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الشرق الأوسط

ESCWA

## Arab Society:

# A Compendium of Social Statistics

Issue No. 12

**ECONOMIC AND SOCIAL COMMISSION FOR WESTERN ASIA (ESCWA)**

**ARAB SOCIETY:  
A COMPENDIUM OF SOCIAL STATISTICS**

**Issue No. 12**

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**ARAB SOCIETY:  
A COMPENDIUM OF SOCIAL STATISTICS**

**Issue No. 12**



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## Acknowledgments

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The 12<sup>th</sup> issue of *Arab Society: A Compendium of Social Statistics* is the latest in a series of biennial compendia of the Statistics Division of the Economic and Social Commission for Western Asia (ESCWA). It provides a general view of the Arab society in the ESCWA region and the changes it has encountered over time. Drawing on data provided mainly from national statistical offices (NSOs), it focuses on issues of population, labour, housing conditions, education, poverty, health, and culture. Each issue of the *Compendium* focuses on a single theme. The 12<sup>th</sup> issue of the *Compendium* concerns household composition and family formation.

Not all available indicators are displayed in the body of this publication. A more exhaustive set of tables can be found on the ESCWA website.

Data were drawn primarily from the NSOs of ESCWA member countries and supplemented by publicly accessible data from international agencies, such as the International Labour Organization, World Health Organization, United

Nations High Commissioner for Refugees, United Nations Educational, Scientific and Cultural Organization, and the World Bank. Although efforts were made to present as much of the data received from member countries as possible, – inconsistent or otherwise unreliable data from member countries were excluded from this report. We acknowledge the valuable assistance of NSOs providing us with the necessary data.

In the hope of widening the audience of this publication, the 12<sup>th</sup> issue is intended not only as a reference for policymakers and other officials, but also as a brief overview of trends in the region for readers with an interest in the social climate of Western Asia, such as academics, students, journalists, and the general public.

This publication was prepared by Marwan Khawaja (population), Ismail Lubbad (labour), Romesh Silva (households and families), Sukaina Al-Nasrawi (education and poverty), Zeina Sinno (health), Raffi Shirinian (housing conditions), and Dina Karanouh (culture).

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## SYMBOLS AND ABBREVIATIONS

|        |  |
|--------|--|
| BCG    | Bacillus Calmette-Guerin   |
| BMI    | Body mass index  |
| DHS    | Demographic and health survey                                      |
| DPT    | Diphtheria, tetanus and pertussis                                  |
| ESCWA  | Economic and Social Commission for Western Asia                    |
| GCC    | Gulf Cooperation Council   |
| GDP    | Gross domestic product   |
| GPI    | Gender parity index  |
| ICF    | International Classification of Functioning, Disability and Health |
| MDG    | Millennium Development Goal  |
| MICS   | Multiple Indicator Cluster Survey                                  |
| MMR    | Maternal mortality ratio   |
| NCD    | Non-communicable disease   |
| NSO    | National statistical office  |
| PAPFAM | Pan Arab Project for Family Health                                 |
| TB     | Tuberculosis   |
| UIS    | UNESCO Institute for Statistics                                    |
| UNESCO | United Nations Educational, Scientific and Cultural Organization   |
| UNHCR  | United Nations High Commissioner for Refugees                      |
| UNRWA  | United Nations Relief and Works Agency for Palestine Refugees      |
| WHO    | World Health Organization  |

## Introduction

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*Arab Society: A Compendium of Social Statistics* is the latest in a series of biennial compendia of the Statistics Division of the Economic and Social Commission for Western Asia (ESCWA). It provides a broad description of Arab society in the region and how it is changing over time. Drawing on data provided mainly from national statistical offices (NSOs), it focuses on population dynamics, households and families, employment, education, housing conditions, health, poverty, and culture. In each issue of the Compendium, we focus on one theme, and this year's theme is households and families. Other issues of social concern, such as crime and justice, social protection and social participation, are left out owing to the lack of reliable data. Data for Mauritania are not reported in this issue of the Compendium as the country became a member of ESCWA after the finalization of the data collection process.

The Compendium shows that the Arab population in the Arab region continues to grow and diversify rapidly. Population growth rates vary widely from less than 1 per cent to over 3 per cent, with an average of 2.1 per cent per annum. At this rate of growth, the population of the region is expected to double in size in approximately 35 years. The population is young overall, but there is considerable heterogeneity in the age-sex profile of countries in the region owing to varying demographic transitions, the size of migrant labourers and influx of refugees in some countries. The proportions of children less than 15 years of age range from a low of about 15 per cent in Qatar in 2013 to a high of over 40 per cent in Palestine. The sex ratios for all Gulf countries are large, and there are nearly 300 men per 100 women in Qatar.

Recent estimates show a rapid decline of fertility and mortality during the recent past. Total fertility varies greatly from a below replacement level (below 2.1) in Lebanon, Morocco and Tunisia to over 5 children in Iraq. After a prolonged stall in fertility of Egyptian women, recent estimates show a rise in fertility from 3 in 2008 to 3.5 in 2014, the same level as in 2000.

Improvements in population health and longevity are evident, but the data show clear disparities across countries. Life expectancy at birth ranges from 62-64 years (for men and women,

respectively) in Yemen to 77-81 years in Qatar. Gender differences in life expectancy at birth are generally small, with a difference of two years or less in such countries as Saudi Arabia and Bahrain, implying female disadvantage. Recent data on infant mortality also show gender differences in 10 out of the 16 countries, indicating possible discrimination against girls.

The region houses an exceptionally large proportion of immigrants, with the number of migrants having doubled in the last two decades. Data for 2012 show that about one out of four persons in six out of nine countries in the region was an international migrant. The proportions of migrants in member countries of the Gulf Cooperation Council (GCC) are relatively large, and these originate primarily from South and South-East Asia. The region also has a relatively large number of refugees and displaced populations, with three countries (Jordan, Lebanon and Palestine) having over 1.5 million refugees each.

The available data show that labour force participation is generally low in the ESCWA region, mainly because of very low female participation rate in the labour market; overall, rates for working-age women are less than half the rates for working-age men. The general unemployment rate among labour force participants varies widely, ranging from 27 per cent in Palestine to about 3 per cent in Qatar. Across the region, unemployment is systematically higher for females than males. Youth unemployment remains high across large parts of the region, and female youth unemployment rates exceed 50 per cent in seven countries in the region. The service sector dominates the labour market across the Arab region.

Over the last 20 years, there has been a steady decline in average household size from around 6-7 persons per household to approximately 5 persons per household across the region. Although the most common type of living arrangement is the nuclear family, about one tenth of households in the region are extended households.

There has been little change in the median age at marriage in Bahrain and Morocco over the last 20 years. However, in Egypt and Morocco, people

seem to marry about 2.5 years earlier in rural areas compared with urban areas. Although there has been a decline in teen marriages across the region recently, marriage amongst 15-19-year olds is still common, especially for females. Marriage to relatives continues to be a prevalent practice across the region, ranging from 40 per cent in Yemen to 20 per cent in Egypt. Women in rural areas are generally younger than women in urban areas when they have their first child.

Data on housing conditions are generally rare, and is mainly derived from population censuses. In the majority of countries, the rate of ownership of housing units is high, at 50 per cent and above. The most recent available data show that access to a public electricity network is generally high, with little variations between urban and rural areas in most countries. Similarly, availability of public piped water in housing units is generally high, the exceptions being Bahrain, the Sudan and Yemen. The differential between urban and rural households in their access to the public sewage network and the availability of flush toilets within the housing unit remains high. Data indicate that in some countries such as Jordan, Palestine and Yemen, only up to 10 per cent of the rural population are connected to sewage networks.

Overall adult literacy rates have been increasing, but current rates vary considerably between about 95 per cent in Qatar and Palestine and less than 50 per cent in Yemen. The absolute difference between the adult literacy rates for men and women range from 0.5 per cent in Qatar to about 17 per cent in Egypt. Closing gender gaps are noted in most countries at the primary school enrolment levels whereas widening gaps are reported at secondary school enrolment levels. Wide variations are observed between countries in the pupil-teacher ratios at the primary, secondary and tertiary levels. In terms of public expenditure on education as a percentage of total Government expenditure, Bahrain, Egypt, Kuwait, Morocco, Tunisia, and Yemen report a decrease between 2000 and 2013, while Lebanon, Oman, Palestine, Qatar, Saudi Arabia, the Sudan and the Syrian Arab Republic report an increase.

In recent years, the use of contraceptives has become more prevalent within the region. Iraq, the Sudan, Morocco, and Yemen have witnessed a dramatic decline in maternal mortality ranging

from 88 per cent to 40 per cent between 2000 and 2013. Immunization coverage rates in most countries in the region have improved over the last fourteen years, most notably almost all children in Egypt Jordan, Libya, Oman, Palestine, and Tunisia have received the five main vaccinations. In terms of nutritional status of children in which data are available, boys uniformly experience higher incidences of stunting, wasting and low weight for their age than girls. Across the region, the figures for male smokers are uniformly and notably higher than for female smokers, ranging from 20 per cent in Qatar to 45 per cent in Syrian Arab Republic. Ischaemic heart disease, stroke, lower respiratory infections, and chronic obstructive lung disease have been identified over the last decade as the most common diseases in countries of the region. Across the region, between 2000 and 2013, the trend has been towards increased per capita health expenditures, most notably in the GCC countries.

Using data provided by NSOs and the World Bank, during the period 2010-2012, Jordan recorded the lowest percentage of population living below the national poverty line, at 14 per cent, and Palestine the highest, at 26 per cent in 2011. When comparing the poverty gap across the countries of the region during the same period, it is noted that Palestine records the highest gap, at 6 per cent.

Cinema attendance varies across countries, with Lebanon and Bahrain reporting the highest per capita attendance. In 2014, Internet usage was identified at over 50 per cent (of adults) in 9 out of the 17 member countries. Internet usage increased sharply between 2005 and 2014, with some countries reporting a ten-fold increase.

| <b>ESCWA member countries</b> |                      |
|-------------------------------|----------------------|
| Bahrain                       | Oman                 |
| Egypt                         | Palestine            |
| Iraq                          | Qatar                |
| Jordan                        | Saudi Arabia         |
| Kuwait                        | The Sudan            |
| Lebanon                       | Syrian Arab Republic |
| Libya                         | Tunisia              |
| Mauritania                    | United Arab Emirates |
| Morocco                       | Yemen                |

## **SELECTED SOCIAL INDICATORS**



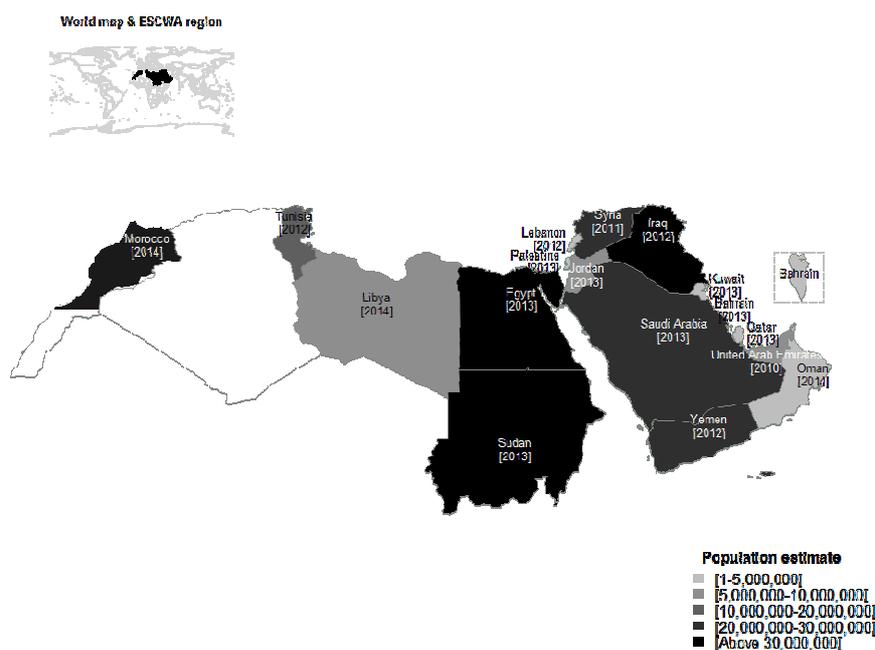
## 1. Population

Countries in the Arab region have reached different stages of demographic transition, resulting in diverse demographic features for the region. This is owing to a wide range of country-specific social, economic, political, and cultural factors. Currently, the region includes countries with markedly different population sizes, age-sex structures, growth rates, and population composition. These features are determined by the speed of change in three main components of demographic change, namely fertility, mortality and international migration (including labour migration and war-related population displacements). Understanding demographic change is crucial from a policy perspective because it affects almost all aspect of life and has important implications for the labour market, economic growth, employment potential, housing

needs and demand for education, health, and social services in any country. Reliable data on the size and structure of populations, as well as on components of demographic change are, therefore, essential for understanding various aspects of social and economic trends and for informing public-policy decisions at the national level. Such data are also important for measuring performance against internationally agreed development goals.

Using data mainly from national sources, this section provides a descriptive account of demographic structure and change in various Arab countries in the region. It describes changes in population size and structure, and the three drivers of demographic change (fertility, mortality and migration).

**Map 1.1 Population size by country, according to the latest estimates**



Source: ESCWA, based on information provided by national statistical offices.

