrants (the survivors in 1977) reached 1,851,341 constituting 15.4% of the total population. The duration of migration ranged from less than a year and more than 7 years.

Table 9: duration of immigration as recorded in the day of 1977 census

of total immigrants %	Immigration duration
50	Before 1970
22.6	3-7 years
13.4	1-3 years
18.7	Less than 1 year

SOURCE: CALCULATED BASED ON IMMIGRATION TABLES IN THE 1977 CENSUS

Most studies confirm the balance of expelling factors with factors of attraction in determining the pattern of migration in Iraq in terms of size and trends, though a number of studies considered some more likely than the others⁹⁵. At the same time, these studies are consistent in the focus on the rural - urban migration tracing its factors to the desire to get a higher income level. This migration was supported by a number of laws such as peasant Liberation by settlement of land for the period 1932-1938, and the agrarian reform law in 1958, where 89.4% of farmers did not own the land. The seventies period witnessed accelerated economic growth represented in the completion of large projects and development plans in the urban sectors accompanied by high wage levels compared to income earned in agriculture. This led to the escalation of the migrants from the countryside, where the cost of moving was non-existent or minimal.

The urban-urban migration includes migration from governorate centers to the

⁹⁵ See, for example: Baali, J.F. "Social Factors in the Iraqi Rural - urban migration" American Journal of Economics and Sociology, Vol. 40, October 1969. Hilmi, w. "Internal migration and Regional Policy in Iraq" unpublished PhD Thesis, university of Sheffield, 1978.

capital and from remote administrative areas (Nahia) to the closest (Qada) to the governorate centers. The concentration of administrative services, education, trade, health, etc. in the capital and governorate centers was an attraction factor for those from less developed centers. For those migrants the goal was achieving the quality of life of a modern family that could not be achieved without migration. The concentration of industry in the cities and job opportunities attracted the educated, the skilled, industrialists, traders, workers in the transport sector, the tourism sector (hotels and restaurants ... etc.), and attracted capital because the transfer of those was not without cost. The decrease in urban population was greater than the rural population in some periods for some governorates such as Nineveh, Babel and Maysan. However, the high rates of the total urbanization and the sharp decrease in rural population concealed this phenomenon.

2. The pattern of migration in Iraq is not limited to male workers who move from the countryside to the city in search of work to contribute to supporting the family remaining in the countryside through earned income and who achieve a surplus in capital to return to the countryside. This is a common pattern of migration for most developing countries. Indeed, immigration in Iraq is primarily a permanent family immigration that represents population movement or displacement rather than moving for work, and the main reason for this are bad living conditions in rural areas, compared to the city. This makes the quality of life in cities better, especially since the cost of moving and accommodation are negligible in the accounts of immigrant (building temporary houses, moving to slums on the outskirts, and finally taking over government buildings after 2003), noting the existence of the clan as an economic support for the migrants in rural areas and in areas of displacement.
3. The pattern of migration in Iraq reveals the importance of choice in the age and sex; a fact not concealed by family migration pattern is more common than others.

Migration left effects on the age structure of the population in rural areas (as shown since the Census of 1977), which does not match the expectations in the traditional studies of immigration. For example, STORM (formal expert of the workforce in the Ministry of Planning⁹⁶) predicted immigration in equal rates for all age groups for the period 1957- 1965 and 1965-1970 and its continuation in the future. However,

⁹⁶ Storm, N., Manpower in Iraq, Ministry of planning, Baghdad , 1970 , (Mimeograph) .

the decline in rural population in the 15-64 categories (the category of labor force) was greater than the rate of decline of the other categories in the census of 1977 which constituted 43.6% of the total rural population compared to 48.6% for urban residents. It may seem to be interpreted on the basis of change in the proportion of the population in the base of the pyramid (zero-14), yet the change was calculated largely for the age structure of males in the countryside as the category (15-64) represented 41.5% of the total male population in rural areas compared to 49.3% of the male population in the cities.

Economic effects of internal migration

The “economic model of migration” concerns with the impact of immigration on the labor market: its impact on the overall supply of work that is the redistribution of the work force - as a production element - between economic activities and geographic areas. Migration is similar to population increase in terms of affecting a shift in the work supply curve of the city to increase; and the amount of this transformation depends on the demographic composition (age and sex) of migrants. The impact on the employment level depends on the elasticity of the work demand curve and work demand in the city.

The labor theory relies on the migration - as a mechanism for response to the incentives- in bringing about structural changes in the economy. It is a continuous process where most productive activities replace less productive; a correction mechanism whose effectiveness depends on the lack of specific restrictions and ensures the distribution of work to achieve a balance in contributions to productivity. Here, the concept of moving goes beyond the migration from the countryside to the cities or between geographical areas, to become a shift, that is a change in the sector structure of distribution of labor force, giving the phenomenon of immigration a prominent place in theories of development. Structural changes are among the most important phenomena of development, especially those related to changing overlaps between the main production activities: agriculture and industry associated with the geographical division of labor: rural/urban. According to the arguments of the classical school, the burden of providing basic resources (labor and capital) to finance the accumulation of industrial capital in the early stages of development lies on agriculture. The thought of economic development in its beginning adopted those assumptions⁹⁷. The idea of the existence of surplus labor in agriculture and the possibility of being transferred to urban sectors without cost is the first step in building economic models of migration. This model assumed that the labor migration and the reverse immigration of capital will bring income levels in different regions to equality.

⁹⁷ Classical models for Nurkse (1953) and Lewis (1954), and neo-classical models such as Ranis & Fei and Todaro (1969) ... and others

Immigration as a mechanism for balancing development in Iraq

Since the beginning of development programs in Iraq (after the Second World War), immigration started in a pattern similar to the one experienced by the European industrial economies i.e. migration from the countryside to the cities; although the consequences differed. The decline in rural population was accompanied by decline in agricultural production, and the growth of migration to cities was accompanied by increased differentiation in wages and income levels of rural and urban areas and increased rates of unemployment in the cities. The theoretical debate on migration in contemporary developmental economics concluded that migration was not a mechanism of balance. On the contrary, it was the source of major imbalance that contributed to the creation of a secondary duplication within the urban sector. The duplication is represented by the growth of the informal sector, which is an economic activity with low productivity and which has become a source of major use for immigrants.

This population movement led to an increase in the size of the urban labor force compared to a decrease in the size of the rural labor force leading its redistribution from agriculture to urban sectors. If this pattern had continued it would have been possible to achieve success for immigration as a mechanism of balance between rural and urban areas⁹⁸. If not for the migration from rural areas exceeded the surplus in numbers - assuming the existence of surplus - as well as marginal workers with low productivity, the agricultural output decreased in proportion with the migration flows. The potential results of direct migration of labor force to the cities, as inferred from the experiences of other communities, is represented in two respectively more important phenomena in terms of their impact on the labor market. These are:

A. Unemployment in cities:

Unemployment in cities resulted from the increasing rates of immigration which was not matched with employment opportunities in urban areas such as in industries, construction, services and other. Although urbanization in developed countries is a driver for economy, it was not the case in Iraq. However, in developing countries, urbanization was associated with major economic and social distortions as it did not come as a result of the natural response to the industrial movement un, which would have transferred the of surplus rural labor to satisfy the growing demand of industry in cities. Consequently, rural areas have lost productive workforce for the benefit of the cities; while, at the same time,

⁹⁸ Philips, D.G., "Rural to urban Migration in Iraq", economic development and Cultural change , July 1959. And , Lawless, R.I " Iraq, changing population Patterns" in chark , s. and Fisher, w, (eds), population of the Middle East and North Africa, London University press , 1972

providing cities with unskilled labor that created surplus on the labor market and spurred the informal economy.

Therefore, even though the migration from the rural areas to the city reduces the disguised unemployment in the countryside, it is believed that it indicates its contribution in increasing unemployment in the cities, noting the unavailability of official data to support this claim.

B. Low rates of participation in economic activities in cities

Migration to cities in Iraq did not increase the contribution rates in the urban sectors as supposed by the theoretical model of migration. The reason is that the majority of immigrants are males of working age. However, rates of contribution in the countryside continued in achieving higher rates because of the increased contribution of female workers in the rural areas than in cities (14% versus 6% women, respectively)⁹⁹.

The lack of impact of migration on urban rates of contribution can be explained by continued high population growth rates; a proportion of immigrants are dependants in relation to the total of migrants; low female participation in urban economic activity; high percentage of participants in the levels of education for males and females; high urban income leading to the possibility of dispensing with the work of family members, etc.

The Social/ Cultural Effects of Migration

The growth and expansion of cities reveals different aspects of the imbalance between rural and urban areas and between different population communities. But the essence of the problem is in the adaptations to changes that are forced on the population. The newcomers brought their rural values to the cities that lost its urban character to the extent that it was said that Baghdad, the capital of Iraq, has become a “large village”. The data on urbanization reveal the demographic dimension, but these figures do not show behavioral and structural changes of urbanization. The cities were colored by rural traits with tendency leading to a decline in the modernization. This is a result of adherence of newcomers to previous patterns of behavior and way of thinking they had in their original residence and, subsequently led, to difficulties in the assimilation process of such large number of rural people and Bedouins in the Iraqi cities. The “ruralization” of cities led to spreading of values related to the behavior of the population with respect to fertility, marriage, gender, education and health, which also impacted development. On the other hand, rural areas lost an important workforce in favor of urban areas and lost

⁹⁹ Iraq knowledge network survey 2011.

the possibility of developing the paid labor sector in favor of continuing the non-paid family business where females are active.

Who are the immigrants?

The question posed by the theoretical traditional approach of migration presumes an advance answer that the migrants are marginal agricultural workers (productivity threshold is low, zero or even negative), and who do not own agricultural land, have no work, abandon the countryside because the “opportunity cost” is low. This is not always true as it is not enough to explain the pattern of immigration in Iraq, and for the following reasons:

1. Rural migrants are possibly non marginal farm workers employed in high cost opportunities whose migration contributed to reduce agricultural income and raise the wage rate in the urban sectors. Asserting that is difficult because periods when the rate of growth of agricultural output decreased (corresponding with the escalation of immigration), has witnessed the problems of organizing ownership, irrigation and drainage, management, etc.. Rural migrants are not necessarily farmers as there are other professional and business rural employment opportunities, (Census of 1977 revealed that only 64% of the rural people work in agriculture, fishing and forestry). Numerous field studies showed that a number of immigrants in the samples taken were not farmers, but they cited the following professions: merchants, shopkeepers, craftsmen, and some of them acquired skills before moving to the city, especially those who completed their military service. Also, the seasonal nature of agricultural work and the rule of the extended family system presume that even farmers were engaged in various other professions from time to time, in fact some of them depend on the agricultural income as a complementary one and it is not a main source¹⁰⁰.
2. If we add to these assumptions the fact of the increasing migration of males of working age to the cities, the presumption of “marginal workers” becomes inconsistent with the pattern of rural migration as it does not apply to the pattern of urban-urban migration because they represent the educated rich professional groups in the small urban communities moving due to differentiation in income, concentration of employment and the level of services.

¹⁰⁰ BarnoutiSuad, the role of women in cooperative farms in Iraq, general union of Iraqi women, Baghdad, 1976.

Whatever the determinants of migration, the possibility of comparing two patterns of life and different means of earning, and the desire to raise the standard of living, it itself constitutes evidence of a degree of choice among immigrants.

An immigrant – the one doing this type of voluntary migration - is with aspirations, capabilities and competencies that the circumstances of the countryside fail to accommodate. The result of such pattern of migration is doubling the effects of migration in general onto areas of origin in terms of the labor force and quality of capital. Thus the phenomenon of duplication in the economy leaves disproportionate growth for the modern and traditional sectors: urban /rural and urgently require direct or indirect treatment.

The traditional theoretical approach to the ideology of development no longer fits for the new conceived relationships between population and development. Migration is one of the dynamics of economic and social transformation in society, and is part of this transformation. Its evaluation in the framework of general economic equilibrium (theoretical) is not possible and rather incorrect because the research in general equilibrium in itself is not possible in a dynamic economy in which the pattern of demand is constantly changing.

There is a strong belief that the most important effect of this pattern of population movement is the phenomenon of polarization or concentration where an uneven distribution took place among governorates or governorate centers from the perspective of Human Geography. Yet, we find from the economic point of view, that the population distribution and movement of the labor force were proportionate with the pattern of distribution of resources and public investment. Thus, this is reflecting an effective mechanism for the labor market mechanism in response to supply for the demand incentives on the one hand. On the other hand, any assessment of the migration must be based on the concept of transformation that happens to the individual and society, because what will be achieved for an individual will reflect on the society, and what is achieved of the individual makes part of the total “accumulation” achieved for community, so internal migration becomes a form of “investment in human capital”.

- It is, in terms of partial analysis, a social transformation towards a more equitable distribution of the entry, and the population widely benefits from a range of “main commodity” and “social goods” such as education, health services, adequate housing and recreational facilities and expanding participation in political decision-making.

- At the macro-level analysis, migration is associated with emptying of the countryside from productive elements of the population, and with urbanization problems of unemployment, overcrowding and pollution, crime and delinquency and hotbeds of conflict and rebellion.

These features, reflected in indicators of human development, poverty and living conditions are largely associated with the level of responsiveness of public policy to these challenges. The success in their containment, treatment and correction, since those are direct results, are sometimes indirect to development policy itself because it requires a review of those policies from the viewpoint of the international frameworks.

4.2 Currents of intrnational migration

International migration is a more complex and difficult demographic process in terms of measurement than other demographic variables due to the efforts and information required for studying its patterns and trends and monitoring its occurrence across time and place. It is a must to record data related to such movement in both places, including information on country of origin in the case of incoming and the country of destination in the case of displacement, with detailed information available to only a few countries in the vast majority of cases. Here we can say that migration flows are not recorded accurately. The national statistical services often record the total number of entrants and displaced persons only and therefore studies on migration patterns and trends cannot be conducted¹⁰¹.

Current trends of external migration in Iraq

Migrating to the outside of the country was never the characteristic of the Iraqi population until recently. The monitored population is not commensurate with the size of internal migration, which reflects their tendency to stay in their own land, perhaps influenced by a particular culture that does not encourage immigration, or the absence of aspirations to migration (similar to the migration of people from Syria and Lebanon since the beginning of the twentieth century). But this fact confirms the balanced relationship between population size and the resources available to some extent (which explains a lot of cases of international migration, including migration of Egyptians) in the sense that the economic factor alone is not enough to explain the pattern of migration of Iraqis abroad, which started since the late past century and the beginning of this century, and that we have to look for other factors.

¹⁰¹ YounisHamadi Ali, principles of demography, Dar Wael, edition 1, 2010, p 214.

Voluntary migration

The exceptional circumstances experienced by the country since the eighties of the last century, starting with the Iran-Iraq war (1980-1988) and the 1991 Gulf War through economic sanctions and the end of the events after the change of the political system in 2003 led to increasing the aspiration of the Iraqis to migrate out of the country. Therefore, Iraq has a large number of expatriates in Europe, United States and neighboring countries. One study estimated that there are more than 91 thousand of Iraqi immigrants in the United States, 32 thousand in the United Kingdom, 17.5 thousand in Denmark, 14.7 thousand in Norway, about nine thousand in Turkey, three thousand in Finland and about five thousand in New Zealand in 2000¹⁰². Looking at the composition of migrants, 16.6% of them fall within the category of young (15-24 years), and more than half of them within categories (25-34 and 35-44 years)¹⁰³, with 55% of them obtained citizenship, and about a third have a high academic degree.

The net migration included large numbers of displaced people and so Iraq became a country drained not only in terms of the number of displaced people, but in most of the social, economic and cultural aspects associated with this phenomenon. The voluntary migration even though politically motivated, often relates to highly qualified and skilled population groups who find opportunities to work in the countries of the West or neighboring Arab states and others.

That migration flows for the periods referred to in the table (10) below, which reached the peak between the years 1985-1990, and the period between the years 2000 to 2005, confirms this.

¹⁰² Arab league, division of population policies and migration/ social sector, regional report of the migration of Arab labor force; the migration of competencies a waste or opportunity?, 2008, tables 3 and 4, p 5-6.

¹⁰³ Previous source, table 5, p7.

Table 10: net international migration for a number of Arab countries

	1970-1975	1975-1980	1980-1985	1985-1990	1990-1995	1995-2000	2000-2005	2005-2010
Somalia	0	1 588	- 832	- 632	- 893	- 100	- 200	- 300
Egypt	- 627	- 848	- 697	- 652	- 1 109	- 946	- 371	- 347
Sudan	176	328	416	- 459	- 168	- 227	- 532	135
Iran	78	420	2 073	1 344	- 1 485	687	126	- 186
Iraq	- 9	- 48	- 200	- 630	- 154	- 18	- 580	- 150
Jordan	- 30	- 81	82	118	401	- 188	- 94	203
Kuwait	109	101	103	119	- 602	125	162	278
Saudi Arabia	492	996	1 392	538	- 122	- 877	1 726	1 056
Syria	- 82	- 162	- 87	- 147	- 70	- 130	548	- 56
Turkey	- 315	- 368	- 78	- 150	- 200	- 150	- 100	- 50
Yemen	- 353	- 75	- 50	- 50	650	- 100	- 100	- 135

SOURCE: POPULATION DIVISION OF THE DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS OF THE UNITED NATIONS SECRETARIAT, WORLD POPULATION PROSPECTS: THE 2010 REVISION, [HTTP://ESA.UN.ORG/UNPD/WPP/INDEX.HTM](http://esa.un.org/unpd/wpp/index.htm)

According to the contents of the Arab Labor Organization report issued in 2007, about 7350 Iraqi scientists emigrated during the period 1998-1991 to Arab and foreign countries as a result of the political and security situation and the circumstances of the international embargo imposed on Iraq. Noting that 67% of these immigrants are university professors, while the remaining 23% work in the centers of scientific research¹⁰⁴.

Forced migration and asylum

Iraqis face in the last thirty years what can be called emergency immigration driven by various reasons, followed by a wave of immigration after 2003 to escape the violence such as terrorist attacks, organized crime, sectarian violence and forced displacement¹⁰⁵. Immigrants are divided into two categories: those forced to leave areas of original residence but remain within the country are the internally displaced¹⁰⁶. On the other hand, there are those forced to leave their country temporarily or permanently and are considered as international immigrants. It is known that the legal status of refugees as defined by the Convention on the Status of Refugees of the United Nations in 1951 is only given to persons who migrate because of justified fear of oppression on the basis of race, religion, nationality, membership of a particular social group or political opinion outside the country of citizenship, and owing to such fear, are unwilling to avail themselves the protection of that country¹⁰⁷.

It is known that the refugee issue is closely linked to human security since humans become refugees as a result of reasons that pose serious threats to their security. The minimum of threats is the loss of employment and livelihood, and the maximum is a threat to their life, as a result of insurgency and occupation¹⁰⁸. The contravention of the Universal Declaration of Human Rights foresees, in most of its articles, the right to respect the private life, including housing and the freedom to choose their place of residence and movement and the right to own property. According to this the security of man is the essence of the right to development, and there is no development without an enabling environment characterized by stability¹⁰⁹.

104 http://bet-nahrain.org/index.php?option=com_content&view=article&id=1449:2011-07-09-17-44-33&catid=15:2010-10-12-08-28-42&Itemid=38
 105 Previous source, p 67.
 106 Previous source, p 93.
 107 Arab human development report 2009, previous source, p 93
 108 Arab human development report 2009, previous source, p 92.
 109 Bait Al Hekma and the central organization for statistics, previous source, p 67.

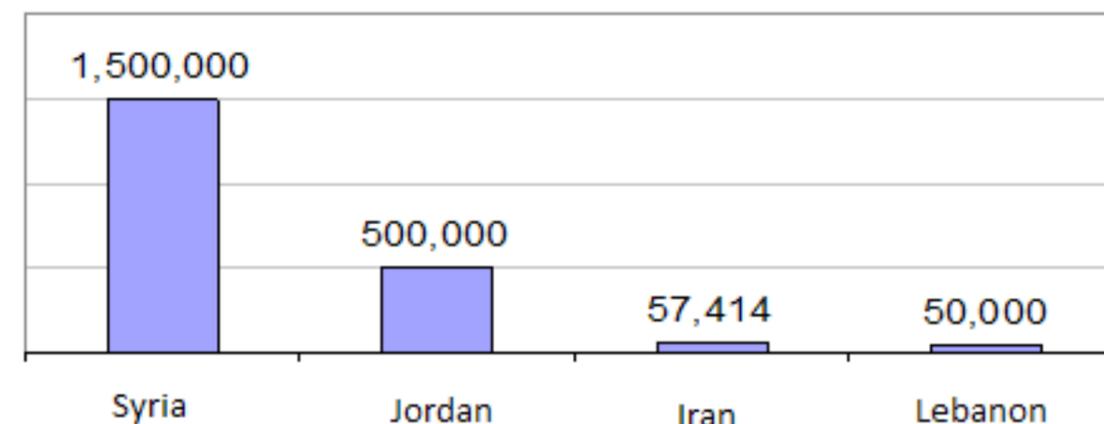
Table 11: figures of Iraqi refugees in 2002

العدد	الدولة
1000	الأردن
2450	لبنان
5200	السعودية

UNHCR, THE GLOBAL REPORT 2002, P.283-28

However, the fact that the process of calculating refugees in the world is difficult, still the closest estimates to the statistics recorded by the Office of the UN High Commissioner for Refugees show that the total migrants in the Arab region reached nearly 7.5 million, while the total of Iraqi refugees in Jordan and Syria to nearly two million refugees¹¹⁰.

Figure 18: Iraqi refugees in neighboring countries in 2009

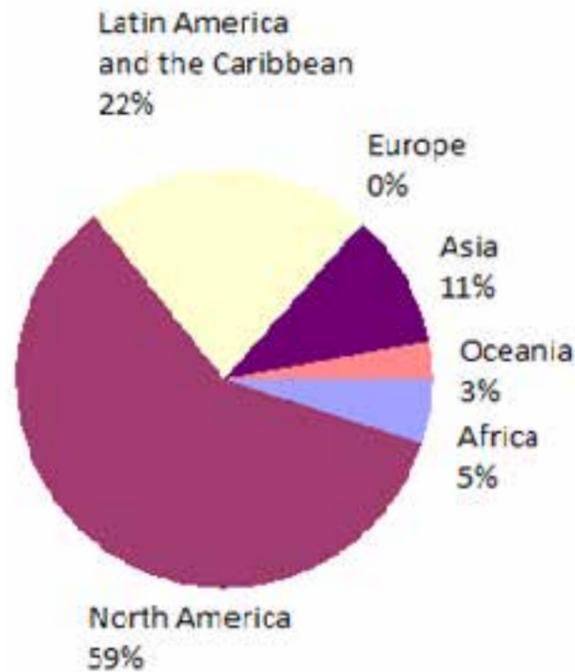


SOURCE: ARAB HUMAN DEVELOPMENT REPORT 2009, UN HIGH COMMISSION FOR REFUGEES, 2008.

According to the International Human Development Report 2009, the number of Iraqi refugees as a result of violence and conflict in 2007 was about 2279 thousand people constituting about 16% of the world's refugees¹¹¹. Most of the Iraqi immigrants are concentrated in North America followed by Europe.

110 Previous source, p 95.
 111 UNDP, human development report 2009, table d, p 158.

Figure 19: Iraqi immigrants as per country of destination, 2007.



SOURCE: UNDP, HUMAN DEVELOPMENT REPORT 2009, TABLE B, P 150.

It seems that migration motives and aspirations are still active among the population, especially among youth. The data of the National Youth Survey indicates that 17% of young people aged (18-30 years) wish to immigrate outside Iraq, 53% of them preferred going to a European country, 24% to an Arab state and 13% to a neighboring country and about 9% to America. It seems that males are more inclined to migration (21.5%) than females (12%), and that the population of urban centers is also more inclined to migration (18.5%) when compared to the rural population (13%)¹¹². The causes of migration vary for individuals between work (33%), and escape (26%), access to asylum (15%), and study (9%), in addition to other reasons (14%)¹¹³.