### A growing population

Demographic transitions in the Arab region are believed to follow the standard pattern of the rapid decline in mortality starting in the mid-1960s, owing to improved health conditions and socioeconomic

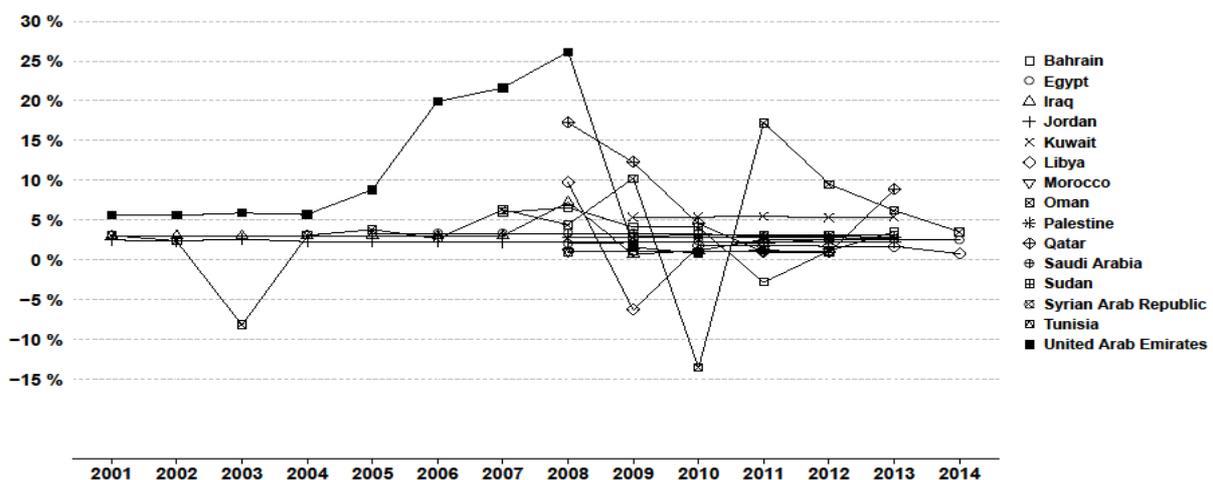
development, followed by a delayed decline in fertility in the mid-1980s. Variations in the speed of transition across countries, coupled with peculiar migration patterns, resulted in a rather polarized demographic profile and considerable variations in population growth rates across countries.

The United Nations estimates the population growth rate in the Arab region at 2.1 per cent, which is well above the world average (United Nations, 2014). At this rate of growth, the population of the region is expected to double in size in approximately 35 years. However, current population estimates for the period 2000-2013 obtained from 11 NSOs in the region imply large disparities in population growth rates across countries (figure 1.1). According to recent estimates, the countries can be generally divided into three different demographic groups: Countries in the first group have fairly high population growth rates of at least 3 per cent per annum (certain Gulf

countries); Countries in the second group have demographic transitions and growth rates of at least 2.5 per cent (Egypt, Palestine and the Syrian Arab Republic); and countries in the third group have reached an advanced transitional stage with fairly low growth rates (Lebanon, Morocco and Tunisia). Trends in growth rates have shown over time wide fluctuations in the Gulf countries, owing to changes in net international migration.

Thus, although population growth rates have been declining in the region as a whole, the population will, to a varying degree, continue to grow rapidly over the next few decades.

**Figure 1.1 Annual population growth rate, 2001-2014**

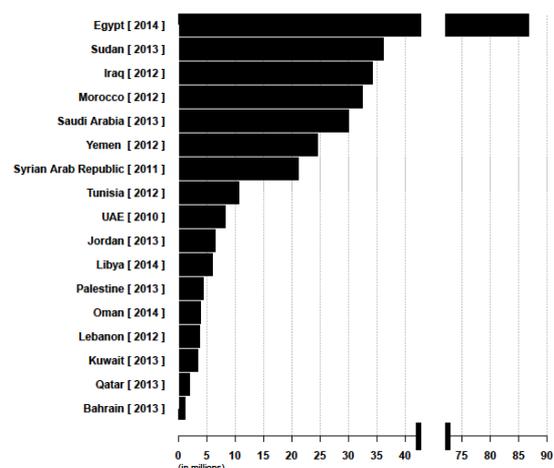


### A young population

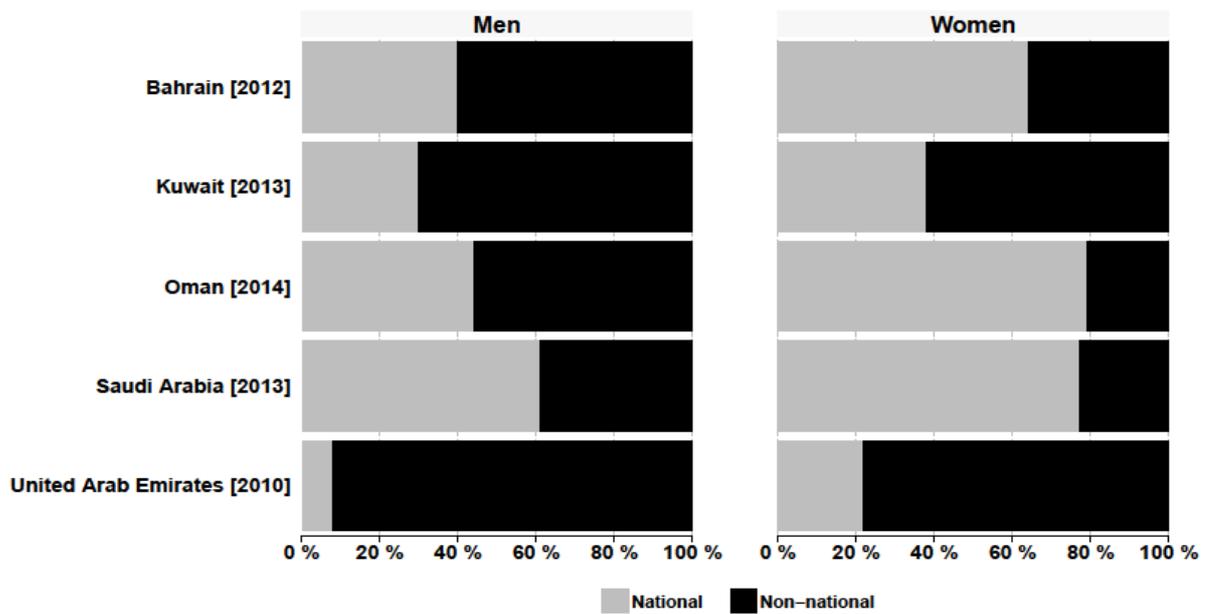
Recent population estimates for 12 countries reveal that population size varies considerably across countries, ranging from 87 million in Egypt in 2013 to 2 million or less in Bahrain and Qatar (figure 1.2). These estimates, especially in the Gulf, are affected by the presence of relatively large migrant (non-citizen) populations.

Figure 1.3 displays population size for four countries in the Gulf by nationality and sex. As shown in this figure, all of these countries have significant migrant populations, with three having a larger number of non-nationals than nationals. Also evident in the figure is the disproportionate number of men compared to women among the non-national populations in each country.

**Figure 1.2 Population size by country, latest estimates**

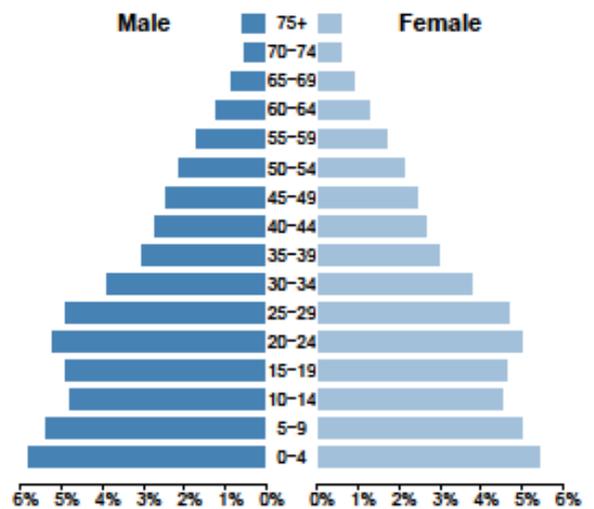


**Figure 1.3 National versus non-national population by gender, latest estimates**

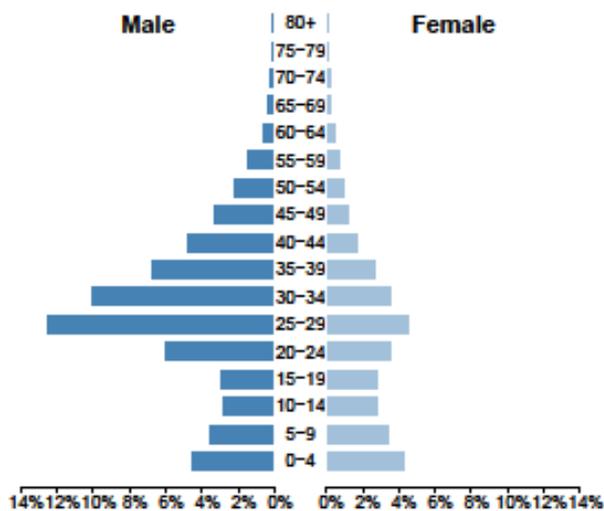


The presence of non-nationals, being mostly male and of working age, affects the age-gender structure of every country in the Gulf. Such age- and gender-distorted population structures are most visible in an age pyramid. Figures 1.4 and 1.5 compare the age pyramids of Oman, a country with significant migrant labourers, to that of Egypt, a country undergoing demographic transition and with few migrant labourers.

**Figure 1.5 Population pyramid, Egypt, 2014 estimates**



**Figure 1.4 Population pyramid, Oman, 2014 estimates**



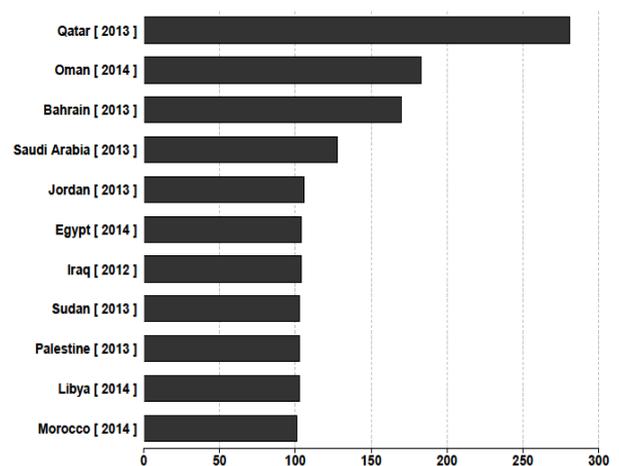
As a result of labour migration, the population-sex ratios for all Gulf countries are large. For example, the gender ratio of men to women in Qatar in 2013 was 281:100 (figure 1.6).

According to United Nations estimates, the region has a relatively young population overall with a median age of only 22 years, compared to a world average of 28.5 years (United Nations, 2015). However, as shown in figure 1.7, the age profile of countries in the region is quite

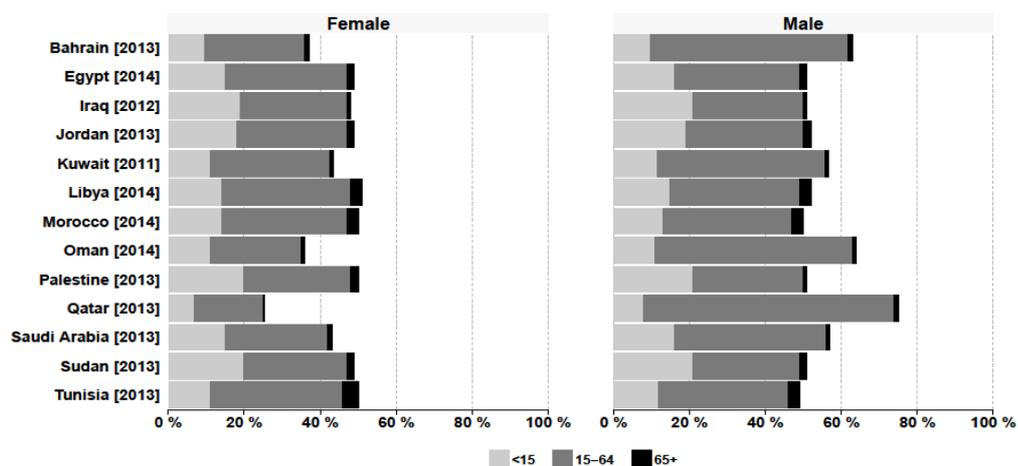
heterogeneous owing to varying demographic transitions and the size of migrant labour groups in some countries. The proportions of children less than 15 years of age range from a low of around 15 per cent in Qatar in 2013 to a high of around 40 per cent in Palestine and the Sudan, in the same year. In contrast thereto, in 2013, the proportionate size of the working age population in Qatar was 84 per cent as compared to around 54 per cent in the Sudan and 57 per cent in Palestine. Available data reveal that the proportions of elderly persons in each country are still small – less than 4 per cent of total populations – with the exception of Libya. Although recent figures of the age structure are not available for Lebanon and Tunisia, these two countries have relatively large numbers of elderly persons, exceeding 15 per cent of the total population. Finally, the data clearly show that the distorted gender distribution of populations in the Gulf countries is due to the disproportionately

large labour-related migration of men compared to women in the working age populations between 15-64 years.