112 NYS, 2009, table 17-10, p 355
113 NYS, 2009, table 17-11, p 356

Figure 20: percentage of respondents of the age group (18-30) desiring migration as per age group

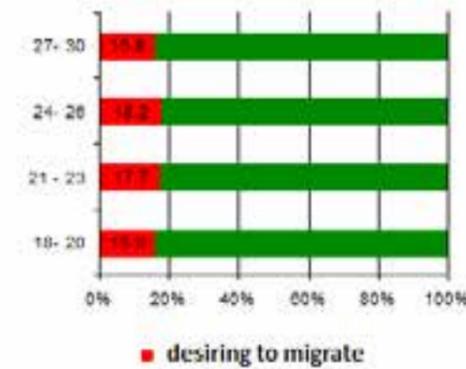


Figure 21: percentage of respondents of the age group (18-30) desiring migration as per sex

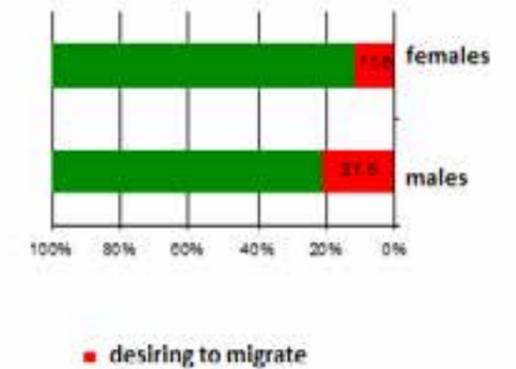


Figure 22: percentage of respondents of the age group (18-30) desiring migration as destination

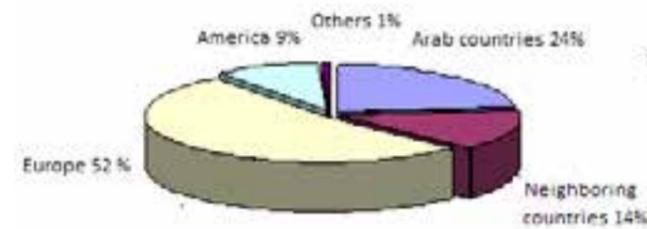
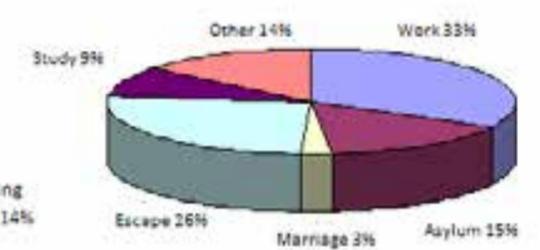


Figure 23: percentage of respondents of the age group (18-30) desiring migration as per motives of migration



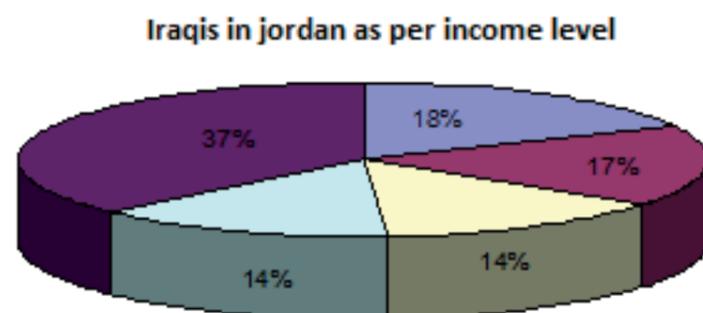
The rising immigration as a result of forced displacement and forced immigration has led to a great loss. Some organizations estimated that Iraq has lost about 40% of the middle class and many of them do not think of returning home¹¹⁴. This is a phenomenon that threatens with great dangers and negative effects on development of the country as a result of the loss of many scientists, intellectuals and competencies.

114 Refugees International, Iraq: The World's Fastest Growing Refugee Crisis, (<http://www.RefugeesInternational.org/content/artical/detail/9679>)

Migration of Iraqis to the outside: a different pattern

The study launched by the Department of Statistics in Jordan and the Institute for Applied International Studies and the Norwegian FAFO, claim that there were between 450-500 thousand Iraqis in Jordan until May 2007, and more than 50% of Iraqis are classified within the categories of high or very high income, and 14% of whom are middle income, while the proportion of low or very low income is 35%. It is also noted that two-thirds of household heads have educational qualification no less than a diploma, and 25.4% of households live in owned housing units. The study also showed that the bulk of Iraqis in Jordan are dependent on cash transfers from others, especially from Iraq. The rich of them receive an income from either the exercise or their management of their activities or transfers from Iraq, while those with middle-income rely mostly on transfers from outside their families or rely narrowly on wages derived from working in Jordan, and the poorest category depend on income derived from working in Jordan

- very low income
- low income
- middle income
- high income
- highest income



Source: general department of statistics/jordan and FAFO, a field study on the conditions of Iraqis in Jordan 2007.

SOURCE: GENERAL DEPARTMENT OF STATISTICS/JORDAN AND FAFO, A FIELD STUDY ON THE CONDITIONS OF IRAQIS IN JORDAN 2007.

Perhaps the most important area that indicates the balanced relationship between population and development, as two mutually effective variables, is the pattern and rates of economic activity of population, the population and social rights, the population and equality in development, as well as women and inequality in development. The second part will follow up on that relationship in the next four chapters.

5.1 The structure of economy and its relationship to economic activity of the population.

Economic activity of a population is related to the structure of the economy and reflects the distribution of labor force by economic activity. As such, it reveals the imbalance in the relative distribution in various economic sectors, the dependency level of the community on certain economic activities, and the prevailing activity in terms of the number of workers.

Economic growth and job creation

The relationship between economic growth and employment is a causal relationship as growth in employment opportunities depends on economic growth, which in turn depends on the increase in productivity. Low rates of productivity may be caused by physical and mental weakness in labor force, and low productivity is one of the main obstacles to development because it restricts capital accumulation in the economy. This indicator is not suitable to explain the phenomenon in Iraq as economic growth does not depend on increasing productivity rather on increasing oil revenues, and employment opportunities do not rely on economic growth but on the pattern of use, policies and management of oil revenues mandated by the population of the state.

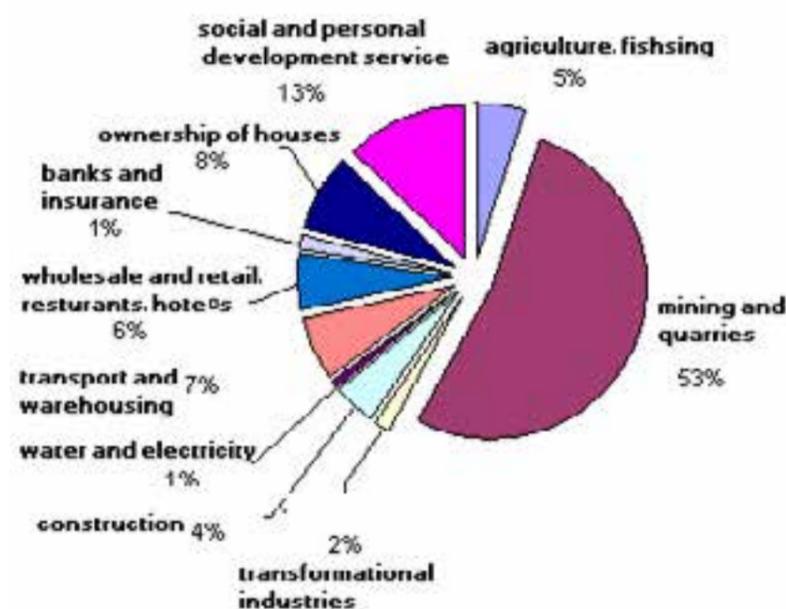
First: Single economy and income generating economic activity

It is known that the Iraqi economy is centered on the production and export of crude oil, and as a result, the economy split into two separate and distinct economies. Oil industry generates most of the gross domestic product (GDP), exports, and public revenues that finance the activities of the state. However, it is not closely linked with other sectors, except to the extent of providing power due to

the absence of front and rear links between them. This phenomenon is reflected on the economy in terms of lack of diversity in production and inability to satisfy the growing domestic demand for different types of goods and services including those that are beyond the capacity of the domestic sector to meet them.

Under these circumstances, the real sector still suffers from many problems including the deterioration of productivity which indicates clear shortcoming in the overall demand activities of vital sectors and commodity in the economy. In particular the transformational industrial sector which contributes about 2% of GDP undergoes many problems, although it amounted to 9% in previous years. The contribution of the agricultural sector declined to 5% though it was about 22% five decades ago¹¹⁵.

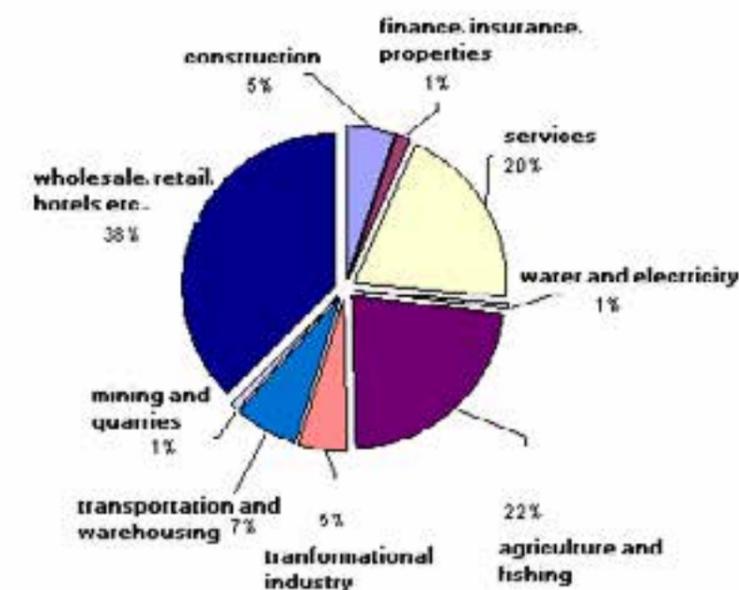
Figure 24: Job distribution of GDP by economic activity 2007 (%)



SOURCE: CENTRAL ORGANIZATION FOR STATISTICS, THE ANNUAL STATISTICS, 2008-2009

115 Mazhar Mohammad Saleh, introduction political economics in Iraq, p 23.

Figure 25: Distribution of labor force by economic sector (2003-2008)



When excluding the oil sector out of the equation of the national economy, the contribution of services in GDP will increase beyond 60%, which demonstrates the fragility and weakness of the economy and the predominance of fragile service activities. Therefore, the economy's capacity to generate jobs and employment opportunities appears weak in light of its mono-economic nature and lack of diversification. The fact is that the oil sector accommodates about 2% of the labor force only, while the remainder (98%) of the labor force left for sectors whose contribution to GDP does not exceed 30%, and which are dominated by marginal service activities that leaves a negative effect on the composition of the labor market and employment or the ability for productive employment. Therefore the rate of underemployment rises to more than 10% according to the conservative definition¹¹⁶.

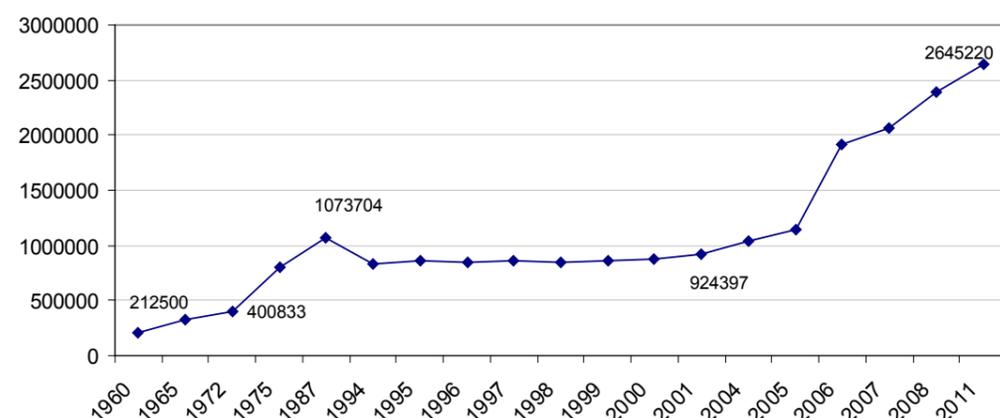
The current situation of the labor market, which is characterized by high unemployment, and the dominance of the government sector explain the weak private administrative and financial activity. The weakness of the private banking sector, the stock market and other means of funding can be added to the problem. The deterioration experienced by the political and security situation in the country led to the deterioration of the labor market and halt of the process of reconstruction.

116 According to the ILO, underemployment means those working but willing to get more work or other type of work, with average weekly hours of work less 23 hrs and willing to get more work. See: the central organization of statistics and IT, employment and unemployment survey in Iraq, 2006, July/2007, p 21.

Second: The employment policy of the government

The state is considered the largest employer in the economy in Iraq as it is the main player in the recruitment of the labor force and the decision-maker of the level of remuneration. Employment is often used as a policy tool to accommodate the newcomers in the labor market. Since the mid-seventies of the last century, the government committed itself to a policy of employing all the graduates in the public sector, and made compulsory employment for graduates of certain disciplines such as medicine, engineering, and postgraduates. However, the conditions of the sanctions in the nineties and the resulting decline in the financial capacity of the state imposed a change in that policy, and employment in the public sector lost attraction with declining levels of real and nominal wages. The increased interest in the agricultural sector turned it more attractive to the labor force. The wholesale and retail activities shifted to the private sector because of restrictions on freedom of the state in the field of imports, and it seems that the crisis of the labor market coincided with the imposition of sanctions diminishing opportunities for new entrants to the labor market. So the marginal sector expanded in an unprecedented manner, and non-productive activities flourished. The nineties carried the manifestations of the imbalance in the labor market, particularly the high unemployment and low levels of efficiency, and seriousness of these imbalances lies in its impact on quality of life for workers and on their social conditions.

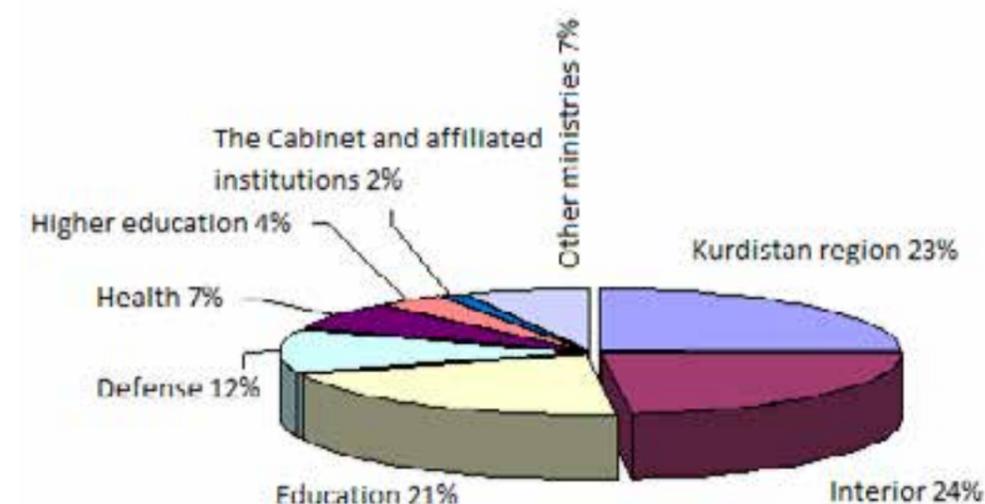
Figure 26: The growth in number of workers in the state institutions (1960-2011)



SOURCE: CENTRAL ORGANIZATION FOR STATISTICS, STATISTICS FOR VARIOUS YEARS, GENERAL BUDGET OF THE STATE FOR VARIOUS YEARS

Since 2003, the number of government employees grew more than three times due to insufficient employment opportunities which made the Iraqi government one of the largest governments in the world in terms of number of employees that in various state areas increased from 1,047,000 in 2004 to 2,389,901 in 2008 to 2,645,220 employees in 2011. It is also characterized with the lack of modern management systems, low levels of e-government, high rates of corruption and evident weakness in the public sector efficiency and good governance.

Figure 27: The distribution of government employees as per organ, 2011



The analysis of the structure of the economy indicates two basic traits: the disruption of the structure of production and the dominance of the government sector and weak private sector. Both qualities are related to the dependency of the economy to the oil sector, a feature that will have a sustainable impact on the characteristics of the working population.

5.2 Characteristics of the economic activity of population

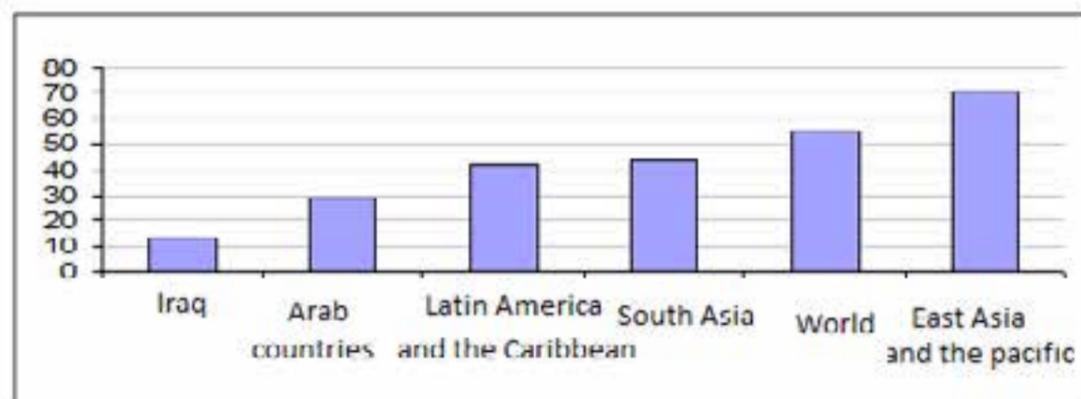
The economic activity of residents is measured by participation in labor force indicated by the number of employees and the unemployed, and excludes people who fall within the economically active age group but engaged in non-civil jobs (members of the military and security forces), and should also exclude individuals who are in rehabilitation institutions, hospitals, as well as students and housewives. The workforce does not include women who are performing domestic

services, and do not include children and retirees. This chapter will introduce the characteristics of the working population such as the low rate of economic activity, high rates of dependency, imbalance of sector distribution, low levels of education among workers, high unemployment and weak economic participation of women which are all characteristics associated with the nature of the “distorted” structure of the economy rather than linked to the structure of the population.

Low rate of economic activity

Economic activity rate is used to indicate the general level of participation of the population who are engaged in working life and are economically active. It refers to the relative importance of labor available to work in different sectors of the economy. This rate is influenced by a number of variables, such as sex, age, marital status, and education. The rate of economic activity in relation to the total economically active population who are of working age i.e. 15 years of age and older amounted to (43%), which reaches its peak at age group (35-39) years. The rate of economic activity for males amounted to (74%), and (13%) for females. In general, economic activity rate is characterized by being higher among young females in rural areas compared to urban areas, as well as in peripheries of urban regions¹¹⁷. The economic activity rate for females in Iraq is low by global and regional standards placing Iraq in last rank among Arab countries¹¹⁸. Despite the fact that Iraqi women have made significant progress in the field of education that led to a clear improvement in their possession of skills and knowledge that qualify them to compete in the labor market, the rate of their economic activity is still low.

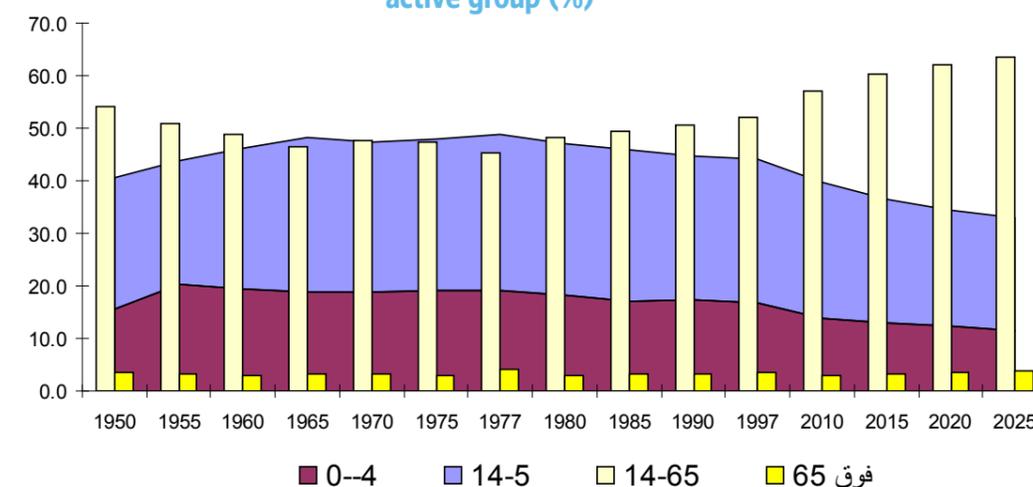
Figure 28: Economic activity rates of women in Iraqi and the world



117 Ministry of planning and development cooperation, central organization for statics, social and economic survey of Iraqi family.
118 ILO, Labour statistics database (LABORSTA), which is available at (laborsta.ilo.org/cgi-bin/brokerv8.exe)

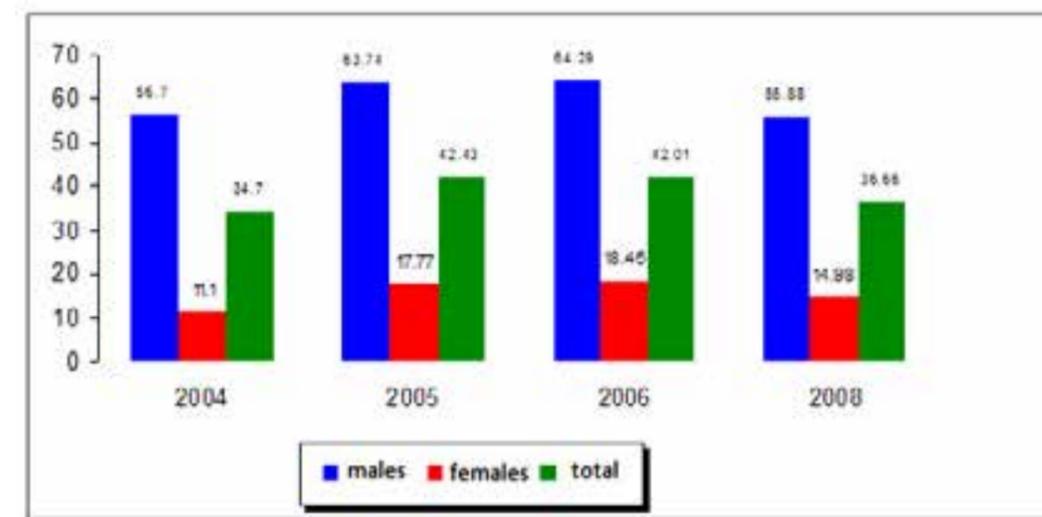
The distribution of population by age groups is important in determining the size of the labor force. The classification of the working population into categories with defining the size, paves the way for the basic human who can be counted upon to meet the needs of the branches of the economy in the present and future. It is noted that the high categories of working age (15-64) for males in urban areas are higher than other age groups, particularly within the category of children and the young (0-14). This could be due to the impact of migration from the countryside to the city and especially for the size of the working age categories.

Figure 29: Population age groups and the development of the economically active group (%)



UNITED NATIONS, DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS, POPULATION DIVISION, AND WORLD POPULATION PROSPECTS: THE 2006 REVISION VOLUME I: COMPREHENSIVE TABLES, NEW YORK, 2007, P. 276

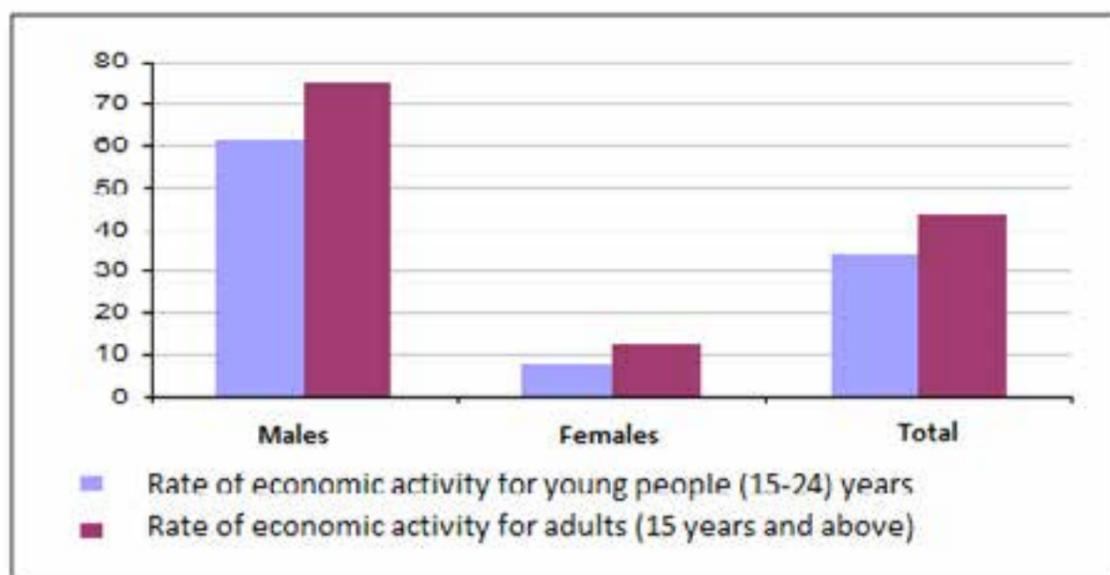
Figure 30: Rate of economic activity by age and sex 2004-2008



SOURCE: EMPLOYMENT AND UNEMPLOYMENT SURVEY, 2004, 2005, 2006, 2008

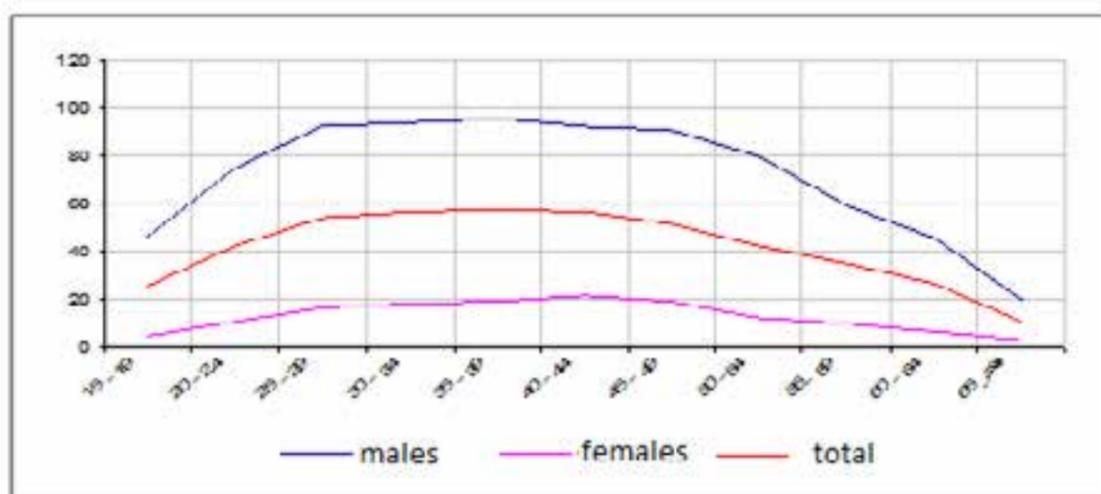
The low economic activity rate for individuals aged (15-24) indicates delay in becoming economically active as it amounts to (61%) for young people, compared with (74%) for adults. The low activity rate for females (8%) as compared to males (34%) in the same age group refers to the social constraints imposed on the entry of females at an early age into the labor market, so we find the activity rate for females peaked in the age group (40-44 years).