**Figure 1.6 Sex ratio by country, latest estimates/censuses (per 100 males)**



**Figure 1.7 Population by age group and sex, latest estimates/censuses**



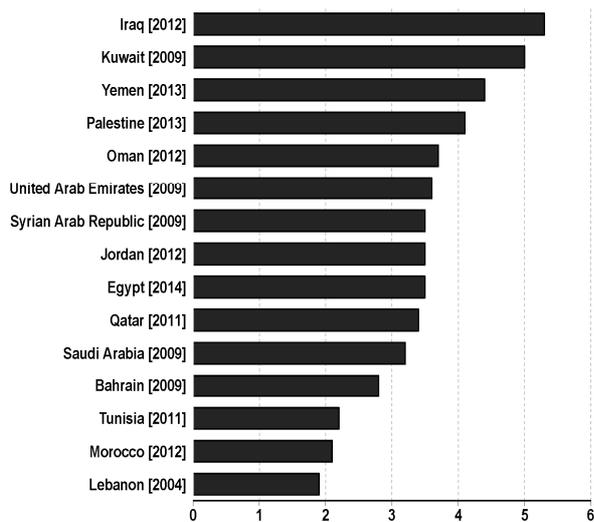
### Fast decline in fertility, but recent increase in Egypt

Most countries in the region have experienced rapid, although delayed, decline in fertility rates over the past few decades. The speed of decline in fertility varied widely across countries, with some showing little or no decline during the past decade, and even slight increase more recently, as in the case of Egypt. As a result, current estimates of total fertility reveal marked diversity across the region.

Figure 1.8 shows the most recent estimates of total fertility (number of children per woman) in

15 Arab countries. Total fertility varies significantly from a below or near replacement level in Lebanon, Morocco and Tunisia to over 5 in Kuwait (in 2009) and Iraq (in 2012). Recent estimates from Palestine and Yemen show a decline in fertility to around four children per woman. It should be pointed out that the reported figures for Gulf countries refer to the national populations, excluding immigrants, and hence tend to be higher than the total resident population figures. With the exception of Bahrain, fertility in the Gulf countries is over three children per woman.

**Figure 1.8 Total fertility rates, latest data available (births per 1,000 women aged 15-49)**



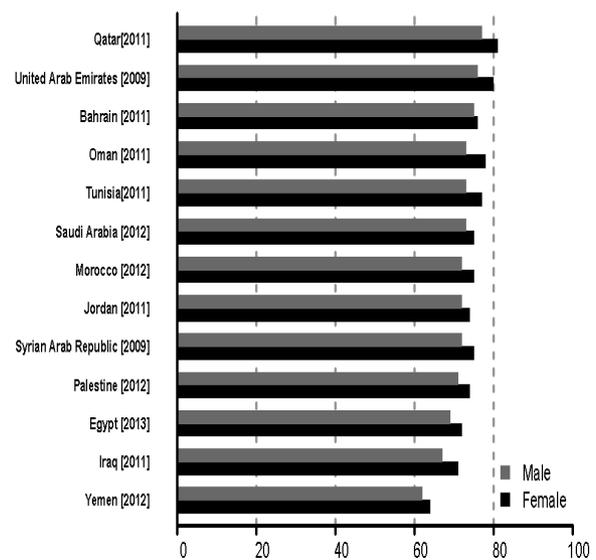
Trends in fertility over time show a rapid decline in some countries. As compared to the rates in 2000, recent fertility estimates for 12 countries show rapid decline in fertility in half of them. Five countries, namely Bahrain, Jordan, Iraq, Kuwait, and the Syrian Arab Republic, show a slow average decline ranging from 5 to 12 per cent in about 10 years. After stalling for some years, fertility in Jordan began a slight decline from 3.7 children per woman in 2002 to 3.5 children per woman in 2012. Also, after a prolonged stall, recent estimates from Egypt show a rise in fertility from 3 in 2008 to 3.5 in 2014, the same level as in 2000. Changes in age-specific fertility from 2008 to 2014 show that the rise was noticeable in almost all age groups, and especially sharp for women aged 20-24 years. This increase coincided with the recent conflict in the country, and could also be due to a rise in marriage, increased demand for children, or both.

#### Small female advantage in life expectancy at birth

Over the past few decades, the Arab region has experienced remarkable improvements in population health. According to United Nations estimates, life expectancy at birth has improved by around 20 years since the 1960s (United Nations, 2015). However, improvements are not evenly distributed across the region. Poorer countries still have relatively high mortality rates and low life expectancy at birth. Furthermore, gender disparities according to the health status still persist in many countries.

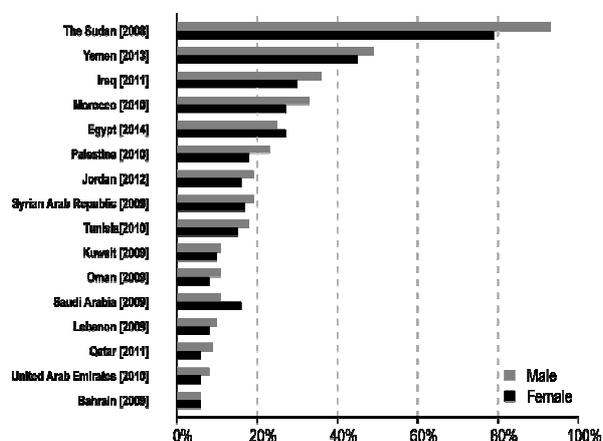
Only 13 countries in the region provided recent estimates of life expectancy at birth. As shown in figure 1.9, recent estimates of life expectancy at birth range from 62-64 years for men and women, respectively, in Yemen to 77-81 years in Qatar. Qatar and the United Arab Emirates have the highest life expectancies at birth for both men and women. It is interesting that some middle-income countries such as Morocco, Tunis and the Syrian Arab Republic have fairly similar levels of life expectancy at birth than some richer countries in the Gulf. It is also evident from the data that gender differences in life expectancy at birth are generally small, with a difference of only two years or less in three of the countries (Bahrain, Saudi Arabia and Yemen). Such small gender differences in life expectancy may indicate female disadvantages in survival chances. Coale (1991), using model life tables, estimated a narrow variation in sex ratios of life expectancy at birth of -0.924 to 0.946. Therefore, values of around 0.94 may indicate discrimination. With the exception of Qatar and Oman, all countries with data on life expectancy show values above 0.94, implying notable gender disparity in longevity. However, trend data from a few countries (not shown) reveal that improvements in life expectancy at birth over the past decade are generally more favourable for females than males.

**Figure 1.9 Life expectancy at birth for total population by sex, latest data available**



Large variations in infant and child mortality rates are also evident across countries in the region. Infant mortality rates range from over 86 deaths in the Sudan (in 2008) to very low rates of 10 or less deaths in the Gulf countries, excluding Saudi Arabia. The rate of nine deaths per 1,000 births reported in Lebanon is surprisingly low as compared to previous estimates (for instance, PAFAM, 2004), and this could be due to estimation bias associated with indirect methods of estimation using data from the Multiple Indicator Cluster Survey (MICS) (figure 1.10). Sex differentials in mortality are generally too small to indicate statistical significance, but they tend to favour females as would be expected in most countries. In two of the countries, namely Egypt and Saudi Arabia, recent estimates show a male advantage. In gender egalitarian countries, such as Sweden, the sex ratio of infant mortality rates is around 1.20. In only 6 out of the 16 countries for which data on the infant mortality rate by sex are available, the sex ratio is above 1.20. The lack of such gender differences in the infant mortality rate in 10 out of the 16 countries may indicate discrimination against girls.

**Figure 1.10 Infant mortality rates by sex, latest data available (per 1,000 live births)**



Data on trends in infant and child mortality from a few countries indicate continued improvements over time. However, reductions in mortality seem stalled in countries with low mortality rates (specifically, Gulf States), but also in countries with relatively high levels of infant and child mortality (Egypt, Iraq and the Syrian Arab Republic). Recent estimates from Jordan (17 deaths in 2012) and Palestine (18 deaths in 2013) show sharp declines in infant mortality rates in recent years.

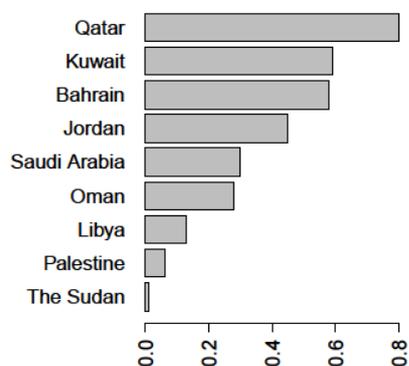
## International migrants nearly doubled in 20 years

International migration can have a profound impact on the population age-sex structure of a country, as well as on its economic, social and health conditions. Despite its significance, there is little data or literature on international migration in the Arab region. Here, limited data from international sources are used to highlight the size of migrant and displaced populations as well as net migratory movements.

The majority of countries in the region have relatively large migrant populations. Data for 2013 reveal that six out of nine countries in the region for which data are available classify at least 25 per cent of their populations as international migrants (figure 1.11). The number of international migrants constituted more than 80 per cent of the population in Qatar and nearly 60 per cent in Bahrain and Kuwait (in 2011). The migrant population is also relatively large in Jordan (45 per cent), Oman and the Kingdom of Saudi Arabia (nearly 30 per cent). It should be noted that, unlike those in the GCC countries, Jordan's migrants originate largely from neighbouring Arab countries, mainly Egypt, Iraq, Palestine, and Syrian Arab Republic.

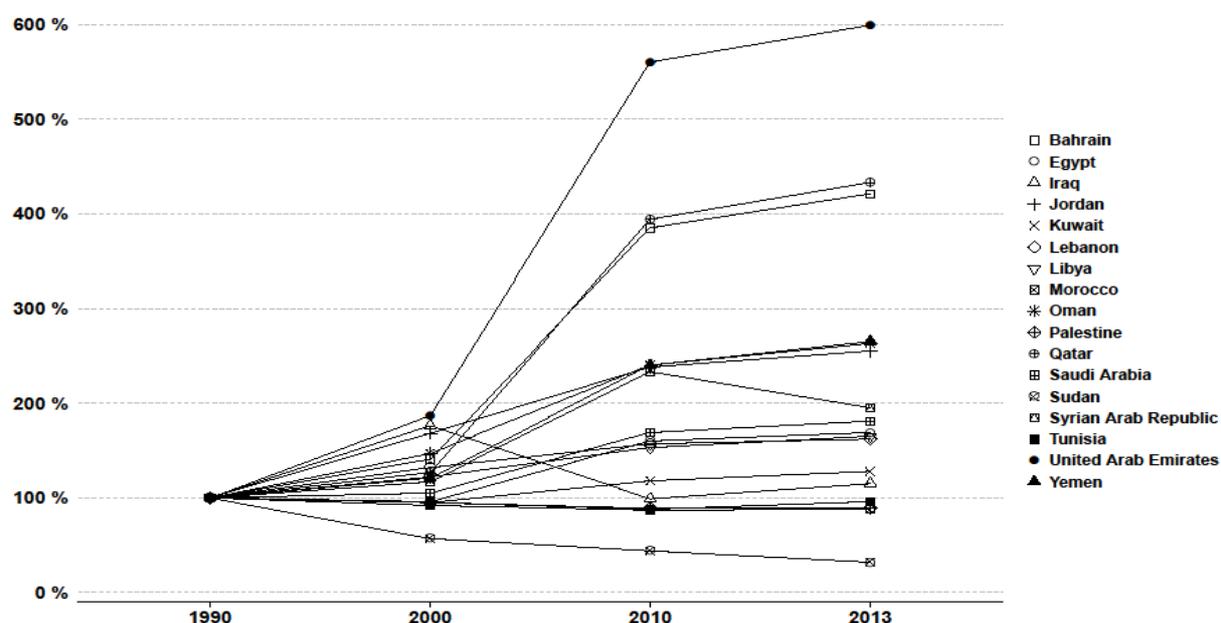
Trends in estimated international migration stocks indicate a substantial increase in international migrants from 1990 to 2013 in 12 out of 17 Arab countries. As compared to 1990, the number of international migrants more than doubled in 6 out of the 17 Arab countries by 2013 and more than tripled in three of them, namely Bahrain, Qatar and the United Arab Emirates (figure 1.12).

**Figure 1.11 Proportion of international migrants of total population, 2013**



Source: United Nation, 2014; and United Nations, 2015.

**Figure 1.12 International migrant stock at mid-year (percentage of base year 1990)**

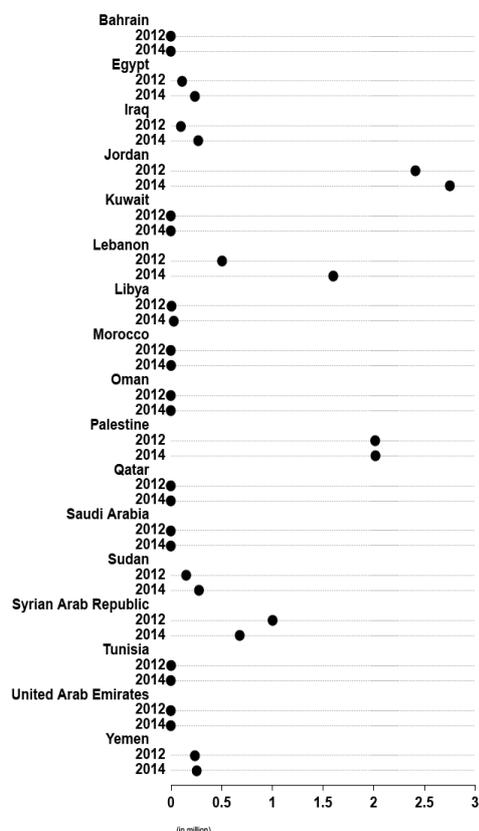


Source: United Nations, 2014.

Estimated net migration rates per 1,000 people were positive for 8 of the 17 countries during the period 2010-2015. Oman and Qatar had the highest positive rates at 59 and 49 migrants per thousand population, respectively. In contrast, the Syrian Arab Republic had the highest negative rate at 16 per thousand population. Trends in these rates show some fluctuations between 1990 and 2010, but were increasing consistently in the Gulf countries of Bahrain, Kuwait, Qatar, and the United Arab Emirates.

It is widely known that the Arab region has a relatively large number of refugees and displaced populations, with clear demographic, social and public policy implications. In fact, the region has the largest number of refugees in the world, with the Palestinians being the largest and oldest group of refugees (UNHCR, 2015; UNRWA, 2015). As shown in figure 1.13, three countries (Jordan, Palestine and Lebanon) each have over 1.5 million refugees, followed by the Syrian Arab Republic with over half a million. The large size of the refugee population in Lebanon and Jordan relative to their national populations has important implications on the host countries' labour market and their capacity to provide adequate health and social services.

**Figure 1.13 Refugees by country/territory of asylum, 2012-2014**



Sources: UNHCR, 2015; and UNRWA, 2015.

## 2. Household composition and family formation

The composition of a household shapes the lived experience of its inhabitants and provides some broad indications of social and economic well-being of the members of the household (Deaton and others, 1989).

Early studies on household dynamics in the Arab region focused on the increasingly common occurrence of the nuclear household structure and the move away from the traditional extended family households (Barakat, 1985). More recently, Khedr and El-Zeini (2003), using data from a 1995 demographic and health survey (DHS), found evidence of an increase in female-headed households, an increase in households occupied by single individuals, and that approximately 75 per cent of households were nuclear households.

Throughout the Arab region, the family is widely regarded as a core institution within society that shapes the lived experience of its constituent members and heavily influences the formation of human and social capital (Salehi-Isfahani, 2013).

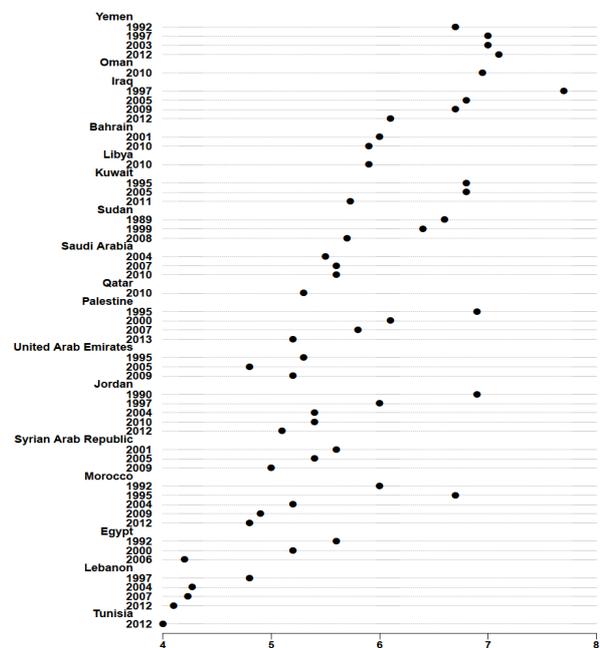
Until recently, little was known about marriage dynamics and family formation in the Arab region (Yount and Rashad, 2008). Rashad and others (2005) noted that the young age distribution in the region and economic and societal changes have had important effects on the timing and nature of marriage in the Arab world. In particular, increasing industrialization of the labour market, urbanization of the population and rising educational attainment have been linked to an increase in the age at first marriage (Rashad and Osman, 2001).

In this section, we describe recent trends in household size and composition in the Arab region, using available data from censuses and household surveys. We also explore the nature and recent trends of family formation across the Arab region. We focus specifically on the patterns and trends in marriage and the timing of the onset of childbearing. Our analysis draws on official statistics reported by NSOs as well as available data from recent DHSs in Egypt, Jordan, Morocco, and Yemen.

### General decline in average household size

Figure 2.1 displays recent trends in the average household size across the Arab region based on available data. Over the last 20 years, the general trend across the region has been a steady decline in average household size from around 6-7 persons per household to approximately 5 persons per household. This has been the case particularly in Egypt, Iraq, Jordan, Lebanon, Morocco, Palestine, the Sudan, and Syrian Arab Republic, whereas the decline in average household size in GCC countries has been more gradual.

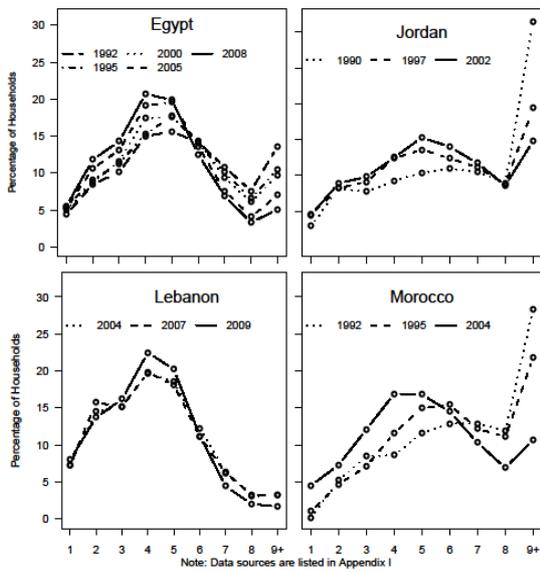
**Figure 2.1 Average household size in selected Arab States, 1990-2012**



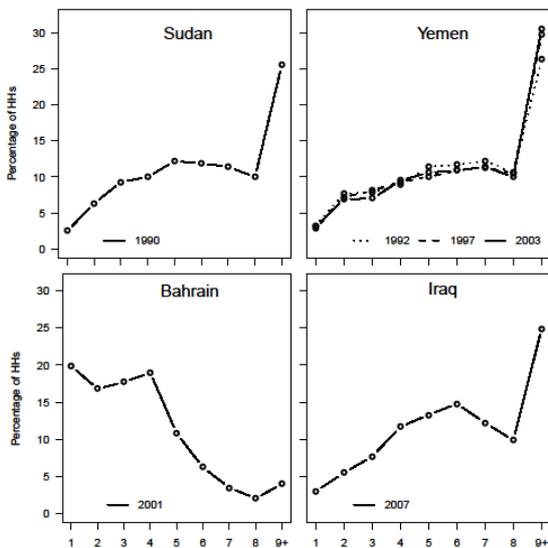
### Increased urbanization, decreased household size

In Egypt, Jordan and Morocco, the observed decline in average household size has been driven by a notable shift in the distribution of household size (figure 2.2). In particular, there has been a notable decline in the proportion of large households (such as those households with 9 or more residents) and an increase in the percentage share of small households between the early 1990s and more recent years. This pattern is consistent with a trend of increased internal migration from rural to urban areas (Mirkin, 2013).

**Figure 2.2 Distribution of household size in selected Arab countries, 1990-2009**



**Figure 2.3 Distribution of household size in selected Arab countries, 1990-2007**

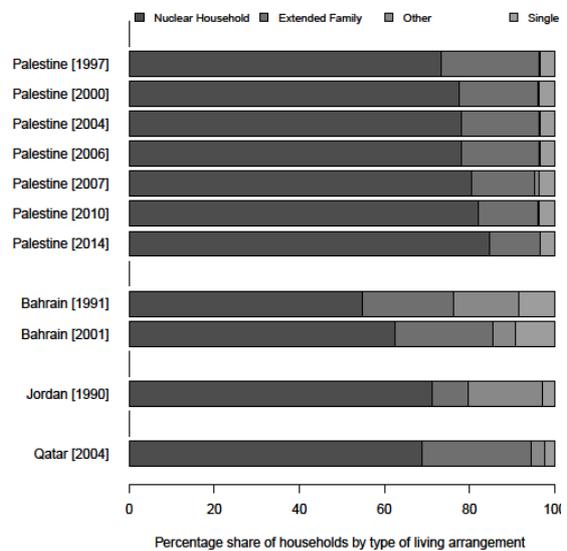


However, the distribution of household size varies considerably across the region, as shown in figure 2.3. Countries with large rural populations, such as Egypt, Morocco, the Sudan, and Yemen, have bimodal distributions characterized by large households in rural areas and approximately notably smaller households in urban areas. In contrast, large households are rare in Bahrain, where most houses have less than 4 residents. In Iraq and Lebanon, households most commonly have 5-6 members.

**About one in ten households extended**

Of the countries for which we received data on living arrangements, the most common type of living arrangement is the nuclear family, namely a household consisting of a married couple and their dependent children, childless couples or a single individual with children. In Bahrain, Jordan, Palestine, and Qatar, more than two-thirds of households consist of nuclear families as shown in figure 2.4. Around 20 per cent of households in these countries show extended family living arrangements.

**Figure 2.4 Distribution of households by type of living arrangement, 1991-2014**

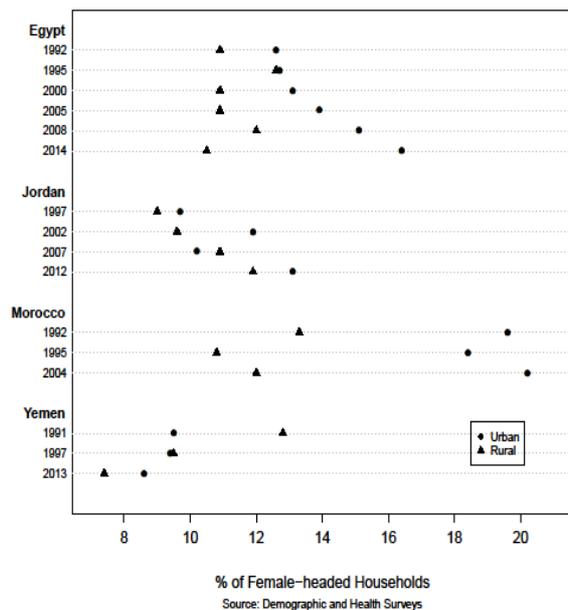


There is notable variation in the percentage of female-headed households across the region, as shown in figure 2.5. The most recent data for the Sudan suggest that 28 per cent of households are headed by females, whereas 10 per cent of households in Palestine and the Syrian Arab Republic are headed by females and 7 per cent in Yemen. Temporal trends in the percentage of female-headed households have also varied considerably across the region. Official data from the Sudan suggest that the percentage of female-headed households has doubled over the last 20 years. In Egypt, Jordan, Morocco, and Palestine, notably more modest increases have been observed. In these countries, recent DHSs have shown that the percentage of female-headed households is higher in urban than in rural areas. However, in Jordan and Yemen, there is a small difference in the percentage of female-headed households (of about 1-2 per cent) for

urban and rural areas. In Morocco and Egypt, the urban/rural differential in the percentage of female headed households is 8 per cent and 5 per cent, respectively.

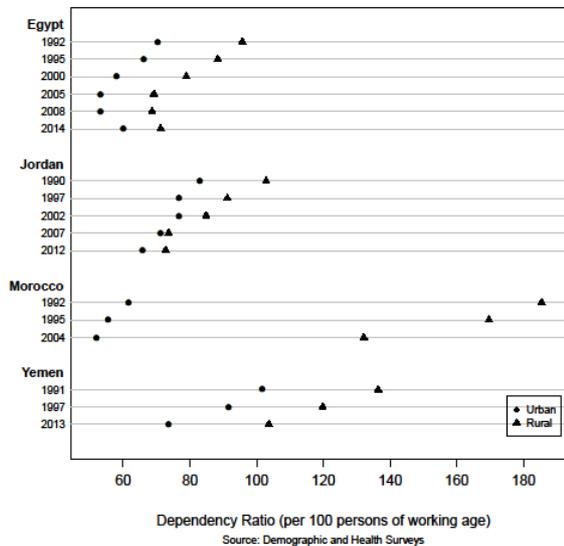
### Recent rise in female-headed households

**Figure 2.5 Female-headed households in selected Arab countries, 1992-2013**



The dependency ratio of the household population measures the ratio of dependents (people younger than 15 or older than 64 years) to the working-age population (people aged 15-64) across the entire population. Morocco and Yemen have relatively high dependence ratios compared to Egypt and Jordan. Figure 2.6 shows that the dependency ratio in these four countries is consistently higher in rural than in urban areas. In recent years, there has been a general trend of decreasing dependency ratios in both urban and rural areas, as fertility declines and the relative size of the working-age population increases. The exception in the region has been Egypt, where fertility has increased in recent years thus resulting in a small increase in the dependency ratio due to recent increases in birth rates (Ministry of Health and Population, UNICEF and El-Zanaty and Associates, 2014).

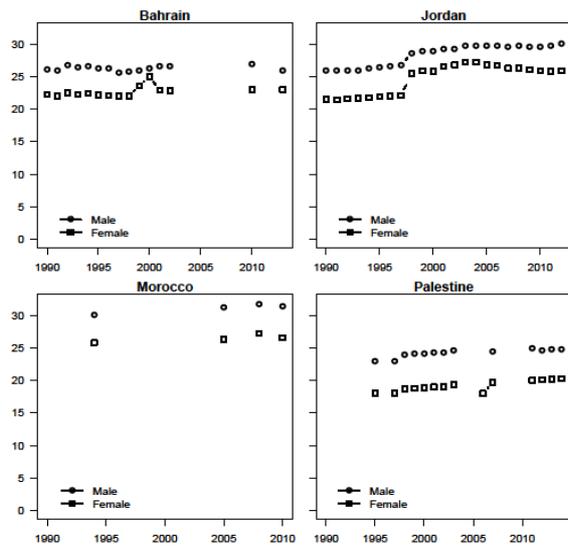
**Figure 2.6 Dependency ratio in selected Arab countries, 1990-2014**



### Little change in the male-female gap in age at marriage

Figure 2.7 displays the median age at marriage for males and females in countries for which official statistics are available for several years in the recent past. We observe variation in the median age at marriage across countries, whereby marriages tend to be concluded early in Palestine (with 50 per cent of women married by the age of 20 and 50 per cent of men married by age 24). In contrast thereto, the onset of marriage in Bahrain tends to be a little later (around 23 years for women and 26 year for men), and notably later in Jordan and Morocco. Although the onset of marriage differs across these countries, the marital age gap between men and women tends to be approximately 4 years for Bahrain, Jordan, Morocco, and Palestine. Further, there has been little change in the median age at marriage in Bahrain and Morocco over the last 20 years, whereas in Jordan and Palestine, there has been a small but steady increase in the median age at marriage over the last 10-15 years. Rashad and Osman (2001) have noted that increases in the age at first marriage in the region are associated with increases in female educational attainment, rises in female labour force participation and changes in national laws.