Figure 31: Economic activity rate for adults and young people in Iraq 2007



SOURCE: CALCULATED FROM THE SOCIAL AND ECONOMIC SURVEY OF IRAQI FAMILY 2007

Figure 32: Rate of economic activity by age groups 2007

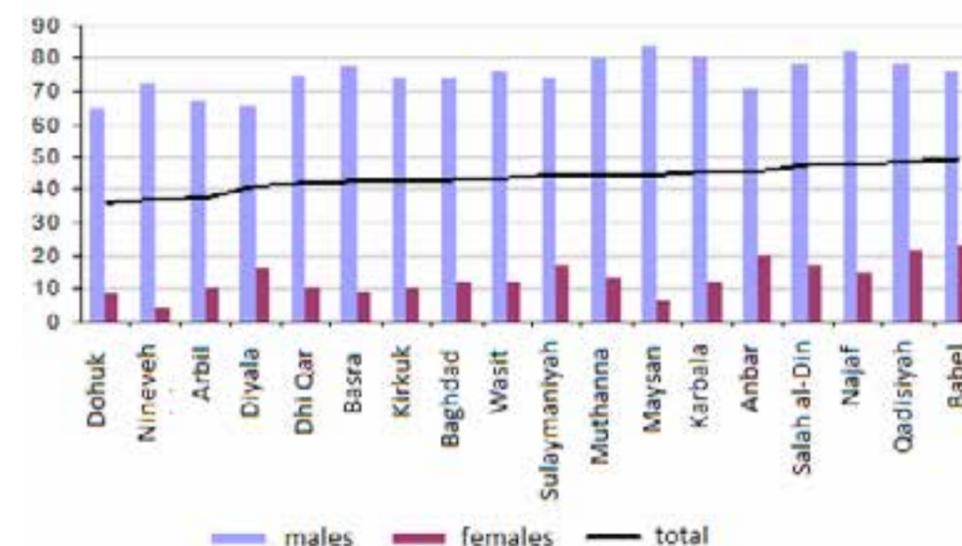


SOURCE: CALCULATED FROM THE SOCIAL AND ECONOMIC SURVEY OF IRAQI FAMILY 2007

Economic activity by Governorate

Governorates vary in terms of the economic activity of their individuals as it reached the maximum in Babel and Qadisiya (49%), then Najaf and Salah al-Din (48%), and lowest in Dohuk (36%), Nineveh and Arbil (37%). This is due to variation in the proportion of economically active women.

Figure 33: Rate of economic activity by governorate 2007



SOURCE: CALCULATED FROM THE SOCIAL AND ECONOMIC SURVEY OF IRAQI FAMILY 2007, TABLE 5-4, P 326.

The structure of economic activity of workers

Regarding the distribution among sectors, the available data of 2008 indicate that in 71.7% of the workforce were employed in the services sector, 14.8% in the industrial sector and 13.6% in the agricultural sector¹¹⁹. Therefore, the services sector became the primary employer of the forces operating in Iraq. This appears to be consistent with the case of oil countries dominated by services activities more than in Iraq, and is also proportionate with the ability of the services sector to absorb the newcomers into the labor market and the limited ability of the other two sectors to provide enough new job opportunities. The rise in the proportion of workers in the industrial sector does not reflect the positive shift but it rather indicates the existence of more than half a million public sector employees who have been non productive since 2003 due to the anticipated reform policy.

119 General secretary of the Arab League and others, the unified Arab economic report 2010, annex 2/10, p 314.

Table 12: Percentage of work force in the three economic sectors 1985-2008

Sector	1985	1995	1996	1999	2008
Agriculture	24.5	12.8	10.7	10.6	13.6
Industry	23.5	24.6	24.2	22.4	14.8
Services	52	62.6	65.1	67	71.7

SOURCE: GENERAL SECRETARY OF THE ARAB LEAGUE AND OTHERS, THE UNIFIED ARAB ECONOMIC REPORT FOR VARIOUS YEARS

The percentage of wage workers is (66%) of the total economically active individuals. However, it falls in the youth age group to about (40%) and (7%) for young women, reflecting the lower social preference of work for women and the difficulties of entering the labor market. The public sector employs about a third of the economically active labor force, and more than half of economically active women, but employs only (4%) of youth, which is due mainly to the nature of the law that prevents public sector employment for those under 18, which means the exclusion of individuals aged (10-17).

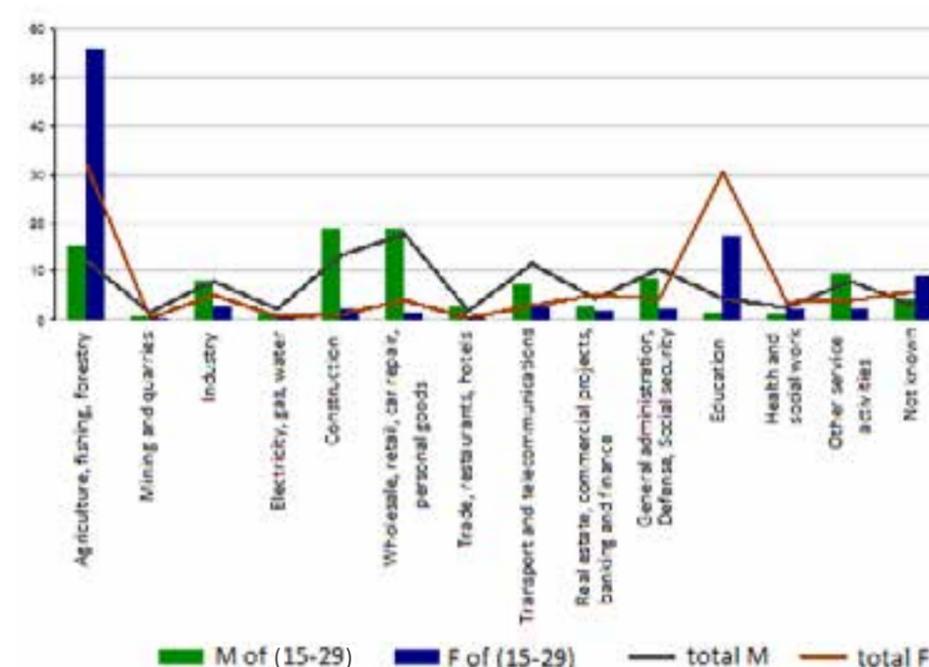
Table 13: Distribution of workers by sector, age and sex 2007

Years	Public sector			Private sector			Other		
	M	F	Total	M	F	Total	M	F	Total
10 - 14	1.5	0.2	1.2	88.5	91.7	89.2	10	8.1	9.6
15 - 19	7.3	2.7	6.8	84.2	84.9	84.3	8.5	12.4	8.9
20 - 29	27	49.7	30	67.5	43.6	64.4	5.5	6.7	5.6
30 - 39	34.3	61.7	38.8	62	34	57.4	3.7	4.3	3.8
40 - 59	37.7	59.2	41.7	59.3	36.9	55.1	3	3.9	3.2
60 and above	25.9	30.2	26.6	69.1	59.8	67.6	5	10	5.8
Total	29.1	50.4	32.5	66.2	44	62.7	4.7	5.6	4.8

SOURCE: IRAQ HOUSEHOLD SOCIO-ECONOMIC SURVEY 2007, TABLE 5-21, P 364.

The statistical data show the composition of jobs in the economic activities where women are generally more active in the agricultural sector (32%) and in the education sector (31%). The concentration seems more clear for women aged (15-29) in the agricultural sector (56%), and drops for education to (17%) to increase the contribution of women in this age in the service activities. The high percentage of the contribution of young people aged (15-29) in agriculture reflects the choice between education and work, as individuals who do not wish to complete their studies move to work in activities that do not require great skill and high education for both sexes, such as agriculture and the construction sector for males.

Figure 34: Distribution of workers by economic activity and sex 2007

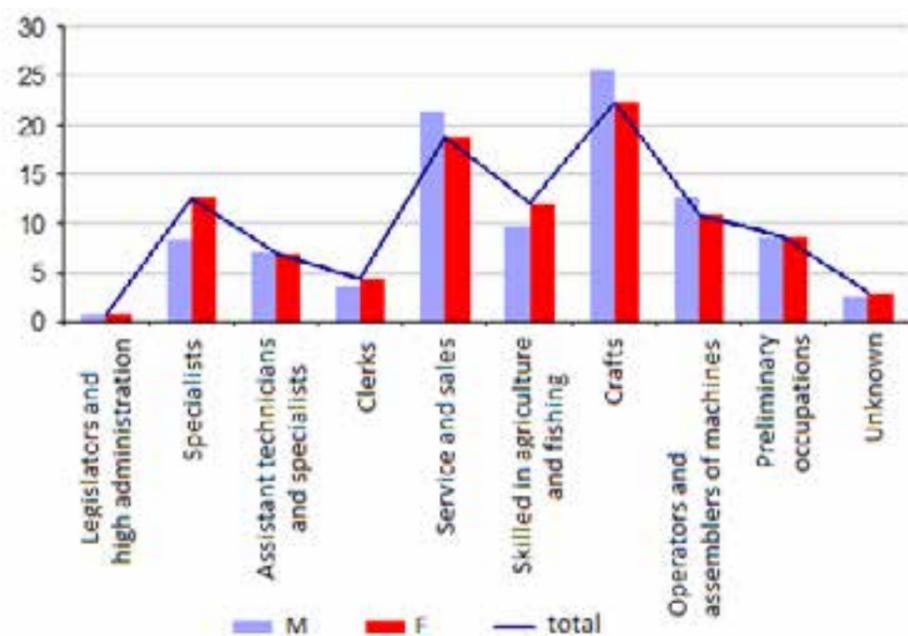


SOURCE: IRAQ HOUSEHOLD SOCIO-ECONOMIC SURVEY 2007, TABLE 5-20, P 362.

Analysis of the distribution of employees by professional category reflects the industry structural pattern where the percentage of workers in crafts (often concentrated in the sectors of industry and construction), is followed by workers in services and sales (who are mostly involved in trade and services). The specialists and technicians are concentrated primarily in the activities of public administration, education and health. The overall distribution is consistent with

the distribution by sex with slight differences between both sexes. Hence, education is playing an influential role in the distribution of workers by occupation and economic activity.

Figure 35: Distribution of workers as per category and sex, 2011

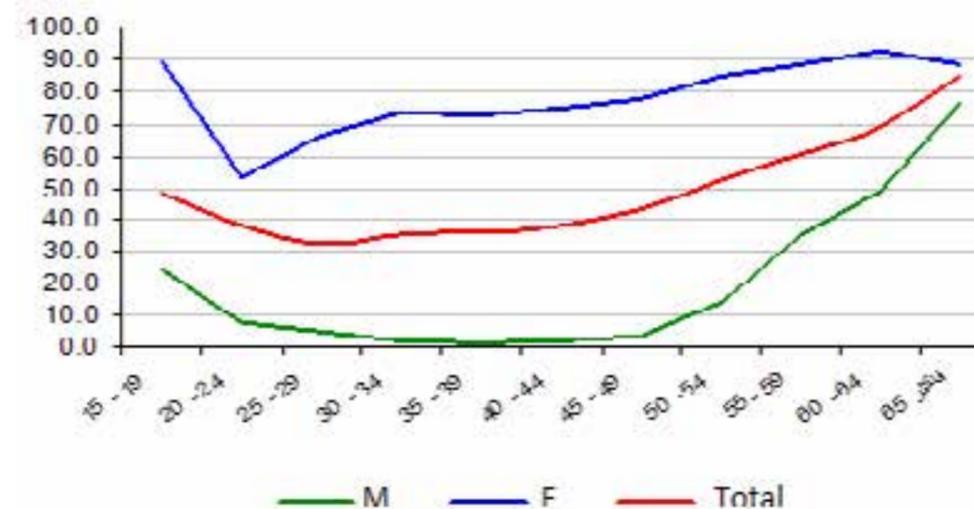


SOURCE IRAQ HOUSEHOLD SOCIO-ECONOMIC SURVEY 2007, TABLE 5-15, P 348.

Economically inactive population

There are several reasons that make individuals economically inactive, i.e. people who do not work, are not unemployed, and are not looking actively for work. These reasons include: caring for one of the members of the family, illness, retirement, disability, studying, believing in the lack of employment opportunities, lack of desire or lack of the need to work. The rate of economically inactive population is about 48% of the total population according to results of the survey of employment and unemployment for the year 2008, while amounts to (42%) in the younger age group (15-24). It is very high among females (71%) compared to (16%) for males. Those rates are high by global standards, as usually this age is the stage of education limiting the entry in the labor market at an early age. However, the high dropout rates and low enrollment rates in advanced stages of education are considered indicators of the continued entry of more young people in the labor market even before acquiring the right skills and education.

Figure 36: Rate of economically inactive population by age and sex 2011



SOURCE: IRAQ HOUSEHOLD SOCIO-ECONOMIC SURVEY 2007

High rate of dependency

Despite the fact that rates of age dependency (the number of people aged (0-14) plus the number of individuals aged 65 years and over divided by the number of people aged (15-64)) dropped from (90.8%) in 1997 to (87.3%) in 2007¹²⁰, they are still high, which imposes additional burdens on the working generation of the population. These high rates pose serious challenges, not only through pressure on the labor market, but also in their strong influence on living standards through economic dependency ratio (number of family members divided by number of employed members) which amounts to 5:1 for the poor households twice the rate in wealthier households 2.3:1. This applies to the rate of age dependency, which amounts to 1.6 children and elderly for the poor households, while the rich households amounts to average 0.6 children and elderly in 2007¹²¹. The high rates of dependency are due to the young nature of the demographics and the weak participation of women and inclusion in the category of dependents, as well as high fertility rates that limit the participation rates of women in the labor force.

¹²⁰ Central organization for statistics, ESCWA, man and woman, issues and statistics, 2009, p 20.

¹²¹ High commission for poverty alleviation national strategy for poverty alleviation, Baghdad, 2009, p 15.

Table 14: Dependency rate in Iraq and some Arab countries

	2000	2003	2005	2006	2007	2008
Egypt	70	64	61	60	59	59
Iraq	86	84	83	82	81	81
Jordan	73	71	69	67	65	63
Kuwait	38	35	34	34	34	34
Lebanon	59	56	53	52	51	49
Morocco	62	58	55	54	53	52
Oman	64	60	57	56	55	54
Saudi Arabia	69	63	60	58	57	56
Sudan	83	81	79	78	77	76
Syria	77	70	67	65	64	63
Tunis	57	51	48	46	45	44
Yemen	103	96	92	91	89	87

SOURCE: [HTTP://WWW.ARABSTATS.ORG](http://www.arabstats.org)

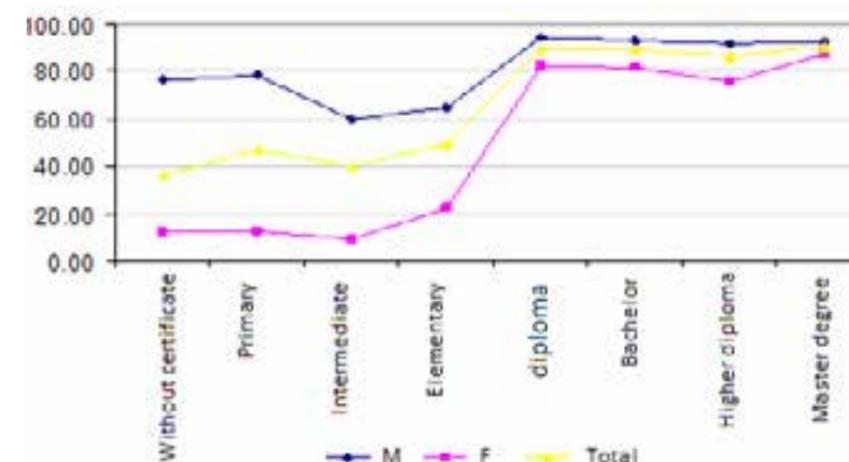
Low educational level of workers

The employment in Iraq did not make progress in the development of quality and capacity, as unskilled labor is still prevailing in its composition, due to the nature of the education system and degradation during the era of economic sanctions (1990-2003). Another reason was the continued suffering in light of the security developments after 2003 which hindered employment opportunities for young graduates to work in the public sector and government. Moreover, there was an absence of attention to vocational education that lacked development and confinement to limited disciplines that did not keep pace with the rapid and successive developments in the labor market and the requirements of development.

Labor is characterized by poor level of education and the available data indicate that the education of most workers is below average, with a general literacy average of 5.6 years in Iraq. This average is very low by international standards as it is even lower than that recorded for the least developed countries (8.3 years). This average rises in Arab countries to 10.2 years, while the global average is 11.3 years. Illiteracy is also of the main obstacles to improving the productive capacities of workers.

There is a clear relationship between education and economic activity as education is employing about 58% of the economically active individuals and those with elementary level and above, while employing only 16% of the uneducated. This relationship becomes stronger for women as two thirds of women who did not go to school work in agriculture, while 78% of elementary certificate holders and above work in the public sector¹²². It is noted that economic activity rates go up with the educational level of individuals, which are almost identical for males and females in general despite the big difference between the rates of economic activity for both sexes. It is also noted that education increases the contribution of females, where the economic activity rate of high school certificate holders is about (17%), and rises to (67%) for women who hold a diploma (Institute), and (71%) for bachelor degree holders, and (83 %) for post graduates. It is ironic that uneducated women are more active than women with primary or intermediate certificates, and the reason is perhaps the low income of families which pushes them to work even in services for extra income.

Figure 37: Economic activity rate by education level 2008



SOURCE: EMPLOYMENT AND UNEMPLOYMENT SURVEY 2008, TABLE 57

122 Ministry of planning, central organization for statistics, living conditions survey in Iraq 2004, part 1, p 128.

Poor participation of women in the labor force

The results of recent surveys show low percentages of women working outside home. In 2011, the percentage of women contribution in the workforce was (14%), most of them are concentrated in urban areas (14.6% in urban areas against 11.3% in rural areas), according to results of Iraq Knowledge Network Survey 2011¹²³. This rate is very low by global and regional standards.

Table 15: Percentage of women of the total population and work force in selected years

Year	% of labor force to population	Males		Females	
		% of population	% of labor force	% of population	% of labor force
1990	26.4	26.4	83.2	4.9	16.8
1995	28.3	28.3	81.3	4.9	18.7
2007	24.5	24.4	84	5.0	16
2008	23.4	23.3	84	5.0	16

SOURCE: LABOR FORCE DATA, WORLD BANK [HTTP://WWW.ARABSTATS.ORG/INDICATOR.ASP](http://www.arabstats.org/indicator.asp), POPULATION DATA, CENTRAL STATISTICAL ORGANIZATION, ANNUAL STATISTICS 2011.

At the level of governorates, Nineveh recorded the lowest rate of economic activity for females in 2003 with a rate of 5%, and achieved the lowest general rate of (38%). While the highest rate of economic activity for females was in Wasit (37%), and also achieved the highest general rate of (58%). Although Dohuk recorded the lowest rate of economic activity in 2008 in general of (39%), the minimum rate of female activity was in Maysan (8%), followed by Nineveh. Babel recorded the highest rates of economic activity for females at (33%). The reason behind this decline in economic activity rates for females in these governorates may be due to the deterioration of security, while the high rates of revised economic activity in Babel and Wasit can be attributed to their rural nature. In general, these rates are low compared with their counterparts Arab countries, as Iraq stands in third place behind Palestine and Saudi Arabia in terms of the economic activity rate for females and it is excelled by other Arab countries.

¹²³ Ministry of Planning, Central Statistical Organization- Iraq Knowledge Network survey 2011, p 86

Unemployment

Unemployment means that a fraction of the labor force halts in the economy despite the availability of capacity and willingness to work and is usually measured by the so-called rate of unemployment. Unemployment is usually the result of an imbalance in the labor market for reasons related to the demand and supply. It imposes economic and social costs when one economy is not able to generate enough jobs for all who are able and willing to work, leading to the waste of energy of a large part of the community's members, in addition to the potential outbreak of social violence and the occurrence of political unrest when unemployment climbs to high levels. In Iraq, unemployment has deep roots, dating back to the end of the eighties when the eight years war ended, and the government faced a problem in the provision of suitable employment for the approximately one million of those who have served in that war. Perhaps the economic blockade exacerbated the problem, which resulted in serious consequences that afflicted the economy and society and the State alike, leading to the spread of unemployment and poverty rates deteriorated by all development indicators. During those years, and despite the difficulties, two distinct sectors coexisted in the economy. Besides the public sector, there was a private sector employing two thirds of labor force, but most of those jobs were in the shadow economy, which accelerated its growth during the nineties.

Table 16: Unemployment rates in Iraq compared to the general rate by environment and sex 2003-2011

Year	Urban areas			Rural areas			Total		
	M	F	Total	M	F	Total	M	F	Total
2003*	31.0	22.3	30.0	28.9	6.7	25.4	30.2	16.0	28.1
2004*	28.3	22.4	27.7	31.2	3.1	25.7	29.4	15.0	26.8
2005**	18.6	22.7	19.3	20.2	2.6	16.1	19.2	14.2	17.9
2006***	19.8	37.4	22.9	15.0	8.0	13.2	16.2	22.6	17.5
2007***	11.4	14.7	11.9	12.3	5.0	11.0	11.7	11.7	11.7
2008****	13.1	25.0	15.2	15.2	8.4	13.4	14.3	19.7	15.3
2011	--	--	--	--	--	--	7	13	8

(*) EXCLUDING KURDISTAN, (**) EXCLUDING ANBAR, ERBIL, DAHUK, (***) URBAN DATA FOR URBAN CENTERS

SOURCES: REPUBLIC OF IRAQ, MINISTRY OF PLANNING AND DEVELOPMENT COOPERATION, THE RESULTS OF SURVEY OF EMPLOYMENT AND UNEMPLOYMENT/ MINISTRY OF LABOR AND SOCIAL AFFAIRS, REPORT ON THE RESULTS OF A SURVEY OF EMPLOYMENT AND UNEMPLOYMENT FOR THE YEAR 2003, IRAQ HOUSEHOLD SOCIO-ECONOMIC SURVEY 2007, TABLE 5-4, P 326-327; CENTRAL STATISTICAL ORGANIZATION, IRAQ KNOWLEDGE NETWORK SURVEY 2011

Characteristics of unemployment

Unemployment rates in Iraq are characterized by a set of properties¹²⁴:

1. Unemployment rates vary among the governorates covered by the surveys. Some recorded low rates as compared to others, at the same time certain governorates continued to top the list of unemployment rate. It should be noted that ThiQar continued to lead in terms of high unemployment rate, followed by Anbar, Nineveh, Muthanna and Qadisiyah, while Basra achieved the lowest rate followed by Wasit, Babil, Sulaimania, Karbala and Kirkuk. The main reason behind the high rates of unemployment in a governorate like ThiQar is due to the nature of the governorate's economy which is mainly centered on agriculture, grazing, and limited private activity. This also applies to Muthanna.

¹²⁴ See: Central Statistical Organization, employment and unemployment survey in Iraq 2006, July/2007.

The lack of security and stability also led to the high rate of unemployment in Anbar, Nineveh and Diyala. In the governorates with relatively low rates of unemployment, the nature of the economy plays a major role in determining unemployment in addition to the relative security and stability prevailing. The large economy of Basra and the presence of oil installations and the port, all increased the chances of getting a job. Also, security and stability and the border crossings with Iran revived the economy of Wasit and Sulaymaniyah. The Karbala and Najaf are among the most important destinations of religious tourism, and that Karbala is an agricultural region relatively active because of the nature of the agricultural sector which is based on permanent crops by (69.11%) of the total agricultural holdings and about (37.55%) of the total agricultural land in the governorate. It also produces (13.7%) of the dates in the country which is stable cultivation compared to patterns of agriculture prevailing in other parts of Iraq that depend on the cultivation of grain or vegetables. For this reason the agricultural sector in Karbala is running (10.13%) of the total permanent workers in Iraq making this region one with relatively low unemployment¹²⁵.