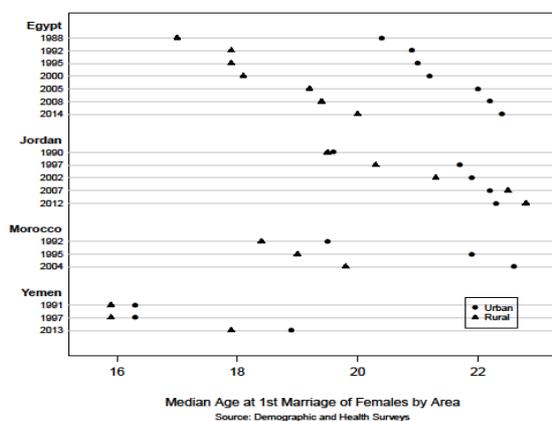
**Figure 2.7 Median age at marriage in selected Arab countries, by sex, 2000-2014**



### More wealth, delayed marriage

Throughout the region, there is substantial subnational variation in the timing of marriage. Figures 2.8 and 2.9 present DHS data from Egypt, Jordan, Morocco, and Yemen that show differences in the female median age at first marriage for urban and rural residents as well as by wealth quintile. In Egypt and Morocco, the onset of marriage tends to occur about 2.5 years earlier in rural areas compared with urban areas, whereas in Jordan and Yemen, the urban/rural differential in the median age at marriage is less than a year. In Egypt and Morocco, the median age at marriage differs by around 4.5 years for women between the highest and lowest wealth quintiles. In Jordan and Yemen, the difference is around 1.5 years.

**Figure 2.8 Median age of females at first marriage in selected Arab countries, by area, 1988-2014**

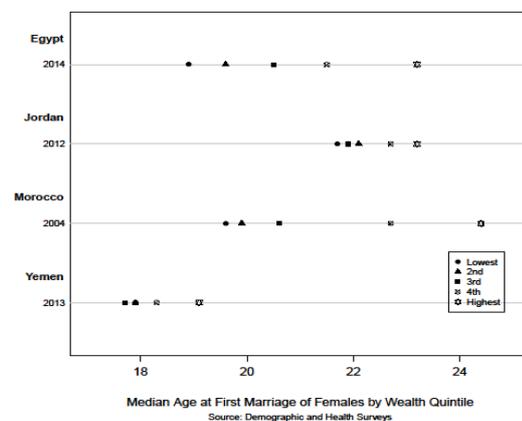


### Child marriage still common

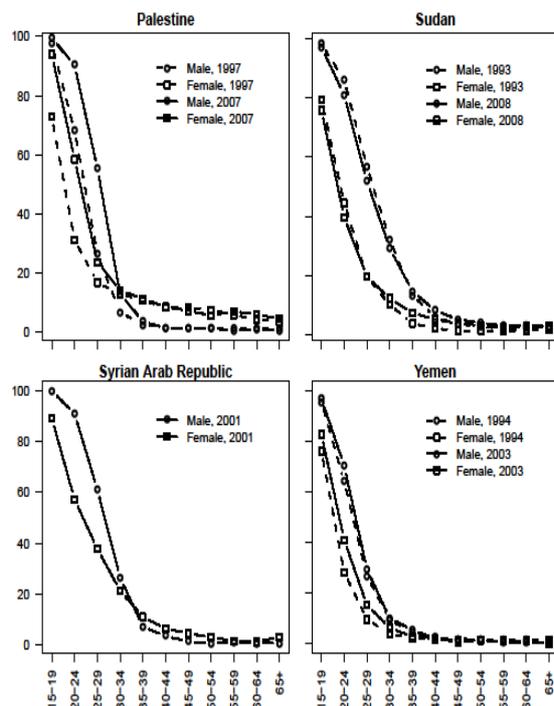
Early child marriage, defined as formal marriage before age 18, is a reality in the region due to a complex combination of religious and cultural norms, high poverty and unemployment rates, and restrictions on geographic mobility. Rouhidi-Fahimi and Ibrahim (2013) found that the prevalence of early child marriage amongst 20-24 year old females ranges from 32 per cent for Yemen in 2006, 25 per cent for Iraq in 2011, 19 per cent for Palestine in 2004, to 13 per cent for Morocco in 2011 and 8 per cent for Jordan in 2012.

Figure 2.10 presents the proportion of never married individuals by age in selected Arab countries. It shows that women are disproportionately affected by early marriage relative to men. Although there have been recent declines in the incidence of teen marriage, marriage amongst 15-19 year-old females is still a notable practice. For example, 21 per cent of 15-19 year-old females were married in Yemen as of 2003, compared with 20 per cent in the Sudan in 2008, 10 per cent in the Syrian Arab Republic as of 2001, and 6 per cent in Palestine in 2007. The practice of early child marriage often results in the start of childbearing at early ages, high fertility and reduced educational and labour market opportunities for the mother (Bunting, 2005). Figure 2.10 also shows that marriage is approximately universal in the Sudan, Syrian Arab Republic and Yemen; however, this is not the case for females in Palestine.

**Figure 2.9 Median age of females at first marriage in selected Arab States, by wealth quintile, 2004-2014**



**Figure 2.10 Single individuals in selected Arab countries, by age and sex, 1993-2008 (percentage)**

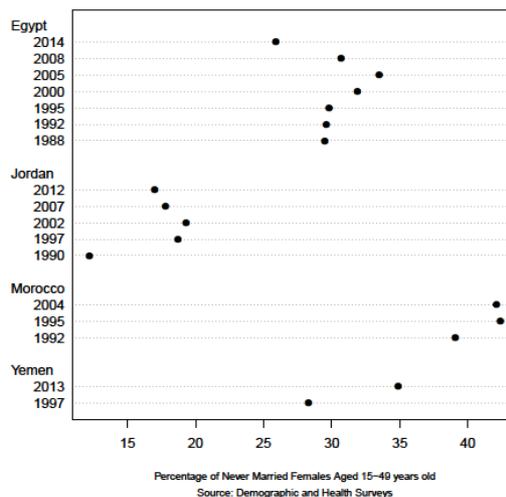


### Steady decrease in never married women in Egypt

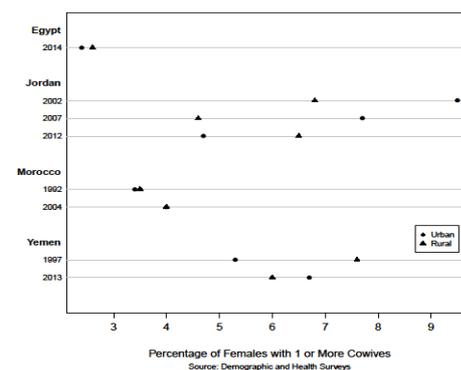
The proportion of never married females varies across the region. Figure 2.11 presents data from available DHS surveys and show that around 43 per cent of females aged 15-49 are not married in Morocco compared with 18 per cent in Jordan. Despite the rising costs of marriage in Egypt noted by Singerman and Ibrahim (2001), the per cent of never married women aged 15-49 has steadily declined over the last decade.

Recent DHS data, as displayed in figure 2.12, show that the prevalence of polygynous marriage is generally low but varies across countries. Around 6 per cent and 5 per cent of women in Yemen and Jordan, respectively, are in marriages with one or more co-wives, whereas in Egypt around 3 per cent are in such marriages. Interestingly, in Jordan, polygynous marriage was more common in urban areas about 13 years ago but is now more common in rural than in urban areas, whereas the reverse is true in Yemen, where the practice is now more common in urban areas, but was more common in rural areas 15 years ago.

**Figure 2.11 Never married females aged 15-49 years, 1988-2014**



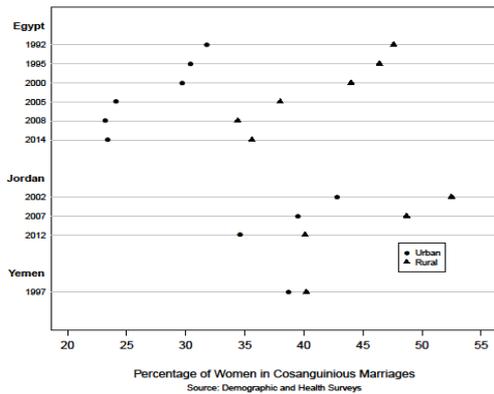
**Figure 2.12 Females with one co-wife or more, 1992-2014**



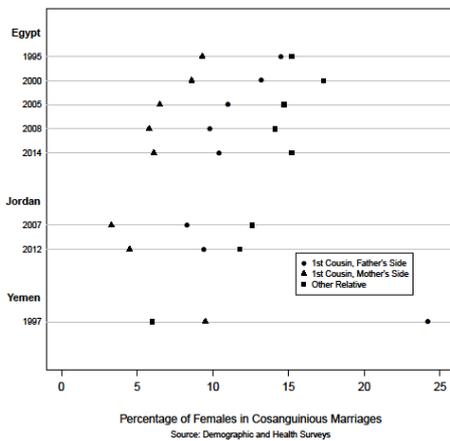
### Cousin marriage still prevalent

Marriage to relatives is a common practice and has a long historical tradition in the region. According to recent DHS data, around 40 per cent of marriages in Yemen are concluded between consanguineous relations compared with 35 per cent in Jordan and around 30 per cent in Egypt. In Egypt and Jordan, the practice is notably more common in rural areas, whereas in Yemen the practice is only slightly more common in rural than urban areas as shown in figure 2.13. In all three settings, consanguineous marriages are most common amongst first cousins, particular on the father's side (see figure 2.14). Tadmouri and others (2009) have noted that consanguinity in the Arab region negatively affects postnatal mortality and congenital malformations.

**Figure 2.13 Females aged 15-49 years in consanguineous marriages, by area, 1992-2014**



**Figure 2.14 Females aged 15-49 years in consanguineous marriages, by relation type, 1992-2014**



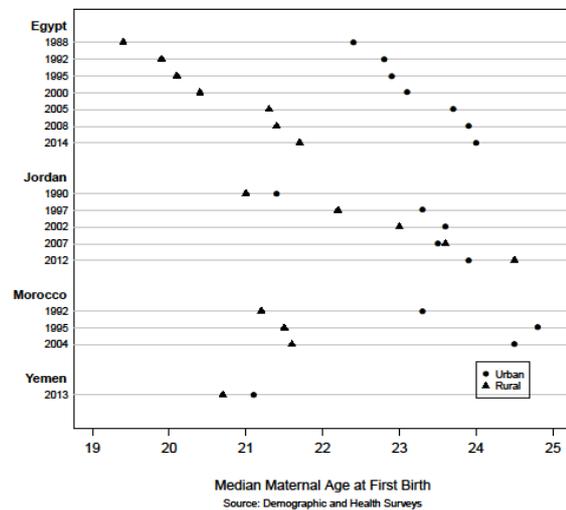
**Small urban/rural differentials in the onset of childbearing**

Recent DHS data indicate that the median age at first birth for women in Egypt, Jordan, Morocco, and Yemen is between 21 (in Yemen) and 24 (in Jordan). Figure 2.15 shows that, in general, there is a notable difference in the timing of first births in urban and rural areas in the countries, whereby the onset of childbearing is later in urban than in rural areas. In Jordan and Yemen, this urban/rural differential in the female median age at first birth is relatively small (less than 12 months), whereas in Egypt and Morocco it is more than two years. Figure 2.16 shows the variation in the onset of early childbearing in countries in the region that have recently conducted a DHS. The early onset of childbearing is more common in Yemen and

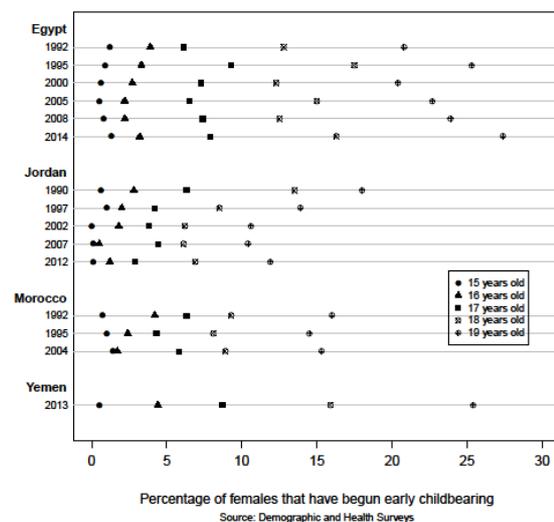
Egypt, both in terms of the onset of childbearing at age 19 as well as the very early onset of childbearing at age 16, than in Jordan and Morocco. Early childbearing before the onset of adulthood poses multiple serious risks to both mother and child (UNFPA, 2013). For the mother, early pregnancy is associated with adverse health, education and economic outcomes, whereas for the child, there are substantially increased risks of prenatal and infant death.

**In Egypt about one in five women aged 25-49 begun childbearing before age 19**

**Figure 2.15 Median maternal age at first birth in selected Arab countries, 1988-2014**



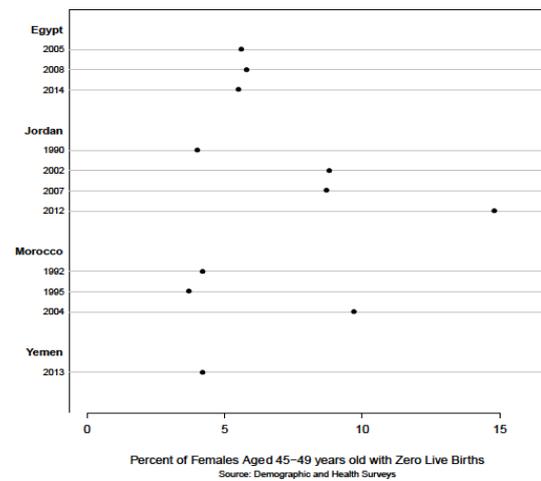
**Figure 2.16 Females who began childbearing early, selected Arab countries, 1988-2014**



### Childlessness more common in Jordan than Egypt

Figure 2.17 shows the percentage of females aged 45-49 who are childless, meaning that they have never given birth, in Egypt, Jordan, Morocco, and Yemen. In Egypt, the percentage of females aged 45-49 who have never borne children has remained approximately constant at around 6 per cent, whereas in Jordan and Morocco, it has steadily increased from 4 per cent in 1990 to 15 per cent in 2012 and 4 per cent 1992 to 10 per cent in 2004, respectively. Childlessness amongst the cohort of Yemeni females aged 45-49 is notably lower than in Jordan and Morocco, namely 4 per cent, in 2013.

**Figure 2.17 Females aged 45-49 with zero live births, 1992-2014**



### 3. Labour

Labour market composition and trends are important determinants of macroeconomic performance. In the Arab region, women participate in the labour force at much lower rates than men often by a wide margin. Youth and women who participate in the labour force in the region typically face high unemployment rates.

This section provides a brief overview of employment and the labour market in Arab countries by using household survey and population census data provided by NSOs. Specifically, recent data on labour force participation, unemployment, employment by economic activity, employment status, and occupation are presented. The data will be disaggregated by age and sex wherever possible. Trends for two recent time periods, 2001-2005 and 2006-2014, will be shown. Whenever comparison between the two periods is made, the latest available data within each time period are selected.

The phrase ‘latest data available’ in this chapter refers to the latest date for which data are provided for a particular indicator in a particular country. Only data on national citizens are used in all figures for all countries.

Labour data disaggregated by citizens (nationals) and non-nationals, where available for GCC countries, can be seen on the website of the ESCWA Social Development Division. For some countries, recent data on labour are not available due to the effects of armed conflict or substantial delays in reporting by NSOs.

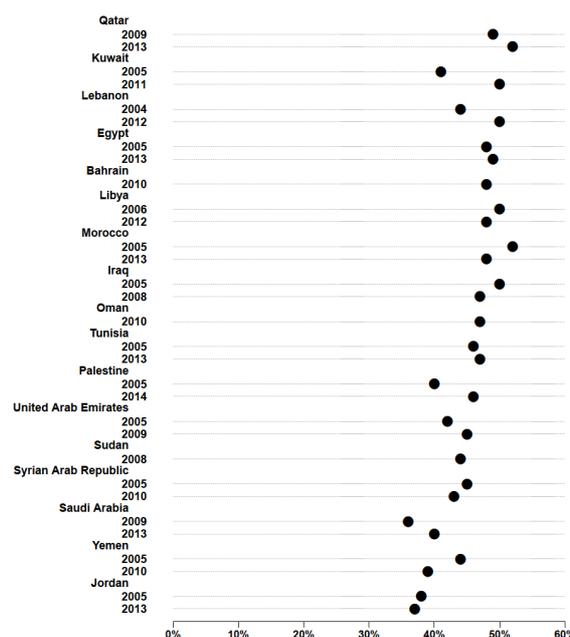
#### Labour force participation highest in Qatar, lowest in Jordan

Labour force participation is a measure of the percentage of adults (15 years and older) who are either working or not working but actively seeking work. Labour force participation is low in the Arab region, mainly because of low participation rates amongst women.

As can be seen from the latest available data, shown in figure 3.1, labour force participation rates vary across the region to a certain extent. Qatar was the only country to have a labour force participation rate of 52 per cent, whereas Jordan reported a rate of 37 per cent for 2013. Over the

last decade, Kuwait, Lebanon, Libya, and Palestine all recorded notable increase in their labour force participation rates. For example, between 2005 and 2011, the labour force participation rate amongst nationals in Kuwait increased from 42 to 49 per cent.

**Figure 3.1 Labour force participation rate, 2003-2014**

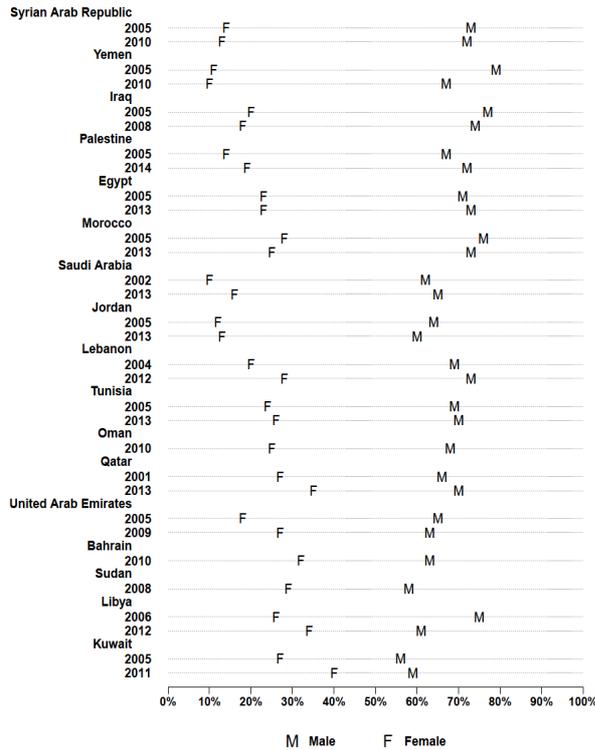


#### Women’s labour force participation rates less than half of men’s in most countries in the Arab region

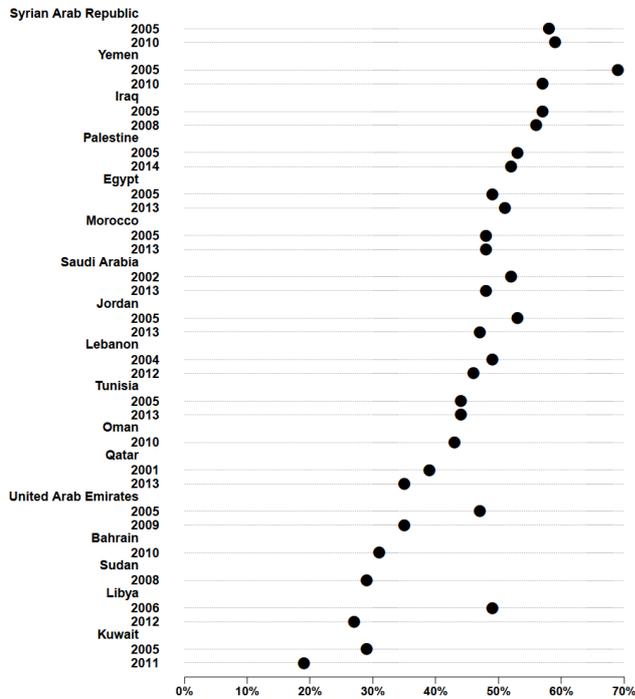
Most countries, except Kuwait in 2011 and Libya in 2012, reported labour force participation rates for working-age women that were less than half the rate for working-age men. In two countries, namely the Syrian Arab Republic and Yemen, working-age men participated in the labour force over five times the rate of working-age women.

For the latest available data (figure 3.2), the highest labour force participation rate amongst working-age populations was 73 per cent for men in Egypt in 2013 and the lowest was 59 per cent in Kuwait in 2011. As for women’s labour force participation rate, the highest rate was 41 per cent in Kuwait in 2011 and the lowest was 10 per cent in Yemen in 2010.

**Figure 3.2 Total labour force participation rate, by sex, 2005-2014**



**Figure 3.3 Absolute difference in sex-specific total labour force participation rate, 2002-2014**



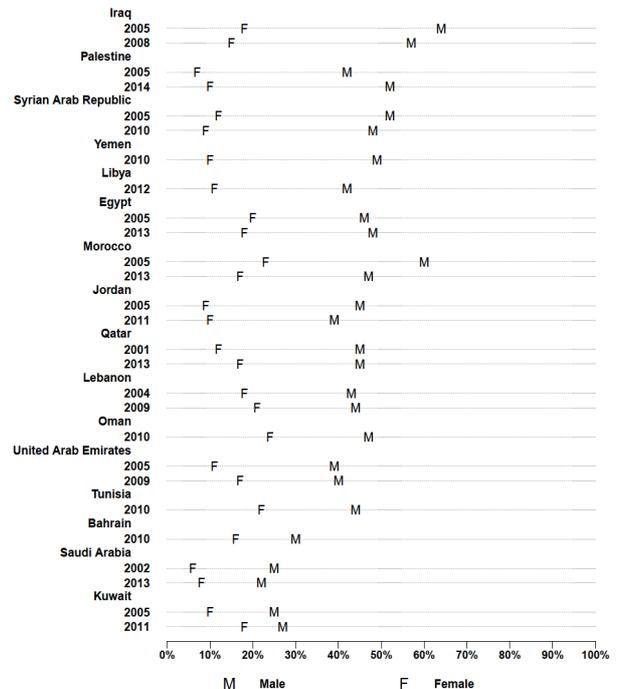
**Only 8 per cent of female youth in Saudi Arabia participated in the labour force in 2013**

To some extent, lower labour force participation rates are expected among youth than adults because young individuals may be enrolled in school.

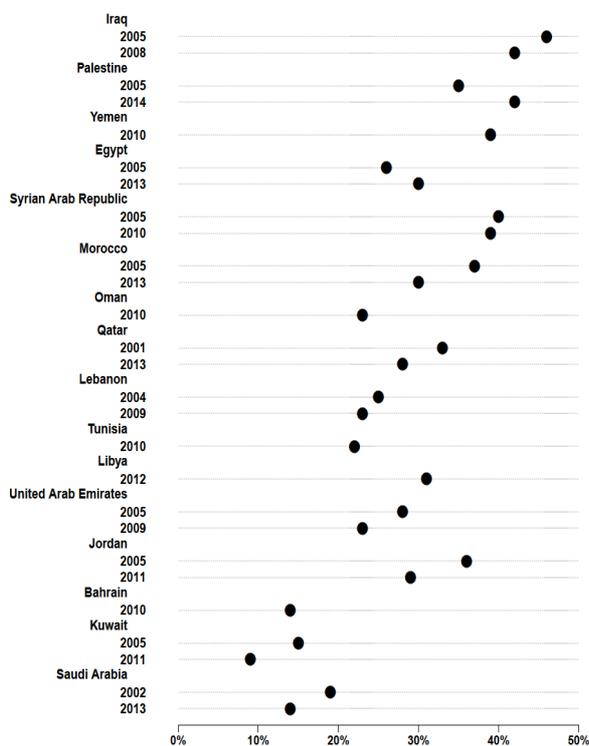
Figure 3.4 shows that the labour force participation rate for male youth is almost three times higher than the labour force participation rate for female youth in all the Arab countries. Also, the lowest labour force participation rate in the 2005 to 2014 time period was 8 per cent for females' youth in Saudi Arabia in 2013. The highest recorded was 24 per cent in Oman in 2010.

For the latest available data, the largest absolute difference between youth male and female figures was 42 percentage points in Iraq 2008 and in Palestine in 2014. The largest relative difference was recorded in Syria, Palestine and Yemen where male youth participated in the labour force at 5 times the rate of female youth. Figure 3.5 shows that for most countries in the region the absolute sex difference in labour force participation rates for youth has been above 30 percent.

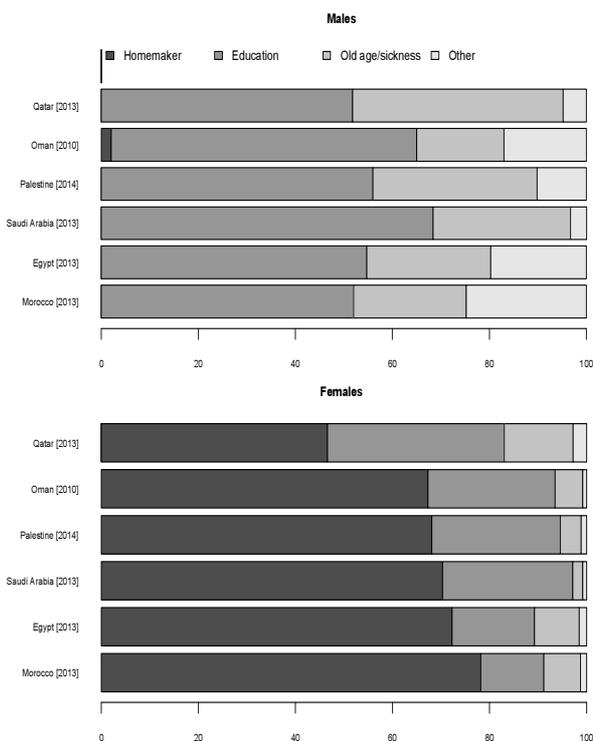
**Figure 3.4 Labour force participation rate for youth (15-24 years), by sex, 2005-2014**



**Figure 3.5 Absolute difference in sex-specific youth labour force participation rate, 2005-2014**



**Figure 3.6 Distribution of individuals outside the labour force, by sex and reason, 2010-2014**



**About 78 per cent of women outside the labour force due to home duties in Morocco in 2013**

Figure 3.6 presents information for six countries that reported these data on the distribution of males and females outside the labour force. There is a notable sex difference across all of these countries, whereby men tend to be outside the labour force for education reasons whereas women tend to be outside the labour force because of housework. For all six countries, men also reported being outside of the labour force for reasons of old age or sickness at systematically higher levels than females.