2. Unemployment is often concentrated in age group (15-24) and then declines in subsequent age groups. Because of the size of this age group (approximately 30% of the total labor force), it holds the largest share of the total unemployed. In 2004, the unemployment rate for this segment was (43.8%) out of which (46%) for males, and (37.2%) for females¹²⁶. The percentage dropped to (34.89%) in 2006, out of which (36.91%) for males and (27.37%) for females. It is also perceived that unemployment is concentrated in urban areas. The behavior of indicators of unemployment for this age group almost matches the general behavior of unemployment rates. The reason for high unemployment in this age group is resulting from the rising unemployment among females in excess of their participation in the labor force by about three times.
3. The decline experienced in the unemployment rate in 2005 was not a result of changing labor market conditions, but is mainly a consequence of a change in the mechanism for collecting data on unemployment. Whereby the ILO standard for unemployed persons was changed to count those persons who worked for even one paid hour within the preceding week of the survey data collection.

¹²⁵
¹²⁶

Data is taken from the statistical data set of 2005-2007.

Ministry of planning, Central organization for statistics, employment and unemployment survey in Iraq 2004, p 10.

Chapter 6 - Population and social rights

4. Unemployment is inversely proportional to the high level of education as it increases in the categories of low education. According to the results of the survey of social and economic development of Iraqi families in 2007, the ratio of unemployed graduates from preliminary education and below constituted (57.9%) of the total unemployed, while the percentage of unemployed who hold a certificate higher than elementary amounted to (29.1%). The high percentage of unemployed graduates (5.4%) and bachelor's degree holders (13.9%) reflects the structure of demand for these specialties and inadequate output of higher education to the needs of the labor market.
5. On the other hand, getting a job with full working hours is difficult for individuals. According to results of Iraq Household Socio-Economic Survey 2007, large proportions of individuals may have stopped the practice of the last full-time work for years and this is what indicates the nature of the labor market. Also, there are few permanent opportunities available for individuals to get jobs in the private and public sector.

The steady population growth and high fertility rates in Iraq put a severe pressure on health services, education, housing and social protection. The slow improvement and expansion in these services is not commensurate with the needs of the population on the one hand, and with the availability of resources and high costs of delivery on the other hand. This is a fact worthy of attention, as the population still has access to little or poor quality of services or is forced to bear the additional costs to access them.

The realization of the economic and social rights of citizens is the primary duty of the state according to international charters and conventions ratified by Iraq. The state duty is asserted in past constitutions as well as the new one formulated in 2005. The new constitution stipulates in the chapter on the rights and freedoms/branch of economic, social and cultural rights in articles (22-34) right to decent work, right to education, right to health care, right to decent living and dignified living and enjoying social justice. This chapter will follow on the extent to which the populations enjoyment of these rights noting that, up to the present time, an overall system that takes care of these rights for the population is not available. Such a system of social insurance is the backbone of the entire social system. It is the mechanism through which the general population, especially the poor and middle class, can face public or individual crises and ensure their access to their rights.

Article 29 of Iraq new constitution

First:

A. The family is the foundation of society; the State preserves its entity and its religious, moral and patriotic values.

B. The State guarantees the protection of motherhood, childhood and old age and shall care for children and youth and provide them with the appropriate conditions to further their talents and abilities.

Second: Children have right over their parents in regard to upbringing, care and education. Parents shall have right over their children in regard to respect and care especially in times of need, disability and old age.

Third: Economic exploitation of children shall be completely prohibited. The State shall take the necessary measures to protect them.

6.1 Health care

Health is one of the main pillars of development, as it is a natural and fundamental dimension in people's lives. However, the health system in Iraq has not yet ensured equitable access to services for all residents even if many of the health indicators showed significant improvements in Iraq as compared to the nineties.

Article 31:

First: Every citizen has the right to health care. The state takes care of public health and provides the means of prevention and treatment by building different types of hospitals and medical institutions.

Second: Individuals and institutions may build hospitals or clinics or places for treatment with the supervision of the state and this shall be regulated by law.

Primary health care services for mother and child

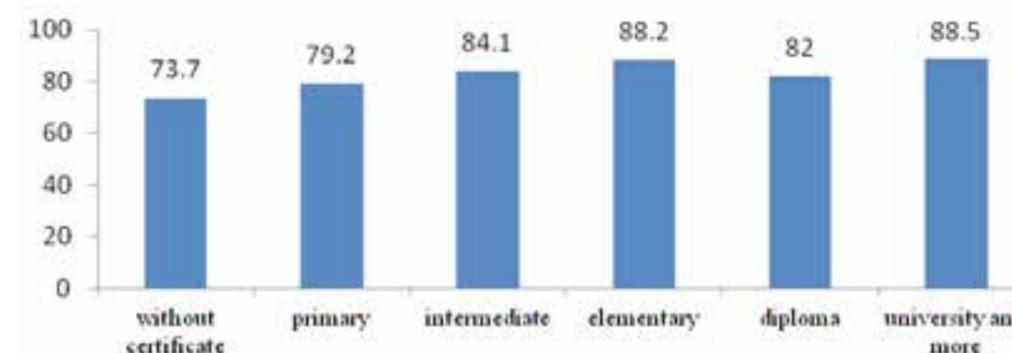
The primary health care services for mother and child witnessed relatively concrete development. It means the health care services provided to the mother before pregnancy, during pregnancy and after birth. Still, there is an urgent need for more efforts in promoting this aspect of health care in order to reduce maternal mortality in pregnancy, childbirth and postpartum, which are among the basic health indicators in the Millennium Development Goals.

Places of birth and care during childbirth

There is no doubt that the health conditions and medical assistance in the appropriate time of birth reduces the risk of complications, disease and infection to both mother and child. The main objective for providing safe delivery services is to protect the lives and health of mothers and children by ensuring safe births. Healthy environments can often form an important element to reduce unexpected health risks on the mother and child through the increase of births of infants done under professional supervision. The Ministry of Health is the main official body which holds the responsibility of reproductive health care, along with the private sector. Births that occur in health institutions (public hospital + private hospital + primary health care center that contain birth facilities) reflect the development of

health and social awareness of citizens towards birth in health institutions away from unqualified practitioners. At the same time it also indicates the availability of this service to the population on the government and private level. I-WISH 2011 survey data indicates that nine out of every ten births in the five years preceding the survey had been under the supervision of qualified medical staff both inside and outside health institutions, and this percentage is higher in urban areas (93.2%) than in rural areas (84.4%). It is also higher in the rest of the governorates (91.1%) than that in the Kurdistan Region (85.6%). It also shows at the same time the high awareness among women for the need to access to this service, and as such this percentage is strongly related to the level of education of the mother.

Figure 38: Percentage of births during the five years preceding that occurred in a medical institution/ (I-WISH 2011)



According to the results of Multiple Indicator Cluster Survey for the year 2006, (88.5%) of births were assisted by skilled professional. This ratio varies by place of residence, in cities it goes up to (95%), while declines in rural areas to (78.1%). Qualified assistance at birth have been provided to almost all women in Najaf (98%), while women in Nineveh, Kirkuk and Wasit were less fortunate in the enjoyment of qualified help (74-78%)¹²⁷.

The results of Multiple Indicator Cluster Survey 4, 2011 show that¹²⁸ the rate of births done by qualified health professionals is (87.3%), and rises slightly in Kurdistan Region to (89.1%), and birth in hospitals or health centers are at (73.3%) and (79.5%) in Kurdistan Region.

The results of Multiple Indicator Cluster Survey 4 show that the proportion of births that were assisted, during the two years preceding the survey, by qualified persons were (89%) and this percentage increased in urban areas to (93%) and to (82 %) in

¹²⁷ Central Statistical Organization and others, monitoring the conditions of women and children, MICS 2006, final report, p 53
¹²⁸ Central Statistical Organization and others, monitoring the conditions of women and children, MICS 2011 preliminary report

rural areas. The higher the educational level of women the more they were inclined to rely on qualified people at birth. The percentage of women with medium or higher certificates amounted to (95%).

The percentage of births that were done by doctors during the two years preceding the survey were more than half while births by licensed nurses or midwives were (28%). The births done by unlicensed midwives and in traditional delivery facilities (Jada) were (10%), and young women relied on help from doctors at birth more than older women. Survey data also showed that older women were more likely to rely on unlicensed midwives and traditional birth facilities (Jada) compared to young women.

The Multiple Indicator Cluster Survey 4 showed that the percentage of births that took place in a hospital or health center during the last two years before the survey was (74%). Data also showed that urban women often give birth in health institutions compared to rural women (79% versus 67%) respectively. No differences between Kurdistan Region and other parts of Iraq in deliveries in health institutions were seen. Also, young women from the age groups under 20 gave birth in health institutions (79%) and aged 20-34 years (74%), and older women within the age group of 35-49 (71%). It also showed a strong correlation between educational level and place of birth as (66%) of the uneducated women give birth in health institutions compared with women holders of a medium or higher degree (82%). According to wealth index the proportion of women from poor families (first level) who gave birth in health institutions amounted to (62%) versus (83%) for women from wealthier households (level 5).

Pregnancy Outcomes

Loss of a child at any stage of pregnancy constitutes a trauma to both mother and family. It also leads to the domination of a harsh atmosphere of sadness similar to that related to the death of an adult family member, which is linked to the relative importance of the child, and may subject women within the cultural structure to exclusion. Pregnancy represents the beginning of the fertility of women and announces the entry of the female to the actual effective contribution stage in strengthening the community to which she belongs by giving birth to children.

Despite the importance of the problem, data on pregnancy loss are rare at the national level of Iraq. Two different types of pregnancy losses can be identified: If the death of the fetus happened within 24 weeks of conception either naturally or done on purpose and is called abortion. If death occurs after 24 weeks but before

delivery it is termed as stillbirth. It is estimated that the number of stillbirths in the world is about 3.2 million a year. In this context, it is not considered a pregnancy loss if the child breathed at birth or if it dies after a short period.

Data from the Iraqi Family Health Survey showed that out of every 100 pregnancies, there are 89.1 that end with a live infant and 9.7 of which end within the first six months. And 0.8 per 100 pregnancies are prone to fetal death in uterus. The data also showed that pregnancy loss rates are higher in urban than in rural areas and also rise in the central and southern governorates as compared to Kurdistan Region. Overall, this is due mainly to differences in the birth rates of the so-called "stillborn". It is also noted that the loss rates rise with the rise of educational levels. Uneducated women lose 9.2 of every 100 pregnancies, while women with high school education or higher to 14.4 and 14.7 per hundred pregnancy respectively. Perhaps it is due to delayed marriage of educated women, which increases the likelihood of exposure to the complexities in the processes of pregnancy.

6.1.1 Reproductive health services and family planning

The demand for reproductive health services and family planning is largely influenced by the level of services, quality, cost and its accessibility. Benefiting from health care, whether private or public, regular or irregular, depends on social and demographic factors. It also depends on the nature of the prevailing social structure, level of education, beliefs and prevailing practices, discrimination on the basis of gender, status of women, the environmental situation, the pattern of diseases and health care system itself. The selection of appropriate means of family planning is important for women and children, in order to prevent early or late pregnancies, ensure the spacing of births and the number of children. The Multiple Indicators Cluster Survey 2006 showed that young women were less inclined to use family planning methods compared with older women. 21% of married women aged (15-19 years) used some methods compared with (36%) of ages (20-24 years), and (64%) of ages (40-44 years old), and the reason may be that young women want more children. The percentage also decreased significantly in the case of women who have no live children. The greater the number of living children for women, the more likely they are to use family planning methods. The family planning methods use goes to (53%) among women in urban areas and (44%) in rural areas¹²⁹.

Family health survey showed that (92%) of women who have been married previously had been pregnant despite slight differences as per place of residence

¹²⁹ Central organization for statistics and others, monitoring the conditions of women and children, MICS 2006, final report, p 46-47.

(urban and rural), or regions, or level of education. The percentage rises with age until it reaches its peak (98.4%) in women at the end of reproductive age (45-49 years)¹³⁰. On average, women in Iraq in the late reproductive age have a rate of up to 6.38 children, and this rate goes down in parallel with age. Rate of children born at any time in women's life is higher in rural than in urban areas, because the mothers in rural areas have an average of 4.4 children, compared to 3.39 children for women in urban areas. The highest average is for children in Kurdistan (4.17 children) compared to (3.54 children) in the south and center¹³¹. It is clear that women in rural areas bear the burden of reproduction about quarter more than in the case of women from urban areas. Also, the health services in rural areas are inferior in quality and quantity than in cities.

Table 17: Reproductive health in Iraq

Rate of spread of various types of contraceptives among married women aged (15-49)	50.0
At least one visit during pregnancy	84.0
Births under skilled professionals	80.0

SOURCE: UNDP, HUMAN DEVELOPMENT REPORT 2011, TABLE 4 P 153

6.1.2 Maternal care during pregnancy

Almost nine out of ten pregnancies, during the last five years preceding the survey were followed by a qualified person. It was found that this percentage in urban areas is (92.4%) higher than in rural areas (83.5%). Percentage of women whose pregnancy were followed by a qualified person decline with the decrease of birth order. The percentage of ante natal care for first pregnancy is approximately (96%), compared with (84%) for the fourth and beyond newborns. Among the women who followed their pregnancy, we find that almost (64%) of them may have had four or more follow up visits.

¹³⁰ Ministry of health and others, preliminary report for family health survey in Iraq 2006-2007, p21.
¹³¹ Previous source, p 22.

Table 18: Maternal care during the five years preceding the survey of married women or those previously married of the age 15-49.

	Governorates	Kurdistan	Iraq
Percentage of women who received care from a qualified medical practitioner during pregnancy	89.5	89.9	89.6
Percentage of women who received care from a qualified medical practitioner during the first three months of pregnancy	62.8	56.3	62.0
Average of visits during pregnancy among mother who received medical care during pregnancy	5.2	4.9	5.2
Percentage of women who gave birth to their last newborn in a medical institution	78.5	78.8	78.5
Percentage of (last) deliveries that was under medical supervision ¹³²	91.1	85.6	90.4

SOURCE: PRELIMINARY RESULTS OF (I/WISH 2011) SURVEY.

Health care for pregnant women

The rate of first visit of pregnant women to doctors for the whole of Iraq was (51%) and the rate of the fourth visit for the whole of Iraq was (27%). The percentage of first visit for periodic screening for pregnant women to the whole of Iraq decreased to (51%) for the year 2010 compared to (54%) for the year 2009. The lowest percentage was recorded in Anbar at (22%) and the percentage of the sixth visit hit (1%) for the same governorate in 2010; In Diyala the percentage of the first visit increased from (66%) in 2009 to (87%) in 2010. In Sulaymaniyah the same improvement for the first and sixth was observed. The percentage of pregnant women at risk continued without reduction at (22%) for the whole of Iraq in 2010 as it was in 2009. As for the post birth examination Diyala Health Department recorded the highest coverage at (89%). The variation in coverage rates between the governorates of Iraq may be due to the availability of trained cadres and the varying cultural values and health awareness of individuals, families and society in governorates.

There is a belief that health care and appropriate nutrition for pregnant women have impact on the health of newborn, which is relatively indicated by birth weight, body constitution and also genetic factors. It should be noted that among the total number of births for the whole of Iraq in 2010 which amounted to (1.225) million births, the number of births weighing more than (2500 g) in 2010 was

¹³² Including deliveries that took place in a medical institution and that took place outside but under medical supervision.

(1.096.) million constituting (89.4%) of the total births. The number of births weighing less than (2500 g) amounted to (124,998) constituting (10.2%), while percentage of un-weighed births was (0.4%)¹³³.

6.1.3 Postnatal care

Periodic medical examination of the newborn

Not all the newborns in health care institutions get sufficient or necessary care due to lack of service, medical staff or basic supplies. For example, the rate of (recumbent children/ Incubator) witnessed a decrease to a lower rate (70 recumbent children/ Incubator) in 2008, while the rate was (90 recumbent children / Incubator) in 2007. This rate decreased due to a shortage in the number of incubators, which is one of the most important causes of children mortality in Iraq, as also indicated by the annual report of the Ministry of Health in 2010. Regarding the neonatal care, available indicators of the number of visits made, do not reflect significant progress in public health awareness among mothers perhaps due to poor services provided by institutions rather than lack of interest by mother. This assumption is confirmed by the variation among governorates. The rate for the first visit in 2010 dropped to (76%) by (2%) compared to 2009. However, the overall average hides large variations among governorates. It is noted that Diyala made a remarkable rise for the first visit of the newborn from (76%) for the year 2009 to (94%) for the year 2010. This applies also to ThiQar as the rate increased from (84%) to (96%), and there is a significant increase for the rest of the visits in the same governorate, while the first visit in Sulaimaniyah increased from (69%) for the year 2009 to (80%) for the year 2010. It was also observed that the rate of the first visit of the newborn was low in some governorates such as Basra, Nineweh, Anbar, Muthanna and Dohuk¹³⁴.

Periodic examination of the child

Rates of the first visit for periodic medical examination of the child of the age (1-5 years) are still very low, it fell to (20%) in 2010 after it had been (24%) in 2009. This ratio is low and insufficient to provide prevention and follow up on the health, nutritional status and to monitor the child's development. This observation applies to most of the governorates, especially the first visit to the child in each of

¹³³ Ministry of Health, annual report 2010.
¹³⁴ Previous source.

the governorates of (Dahuk, ThiQar, Kirkuk, Babil and Diwaniya) and Salahuddin where the rate of the first visit of a child dropped from (60%) to (15%) for the same period. On the contrary, it is noted that rates of first and second visits increased in Diyala from (51%) for the year 2009 to (67%) for the year 2010 for the first visit, and (48%) to (65%) for the second visit.

Breastfeeding and child nutrition

Child nutrition indicators are of the most important indicators for the follow-up on rates of malnutrition for children under five. They measure the progress made in reducing these rates, which is one of the main objectives for reducing morbidity and mortality for children under five. The percentage of the 100% breastfeeding for the age group less than 6 months increased to (18.6%) and (18.9%) in Kurdistan Region.

Continuous breastfeeding for infants aged 12-15 months amounted to (51.9%) and (40.9) in Kurdistan Region. Complementary concurrent feeding rate is at (68.5) and (54.7) in Kurdistan Region. Here, the importance of community awareness to increase 100% breastfeeding in order to achieve the goal of exclusive breastfeeding during the first six months of the neonatal, which leads to reducing malnutrition for children¹³⁵.

The mixed feeding of the baby amounted to (49%) and (53%) for the age groups (7-12) months and more than year, respectively, while the proportion of artificial feeding amounted to (38%) and (33%). Rates of children with diseases resulting from malnutrition or lack of it do not reflect the abundance of resources available to the population.

¹³⁵ MICS, 2011, preliminary report

Table 19: Rate of children with underweight, stunting and wasting 2011

	Iraq	Kurdistan
Children with moderate or severe underweight	8.4	6.5
Children with severe underweight	3.8	3.4
Children with moderate or severe stunting	22.3	17.1
Children with severe stunting	9.6	6.6
Children with moderate or severe wasting	6.9	4.7
Children with severe wasting	3.4	2.4

SOURCE: MICS, 2011, PRELIMINARY REPORT, PREVIOUS SOURCE (SUMMARY TABLE)

Preventive services

The development of preventive services, including medicine and health promotion services and maternal and child care all contributed to the control of the transmitted infections. They also increased health awareness among the general community to adhere to standard vaccines for children and tetanus toxoid. They also contributed to the control and the reduction of the rates of morbidity and mortality in women and children in particular. Vaccination campaigns included polio immunization – all types of measles - typical vaccines - tetanus vaccine, vaccination of pregnant women, but it is still not comprehensive or complete, and seemed better in Kurdistan Region.

Table 20: Immunization of children in Iraq 2011

	Iraq	Kurdistan
Vaccination against tuberculosis at 12 months	92.1	97.4
Vaccination against polio at 12 months	69.4	74.7
Triple vaccination at 12 months	62.8	70.5
Vaccination against measles at 12 months	74.5	81.7

Relative improvement in the percentage of coverage with children vaccines can be noted between 2006 and 2011 by the results of the cluster survey. The survey shows the percentage of triple vaccine (third dose) increased from (52.8%) in 2006 to (62.8%) in 2011, and the percentage of polio vaccine increased from (57%) to (69.4%) and viral hepatitis vaccine from (49.4%) to (58.4%), while measles vaccine increased from (64.1%) to (74.5%) and mixed measles vaccine from (48.5%) to (58.7%).

School Health

Rates supplied by official reports do not reflect the extent to which the population is covered in terms of their right health care services. For example, a relative improvement in the basic school health service is noted as the number of pupils who have been to a medical examination in 2010 amounted to (862,845) with an increase of (15%) for the year 2009. Eyes were examined at a rate of (98%) for pupils in kindergarten throughout Iraq and (97%) of the school pupils as indicated in the annual report of the Ministry of Health in 2010¹³⁶. However, the fact is that these ratios do not disclose the extent of health services coverage for the age groups required of the total population. For instance the number of students in kindergarten is 855,952 for the 2007-2008 school year only, and the net enrollment ratio in primary schools is incomprehensible (89.1) as well as the net percentage of completion of primary education (43.3) and these rate drop further for females.

As for school health for students from middle and junior high, it is non-existent at the time when this segment of the population is in much need for care and prevention of practices and diseases that affect their wellbeing in the future.

Public health care services

Public health care services are provided by public and private institutions by the State to care for the health of its citizens in the public and private sectors. It includes all hospitals, clinics, pharmacies and human resources of doctors, nurses, engineers of medical devices technicians, researchers and all who work in this area. It also includes the supporting industries for medical services such as industry of medicines, devices, and others; as well as medical research and educational institutions.

¹³⁶ Ministry of health, annual report, 2010

Primary health centers

Primary health care is the backbone of the health system in Iraq. Yet, there is an evident deficit in the provision of such services in terms of quality and quantity, as there is only one health center per 31,800 people at the level of Iraq. This increases to more than 40,000 of the population in the Baghdad, Karbala, ThiQar and Najaf, whereas one primary health care unit should be provided per 10,000 of the population.¹³⁷

All types of health centers contain birth and emergency facilities, and nearly (250) center for primary health care were established after 2003. Their numbers increased during the period (2003-2008) at a growth rate of (2.8%). The indicator for the number of health center run by professionals per 10,000 populations in 2008 amounted to (34,911), but this indicator did not rise to the required level. It means that the level of services provided and their quality is less than the required level by almost three times. The number of major health centers is (782) center, and the rate of sub-health centers run by professionals per 5,000 of population amount to (58,460), and the number of sub-centers is only 467, reflecting a significant gap between the targets and actual availability of health centers.

6.1.4 Disparity in the response of the population

Access and benefits of health care, whether in public or private sector, formal or informal, is affected by many factors, including socio-demographic aspects, social structures, level of education, beliefs and cultural practices, discrimination on the basis of gender, the status of women, political and economic systems, environmental conditions, types of diseases and health care system itself. The main driver of the health behavior remains the regulatory framework for the health care system. Iraqi Family Health Survey 2006/2007 showed that half of respondents are looking for medical care in public institutions, and the rest (41.2%) are looking for medical care in private hospitals, while (9.3%) remain home and do not to go to health care centers. Visits of health centers increased by more than (36) million in 2009 including Kurdistan region as compared to more than 40 million in 2010. That is an increase of (10.5%). The number of visits per capita for health centers amounted to (1.2 visits/ year), and the number of patient visits to health centers is very close to the number of patient visits to hospitals. This indicator shows a relative development of the services provided in health centers to be almost at the level of

¹³⁷ Ministry of planning, the national development plan 2010-2014, part 1, the plan text.

hospitals. It is contrary to previous situations when patient visited hospitals more often because of the quality of services. Dental services (preventive and therapeutic) provided in these centers are important and basic services that start with children aged over (6) months, since modern devices and all the diagnostic and therapeutic were provided. There are (800) teeth chair, the staff was sent to training courses and school dental health programs were adopted. Thus the number of visitors to those units increased to approximately (6) million for the year 2010, as compared to (5) million in 2009 including Kurdistan region, which is an increase by (15%)¹³⁸. The highest percentage of dental visitors compared with the total number of dental patients was in Baghdad at (27.5%) due to the stability of the staff and the existence of specialized dental centers, while the lowest was in Salah al-Din at (1.4%) due to poor stability of the medical staffs.

In terms of reproductive health, women who worked in health organization on issues of fertility and childbearing in rural, and to a lesser extent in urban areas, received varying reactions. The absence of the female element from the medical staff sometimes leads to reducing the area of intervention of the medical staff, and sometimes results in the total boycott of the clinic. In many cases, individual cultural elements overlap with their view of contraceptives and contribute in determining the extent of their acceptance or rejection of the idea of family planning. The relationship between family planning as a rational behavior related to the health institution and the family and cultural beliefs is very complicated. It requires the examination of people's attitudes to family planning and techniques regarding the development of the status of the family and women within the context of their interaction with religious practices related to fertility and reproductive health.

Because of the dominance of value systems and traditions, it is often noted that some couples whose wives gave birth in hospital are not satisfied with what is happening within the institution. Despite their awareness of the dangers of childbirth at home some people prefer help from a nurse or any woman in their home because there are men in hospitals.

The reality is the heavier the modern health infrastructure, the less recourse to the conventional methods. As long as modern medicine is away from home, women continue their traditional practices and consider the medical institution a last resort after exhausting all potential solutions on the level of family and community.

¹³⁸ Previous source 44.

Few primary health centers

Primary health care is a mainstay adopted by the health system in Iraq. However, there is an evident deficit in the provision of such services in terms of quality and quantity, as there is only one health center per 31,800 of population at the level of Iraq. This increases to more than 40,000 of the population in the Baghdad, Karbala, ThiQar and Najaf, whereas one primary health care unit should be provided per 10,000 of the population.

Poor secondary and tertiary health care

Official data indicate rapid trend towards encouraging the expansion of hospital services and private centers. The total number of hospitals throughout Iraq is (321) hospital (public + private), (229) government hospitals, with an increase of (9) hospitals compared to the year 2009 and (61) of them being educational hospitals. The number of public hospitals is (150) for the year 2010 compared to (147) hospitals in 2009. The specialized hospitals were (79) compared to (73) hospitals in 2009. The total number of beds in public hospitals was (42,459) with an increase of more than 1,500 beds in 2009. Estimated distribution rate of bed per family is (1.3) beds per 1,000 people. Basra governorate also recorded the highest rate (1.9) compared to Diyala (0.7) beds per 1,000 inhabitants, and the total number of beds for children is (5,791) beds for 2010, compared to (5,703) 2009. The rate of individual visits to health institutions amounted to (2.3) during the year 2010, compared with 2.2 in 2009. The centers of infertility and IVF show that the percentage of diagnosis cases of infertility amounted to (83,668) in 2010 compared to (77,641) in 2009. The highest rate was in Baghdad, followed by Erbil. Sulaymaniyah indicated the minimum of cases of infertility.

Emergency and paramedics

Bed capacity of the emergency halls increased securing 24hrs requirements as number of visitors' amounted to (6,850,339) visits, excluding Erbil, for the year 2010 compared to (7,015,110) visits in 2009.

Popular medical clinic services

The number of health insurance clinics is (353) for the year 2010 compared to (298) in 2009. The number of popular medical clinics was (352) in 2010.

Specialized centers (tertiary level of service)

The total number is (66) centers with largest number in Baghdad (13), followed by Sulaymaniyah (9). The absence of such centers is noted in the governorates of Missan, Diyala, Anbar, Salah al-Din.

Shortage of human resources in the health sector

Some levels of services can be indicated in comparison with the population and required efficiency index. For example, data show that the index of specialized and non-specialized physicians per 10,000 people did not rise during the last five years. The index reaches more than 6 doctors per 10,000 of population which does not meet the required standard (10 physicians per 10,000 people). It seems that the indicator of doctor/nurses is less than the required level. 20 nurses per 10,000 populations did not reach the required standard that is 40 nurses, as well as the index of population/hospitals and population/ popular clinics. Also and the occupancy rate of the family did not quite live up to the required standard.

Indicators of medical staffs/ population

The number of specialized and non-specialized doctors in all of Iraq in 2010, according to the annual report to the Ministry of Health with the numbers of doctors recommended by the Ministry of Higher Education and Scientific Research and by health departments, was (24,750) constituting an average of (7.5) doctors per (10,000) inhabitants. The number of dentists in the Ministry of Health for the year 2010 was (5,494) at a rate of (1.7) per (10,000) inhabitants. Moreover, the number of pharmacists (specialized and non-specialized) in all of Iraq was (6,265) at a rate of (1.9) pharmacists per (10,000) inhabitants.

The number of graduated nursing and health staff from nursing and midwifery schools and nursing colleges amounted to (46,024), in average (14) per (10,000) inhabitants in 2010. The total number of people with health professions for the year 2010 was (54,898) at a rate of (16.7) for each (10,000) of the population.

The health system in Iraq suffers shortage in human resources as the rate of doctors amounted to 6.1 per 10,000 people, compared to 30 in Bahrain, 24 in Egypt, 9 in Iran and 26 in Jordan. Iraq needs to graduate 12,758 physicians during the next four years to reach the average of 10 doctors per 10,000 people, and in this area Iraq is located in the lowest middle-income countries according to the rankings of the World

Health Organization (WHO). Medical services are also affected by the movement of the population and the migration of skilled workers in the medical fields out of or inside Iraq. This left a void difficult to fill with the available human resources, especially since emergency cases increase in crisis areas and areas of the displaced.

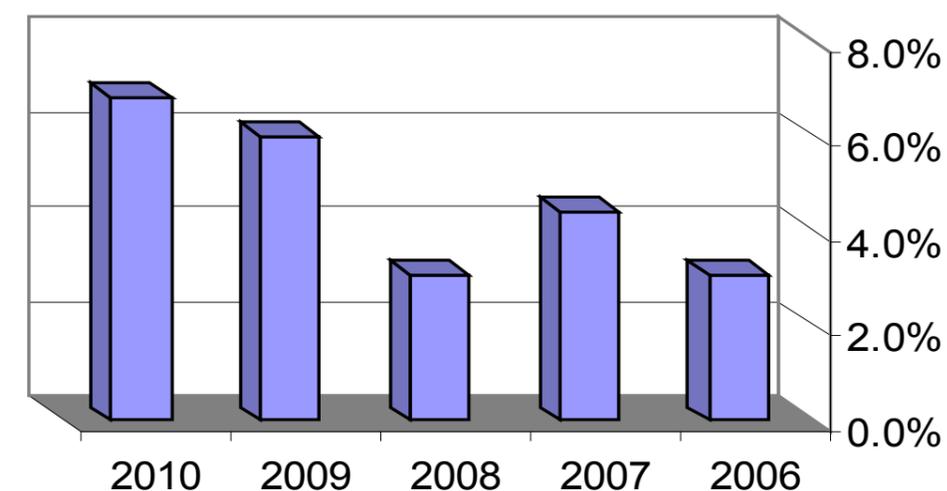
There is also a large gap in the numbers of female doctors as their percentage is about 50% of the number of male doctors. The deficit seems huge in the numbers of females nurses and midwives where the rate was 2.4 per 10,000 population compared to 58 in Bahrain, 34 in Egypt, 14 in Iran and 32 in Jordan. This figure reflects the indifference of the health system for chronic needs of women in reproductive health where habits and traditions limit women from accepting the services of male practitioners. Iraq needs to develop incentive policies for the involvement of females in health education and graduate thousands of female nursing staff and midwives during the next five years to cover this massive deficit.

6.2 Spending on social services for the population

6.2.1 Spending on health

There is no doubt that the allocation of financial resources for the health sector did not take a high priority during the past three decades because of the crises experienced by the country. Spending on this sector is low so far, affecting the level of services provided to citizens. In addition, the level of implementation in spite of the meager allocations is also low and the proportion of spending on the health sector is 4.9% of total government expenditure for the years 2002-2006. In all cases, the allocations are few and inadequate in comparison with the recommendations of WHO, which suggests that developing countries spend about U.S. \$ 34 per capita in the field of health care. This would pile a burden on Iraq in terms of disease and increasing the lack of medical services, as well as the inability to provide medical supplies. As a result it affects the accomplishment of the Millennium Development Goals for improving health care.

Figure 39: Allocation of Ministry of Health in the general budget (2006-2010) %



SOURCE: NAJEH NEMA AL KHAFAJI, A STUDY IN THE GENERAL BUDGET OF IRAQ 2006-2010, BAIT AL HEKMA

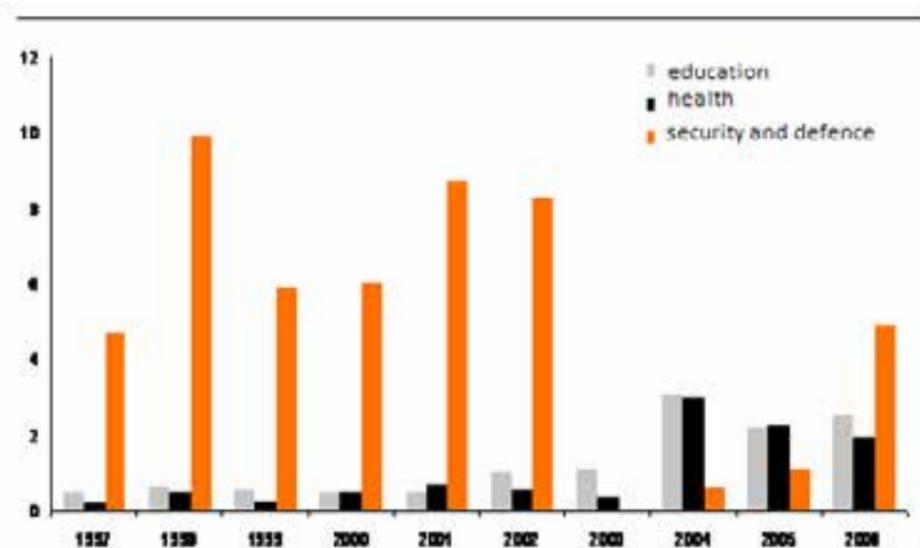
The statistical data indicates the relative importance of the allocations of the Federal Ministry of Health and health institutions and centers in the general budget (2006-2010). It is clear that it did not take an upward trend that is comparable with the rate of population growth (3%) or the need of the population to health services. The percentage growth in the allocations mentioned is 39%, 53.3%, 17.7%, 44.3% for the years (2007-2010). The operating expenses for the budget allocations of the Ministry of Health in 2010 have the rate of 7.6% of the total operating expenses of the government and represent allocations of investment projects by 4.7% of the total allocations of investment projects.

6.2.2 Spending on education

Iraq used to have an educational system that was considered one of the best systems in the Middle East. Since the 1980s, due to lack of allocations and migration of specialists and teachers, the quality of education in Iraq dropped on an ongoing basis. This happened particularly during the past quarter century caused by the conditions of war and sanctions. With the inactivity of the institutions of the education system, it has failed even to maintain the levels and quality of teaching staff. The quality deteriorated significantly due to low wages and lack of investment in training, reliance on unqualified teachers and the deterioration of the physical infrastructure of educational institutions. All of this negatively impacted the

quality of education in Iraq that failed to respond to the needs of the last two generations. Only a few students got the opportunities to acquire the necessary skills to secure gainful employment commensurate with their skills. Therefore, an increasing number of graduates entered the circle of unemployment and poverty. The education system was unable to produce qualified graduates for work, did not succeed in giving students the skills needed by the public and private sectors in accordance with the requirements of economic development and was away from promoting the creativity of young people¹³⁹.

Figure 40: Public spending on education, health and military compared to GDP %.



SOURCE: HUMAN DEVELOPMENT REPORT 2008.

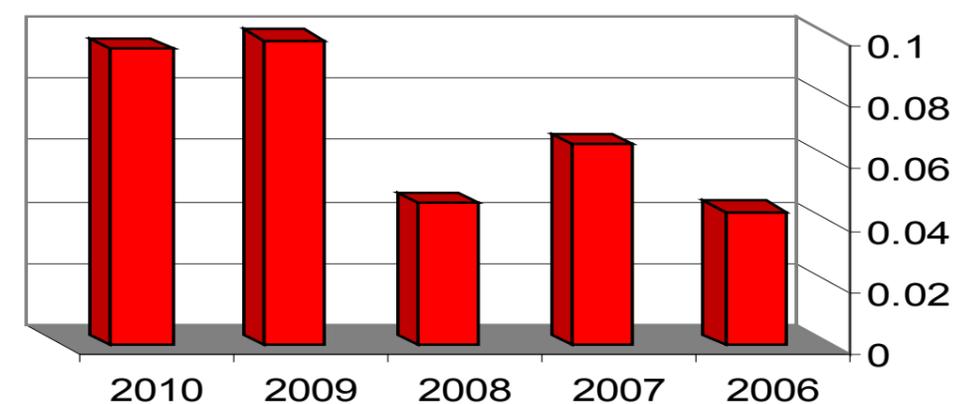
Official data of the Ministry of Finance indicate a significant improvement in the proportion of public expenditure on education of the total government expenditure for the years 2006-2010. However it is still below the levels reached in the second half of the sixties and the first half of the seventies of the last century. The share of education from the general budget (operational and investment government spending) is still far from the spending of the countries of North Africa and the Middle East which amounts to 18%¹⁴⁰. The analysis suggests that most of the increase has tended to meet the needs of the current budget that is mostly wages and salaries of employees in this sector. The budget constituted the percentages of 95.6, 99, 98.6, 98.84 and 94.3% of the total budget of the Ministry of Education for the years 2004-2008, respectively¹⁴¹. The investment expenditures that were allocated to the budget of the Ministry of Education focused primarily to secure the school buildings for

¹³⁹ National report on human development 2008.
¹⁴⁰ Human development report for north Africa and the middle east, "the un followed road: reforming education in north Africa and the middle east", world bank, 2007.
¹⁴¹ Al Zbaidi, report on education conditions in Iraq, educational planning division, ministry of education 2009.

various stages in order to:

- Removing duplication of school buildings (two-time attendance at the rate of 35.8% for primary and 42.1% for secondary and 23.5% for vocational education and 49% of the number of teachers, and three-time attendance at the rate of 4.5% for primary and 3.4% for secondary, and 1.5% for vocational education for the year 2007-2008).
- The natural expansion, which was estimated by at least (3%) in the population or;
- New buildings or disposal of leased buildings from the private sector or old buildings or dilapidated which amounted to 1878, 1898 and 1925 for the years (2007-2008) and (2006-2007) and (2005-2006) respectively, and substitution of inappropriate locations.
- Since the need is urgent as the number of pupils in each class exceeds fifty, the elimination of this phenomenon requires the creation of school buildings and the establishment of appropriate modern buildings¹⁴².

Figure 41: Percentage of allocations of education in the federal budget (2006-2010)



SOURCE: NAJEHNEMA AL KHAFAJI, A STUDY IN THE GENERAL BUDGET OF IRAQ 2006-2010, BAIT AL HEKMA

¹⁴² NajehNema Al Khafaji, a study in the general budget of Iraq 2006-2010, Bait Al Hekma

6.3 Social protection of the population

Article 34:

First: Education is a fundamental factor in the progress of society and is a right guaranteed by the State. Primary education is mandatory and the State guarantees to eradicate illiteracy.

Second: Free education is a right for all Iraqis in all its stages.

Third: The State encourages scientific research for peaceful purposes that serve man and supports excellence, creativity, invention and the different aspects of ingenuity.

Fourth: Private and public education is guaranteed and shall be regulated by law.

Although education is free at all stages, evidence show that some of the expenses borne by the families constitute a burden on poor households. Also the deterioration of the quality of education is putting more burdens on these families, thus increasing the vulnerability of their children to fail. Perhaps the paradox noted here is that, despite the improvement in public spending on education, the pattern of household expenditure on education has continued to grow to meet those expenses 5 times to what was spent by the family in 1993 and three times the spending in 1988 ([3]). This imposes further burdens on the poor as families vary in terms of the amount of allocations out of their income on education. An average expenditure on education per capita during (12) months rose up to (73.4) thousand dinars in the category of the poorest compared with (286.1) thousand in the fifth category (richest), which is a big difference. This explains part of the low enrollment rate for school stages in poorer class. Mainly girls' education is sacrificed because of family's inability to cope with the increased spending with progress in the study and then with the education of boys who get caught up early in the labor market.

Table 21: Differences in average of spending on education of females in the poorest and the richest categories

Category	Spending								
	Tuition fees	Uniform	Food	Accommodation	Books and supplies	Transport	Private tuition	Other	Total
The poorest	0.4	24.8	14.3	0.0	7.3	5.1	0.7	2.2	71.6
The richest	8.3	61.5	78.6	0.7	26.1	43	18.7	8.9	286.4

Article 30: The new constitution of Iraq

First: The State guarantee to the individual and the family -- especially children and women -- social and health security and the basic requirements for leading a free and dignified life. The State also ensures the above a suitable income and appropriate housing.

Second: The State guarantees the social and health security to Iraqis in cases of old age, sickness, employment disability, homelessness, orphanage or unemployment, and shall work to protect them from ignorance, fear and poverty. The State shall provide them housing and special programs of care and rehabilitation, which will be organized by law.

Forms of social protection provided by the state to the population are limited to certain categories of the population under the existing legislation, namely:

1. The Social Security Act (inactivated) and its provisions apply to the formal private sector employees only, while employees in all other business sectors remain unprotected.
2. Civil Retirement Law for workers in the government sector and the pension law for military personnel.
3. Social Welfare Act No. 126 of 1980 and its associated network system of social protection and widows care system made after 2003.
4. Provisioning card system which was implemented since 1996 to ensure equal food rations to the population to protect them from poverty and famine during the sanctions period.

The safety nets or social security is one of the mechanisms for absorption of the negative repercussions of the reforms during the transition and the ration card mechanism. They cannot substitute comprehensive social protection systems since it assumed an unsuccessful and non-lasting policy, but assumed rather a temporary measure to protect the marginalized and poor of complete collapse.

Social protection network

The social protection network is one of the means of social insurance (Social Welfare / Family Welfare Fund). It is funded from the State budget and represents a manifestation of social solidarity for some segments of society according to the provisions of the Social Welfare Act No. 16 of 1980. The federal budget, since 2006, included financial allocations needed to pay the salaries (social protection network). This contributes to the alleviation of poverty caused by the economic reform policy and eases the support from the government for petroleum products. As a result, the allocations of social protection network include aids to up to (500) thousand families towards the delivery of more than one million families after they had been up to (150) thousand families within the fund family care/social welfare.

Poverty line in Iraq is set to one Dollar a day which is equivalent to (50) thousand Iraqi Dinars a month. The assistance would increase to (70) thousand Dinars for two persons, (90) thousand Dinars for three, (100) thousand Dinars for four and (110) thousand Dinars for five, while the upper limit of the salary is (120) thousand Dinars. The number of those covered under the umbrella of the network has expanded as with allocations totaling 857.5 billion Dinars for the year/ 2010 and accounted for 1% of the total federal budget allocations of 84657.5 billion Dinars.

Table 22: Allocations for the social protection network in the federal budget in billion Dinars (2006-2010)

Year	2006	2007	2008	2009	2010
Allocations	500	990	1087.1	845.7	857.5
Relative importance of the total budget	1%	2%	3%	1.2%	1%

The government also included the issue of tackling poverty within its priorities, and adopted a Poverty Reduction Strategy in 2009. It allocated for the first time in the budget of 2012, nearly \$ 500 billion for special projects for the poor: the removal of mud schools, micro-credit fund support and support to health centers in poor areas.

The limitation of the protection systems to these slides is contrary to the principle of the State activating rights foreseen by the Constitution in the first place. In the second place, it also draws attention to the need to provide or reform social

protection systems that take the utmost importance in transitional phases in different societies, including the capitalist countries. If the transitional period does not accomplish this in Iraq, the absence or lack of social security constitute be the key flaw of any system making the community full of victims of this inequality.

Chapter 7 - Population and Inequality

The population; size, structure, concentration, growth, development and their movement affect the development of the pattern of their lives and the extent of the exercise of their fundamental, economic, social and cultural rights. Accordingly, the objectives of the Program of Action of the Cairo Conference 1994 included the issues of population distribution, urbanization and internal migration and sustainable development, to encourage more balanced spatial population distribution through the promotion of equitable and sustainable development ecologically. The conference also aimed to review the policies and mechanisms that contribute to the population concentration in excess of the limit in the big cities. This chapter will address the inequalities in development: the imbalance in the distribution of population among the governorates, disparities in human development and the resulting poverty and inequality in population rights in the development, as well as vulnerable groups of the population.

7.1 Imbalanced urban development

The program of Action of the Cairo Conference 1994 called on States to review policies that contribute to the concentration of population in cities. It also aimed at strengthening the management of services and the territory of urban communities in order to address the challenges cities are facing because of demographic trends of birth rates and internal migration. The population of Iraq is distributed -as it is noted in Chapter I- unevenly among the governorates; its distribution is linked to natural, economic, administrative, political and religious factors. The following observations about the pattern of population distribution that can be noted:

1. There is no balance between the area of the governorates and their share of the size of the population in Iraq, The data regarding Iraq's governorates share of area and population in the last decade, indicate the existence of imbalanced geographical distribution of the population in urban areas (70.9%) of Iraq's population live in urban areas and (41.5%) of them in the governorate centers. This clearly shows the dominance of the governorate of Baghdad, since the political and economic activities are concentrated in the capital. Baghdad hosts about a quarter of Iraq's population, while it only constitutes one percent of the area of the country. The same statistics applies to the case in the governorate of Babel. In general, fifth of the population live in three governorates in which the three major cities are located, Baghdad,

Mosul and Basra. In contrast, there are three governorates that account for half of the area of Iraq, but their share of the population is about (11%) only; Anbar with an area of about one third of the country and its share is (5%) of the population, Muthanna with an area of (12%) and a population of about (2%), and Najaf whose area and population are (6.6%), (3.6%) respectively. According to the results of listing and the numbering in 2009, Baghdad includes 6.7 million people, and there are 3.1 million in Mosul and 2.4 million people in Basra. Among the 120 urban centers in Iraq, there are four centers which contain more than one million people; Rusafa, Karkh, Basra and Mosul These four are home to more than five million people. On the other hand centers like Kirkuk and Adhamiya are home to between one and three quarters of a million people, six urban centers consist of 750-500 thousand people: Kadhimiya, Karbala, Najaf, Nasiriyah, Erbil and Sulaymaniyah. The large urban centers in the country accommodate about 25 million people.

2. Population growth rates for the governorates differ not only due to differences in the levels of the birth rate, but also because the share of the governorates of net international and internal migration has been uneven as well. While the population of Iraq increased at a rate of 2.97% per annum for the period 1997-2007, seven of the 18 governorates witnessed lower population growth rate per annum namely; Kirkuk, Basra, Dahuk, Maysan, Qadisiya, Salah al-Din, and Baghdad, while the remaining eleven governorates grew on an annual rate of population growth that exceeds the overall rate of the whole of Iraq¹⁴³.
3. There are also local variations in the fertility level as the total fertility in rural areas is higher than in urban (5.1 versus 4.0). In governorate centers fertility level is less than in other urban areas (3.8 versus 4.2). Levels of fertility among governorates also vary. It reached the maximum in the governorates of Maysan and Nineveh (5.4) and lowest is in the governorates of Sulaymaniyah and Kirkuk (2.9 and 3.3 respectively). Other governorates recorded fertility levels lower than the national level; Diyala, Anbar, Baghdad, Babel and Erbil, while others recorded fertility levels higher than the national level; Dahuk, Salahuddin, Karbala, Wasit, Qadisiyah, Najaf, ThiQar, Muthanna and Basra.

¹⁴³ National report of Iraq on progress in achieving the goals of the international program of action of Cairo conference 1994- within the context of the MDGs, ministry of planning 2009.

This odd distribution can be explained by the negative impact of the pattern of spatial development for urban areas at the expense of the rural area. This created governorates and regions that were economically, socially and culturally relatively developed and under developed. Perhaps the misallocation of investments geographically and sectorally (industry at the expense of agriculture) stands in the forefront of the reasons behind this discrepancy between governorates and between urban and rural areas. This spatial variation resulted in the concentration of population, economic activity and services in few cities. Those cities became elements of attraction for the population and labor force moving from towns and small rural areas to urban areas and to economically developed governorates¹⁴⁴ as evident from the administrative division of the cities of Iraq into to eighteen governorates with attractive centers surrounding areas. Urban growth usually follows economic growth in urban centers, and therefore the centers enjoy strong attraction for population of nearby and distant areas in view of the many employment opportunities and service. This leads to the increase in population, and thus a population pressure on health, educational and residential services and consequent social problems. These problems are reflected in the emergence of residential neighborhoods within the city which are the hotbeds of poverty, crime, juvenile delinquency and social disintegration. This is in addition to the acute shortage of human resources and lack of access to justice in urban areas¹⁴⁵ leading to limited opportunities for the rural population to access services and to the decrease in their quality of life.

The stream of migration from rural areas to urban areas has not stopped, leading to the existence of areas with deteriorated perimeters and informal settlements. As is the case in many parts of the world, informal slums (squatter) are closely linked to poverty and deprivation of basic services and regular income.

Those areas are associated with population groups characterized by their economic and social fragility, such as, new immigrants, displaced persons and marginalized individuals in the labor force. The areas inhabited by vulnerable groups are especially susceptible to social exclusion. In terms of distribution of health centers, it appears that there is a clear difference between one governorate and the other reflecting the unequal distribution of services. At the time the number of health centers in the capital, Baghdad does not exceed (171) covering a population of approximately seven million people. This number rises in the northern governorates like Sulaimanah for example, where it reaches (387) covering a population of up to one million people. Based on this indicator, the rate of health centers per 10,000 inhabitants amounts to (41,741) in Baghdad, compared to Wasit governorate where

¹⁴⁴ Ministry of planning, National Development Plan 2010-2014, p 23-24.
¹⁴⁵ Ministry of Health, statistical guidebook 2008.

the rate is (28,123), and (25,800) in Diwaniya. The control imposed by large major cities has made them attract the best elements of the educated class and skilled people in Iraq. These educated groups such as doctors, engineers, experts and staff prefer working in the big cities rather than the other for the availability of amenities and jobs.

The continuation of this pattern of uneven population distribution for a long time left structural traces on the habitat and its surroundings, It also influenced the population themselves with their degraded environment, their isolation and social, political and economic exclusion, in addition to the fact that the residents of these areas may become prone to negative feeling towards their national responsibilities due to sense of inequality in rights with the people of major cities¹⁴⁶.

7.2 Inequality in Human Development

Despite the progress made by all countries in the human development, the performance of Iraq has been weak and uneven. According to the National Human Development Report (HDR) for 2008, the decline was comprehensive of the different aspects measured by the Human Development Index. Among the lower-middle development countries, Iraq ranked "132" according to HDR 2011. If the index seems low in terms of international comparison, the variation in the level of the index between the governorates reveals a great variation among them in the achievements of development.