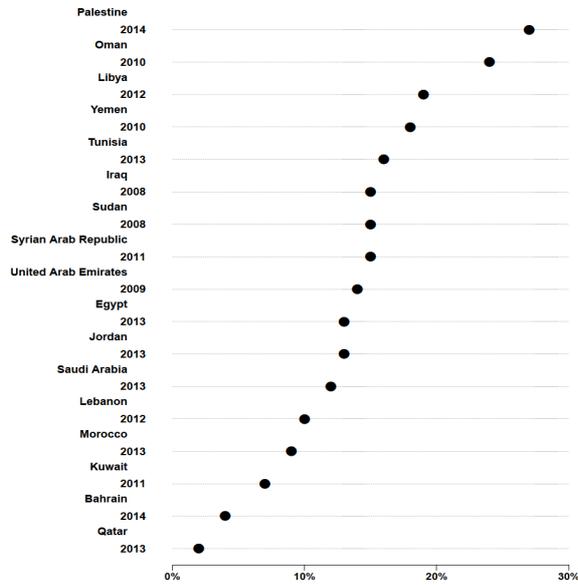
Figure 3.6 shows that, in 2013, 47 per cent in Qatar, 72 per cent in Egypt and 78 per cent in Morocco were not part of the labour force due to home duties.

**Highest unemployment rate in Palestine, lowest in Qatar**

The unemployment rate, the percentage of those economically active who cannot find work, is perhaps the most often-cited indicator of a country’s labour market and a general indicator of the economy. Despite the limitations of the unemployment rate as a summary indicator (for example, unemployment may be low where job quality is also poor), it gives a rough sense of the difficulties faced by the economically active population in each country.

As shown in figure 3.7, Palestine reported the highest overall unemployment rate, at 27 per cent, amongst the countries that provided data for the 2008-2014 period. The majority of countries in the region have experienced an unemployment rate between 10 and 20 per cent in recent years. Bahrain and Qatar have had the lowest unemployment rates in recent times – below 5 per cent.

**Figure 3.7 Total unemployment rates, 2008-2014**

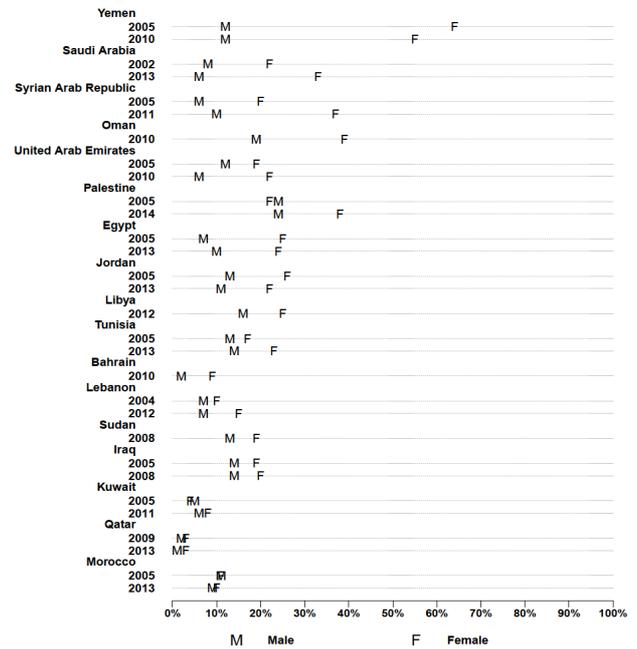


**Increased gender gaps in total unemployment rates in most Arab States**

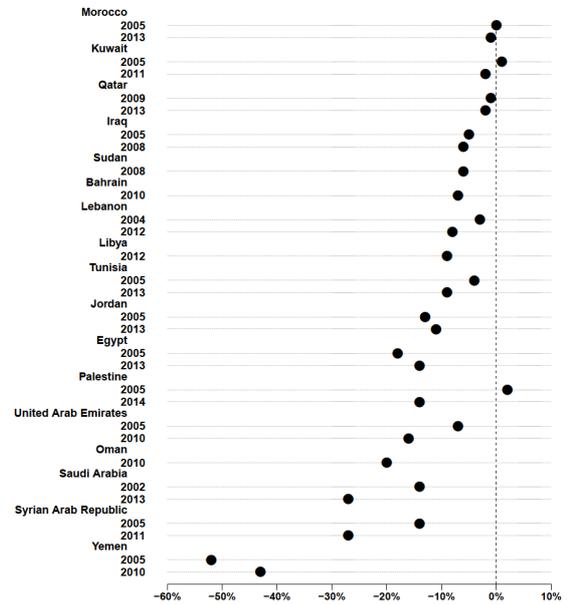
Total unemployment rates among women are notably higher than for men across the entire region, as shown in figure 3.8. The lowest unemployment rate in working-age populations in this period was in the GCC countries, namely: 1 per cent for men in Qatar in 2013, followed by 2 per cent for men in Bahrain in 2010 and 6 per cent in Kuwait and Saudi Arabia, according to the latest available data. The highest male unemployment rate was 24 per cent in Palestine in 2014. The highest female unemployment rate was recorded in Yemen in 2010, namely 55 per cent.

Between 2008 and 2014, the female unemployment rate increased in the majority of the Arab countries for which data are available, as shown in figure 3.9. However, there has been a decrease in female unemployment rates in recent years in Yemen, Saudi Arabia, Egypt, Jordan, and Morocco. Between 2008 and 2014, the gender gap in unemployment increased in all Arab countries except for Egypt and Jordan, while it remained stable in Morocco and Qatar. Morocco, Kuwait and Qatar had the lowest absolute sex differences in recent total unemployment rates.

**Figure 3.8 Total unemployment rates by sex, 2005-2014**



**Figure 3.9 Absolute difference in sex-specific total unemployment rates, 2005-2014**



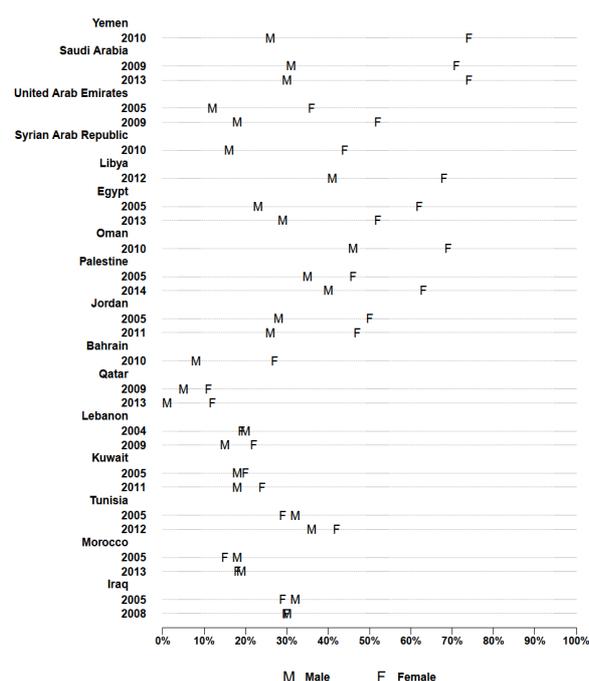
The recent reported data show that, in some of the GCC countries, namely Bahrain, Saudi Arabia and the United Arab Emirates, female unemployment rates are at over three times the rate of male unemployment.

## Markedly high unemployment for youth

The combined difficulty of finding work as a woman and finding work as a youth in the region presents an exceptional challenge for female youth seeking employment.

As shown in figure 3.10, recent data indicate higher unemployment rates for female youth than male youth in all Arab States except for Morocco. Unemployment rates for female youth were over 50 per cent in seven countries during 2005-2014, namely: Egypt (52 per cent in 2013), Libya (68 per cent in 2012), Oman (69 per cent in 2010), Palestine (63 per cent in 2014), Saudi Arabia (74 per cent in 2013), United Arab Emirates (52 per cent in 2009) and Yemen (74 per cent in 2010). The highest unemployment rate reported in this time period was 74 per cent amongst female youth in Saudi Arabia in 2013.

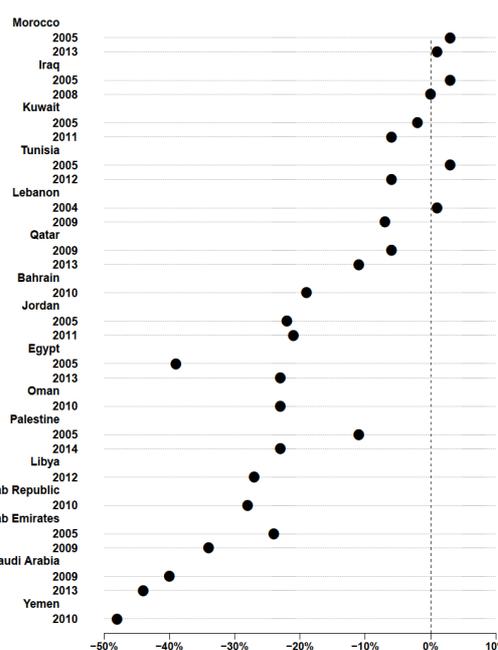
**Figure 3.10 Youth unemployment rates by sex, 2005-2014**



However, male youth unemployment rates were low; in Qatar in 2013, for example, unemployment was reported at 1 per cent for male youth, whereas at 12 per cent for female youth. The female youth unemployment rate was the lowest among Arab countries which reported data within the above-mentioned time period.

Between the two observed time periods, the female youth unemployment rate has increased in the majority of Arab countries except for Egypt and Jordan. During the observed time period, the gender gap in the youth unemployment rate has also increased in all reported Arab countries, except for Egypt and Jordan.

**Figure 3.11 Absolute difference in sex-specific youth unemployment rates, 2005-2014**



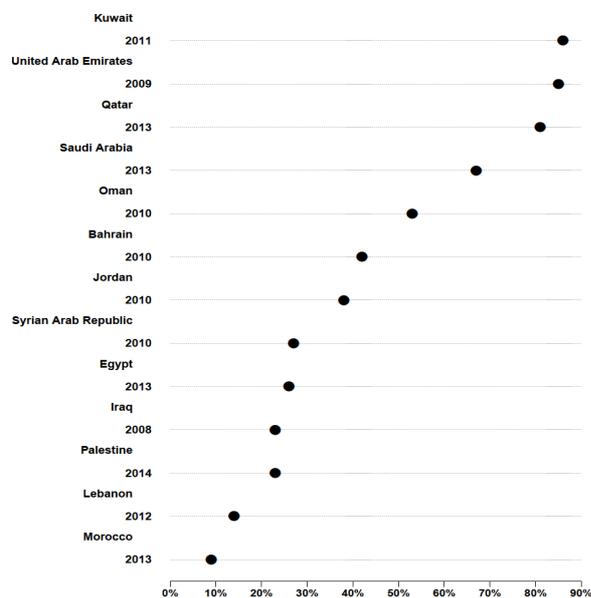
## High share of employment in public sector in Gulf States

The highest share of employment in the public sector in the region was recorded in the GCC countries, namely in Kuwait, the United Arab Emirates and Qatar at 86 per cent in 2011, 85 per cent in 2009 and 81 per cent in 2013, respectively. The lowest share of public sector employment reported was in Morocco at 9 per cent in 2013, as shown in figure 3.12.

In Morocco, 90 per cent of the employed workers were in the private sector in 2013. This constitutes a higher percentage than that of any other country which reported the total number of nationals and non-nationals working for the private sector for the latest available data. The next highest figure for employment in the private sector was noted in Lebanon at 86 per cent in 2012. The lowest figure for the same indicator

was reported in the United Arab Emirates with 8 per cent for nationals in 2009.

**Figure 3.12 Total employment in the public sector, 2008-2014**



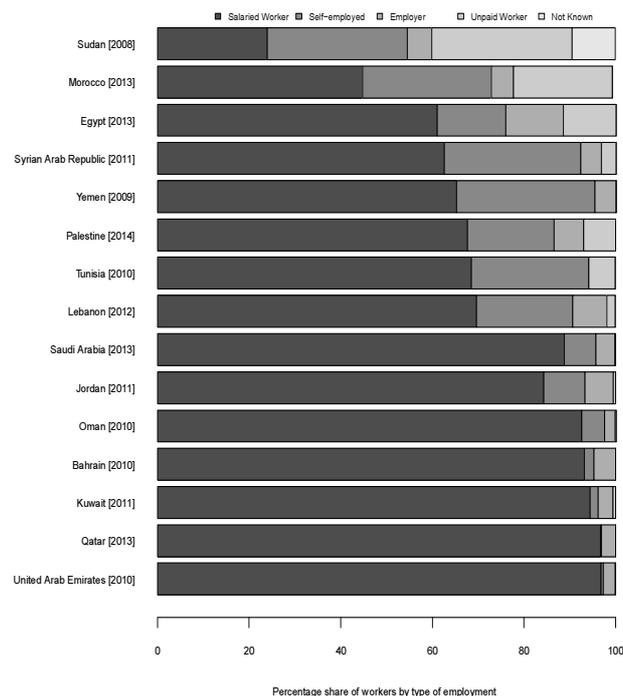
### High percentages of self-employed workers in the Sudan, Morocco, Yemen and Syrian Arab Republic

Most workers in the Arab region held salaried jobs in the 2008-2014 time period, as shown in figure 3.13. The exceptions to this pattern were the Sudan and Morocco, which both had high proportions of self-employed workers (31 and 28 per cent, respectively). Egypt reported the highest percentage of employers in the labour force, at 13 per cent, whereas Saudi Arabia recorded the lowest, at 2 per cent in 2013.