This variation is clearly associated with the distribution of population between rural and urban areas and concentration of the urban population in some governorates at the expense of the other. This explains the reasons why those governorates that have a higher level of human development, including higher income, and better access to health and education, are biased in terms of distribution of their services to the urban population. Statistical data have shown that the highest rates of poverty are linked with lower value of the human development index within a high proportion of the rural population. The governorate of Muthanna is a glaring example of this relationship.

¹⁴⁶ Dr. Abdulrazeq Abas Hassan, evolution of Iraq cities, Rashad press, Baghdad 1977, p88.

Table 23: Relation between the percentage of rural population and poverty rate and the human development index in Iraq

	Governorate	% or rural population	Human development index		Poverty rate	
			Order	Index value	%	order
Rural governorates	Muthanna	56	17	0.570	49.8	1
	Salah al-Din	56	13	0.600	40.5	3
	Babel	53	6	0.629	42.5	2
	Anbar	52	3	0.652	21.8	13
	Diyala	51	11	0.615	34.4	8
Governorates with high urbanism	Erbil	17	2	0.652	3.7	17
	Sulaymaniyah	15	1	0.676	3.3	18
	Baghdad	13	10	0.625	13.9	14

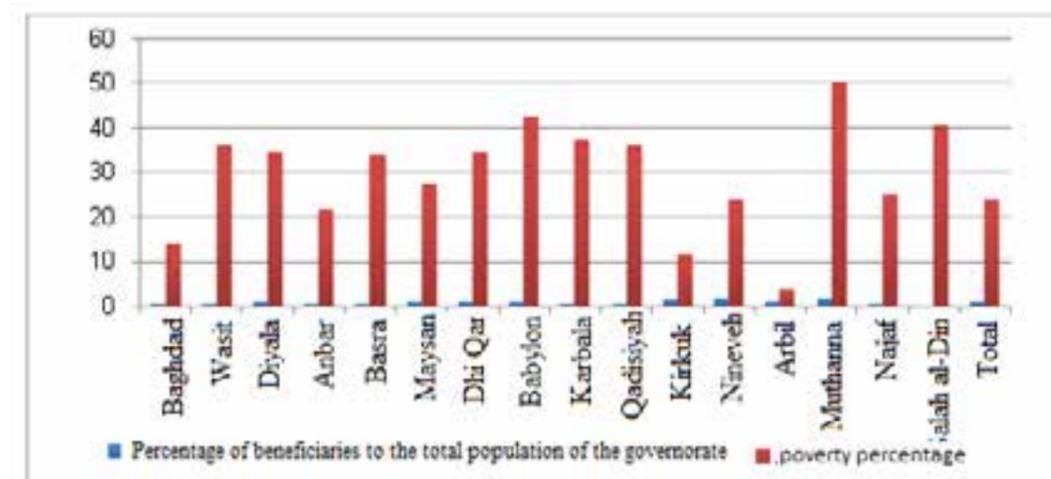
7.3 Poverty disparity among the population

The Poverty Reduction Strategy (2009) revealed that (23%) of the population lives below the national poverty line which estimated at about 77 thousand dinars per month per capita. There are also variations in the rate of poverty among rural and urban areas and among governorates. (39%) of the population in the rural areas is poor, or 3.4 million people, compared to (16%) of the urban poor, or about 3.5 million people. Muthanna poverty rates stand at (49%), Babel (41%) and Saladin at (40%) and are among the poorest governorates in Iraq.

Communities vary in terms of indicators of poverty, but the proportion of poor individuals in the country indicates the degree of the variation and the difficulties population faces in some areas compared to other regions of the country. The 2007 social and economic survey data indicate that the poorest 25 localities in Iraq

comprise (67%) of the total population, but also include (83%) of the poor in the country. It should also be noted that the countryside of Babel, which is the poorest with poverty rate of (61%) comprises the largest group of poor people that makes up (7%) of the total, although it includes only (2.6%) of the total population.

Figure 42: Pattern of geographic distribution of the aids of the social protection network and poverty rates by governorate



7.4 Disparities in achieving the Millennium Development Goals

Governorates vary in achieving the Millennium Development Goals, and this can be inferred from the results of follow-up reports the Millennium Development Goals prepared by the Central Statistical Organization¹⁴⁷. According to the report the weakest governorates in the level of achievement of the Millennium Development Goals are the southern governorates and in particular (Muthanna and Maysan). The Nineveh governorate is experiencing a shortage in the achievement of targets at some of the indicators. The following is a summary of the disparities in the achievement of the MDGs at the governorate level.

MDG 1: Eradication of extreme poverty and hunger

At the level of Iraq, (3.1%) of households has an income below one Dollar a day. In Diyala this percentage increases to (11.2%) which is the highest rate among the governorates, followed by the governorate of ThiQar at (8.9%). The city of Karbala recorded the lowest percentage of (0.6%).

¹⁴⁷ Central organization for Statistics, achieving MDGs report, 2011.

MDG 2: Achieving universal primary education

Most governorates made progress in the net enrollment rate in primary education. The highest rates are in the governorate of Najaf at (96.1%). There was no improvement in the indicators of secondary education, where the highest percentage recorded in the net enrollment rate was (50.5%) in the governorate of Kirkuk and the worst was Maysan governorate at (28.5%).

MDG 3: Promoting gender equality and women empowerment

Women empowerment Indicators increased in the governorates with the increase in the proportion of seats held by women in the governorate councils. The highest rate was recorded in Muthanna at (40%).

However, there is a fall in the index of the proportion of women in paid employment in non-agricultural sector despite the high ratio of females to males who are literate in the age group (15-24) years.

MDG 4 goal: Reducing child mortality

It is necessary to track infant mortality rate because as the report shows, more than half of the governorates have high child mortality rates, especially in the governorate of Salah al-Din at (70) deaths of children per (1000) live births.

MDG 5 : Improving maternal health

With regard to MDG5a, the report shows that there is improvement in the indicator of the proportion of births that take place under the supervision of health personnel in most governorates. As a result, the proportion of maternal mortality has dropped from 291 deaths per 100,000 live births in 1999 to 84 deaths per 100,000 live births in 2007. With regard to Goal 5b, which includes universal access to reproductive health by 2015, as the available data so far do not give a clear picture about the progress in this area. In addition there is no detailed data available for the past that can be contrasted with data of Iraqi Women Integrated Social and Health Survey (I-WISH) 2011, but it is clear that there is a need for a lot of work to be done in this area.

MDG 6: Combating HIV/AIDS and other diseases

Iraq is among the countries with less incidence of HIV. However, the southern governorates suffer from high incidence of tuberculosis, with the highest percentage in Diwaniyah governorate by 69 cases per 100,000 people, followed by the governorate of Muthanna and ThiQar.

MDG 7: Ensure environmental sustainability

Governorates varied in achieving environmental indicators. Some have maintained the previous rates of achievement, while others declined, in particular the southern governorates. The results showed that Baghdad has the highest percentage of population with access to improved source of water and also improved sanitation.

MDG 8: Developing a global partnership for global development

Unemployment Index rate among the population between (15-24) years of age is considered one of the best indicators showcasing the eighth MDG. It has been shown that the governorate of ThiQar has had the highest rate of unemployment over the years (2005, 2006, 2008) by (55.7%, 48.5%, 59%), respectively. The unemployment rate declines in the governorates of Wasit and Sulaymaniyah in the year 2008.

7.5 Expenditure, income and the inequality in distribution

According to the results of the Iraq Household Socio-Economic Survey 2007, the monthly average of household expenditure is 1,000,800 Dinars (12,009,600 Dinars per year). The monthly average expenditure per capita is 145,820 Dinars. The annual per capita is 1,749,840 Dinars which is equivalent to \$1.388 as per exchange rates of 2007. The following are some indicators of disparity in the average spending per capita.

Table 24: Distribution of households by monthly per capita

	Less than 100 thousand Dinar	More than 100 thousand Dinar	180 thousand Dinar and more	Total
Iraq	32.6	38.2	29.2	100
Rural areas	53.4	32.6	14	100
Muthana	54.4	27.1	18.5	100
Erbil	4.4	24.9	70.7	100
8 children and more	32.7	62.8	4.5	100
No children	19.1	39.7	41.2	100
The head of the household works in agriculture	57.1	28.9	14	100
The head of the household is employe	44.8	34.5	20.7	100

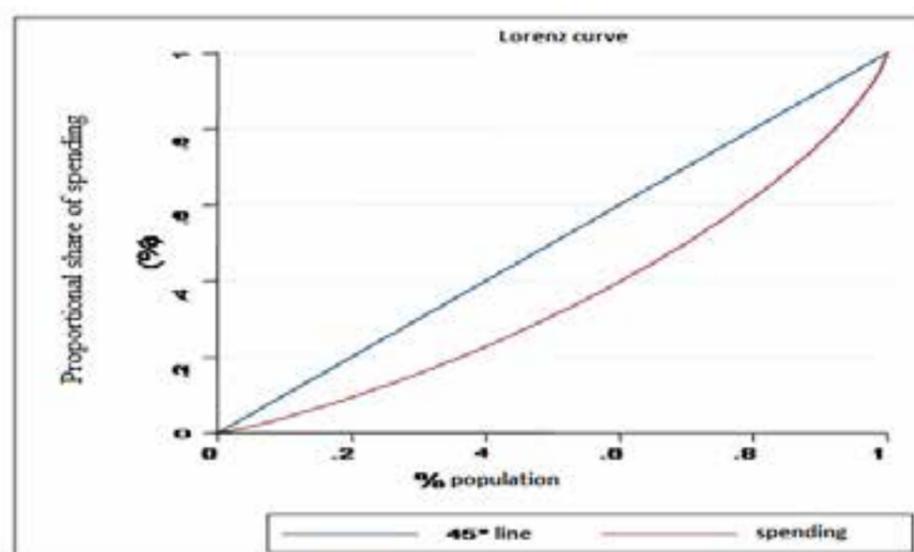
The percentage of food expenditure of the total spending per capita at market prices amounted to (35.6%) and the prices paid at (31.7%) which is attributed to the contribution of the ration card system in the cost of spending. It is shown that the governorates vary in the average consumption as shown in the following table:

Table 25: Variation in the consumption level by governorate

Governorate	Average spending (thousand dinar)	Percentage % to average	Percentage to lowest governorate
Dohuk	222.8	152.8	225.1
Nineveh	124.0	85.0	125.3
Sulaymaniyah	297.3	203.9	300.3
Kirkuk	7,144	99.2	146.2
Erbil	293.1	201.0	296.1
Diyala	112.7	77.3	113.8
Anbar	120.5	82.6	121.7
Baghdad	148.5	101.9	150.0
Babel	111.8	76.7	112.9
Karbala	110.4	75.7	111.5
Wasit	117.3	80.5	118.5
Salah al- Din	103.5	71.0	104.5
Najaf	93.1	135.8	137.2
Al-Qadisiyyah	116.1	79.6	117.3
Al-Muthanna	99.0	67.9	100.0
Thi-Qar	109.2	74.9	110.3
Maysan	114.2	78.2	115.2
Basrah	120.1	82.4	121.3
Total	145.8	0.100	9.146

Despite the presence of a number of measures for disparity, the Gini coefficient is the most common. Its value ranges between zero indicating the most equality, to one referring to maximum disparity in income and spending distribution. The disparity between rich and poor is very low in Iraq compared to the rest of the world. Comparing the Gini coefficient to that in 128 countries whose data was available, Iraq was ranked eighteenth as the value of coefficient was 0.309, compared with 0.344 for Egypt, 0.353 for Algeria, 0.377 for Yemen, 0.384 for Iran, 0.388 for Jordan, 0.395 for Morocco, and 0.436 for Turkey¹⁴⁸.

Figure 43: Lorenz Curve for spending -2007



SOURCE: CALCULATED BASED ON IRAQ HOUSEHOLD SOCIO-ECONOMIC SURVEY 2007

Iraq Household Socio-Economic Survey 2007 indicate that the richest fifth of households gets (38%) of income while the poorest fifth gets (9%) of the income at the level of Iraq, while governorates vary in terms of inequality in the share of household income, as this disparity reaches the maximum in Dohuk, Erbil, and Najaf, and the lowest in Maysan.

7.6 Inequality and balanced development

1. Iraq's new constitution

In the context of the developments that occurred after the change of the political system in 2003, Iraq's new constitution of 2005 accentuated the rights of the

¹⁴⁸ Higher committee for poverty alleviation policies, poverty alleviation strategy in Iraq, p 12.

population to have balanced development for all people in all regions and governorates whether or not they have the oil wealth in their territory. Article 112 /First, emphasized that the distribution of oil revenues shall be fair and equitable and in accordance with the standards specified in Article (112). Article (121) addressed population density and the needs of the region or governorate. This article addressed the standard vulnerability and the degree of deprivation suffered by the region or governorate whether it was a result of policies of the former regime, or as a result of the adoption of a comprehensive development policy as well as the subsequent imbalanced sectoral and regional growth. The decentralized administration and federalism have become the state's approach to achieving balanced development and ensuring the rights of their populations. The allocation of operating and investment budget resources became a direct tool to achieve this goal and to balance the development of regions. The National Development Plan sets out this and the need of "drawing the features of a population policy aimed at achieving a balanced population growth that helps to make a better human development and takes into account the requirements of the labor market "

In terms of distribution of the health centers, it appears that there is a clear difference between governorates reflecting the unequal distribution of services. At the time the number of health centers Baghdad does not exceed 171 for the population of approximately seven million people. This number rises in the northern governorates such as Sulaiymanah to reach 387 health centers with a population less than one million. Based on this indicator, the rate health center/ 10,000 inhabitants come up to (41,741) in Baghdad, one of the worst governorates compared to this indicator because of high population density, compared by a reduction in the number of health centers, followed by Wasit at a rate of (28,123), and Diwaniya at a rate (25,800).

The framework of the disparity between the population of the governorates and the pattern of the central administration

Years of central rule, and political conditions experienced by the country, have deepened the tendency of the central administration to marginalize local administrations. This led to the deepening of inequalities between the governorates and the overall economic and social conditions, health and cultural rights of the population. In the context of changing the political system in 2003, a new conviction emerged toward the decentralization of administrative tasks to ensure more effective adaptation to new economic data. At the same time centralism prevents the formation of an economic environment capable to create development. In line with the trend towards the reform of administrative structures, Iraq is moving today toward adopting patterns of decentralization in different levels of government, in the hopes of developing and improving the level of service, quality and efficiency, as well as deepening the foundations of democracy. The new constitution of 2005 supported this trend as some of its articles provided for the governorates are to be administered based on the principle of decentralization (Article 116). Legislation has also strengthened this trend, particularly the Law of Governorates not organized into a Region for the year 2008.

The trend towards decentralization in the State's management imposed obligation on the federal government. Obligations are regarding the need to lay the foundations for participation in the development of priorities and objectives for the management, for the sustainable development and the satisfaction of basic needs through the provision of public services. Management of financial resources ought to be available to each region or governorate, both in terms of allocations of the State budget or grants and loans assigned to programs of reconstruction, and implementation of development projects. The Iraqi Constitution provided for in Article 114 on the fundamental economic right of the regions and governorates not organized in a region.

The application of this constitutional provision would strengthen the case of spatial development towards reducing the disparity rate between the population the governorates, which is especially reflected in the allocation of revenues between the regions and governorates, including oil revenues constituting 94% of the total revenues of Iraq. In its Article 112, the Constitution called for equal and just distribution of resources, by not adopting the population as an indicator of a single distribution and by calling for a balanced development of different regions through enabling them to manage their affairs and improve the degree of social and economic development.

See: "Support for decentralization and local governance to help provide services," Bait Al Hekma and Ministry of Planning and ESCWA2011

2. Development and reconstruction program for regions and governorates

The development program for the regions and governorates was put in place in order to stimulate development at regional and local levels as a result of central government's trend towards decentralization. The plan stipulates the preparation of investment projects on the basis of the priorities of regions and governorates in order for the local governments to directly contribute and take its role and the implementation of projects. It is based on development programs including infrastructure projects, approved by the various economic and social spheres. It should be reflected on the basic services to the citizen after the allocation of funds from the federal government in light of the quotas allocated to them according to legislation. As a result, this will lead to stimulate the private sector to seek to find job opportunities for residents and reduce the level of unemployment in regions and governorates.

Necessary funds were allocated for projects related to (development program for regions and governorates) as of the budget year 2006. The volume of allocations (funds) approved in the federal budget for development projects and the reconstruction of the regions and governorates for the years (2006-2010) was 19,560.3 billion Dinars, which constitutes (22.9%) of the allocations of investment projects for the same period and the rate of (5.7%) of the total budget allocations for the years mentioned¹⁴⁹.

Compensatory quotas in the budget law of 2010

The budget law for 2010 guaranteed for the first time compensatory share to the governorates producing crude oil and gas by (1) Dollars per barrel of product and (1) Dollars per refined barrel and (1) Dollar for the production of (150) cubic meters of natural gas. The law grants the authority to Federal Minister of Finance to allocate \$ 20 of each entry visa for the foreign visitor to the holy thresholds. Other revenue is distributed to the concerned governorates only to be disbursed for the development of the holy sites so as to be complementary to the regions development program allocations funded from the budget and approved by the federal government. In order to achieve the objectives of spatial development and translating the regional priorities and the diminishing the ratio of deprivation among the population.

Federal Budget Law for the year 2010, Article 43 / First and Second

¹⁴⁹ NajehNema Al Khafaji, a study in the general budget of Iraq 2006-2010, Bait Al Hekma

The allocation of funds for Development program for the regions and governorates was put in place in order to stimulate development at regional and local levels. At the same time it ensures equality in resource allocation and that they were distributed proportional to the number of residents and the level of deprivation, set by the Ministry of Health based on relevant development indicators. This was a result of central government's trend towards decentralization upon the preparation of investment projects on the basis of the priorities of projects of regions and governorates. The local governments were supposed to directly contribute and take a part in implementation of projects under development programs including infrastructure projects approved by the various economic and social spheres so as to be reflected on the basic services to the citizen. Statistical data show percentages of allocations for the total investment projects and the total public budget allocations for the years (2006-2010), where there was a decrease in these allocations not consistent with the trends towards decentralization and the promotion of development and reconstruction in the governorates (local governments) which aim to reach sustainable development.

Table 26: Allocations of investment projects for 2006-2010/ billion dinar

	2006		2007		2008		2009		2010	
	Allocation	Relative importance								
Development of regions and governorates	3000	5.8%	3000	5.8%	8034.3	9.35	2872.0	4.2%	2654.0	3.1%

The volume of allocations (funds) approved in the federal budget for development projects and the reconstruction of the regions and governorates for the years (2006-2010) constituted (22.9%) of the allocations of investment projects and the percentage of (7.5%) of the total budget allocations for the years mentioned.

7.7 Half the population and the inequality in development

Women account for a half of the population according to official censuses, and the National Development Plan 2010-2014 indicates that the proportion of the male population to the proportion of the female population in Iraq has been roughly balanced over the period between the years 1970 to 2008 with slight effects of

migration on the proportion of males. By reference to the census, it can be seen that the ratio of males of the total population was (51.4%) in 1987 and the ratio of females was (48.6%). These ratios were maintained with changes of small significance after 2003, with the proportion of males dropping to (50.88%) and the proportion of females increasing to (49.12%) of the total population in 2008. The international migration factor is a compelling reason in the interpretation of low gender ratio in Iraq after the events of 2003.

Social, political and economic issues overlap with demographic issues related women. This calls for caution in dealing with numbers, both in the analysis or conclusion, which justifies the scrutiny in the proportion of the female population in censuses prior to the census of 1957, at least. There are also privacy issues in relation to the disclosure of reproductive health, violence against women and women's rights in general. Even the number of females in the family has remained the subject of adapting with the goals determined by males. In the census of 1947 the proportion of females is not realistic because of the tendency of the family to register their male children as female in fear of forced engagement in the World War II period. And in contrast, a case occurred in the late Ottoman Empire in 1904 that agreed to open the first school for girls in Baghdad, near Al Muazem Gate and the governor Abdel Wahab Pasha decided to register women and give those carnets similar to men in Baghdad and Mosul and Basra. "Then men thought that the census of women affected their honor, so the shops of Baghdad took the streets to deny the decision, they were headed by clergymen and equipped with drums, armed with swords and guns and demonstrators clashed with Gendarmerie..."¹⁵⁰. This refers to societal image and attitude from the development of women roles in the context of socio-economic transformations that result in demographic changes. The result is the formation of a new type of population structure, size and growth rates. Nevertheless, in the context of the evolution of the population of Iraq's modern history, opposition to women's participation in public life did not continue. Since the formation of the new Iraqi state in 1921, active feminists have called for the emancipation of women. Iraq was one of the first countries where women have had opportunities to work in the areas of education and nursing in particular. In 1959, the first woman to serve in a ministerial post from Arab States was in Iraq and in the seventies Iraq has seen a rise in the feminist movement within the limits allowed by the State. In the years of the eighties and with the war keeping men busy, woman had to fill many gaps left by men after the involvement of more than a million men in the armed forces during that war. However, the contribution of women in the labor market during the eighties remained low, and further deteriorated during the nineties which were characterized by a sharp decline in real wages, which led to the increase in the withdrawal of women from work.

¹⁵⁰ Omary, political tales from new Iraq, p95, quoted from Droubi, counsels of Baghdadis

The changes that followed in 2003 contributed to improving the rights and status of women in Iraqi society, and some of the articles in the Constitution of 2005 gave a strong impetus to the rehabilitation of Iraqi women. They also put the issue of gender discrimination under political and social controversy. However, the practices of the past decades continue to influence the social, economic and political status of women as there is still inequality in the exercise of political, economic and social rights. This is the dominant reflection of the prevailing conditions and the status of half of the population / women in society and the economy and governance.

The gender gap index

The promotion of gender equality and the empowerment of women is one of the things necessary to achieve human development, but this issue is gaining specificity based on the nature of society and economic, social, cultural and political conditions, which affect the shape and nature of the relationship of gender. The indicator of gender clearly shows the gap in the index of education between males and females, the gap in the political empowerment and economic participation.

Table 27: Differences between genders in Iraq

Index	Value / order
Index of differences between genders	Value 0.542 Order 117
% of maternal mortality per 100 thousand live births	75
Population with at least secondary education (% for the age group 25 and above)	Females 22.0 Males 42.7
% of participation in work force	Females 13.8 Males 68.9

SOURCE: UNDP, HUMAN DEVELOPMENT REPORT 2011, TABLE 4, P 153.

Women's education

Education is a key indicator to the reality of women and a critical factor in it. The access to high levels of education will increase the overall roles of decision-making carried out by women, and makes them candidates in the labor force and in the political and social activities. It will also empower them to take a variety of decisions on fertility and health care. Also, education is essential to increase women's awareness of their economic, political and social rights¹⁵¹. This fact is highlighted by knowing that education has increased the share of women in the labor force, with high participation in line with increasing levels of education, so educated women are active for a longer period¹⁵². However, the proportion of women who were not enrolled in education was about 31%, while 8% of women completed their university education¹⁵³. On the other hand, female enrollment ratios in primary schools are low compared to males. The gender gap has become much greater in rural areas, with about 40% of females in these areas are not enrolled in primary school, compared to 20% in urban areas¹⁵⁴.

MDGs

Third Goal: promote gender equality and empower women
Target 4: Eliminate gender disparity in primary and secondary education preferably by 2005, and at all levels by 2015

Of the most important differences between the sexes is what we find in the levels of illiteracy among individuals. The illiteracy rate is (21.6%) among the population aged ten years or more and it rises to (26.4%) among females and decreases to (11.6%) among males. Illiteracy rate goes above the national level in ten governorates and reaches maximum in Dahuk and Maysan (about 31%) and Muthanna (about 30%)¹⁵⁵.

Recorded enrollment ratio of girls to boys in primary education was (94.2%) for the academic year 2007/2008. In the stages of secondary education was (76.9%) for the academic year 2007/2008 while (79.5%) in the stages of primary education in 1990 and secondary education (64.1%) in 1990 as well. In the stages of university education was (86.6%), whilst it was (50.9%) according to the reports of the

¹⁵¹ Ivon Yazbek Hadad and John L., previous source p 227

¹⁵² Ministry of Planning, Central Statistical Organization, living conditions survey in Iraq 2004, previous source, p 122.

¹⁵³ Previous source, p 103

¹⁵⁴ Previous source, p 110.

¹⁵⁵ Results of Iraq Household Socio-Economic Survey 2007, p 257.

Directorate of Social and educational Statistics, suggesting the possibility of eliminating gender disparity such that everyone acquires their rights to education without discrimination and equal access to knowledge and work among people.

According to the 2007 survey results of social and economic status of families ratio of females to males who are literate from age group (15-24) years was (91.6%) compared to (75.6%) in the year 1990. In spite of progress of this indicator, it is noted that there are variations among governorates Ratio drops in some southern governorates because of what was referred to previously -low rates of literacy among women in those governorates.

7.7.1 Political Participation

Iraq is at the forefront of Arab countries in terms of the number of seats reserved for women in national parliaments, as passed by the Constitution. Examination of the Iraqi constitutions starting from the Iraqi Basic Law for the year (1925) reveals that all had established equality of all citizens regardless of gender, race, language, religion or nationality. However, all with the exception of Temporary Administrative Law 2004, did not develop a mechanism to activate this equality¹⁵⁶. It is a mechanism that extended to the permanent constitution by Article (47)/4, which stipulates that “the elections law shall aim to achieve a percentage of representation for women of not less than a quarter of the members of the House of Representatives”. This quota was considered a gain for Iraqi women and an important step in the direction of access to effective participation in all the authorities and decision-making circles. This was enhanced by article (20) which stipulates “Citizens, both men and women shall have the right to participate in public affairs and to enjoy political rights including the right to vote and to elect and be elected”. Because of the election laws women achieved 3, 5, 8, 12 in the electoral list, and with that the law can ensure women a proportion close to one third. Indeed, 86 women were elected to the Transitional National Assembly, which is about (31%) of the seats in the General Assembly amounting to (275) seats. But the percentage fell to about (25%) in the current parliament.

In the executive branch, women got 6 ministries in the first government, “Interim Government” (June 28, 2004 - May 3, 2005). However, in the second government “Transitional Government” of (May 3, 2005- May 20, 2006), the quota was reduced to four ministries in the third government “Government of National Unity,” and to only one without portfolio in the current government (State Ministry for Women’s Affairs). This share is less for the Kurdistan Regional Government, where women only got 4 ministries in the government of the 41 ministerial posts.

¹⁵⁶ Fayza Baba Khan, woman and constitution: developing and amending woman related legislations, p 11.

Table 28: Women’s quota of Iraqi ministries after 2003

Ministry	Number of ministerial posts	Women's quota	
		Number	%
First ministry	32	6	18.75
Second ministry	34	6	17.64
Third ministry	37	4	10.81
Fourth ministry	34	1	2.9

7.7.2 Economic participation

Women’s participation in economic life in quality and quantity is affected by multiple factors such as fertility, population age structure and marriage age. Rising fertility adds increasing family burden during pregnancy and beyond, which limits women’s ability to obtain a permanent position. As for early marriage, it is affecting the level of educational attainment for women, and thus weakens their ability to compete in the labor market. The data indicates that revised economic activity rates for females (the labor force relative to the total population aged 15 years and over) has increased from about (11%) in 2003 to about (21%) in 2006, but declined in 2008 to (18%) by three points. Gender gap (male participation rate minus the rate of female participation) has also expanded for the aforementioned years at the rate of (61%) and (58%) and (57%) respectively. The data shows that rural women are economically more active than urban women. However, it can be said that the gap is still large between men and women and is more than 50 points, which is wider in urban areas (61 points) than in rural (58 points) according to 2008 data.

Table 29: Revised economic activity rates for 2003-2008

	Urban			Rural			Total		
	M	F	Total	M	F	Total	M	F	Total
2005	75.83	13.35	45.19	80.33	33.75	57.78	77.36	20.39	49.55
2006	75.30	16.73	46.17	82.86	31.12	57.35	78.30	20.69	49.72
2008	73.79	15.84	44.91	78.01	24.52	51.72	74.95	18.04	46.84

SOURCE: STATISTICAL DATA SET FOR 2005, 2006, 2008

The productive activity of women in the context of family responsibility and in the domestic economy and participation in the agricultural sector is almost inseparable from their reproductive role, and independent economic activity. Often a lot of their activities are not shown in official statistics. Surveys revealed the use of time as part of this variation, but these surveys still need to focus on rural women.

Women bear additional burdens owing to their reproductive role and unpaid productive activity, as well as unequal access to land, income, and markets. In Iraq, agricultural holdings are owned by men, since women have less than (5%) of the total agricultural holdings in 2001. However, women are “luckier” than that in relation to being employed as workers as (35%) of workers (permanent and temporary) in the agricultural holdings are women¹⁵⁷, which is due women being willing to accept work for lower wages than men.

The analysis of the contribution of women in the labor market reveals that their activity is concentrated in the public sector (53% of the workforce are women), followed by unpaid labor in agriculture by (31%), unpaid labor in non-agricultural sectors by (10%), while (3%) only are paid in the private sector. While (78%) of these women working in agriculture are without pay, and about (11%) in the public sector, and (8%) of them without pay outside the agricultural sector, (3%) of them are in the paid private sector¹⁵⁸. Rates of working women in the administrative area are still low as compared to the global rates. According to 1997 data the rate reached (15%) in Iraq. Precise statistics on the areas of work for women are not available¹⁵⁹. However, women’s participation in the labor market is still lower than

¹⁵⁷ Ministry of Planning, agricultural statistics directorate, agricultural census report 2001, November 2005, calculated based on table 2.1, p. 32.
¹⁵⁸ Higher Committee for poverty alleviation in Iraq and the World Bank, facing of poverty in Iraq: an analytical report on the living conditions of the Iraqi people, the World Bank, 2010, p. 324
¹⁵⁹ Percentage of women working in administrative positions in Philippines 2001 amounted to 58%, Saudi Arabia 31%, Bahrain 2002 10%, Oman 2002 and Egypt 2002 9%, UAE

the participation of their male counterparts. (12.8%) of the women of more than 15 years are in the labor force as compared to (74.6%) of males 15 years and over, which causes the low participation of the whole population in the labor force (43.2%)¹⁶⁰.

Available data indicate that more than half of working women are employed in the service sector, particularly in the areas of education and health, which is supported by social customs and the division of labor based on sex. Women tend to work in professions close to their traditional social function, revolving round their reproductive role. Women employed in the public sector are granted maternity leave for a year (after the delivery leave of 72 days) with full salary for the first six months and half salary in the six remaining months with the provision of nurseries for children in some of the ministries. In fact these privileges are in excess to what is stipulated in the international instruments on women’s rights. Moreover, women working in the public sector are granted the same privileges that are granted to man with regard to salary, allowances and employment opportunities.

The concentration of women in specific sectors in spite of non-discrimination against them may be considered a negative indicator for their incomplete involvement in the economic cycle, compared with men who are distributed in various economic activities.

It should be noted that households headed by women in Iraqi society constitute about (11%) of all households recorded in the survey of living conditions in Iraq. Among those families (73%) of them are headed by widows¹⁶¹, where the phenomenon of poverty is exacerbated.

7.7.3 Discriminatory practices against women

1. Gender-based violence

There was increasing interest in the last decade in the phenomenon of violence in general and especially domestic violence. Domestic violence was recognized as a violation of women’s basic rights and some studies have revealed its health costs, its overlapping effects on generations and its social consequences. Women civil society organizations played a clear role in raising awareness of the dangers of domestic violence, especially as husband’s violence against their wives may reflect a tendency toward aggressiveness against children too.

¹⁶⁰ 2000 8% and Yemen 1999 4%. <http://unstats.un.org/unsd/demographic/products/indwm/ww2005/tab5f.htm>
¹⁶¹ Iraq Household Socio-Economic Survey 2007, p. 325.
 Ministry of Planning, Central Statistical Organization, living conditions survey in Iraq, previous source, p. 113.

Collecting information on domestic violence is still a challenge because of the secrecy surrounding it. The question of violence within the family and the possibility of the presence of the offender at the time of the interview may carry with it the risk of violence again in the future. According to the Family Health Survey, (83.1%) of the women surveyed had been exposed to one form of dominance of the husband at least. The highest percentages recorded in the dominance behavior is jealousy or anger (51.0%), and the insistence of the husband to find out the whereabouts of his wife all the time (63.3%) and the determination to request permission from the husband before seeking care (66.9%). In Kurdistan Region, dominance behavior recorded the lowest rates when compared to the south and central regions, whereas women in the Kurdistan Region are more vulnerable than in the south and center to the dominance of the husband when it comes to matters related to her family and financial issues. Also, there is little variation between urban and rural areas.

The survey found that (33.4%) of married women suffer from psychological violence (emotional), which includes humiliation by (22.3%), contempt in front of others (21.7%) and intimidation (18.3%). It was also recorded that women in the center and south are more vulnerable to psychological violence than is the case in Kurdistan Region (35.7% compared to 17.6%). In general, 21.2% of married women answered that they had experienced physical violence during the 12 months preceding the survey. One study has shown that violent behavior of husbands leads to the lack of roles models within the family, as the reactions of the wives are self-oriented (41%), directed towards harming children (51%) and neglecting external appearance (20.7%)¹⁶².

2. Honor crimes

Women constitute the focus of the honor values of family and clans, especially those related to sexuality. The society usually imposes, by virtue of religion and culture, restrictions that prohibit sexual relations outside marriage and incriminate such behavior, but it seems to be more stringent for females compared to males. The Iraqi legislation reduces the penalty of honor crimes, thus enhancing the violations of women's rights and humanity, especially when murder is based on assumptions and illusions rather than realities. The penal code in Iraq reduces the level of criminal responsibility for crimes of honor and considers the event as a mitigated excuse¹⁶³. In contrast, traditional culture, a predominantly patriarchal culture, does not provide justification for killing the husband caught red handed in adultery.

¹⁶² Afrah Jasem Mohammad, domestic violence, unpublished PHD thesis, sociology department, faculty of arts 2007, p 213-218.
¹⁶³ Article 409 of the Iraqi penal code No 11 for 1969 defined the penalty of no more than three years.

Obtaining accurate figures on the prevalence of honor crimes is very difficult if not impossible as crimes of honor are rarely reported, and the cases that are investigated are even less than that. However, some reports have indicated that the first half of 2006 witnessed an increase in the proportion of deaths of females in the conditions correspond to the crimes of honor, where 275 woman were killed in the governorates of Erbil and Sulaymaniyah, and most of them were recorded as suicides¹⁶⁴.

3. Female genital mutilation

Although mutilating female genitals is regarded as an "assault by wound" by the Article 412 of the Iraqi Penal Code, there is a huge difference between the text and the application, as there are no specific laws criminalizing cutting parts of the female genitalia. While the Ministry of Health prohibited doctors from such operations, there was no legal mechanism for the implementation of this ban¹⁶⁵.

This practice is uncommon at all in southern and central Iraq, but it is spread in remote areas of the Kurdistan Region. According to a survey by an NGO that covered 1,544 women and girls in Jeremyan region in northern Iraq, 977 of them said they were susceptible to genital mutilation¹⁶⁶.

7.7.4 Women's view of violence, sources and causes¹⁶⁷

When looking at the view of Iraqi women aged 15-54 years toward violence, it should be noted that the women of Iraq are unanimous that economic deprivation, denial of the exercise of the rights to communicate with parents, the denial of education, and the denial of the right to work constitute violence against women. More than half of women classified these behaviors as violence against women. Women tend to not to consider deprivation of political participation, the determination to find out whereabouts of the wife all the time, beating the girls on misbehavior, getting permission before traveling, and depriving the wife from going to the health center to cure without company, as violence, as more than 60% of women did not consider that violence against women.

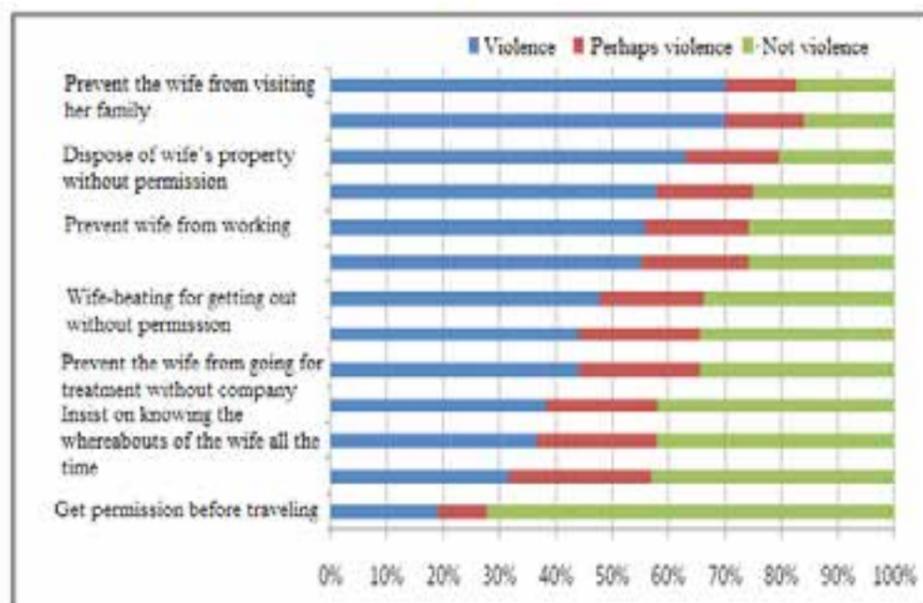
¹⁶⁴ See: Matthew Allen (and others), status of women in Iraq: Update for assessing Iraq's compliance with the legal and factual international legal standards, Association of American lawyers and judges, project development of law in Iraq, 2007, p. 84.

¹⁶⁵ See: Matthew Allen (and others), status of women in Iraq: Update for assessing Iraq's compliance with the legal and factual international legal standards, Association of American lawyers and judges, project development of law in Iraq, 2007, p. 80.

¹⁶⁶ Previous source, p 86.

¹⁶⁷ Iraqi Women Integrated Social and Health Survey (I-WISH) is the first of its kind implemented by the Central Statistical Organization in cooperation with Kurdistan Regional Statistical Office with Ministry of Health and the Ministry of Women and other ministries and bodies concerned, and with the support of the United Nations Population Fund (UNFPA) and the Pan Arab Project for Family Health (PAPFAM). The survey deals with the study of the life cycle of Iraqi women (teenage, age of reproduction, and post-birth, and old age) from several aspects such as empowerment and public health, reproductive health and violence against women and other issues related to the social and economic situation of women, and to build a database on issues on the status of women in various stages of her life. The survey covered all the administrative units in the governorates of Iraq by 10,620 households were selected from the framework of listing and numbering of the Census for the year 2009 through the withdrawal of a cluster sample of multiple phases to ensure impartiality and random and inclusiveness for all Qadha units reaching for families in Blocks, neighborhoods and villages. The survey was carried out on the ground during the month of July of 2011.

Figure 44: Women positions towards domestic violence



Regarding the main cause of violence against women as a phenomenon widespread in Iraq, women aged 15-54 years thought it was mainly due to the dominant culture, wrong family upbringing, wrong understanding of religion, lack of awareness among men and women, the lack of information on women's rights, and their submission and acceptance of violence. These results confirm once again that any anti-violence efforts must begin from the house and from changing the behaviors and concepts of family members on women's rights and the need to combat violence against women. It should be noted that out of every ten married women there is one woman exposed to different types of sexual violence.

Figure 45: Women positions regarding sources of domestic violence

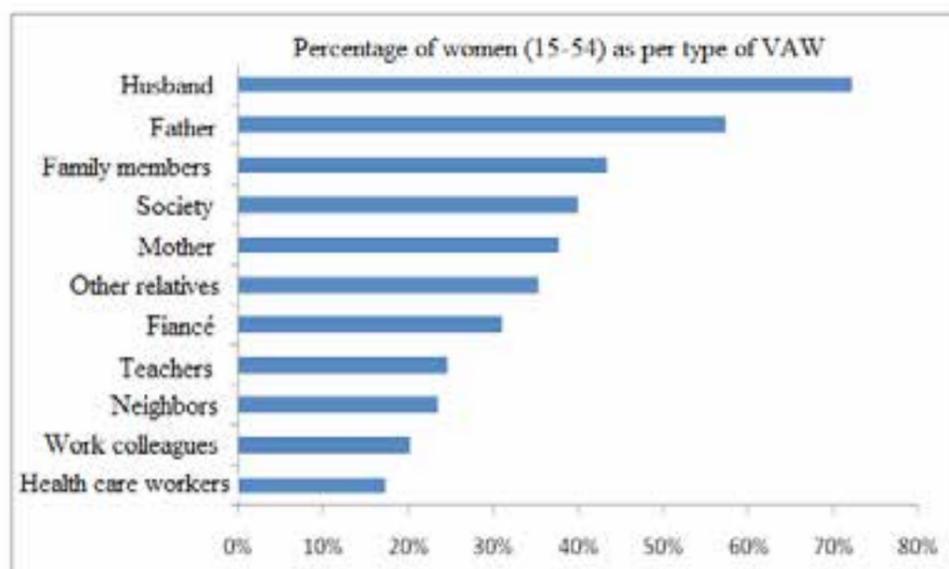


Table 30: Percentage of women disclosing having been subjected to violence during the year preceding the survey in selected places

Place	By place			Environment	
	Total Iraq	Kurdistan	Remaining governorates	Urban	Rural
Street	19.7	9.0	21.5	23.5	10.1
Shopping places	19.2	9.0	20.9	23.1	9.2
Local police barricades	4.8	0.9	5.4	5.1	3.9
Transport media	10.7	3.4	12.0	12.7	5.7
Service and government institutions	4.0	1.5	4.4	4.5	2.6
Educational institutions	2.5	2.1	2.7	3.0	1.0
Place of work	1.5	0.8	1.6	2.0	0.4

With regard to official efforts for combating violence against women, women in Kurdistan Region reported to know about the efforts made by Kurdistan Regional Government (KRG), where nearly four of five women heard of anti-violence against women by KRG, followed by the organizations of civil society in Kurdistan Region. In the rest of the governorates of Iraq, even though the government is a main stakeholder among those who oppose violence against women, less than two thirds of women did not hear about the government's efforts in this area.

Destinations of asylum for victims of violence

Parents are the main destination for women who were exposed to violence. Some women turn to friends, particularly in the Kurdistan Region.

Table 31: Distribution of women by the first destination of asylum thought of when subjected to violence

Destination	By place			Environment	
	Total Iraq	Kurdistan	Remaining governorates	Urban	Rural
Parents	89.6	74.6	92.1	89.4	90.1
Friends	2.6	6.7	1.9	2.8	2.1
The clergy	0.7	1.9	0.5	0.6	1.0
Police	2.7	6.8	2.0	2.8	2.5
Civil society organizations concerned with VAW	0.4	2.5	0.1	0.5	0.2
The media	0.0	0.2	0.0	0.0	0.0
Shelter of the victims	0.2	1.0	0.0	0.2	0.1
Other destinations	3.7	6.3	3.3	3.6	4.0
Total	100	100	100	100	100

Survey shows that if the violence continues, women return to their parents again and some of them go to the police, friends, and to a lesser extent go to clergy. It should be noted that the role of police in the Kurdistan Region is better than in the rest of the governorates of Iraq.

It should also be noted that more than one third of women find it appropriate to resort to the police if exposed to violence (37.0%), and this increases in Kurdistan Region (49.5%) compared with the rest of the governorates of Iraq (35.0%). It is higher in urban areas (38.9%) compared with rural areas (32.2%). Less than half of the women trust the police as a resort, and this increases in the Kurdistan Region (62.0%) compared with the rest of the governorates of Iraq (47.5%). Half of the women who do not trust the police as a resort said that it causes a scandal, while less than a third attributed that to unbelief in the ability of police to find a solution. About two women out of ten felt that their circumstances can be exploited by the police.

7.8 Vulnerable segments of the population

Vulnerable segments of the population include orphans and displaced children, the disabled and the elderly, widows, divorced women, women heads of their families, the forcibly displaced, and others. These categories face problems and challenges in their daily lives, including, a high level of poverty and multiple forms of deprivation. There is no doubt that these groups have become a significant proportion in the Iraqi society. In the situation of changing environment in the country, these groups are constantly exposed to situations of stress, lack of capacity or loss of opportunities and loss of human security for individuals, families and communities.

Children

Children in Iraq (under the 18 years of age), account for nearly half of the population (47%), and is experiencing higher rates of poverty. Children are an entry point for the investment in human capital; however, they are excluded from current development strategies. The continued marginalization of children represents a tremendous threat to human development, and hampers the efforts of economic and social policies aimed at poverty reduction. In order to address this, interventions targeting children should be expanded along with opportunities available to children. There are seven groups of vulnerable children namely: orphans and the homeless in general, children associated with armed groups or affected by armed conflict, street children, children with disabilities, children involved menial forms of work, children with AIDS, and children outlaws.

Widows and orphans

Crises in Iraq began three decades ago and everyone, especially young people, children and women bore the consequences. There is considerable variation in estimates of the numbers of widows and orphans as a result of those wars. Eight per cent of women who took part in the survey of living conditions (2004) were widowed compared to 55% who were married. As for the victims of the events that followed the 2003 occupation, there are also varying estimates. The report of the United Nations on Human Rights in Iraq in 2006 has shown that the numbers of orphans and widows is in a continuous increase. According to some estimates, the number of orphans in Iraq may amount to more than (4) million children, while

the living conditions survey showed that 11% of households headed by women. The Ministry of Labor and Social Affairs data shows that the number of orphanages in all parts of Iraq (except Kurdistan Region) was (23) hosting (502) orphans of (376) males and (126) females. As for children nurseries, there are 42 nurseries.

The elderly

The elderly are increasingly becoming a vulnerable group in Iraq and are at risk of neglect and abandonment, abuse, disease and poverty, particularly in urban areas. The age should not exclude the elderly from employment, as they can also contribute to the Gross Domestic Product (GDP). Thus, it is important to ensure the welfare of the elderly and to make use of the skills and abilities that they have acquired throughout their lives, for the progress of society as a whole.

Changes in the population's age structure are associated with shifts in family structures and transitions to a smaller family units, this transition is directly linked to low fertility, the change in moral values, change in the sates of women and value of a child in the society, and the provision of family care for the elderly. This has led to deterioration of traditional family ties which used to provide protection and care for the elderly. As a consequence the elderly are being left alone without support from family or society, especially in the cities. The situation needs attention, especially at the time when the world is undergoing a financial crisis with an overwhelming negative impact on social and economic life.

The changes that occur in a population's age structure are considered to be the signs and indicators of development and progress as life expectancy in developed societies tends to be longer than in underdeveloped communities. However, at the same time these changes represent a major challenge as they lead to changes in the labor force and have implications on pensions and social security systems, as well as provision of services to and adequate standard of living for the elderly. The development plans, national development plans, poverty reduction strategies and the Millennium Development Goals, largely exclude the contribution of the elderly. This is often based on the assumption that the family will provide protection and support needed for the elderly.

The basis for safe and healthy aging is planted at the beginning of life. This is done through the early planning for the aging. Attention of decision makers and planners in Iraq needs to be drawn to the importance of early planning for the aging. Failure to do so in a timely manner will be costly. The elderly should be recognized for their contribution to development and be included in health strategies and the fight

against poverty and the environment. Development without the elderly cannot be comprehensive and sustainable. The proportion of elderly (65+ years old) amounts to 3% of Iraq's population, the total number of elderly shelters in all parts of Iraq (except Kurdistan Region) is (8) hosting (355) elderly of which (240) of them are males and (115) are females.

The people with disabilities and those with special needs

Article 32:

The State takes care of people with disabilities and those with special needs and ensures their rehabilitation in order to reintegrate them into society. This shall be regulated by law.

The data on the number of people with disabilities and special needs in Iraq is not available. Although the Central Statistical Organization conducted surveys on the numbers of people none of these surveys have been able to determinate the exact data and disability factors.

Remnants of war and environmental factors are the most significant causes of disabilities in Iraq. Most prominently landmines, unexploded ordnance and other explosive remnants of war have so far affected a total of (1,579) persons, (93) of which are with serious wounds, and (642) were affected. Out of (565) victim of landmines that have been recorded, almost all 98.1% were civilians with, a third of the victim being children under the age of (14) years. The 2006 Cluster Survey showed that there was variation in the distribution of forms or categories of disabilities among children by region and age. The most severe cases of disability are found to be higher in urban areas (governorate centers and other urban areas) compared with rural areas. Also, the rates of most categories of disability appear higher in the governorates of the Kurdistan Region than in the central and southern governorates in Iraq, an outcome that may be contrary to the overall assessment of the conditions in the region. The highest rates for all categories of disabilities are concentrated in the age group (2-4) years, with the highest number found in the category of not being able to speak (10.1%).

Certain diseases that are widespread in Iraq, such as heart disease, blood pressure, diabetes and chronic diseases may lead to forms of disability like paralysis and

Chapter 8 - Conclusions and Future Vision

the inability to move and speak. Iraq Household Socio-Economic Survey (2007 IHSES) indicates that the highest rates of disabilities are found in the category of (inability to walk or motor disability) as ranging between (34.8%) and (58.2%) in the age group (40-49) years. It can be assumed that most of the injuries in this category of disability have resulted from war and violence. The highest rate of all disabilities (13.3 %) is found in the age group of (60) years or more. The longest duration of a disability (22) years is found in the age group (40-49 years). Rates of disability increase with the increase in age. Rates of injury among females are the highest in the categories of (blindness 8.2%), (deafness at 4%), (inability to speak 8.4%) and (mental retardation 16.9%). Among males highest injury rates are in the following categories: inability to walk and motor deficit (46.5%) and multiple disabilities (6.5%). Both sexes are equal in terms of the number of years of injury. In terms of the geographical distribution, there is a clear variation in that the percentage of disabled people that is higher in Kurdistan Region (4%) compared to (3%) in Baghdad and (2.6%) in the rest of the governorates. With the exception of the deaf, the percentage in Kurdistan Region is high at (4.3%) compared with Baghdad of (1.3%) and the rest of the governorates at (3.5%). The percentage of speaking disabilities (inability to speak) in Kurdistan Region is (10.1%) compared to (9.6%) in Baghdad and (6.6%) in the rest of the governorates. The percentage of lameness in Baghdad is (57.1%) compared to (42.3%) in Kurdistan Region and (40.7%) in the rest of governorates. The proportion of multiple disabilities in Kurdistan Region is (7.51%) and falls in Baghdad to (4.2%) and in the rest of the governorates at (6.2%).

In terms of to the population distribution, the proportion of disabled people in governorate centers is (3%) compared to (2.2%) in the rest of urban areas and (2.6%) in the countryside. The highest percentage of disabled people is found in the category of lameness or inability to walk as (47.3%, 45.8% and 40% respectively). The rates of mental retardation in Baghdad rise to 15.4%, decrease to 13.5% in the rest of urban areas and again rise to 14.6% in the countryside. The proportion of multiple disabilities seems to be higher in rural areas (6.9%). In terms of percentage, the total number of people suffering from inability to walk is about (45%) which is the highest among the categories of disability, followed by mental retardation at (14.6%), and inability to speak at (8%). The disabilities rehabilitation institutes can be distributed as follows: there are 22 institutes specializing in deafness. 5 specializing in rehabilitation of the disabled, 5 specializing in rehabilitation of the blind, 17 institutes for mentally disables, 2 institutes for severe disability, and 12 sheltered workshops and associations for the rehabilitation of the disabled.

This chapter attempts to extrapolate the challenges that were diagnosed in previous chapters. It uses the indicators available on the data and the population's social and economic variables indicating the levels of achievement of the national goals on population and development as perceived by the Program of Action of International Conference on Population and Development as well as international and regional conferences including the Millennium Summit. It tracks government positions towards population and development issues, gender and reproductive health and development, and relevant policies and programs, all the way to an integrated comprehensive vision for a population policy that should set priorities to focus on in order to reach the objectives of the international program of action.

The people of Iraq, while under economic social, environmental and psychological crises resulting from half a century of conflict and war, look forward to enjoy the virtues of fair and balanced sustainable development and equality, and to live in a world of declining rates of disease, poverty, ignorance, and the impacts of uneven growth of the economy and the abuse of currently available resources, on their life standard and well-being and security, and the future of their children and their generations to come.

As much as that is justified by emergency or unsustainable political and economic factors, and as the demographic changes are cumulative and long-term, the structures of today are the results of direct or indirect factors of yesterday. The summary of studying and analyzing the situation of Iraq population confirms its close association with the absence of awareness of the relationship between population and development and thus lost opportunities to address to the implications of this relationship. This is manifested negatively in both directions; one indicates that excluded population (poor, less educated, lack of access to health services) are less likely to be affected with development achievements. The second indicates that when development is not population centered, it compromises human rights.

8.1 Population and Development

The relationship of population to development in Iraq represents a major challenge because it does not reflect a lack of resources but the misuse or poor distribution of them, which sets Iraq in this sense, apart from many Arab countries. With the

relative abundance of land and water, the productivity of farmlands depends on the administration and management of those lands, but the pressure and human over-investment can destroy the land in few years. Agricultural production, which constitutes the majority of Iraqi territory, often results in adverse effects on the level of fertility of the land¹⁶⁸ thus ensuring sustainable development. With abundant oil resources, it is clear that the natural revenue strongly weakens the development, especially if combined with its unsustainable use. In addition to the fact that depleted resources generally do not provide a sound base to lay the foundations of sustainable development that safeguard the rights of future generations unless the understanding of the relationship between population and development is clear in awareness of decision makers and represented in the long-term economic development plans and programs, something the state has not acknowledged so far.

The population of Iraq is no different from other Arab countries, in the sense that the main challenge is the high rate of population growth and the imbalance in their geographical distribution. The population growth is attributed to high fertility rate and the disruption of their geographical distribution effects disparity in enjoyment of economic and social development.

Mobility of population: Iraq is still, after eight decades of the discovery of oil, starting the process of economy modernization and having concentrated economic, social and cultural services in the urban centers, especially in major cities. Since the stream of immigration is still overwhelming the peripheries, cities and centers, urban growth did not take a balanced shape and the manifestations of this imbalance is evident in the geographical distribution. The attraction of the population to these cities led to increased attention of governments to those centers, increased investment in their infrastructure, concentration of service institutions and the growth of industrial enterprises in these areas. This also included improvements in education and health services, as well as significant improvement in the means of transport. The governorate centers enjoyed a better share in terms of quantity and quality of public services in comparison to Qadha', Nahia or rural areas, which was reflected strongly in the population distribution and varying density on both the national level and at the level of each governorate. These facts reflected on the population trends in the tendency towards decentralization and sometimes federalism in order to ensure the rights that the Constitution provided for.

The rising international migration as a result of forced displacement and asylum led to an important loss. Some of the organizations estimated that Iraq has lost about

¹⁶⁸ Ali Hanoush, present issues and future choices, Dar Al Konoz Al Adabyia, Beirut, 2000, 49

40% of its middle class many of whom do not think of returning home¹⁶⁹. This phenomenon has had dire consequences and negative effects on the development of the country due to the loss of many of its competencies.

Population Growth: despite the stability of the population growth rate over the past years (due to lower fertility rates and increasing rates of net migration), the pace of annual increase to the size of the population continues to take an upward and a steady trend amounting more than 800 thousand people per year, according to data from the results Census listing and numbering of the 2009. This means that the population of Iraq is increasing by one person every 40 seconds.

Infant mortality and children (below 5 years) mortality rates in Iraq dropped, and so did the maternal mortality rate, but they are still the highest compared to neighboring Arab countries. The total fertility rate decreased from (4.7) for the period 1994-1998 to (4.3) newborn/ woman in 2006 and maintained this ratio in 2010. But for the fertility rate to reach the level of replacement by 2015 (2.1 births per woman throughout her life) i.e. to achieve a demographic transition, the total fertility rate should fall to half of its present level in the remaining years of the two decades following the Cairo Conference, 1994.

Patterns of early marriage and motherhood, the period between birth and the end of the childbearing process, plays an important role in achieving fertility on the social level. In general, in countries where childbearing starts at an early age, it is also completed at a late age, and therefore these countries are usually characterized by relatively high rates of fertility, mortality, unsatisfactory health conditions and inappropriate social environment.

Rural women on average give birth to two children more than those in urban areas, and women without any degree give birth to almost 3 more children than the women with college degree or higher. Because of the absence of a national program for family planning, between 40% to 50% of married women use family planning methods in the age group (49-15 years). The level of use of family planning methods in Iraq still has a long way to go to reach the level that helps to lower fertility to the replacement level or somewhere close to it.

The significant drop in fertility rate in the foreseeable future is an unrealistic and an impossible goal in view of the effectiveness of the impact of the factors encouraging high fertility. Indicators used in the extrapolation do not show that a significant change is very likely, as the increasing urban growth did not necessarily lead to making the populations orient towards the size of the family based on available income and the ability to ensure a decent life. When these indicators,

¹⁶⁹ Refugees International- Iraq: The World's Fastest Growing Refugee Crisis, (<http://www.RefugeesInternational.org/content/artical/detail/9679>)

Government positions on the incorporation of population issues into sustainable development policies and programs

supported by high cultural pressure and increased employment opportunities, education and economic independence for women overlap and effectively contributes to the decline in fertility in Iraq in the future. The high level of income that allows individuals ample opportunities to further education of family members and the expansion of horizons of cultural, scientific and social aspirations will enhance the inverse relationship between culture, education and the birth rate. This opinion is derived from the analysis, which focused on individual characteristics; however, it does not explain patterns of fertility in Iraq and the Arab countries in general. Surrounding factors and the extrapolation of their future trends have a deep impact in Arab societies, and these factors may be seen as the underlying causes of the lack in the decrease of fertility as expected with the process of social and economic development. Some of these factors are: the growing influence of religious institutions in the behavior of individuals in most Arab countries, the continued conservative social attitude in support of early marriage and the traditional role of women, which is still rooted in the culture of the community, and the loss of economic and political security. This study emphasizes the importance of awareness of indicators of child-bearing as variables associated with fertility and mortality levels when formulating population, health and social policies. Besides the demographic conditions, the study considered a number of phenomena such as unemployment, poverty, inequality and marginalization of groups of the population, neglecting of youth, declaring those are due to the absence of a rational population policy.

8.2 Government attitudes towards the incorporation of population issues into policies and programs of sustainable development

The last three decades have witnessed demographic shifts that accompanied the wars and political events. Although major changes are taking place, large gap exists between those shifts and the level of political and executive attention towards population issues. Government's interest in population issues remained insignificant and no national policy was developed to meet the challenges of population growth, composition and distribution. Iraq has been dealing with population issues in isolation and independence from social and economic development plans, and away from the legislative and political decision-making mechanisms. This separation resulted in effects that contributed to the deepening of the gap between the goal of improving the quality of human life and reducing poverty on the one hand, and the goal of economic growth and material production on the other.

Population and development	Measures
Incorporating population issues in development strategies	Some measures were taken
Taking into account the link between population dynamic and poverty when formulating national poverty alleviation strategies	Nothing done
Taking into account the link between population and development in sectoral and national development plans	To some extent (no long run plans)
Initiative for the elderly	Few measures
Some initiatives	
Adoption of clear strategies/ programs for internal migration	Few measures
Some policies/ programs	
Increased reproductive health services for slum dwellers	No measures
Measures for external immigration	Few measures
Taking population factors into account in the decentralized planning	Many measures
Establishing databases and national information systems	Many measures
Reproductive health and reproductive rights	Measures
Adoption of policies or amending legislations to ensure reproductive rights	No measures
Measures were taken to incorporate reproductive health in the primary health system	Limited measures
Reproductive and sexual health are contained in the health sector reform program	Limited measures
Measures for facilitating access to reproductive health services	Limited measures
Measures for reducing morbidity and maternal mortality	Good measures
Measures to expand choices of family planning methods	Limited measures
Justice and gender equality and empowering women	Measures
Taking legislative measures to protect women rights	Some measures
Progress in bridging the educational gap between males and females	Good progress
Measures taken to inhibit the respect of woman's views in boy's minds	Limited measures
Measures taken to enable men to support women rights	No measures taken
Adopt measures to enable men to do their responsibilities regarding their reproductive health and also the reproductive health of wives	Limited measures

8.3 Population policy

In Iraq, several demographic, social and economic dimensions contributed to population problems, caused by the separation of “population issue” from the “development issue”. The rising oil wealth in Iraq in the mid-seventies and the economic recovery was accompanied by relative increase in population, especially the consuming age groups under 15 years. The quality of the population deteriorated due to lower efficiency of domestic investment and its inability, during the subsequent years, to accommodate the labor force (especially the youth). This was compounded by the inefficiency of public spending which directed a high percentage to military and security expenditures, as well as the consequences of the economic blockade during the nineties. The consecutive neglect of the role and importance of human rights, excluding the human issues in the development process led to many consequences. The most important was worsening poverty, the high level of illiteracy especially among women, high numbers of unemployed, the doubled number of immigrants and the widened gap between the sexes and between rural and urban areas. These phenomena were associated with high fertility rates and breadth of family size and the high rate of child and maternal mortality and dependency.

The state at that time did not attach special importance to population policies to the extent of other countries. In addition, it was not keen to take the decisions and recommendations of international conferences and seminars, as exemplified by its support to maintaining a high rate of population growth by providing incentives to childbearing families, and encouraging early marriages and other types of material and moral support. There was no link to the issue of population with development efforts so as to avoid any direct or indirect obligations. Subsequently, Iraq boycotted Cairo Conference on Population and Development held in 1994. One of the indicators for non-compliance with specific policies on population was the prohibition of the promotion and circulation of contraception for many years, which remained so until the early nineties and through the centers of reproductive health and family planning.

What was done in population policy was no more than adoption of indicators only through the Ministry of Planning which prepared the general indicators of population policy in Iraq and coordinated plans, programs and activities by relevant authorities, held periodic seminars and coordinated with the concerned parties to discuss the research, obstacles and solutions related to population policy. While the Ministry of Education was assigned with directing educational curricula, books and courses related to the importance of extended family and increasing reproduction

and population, the Ministry of Health developed annual programs and plans of medium and long-range regarding caring for pregnant women, birth and reduction of mortality rate among children, other basic tasks related to maternity and reproductive health and treatment of infertility.

The population policy in Iraq seeks to achieve the national objectives through increasing the population by raising the birth rate; increasing the reproduction by means of an annual growth rate of the population commensurate with the demographic characteristics of the Iraqi society and with the circumstances and economic, social and cultural objectives; encouraging and facilitating marriage in order to raise the marriage rate by a set of moral and material means; and raising the life expectancy from 60 years to 70 years.

Development of the labor force included efforts to increase activity rate for both males and females. The policy should address the positive effects of the demographic indicators, especially with regard to the reduction of deaths, and because of positive impact the education and public health, the focus was on investment in social capital by giving priority to investment for education projects and related items and health projects. To avoid the negative effects of education on reproduction (whose basis is marriage) as a result of change in the educated individual view of life in terms of giving the preference to the value of time and social relations at the expense of postponing the age of marriage. The priority of appointment was given to married couples or those to be married, and where given the facilities to help them find affordable housing, and the provision of health and food for children from local or external sources, and at reasonable prices, and provision of material and moral incentives for the families of many children.

8.3.1 Committee of Population Policy

The Ministry of Planning has initiated the formation of the first Committee of the population policy in Iraq in 1988. The committee was re-formed in 1989 with inclusion of members from the Ministries of Education, Health, Higher Education, Labor and Social Affairs and the General Federation of Iraqi Women. In 2001, the committee was reformed again, but it did not take up activities or meetings of importance, and halted its activities following the events of 2003.

In view of the imminent entry of the Iraqi population in the demographic window stage according to the stages of demographic transition, the urgent need calls for developing appropriate policies and investment in employment, job creation,

education, training, skills and health so as to convert the changes in age structure to real economic and development gains. The failure in the development and implementation of such policies will lead without doubt to the loss of human capital and to the lack of stability in the socio-economic relations and then to the loss of development opportunities again. On the other hand, remarkable developments have taken place with respect to information and indicators of population through the implementation of the demographic, health, social and economic surveys, statistics and methods of usage.¹⁷⁰

Population policy is followed in most countries of the world, some are declared, specific or formal while others are not specified, declared or formal. Population policy objectives differ from country to country, and there are differences in the level of development and implementation of population policies and activities associated with them.

8.3.2 The new trends of the population policy

Each country follows a specific policy to regulate the behavior of its population in terms of demographics in the present and future, and sets procedures, plans and programs designed to influence the population variables and the structural composition in accordance with the needs of the community and the requirements of growth and welfare of citizens. Population policy is not limited to addressing the problem of the rapid increase in population, but also includes planning programs to regulate migration, movement and the balanced spatial distribution of the population and to organize the movement and distribution of the workforce and the contribution of women in economic activity and social empowerment. This policy also aims to improve people's living standard and well-being, and narrow the gap between rural and urban areas and everything related to demographic behavior.

It has become important to seriously reconsider the issue of meaningful population policies that are consistent with the economic and social growth without neglecting the human priorities. Rather, the human priorities should take preference over economic priorities in line with the principles of sustainable human development, according to a balanced view that contains the principles and objectives of the international program of action of the International Conference on Population and Development, 1994.

¹⁷⁰ In recent years, technical and technological capacity in ministries, official and academic institutions improved to strengthen institutional and planning mechanisms required to ensure dealing with the population factors in the framework of decision-making and administrative processes related to policies and population and development programs. In this area, there are a number of efforts made in order to gather information – despite the fact that census has not been made since 1997 – from the demographic, health and social surveys carried out by the Central Statistical Organization with support from international organizations, and subsequent activities that contributed to broaden the base of scientific research in development issues.

The program of action which emanated from this conference, noted the need that States should take up the responsibility of preparing, developing and implementing national policies for the population in harmony with its context, emphasizing provision of a wide range of choices to meet the needs of individuals, families and communities. The sole focus should not be on reducing fertility rates and implementation of family planning programs in the narrow sense, but on expansion of the comprehensive reproductive health services and improving their quality and accessibility.

This shift represents a quantum leap in understanding interrelationships between population and development in the context of sustainable development, in determining priorities for funding and investment, and in international cooperation and partnership. Those principles can be summarized as a framework of aspirations of the population, translating the principles and rights enshrined in the new Iraqi constitution into reality to ensure a decent life and sustainable development for the people of Iraq. This is all in the hope that this framework would provide a suitable environment for obtaining the broad official and popular support to those policies and programs, and strengthen the existing partnership between the national, regional and relevant international institutions, in terms of:

1. Evolving the population and development concepts from the total narrow framework which links population growth to economic growth, to the broad individual, human and sectoral framework, that takes into account all the dynamics of the population in the context of sustainable development.
2. Ensuring human freedom and the right to development as an inclusive and inalienable right. Lack of development does not justify lack of human rights. The development must be made for the sake of human rights and the rights of present and future generations. The importance of applying human rights standards to all aspects of population programs and policies with granting freedom and equality in dignity and rights, without discrimination on the basis of race, color, sex or language.
3. Sustainable development requires recognition of reciprocal relations between population, resources and environment, development and sound management to meet the needs of current generations without compromising the fulfillment of the needs of future generations.

4. Upgrading the quality of human life along with control over patterns of production and consumption and protecting the environment for the welfare of future generations. This issue has witnessed significant development and included the effects of population and development activities on the environment and their role in climate change and effects of that on population mobility. It is also an issue of interest and focus for international community in terms of partnerships and cooperation between countries and regions.
5. Human capacity development and application of human rights standards to all aspects of population programs and policies. People are at the core of sustainable development, everyone is entitled to a healthy and productive life. People are the most important resource for any nation, so use of human resources in development should be maximized.
6. Mental and physical health is a human right, and the State should provide primary care services including reproductive health and reproductive rights, which cover family planning and sexual health. It is the right of couples and individuals to decide freely and responsibly for themselves the number and spacing of children and the timing of childbearing, and to have the means and the information needed that will enable them to make these decisions.
7. Gender equality and empowering women to achieve their potential through education and employment opportunities and to participate in the development through policies that eliminate gender discrimination and violence against women. This shall enable women to control their own fertility and be involved fully in the civil, cultural, social and economic life.
8. The incorporation of demographic factors and dynamics in the development strategies and development planning and population programs.
9. Seeking justice in the distribution of income and wealth and social services, and giving attention to marginalized groups especially the poor, elderly and the disabled.
10. Studying the factors and formulating economic, social, environmental and administrative policies, which affect the population distribution and internal migration and urban growth in order to achieve balanced and sustainable development in rural and urban areas.
11. Strengthening the national capacity to collect, analyze and disseminate data and demographic information, and support usage in scientific research, as well as monitoring and evaluation of programs and population policies.
12. Importance of international cooperation and partnership between governments and the private sector and non-governmental and international organizations in the implementation of the program on population and development. International cooperation to eradicate poverty is a condition for sustainable development. Therefore, priority should be given to poor countries. The need for harmonizing international cooperation and partnership with national priorities in the field of population and development, taking full account of the religious, ethical, and cultural values of each individual country.
13. Everyone has the right to education and education should be directed to the development of human resources, especially women and girls. The responsibility of educating children rests primarily on their parents. States and families should give priority to children in education, health care and protection needed, especially against trafficking, sexual abuse and organs trafficking.
14. The family is the basic unit of society that must be strengthened. The marriage must be based on free consent between the two parties and that the husband and wife are equal partners.

The need is urgent at all official, academic and private levels to strengthen institutional and planning mechanisms required to ensure addressing the population issues in the framework of decision-making and administrative processes related to policies and programs of population and development. In this area, there are a number of efforts that have been made in order to gather information from population censuses, demographic analysis, health and social surveys. Moreover, number of subsequent activities were worked on to broaden the base of scientific research, and build national and local capacities for the development of variables and indicators required for monitoring and evaluation processes of population and development policies. Institutions have established databases and national information systems, through international financial and technical support to national institutions. There has also been an improvement in the enabling environment in the statistical agencies, which has made it possible to monitor and evaluate national and international goals and develop indicators for measuring the progress toward the Millennium Development Goals. The scientific data will enable the development and implementation of population policy.

Recommendations

In light of the international program of action emanating from the Cairo Conference 1994 and subsequent meetings, in addition to the objectives of the Millennium Declaration of the United Nations, it is necessary to develop national and international policies and programs in accordance with both the global principles and the local cultural and political fabric that incorporate population issues, reproductive health, and gender in all stages of the preparation, implementation, monitoring, evaluation and revision of development policies and program. This has to be considered as a strategic obligation toward sustainable development, as exclusion of such issues would lead to the deterioration of the quality of life and poverty. The international program of action pointed to the need by States to prepare, develop and implement national policies for the population, and to give a wide range of choices to meet the needs of individuals, families and communities, rather than concentrate on reducing fertility rates. In addition, it also called on countries to broaden the base of comprehensive reproductive health services and improve the quality and fairness of provision, rather than to focus on the implementation family planning programs the narrow sense. Focusing on population issues in isolation and independently from the economic and social development plans and legislative and political decision-making mechanisms, contributes to the deepening of the gap between improving the quality of life and reducing poverty on the one hand, and economic growth and material production on the other. Based on data provided by this study and the field surveys, official national and international reports, and literature and academic studies, the study recommends the following:

General recommendation

In order to achieve decent quality of life for all the population, and to develop the economic, social, health and cultural level of the household, it is important to set forth a general strategic framework. Such a framework should bring about conditions appropriate for obtaining large official and public support for those policies and programs, and for strengthening the ongoing partnership among national, regional and international relevant institutions. It also requires setting a population policy as a scientific and practical tool sensitive towards the people's issues and the choices of families and individuals to achieve the individual and population welfare. It also should be more responsive to implementing and utilizing their legitimate and equal rights. Development of elements that support incorporation of people's issues and their choices in all stages of sustainable development should also commence as soon as possible.

Detailed recommendations

First: Population and Development

There is a need to take the complementary relation between population and development to the intellectual and practical levels, and to convert those into national policies and programs, taking tangible measures to incorporate population issues in their plans and national or sectorial strategies. Of course, reference is made here to the national development plan and sectoral strategies, in particular those for health, education, housing, water, and electricity. Also it should also be reiterated that the National Development Plan 2010-2014 has refers to the population dimension in terms of employment policies.

The national strategy for eliminating poverty should also take into consideration the interaction between population and poverty, and should incorporate population factors in the decentralized planning on the local levels. It should also take into account the interaction between the population and environment. The strategy should also consider the impact of internal and external migration trends, set forth tangible initiatives for the benefit of the aged, and address reproductive health service delivery to dwellers of slums.

Second: Gender

The issue of empowering women, justice and equality between the sexes requires more mobilization and allocation of resources as well as more attention by policy-makers and strategies. It is not only a critical goal in itself, but also as a means to achieve sustainable development goals. Because of the cultural legacy that has mostly thrown women outside the arena of serious dialogue on women's issues and their fundamental rights. There should be a strong commitment to incorporate these rights in all the components of population policies and development strategies.

It is important to formulate policies aimed at protecting women's rights, including equality before law, equal opportunity to education, equal opportunity in employment, parliamentary representation, and guarantees of a life free of various forms of violence. In addition, efforts should continue in terms of promoting elementary and secondary education in order to decrease the educational gap between males and females. Gender-based violence should be countered through including values of respect for women in the curricula and by taking measures to enable men to support women's rights and to accept their responsibility towards their health and the reproductive and sexual health of their wives.

Third: Reproductive Health and Reproductive Rights

The program of action of the International Conference on Population and Development calls all States and Governments to provide reproductive health services, including services related to HIV- for all individuals of appropriate ages - and as soon as possible and no later than 2015. It is important for the state to protect and sustain young and adolescent's educational and health rights, and to incorporate the components of reproductive health into the primary health system. In addition to formulating policies and modifying legislations to emphasize those rights, such rights should also be a mechanism for monitoring human rights. Reproductive health should also be reflected in the sectoral reform program with view to maximizing access to high quality services. Reform efforts should include capacity building for service providers, availability of means and commodities as per international standards, and availability of information and consultancy services. The study also recommends measures to reduces diseases and mortality rates among mothers in accordance with the objectives of safe motherhood and other objectives of reproductive health, expand the chances of informed selection among family planning group, take measures to counter sexual violence including rape and harmful practices by means of modifying the Penal Code, render decisions that prohibit the circumcision for females, and measures to change certain behaviors and policies towards women, tight measures to face sexually transmitted infections including HIV/AIDS.

Fourth: Youth and Adolescents

Youth and adolescents are the most group prone to the risk of sexually transmitted diseases; deterioration of reproductive health, deformities of economic and social development; environmental degradation; and the negative aspects of globalization. Based on this fact, the objectives of the program of action of the International Conference on Population and Development, and national and regional policies and programs started advocating governments towards more objective and more concrete attitudes in securing the lives of young people and adolescents against risks and the incorporation of their creativity in the sustainable development. It is necessary to incorporate concepts of reproductive health into the curricula including the provision of pre-marriage services by specialized units particularly in rural, far flung areas and slums, and spread sexual awareness by means of concerned health institutions targeting girls. In addition, there is a need to supporting young people to achieve life skills at various levels through training and provision of loans. On the other hand, it is important to strengthen the regular

participation of the young in formulating policies and programs in various relevant fields. In this regard, the youth parliament initiative is an initiative that deserves more support and encouragement.

Fifth: Changing Behavioral Patterns

The Cairo Conference on Population and Development gives special attention to information, education and communication efforts, to increase awareness and change behavior regarding reproductive health and reproductive rights - including HIV/AIDS – for all population, including adolescents, through the use of traditional and modern media. It is important to stress the need for measures and set forth media and communication strategies for the benefit of the population, development, reproductive health and gender, and also conduct outreach campaigns with view of changing behavior and increasing awareness in reproductive health. Therefore, there should be an increased coverage by the media for reproductive health, reproduction rights and gender issues.