In the GCC countries, the majority of workers are salaried workers, given that most nationals are employed in the public sector. As a consequence, the percentage of workers in GCC countries who are self-employed is low; it varies from 1 per cent in the United Arab Emirates to 7 per cent in Saudi Arabia as shown in figure 3.13.

In all reporting countries, the percentage figures of women in the categories of employers and self-employed are lower than the percentage of men. The majority of women in Arab countries is employed in the category of salaried workers.

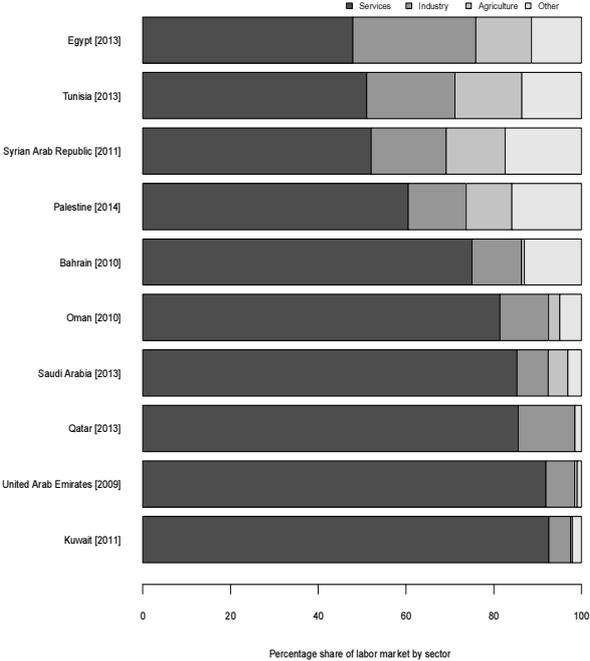
**Figure 3.13 Employment status, 2008-2014**



### Services, the main economic activity in the region

The labour market across the Arab region is dominated by the service sector, as shown in figure 3.14. The service sector employs over 48 per cent of the workers in all Arab countries, but in particular in GCC States, given the high proportion of public-sector employment in their respective labour markets. The services sector in Kuwait accounted for 93 per cent of total employment in 2011, in the United Arab Emirates for 92 per cent in 2009 and in Qatar for 86 per cent in 2013. The industrial sector employed a notable share of the labour force in Egypt, Tunisia and the Syrian Arab Republic, with 28 per cent, 20 per cent and 17 per cent of all workers, respectively, are employed in industry jobs. The agriculture sector accounted for the lowest share of the labour force in all Arab States. In Tunisia, Egypt and the Syrian Arab Republic, between 13 and 15 per cent of workers were engaged in the agricultural sector. In contrast, in small GCC States, such as Bahrain, Kuwait, United Arab Emirates and Qatar, less than 1 per cent of the labour force was engaged in agricultural work.

**Figure 3.14 Total employment by economic activity, 2009-2014**



#### 4. Housing conditions

Everyone has the right to adequate housing, which entails more than just four walls and a roof over the head. Adequate housing is essential for people, and their families, to being sheltered from extreme weather and climate conditions. It should offer people a suitable place to sleep and rest, where they are free of risks and hazards. In addition, housing should give people a sense of personal security, privacy and personal space. These elements, among others, make a house a home and are intrinsically valuable to people (OECD, 2011).

This section provides a descriptive portrait of housing conditions in some Arab countries, using data from recent population censuses and household surveys. Seven indicators out of nine on housing conditions are used in this section: tenure of housing units, type of living quarters, source of water supply, main source of drinking water, existence of flush toilet inside the housing unit, types of sewerage disposal system, and source of electricity. Data on solid waste disposal means and access to public piped water can be found on the website of the ESCWA Social Development Division. The data used here mainly come from national household surveys and the 2000 and 2010 census rounds.

##### The majority of households lives in privately owned housing in most countries

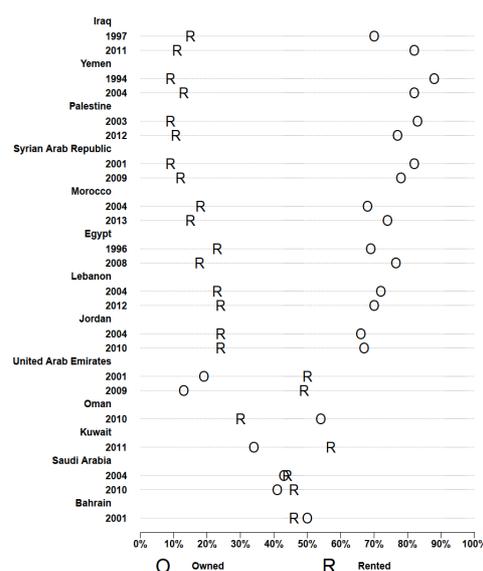
Two categories of tenure of housing units, owned and rented, are compared across countries for two time periods based on two different surveys.

The latest available data show that the private ownership of housing units exceed 50 per cent in most countries in the region, with the exception of the Gulf countries, where the high percentage of rented housing units is attributable to the relatively high number of non-nationals living there.

According to the latest data available, the highest percentage of housing unit ownership is in Iraq, at 82 per cent, and the lowest is in the United Arab Emirates, at 13 per cent. The highest rental percentage is in Kuwait, at 57 per cent, and the lowest in Palestine, at 11 per cent.

Four countries experienced a slight increase in the percentage of privately owned housing units between the last two censuses, namely Egypt, Iraq, Jordan, and Morocco, whereas the opposite is true for Lebanon, Palestine, Syrian Arab Republic, and Yemen (see online annex table 3.1)

**Figure 4.1 Tenure of housing units from the last two censuses or corresponding surveys by country**



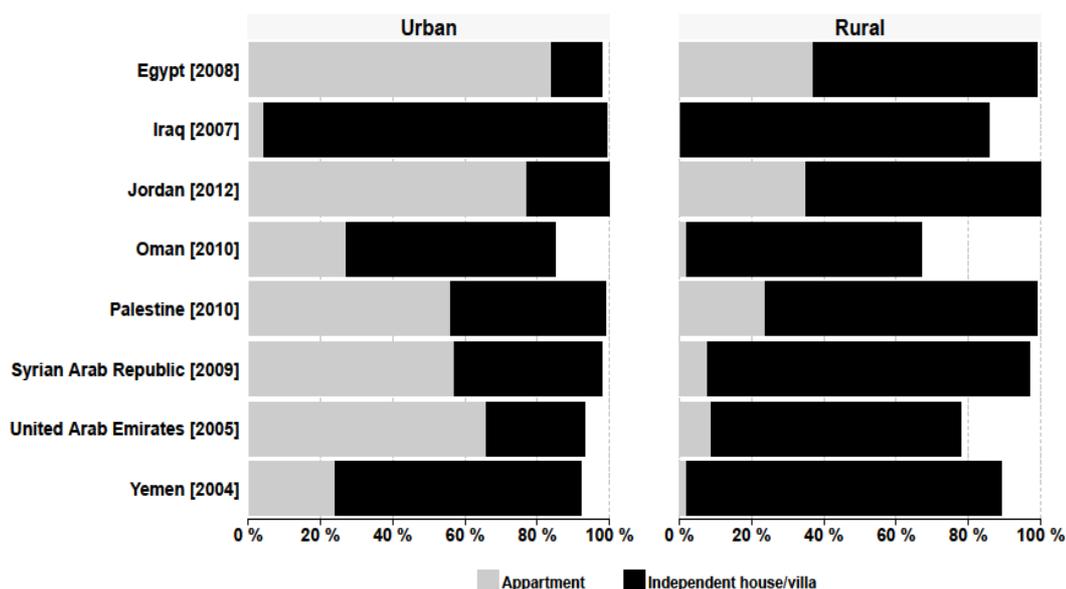
##### Higher percentages of apartments in urban areas

According to Principles and Recommendations for Population and Housing Censuses, Revision 2 (UNDESA, 2008), tenure is considered a core topic, which should be investigated in population and housing censuses.

The highest proportions of apartments both in urban and rural areas across the region exist in Egypt, at 84 and 37 per cent, respectively. The lowest are in Iraq, with 4 per cent and 0.3 per cent of housing units being apartments in urban and rural areas, respectively.

The proportion of apartments is substantially lower in rural than in urban areas. The exception is Iraq, where the percentages of independent houses and villas in both urban and rural areas are very high, at 95 and 86 per cent, respectively (see online annex table 3.2).

**Figure 4.2 Occupied housing units by type of living quarters, latest available data by country**



### Significant variations in public piped water as a means of water supply

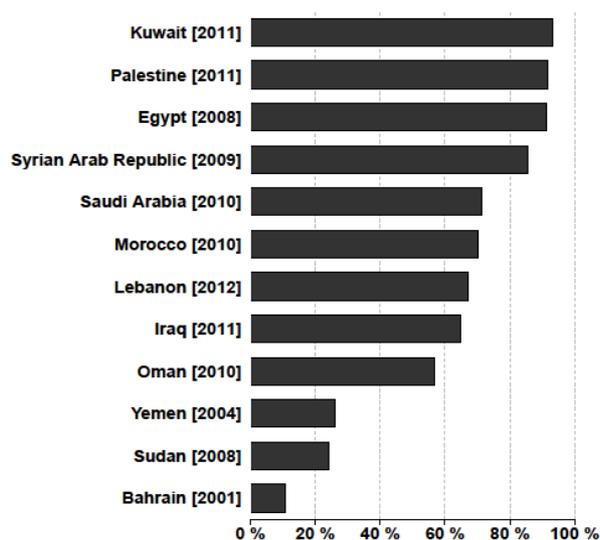
Target 7(c) of the Millennium Development Goals (MDGs) is “sustainable access to safe drinking water and basic sanitation”. It is assessed, in part, by having access to an improved water supply source. Sustainable access to an improved water source, as defined in the guidelines for monitoring the MDGs, refers to the following types of water supply: piped water, public tap, borehole, protected dug well, protected spring, properly collected rainwater, and bottled water. Improved water sources do not include vendor-provided water, tanker truck water, unprotected wells and springs, and surface water (river, stream, dam, lake, pond, canal, and irrigation channel) (UNDESA, 2008).

In six out of twelve countries in the region for which recent data are available, more than 70 per cent of housing units have access to public piped water.

Figure 4.3 shows that the range of access to public piped water varies considerably across the region, from 93 per cent in Kuwait to 26 per cent

in Yemen, 24 per cent in the Sudan and 11 per cent in Bahrain. As a result, there is heavy reliance on other sources of water, such as purchased bottled water and water tanks, in addition to wells, rivers and other types of running water, in at least eight countries in the region (see online annex table 3.3).

**Figure 4.3 Availability of public piped water as a source of water supply within the housing unit, latest available data by country**



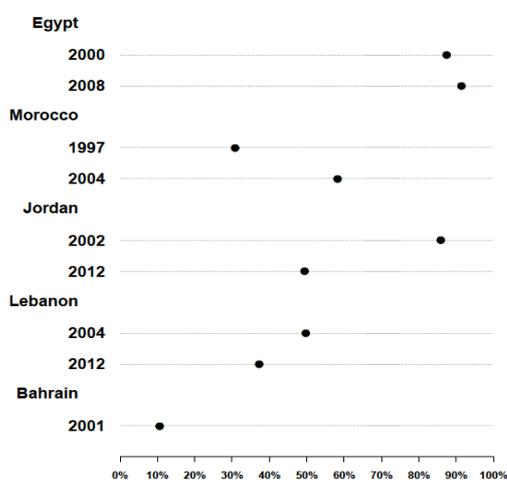
### Increased dependency on bottled water for drinking in some countries

Five countries reported on the availability of usage of public network as a primary source for drinking water covering two time periods.

The highest percentage of housing units using the public network as a primary source of drinking water for the latest available data was in Egypt, at 91 per cent, which is attributable to the relative increase in rural areas.

Over the last decade, two countries in the region, namely Jordan and Lebanon, experienced a substantial decrease in using public network as a main source of drinking water, from 86 to 49 per cent in Jordan and from 50 to 37 per cent in Lebanon. This is the result of the increasing dependence on bottled water and private water purification centres as a main source for drinking water (see online annex table 3.4).

**Figure 4.4 Usage of the public network as the main source of drinking water, data from the last two censuses or corresponding surveys by country**



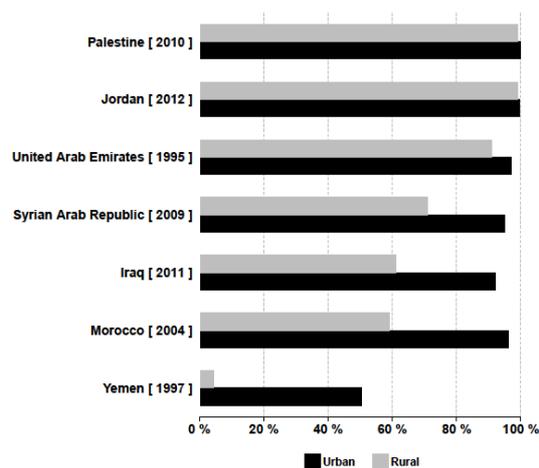
### High availability of flush toilets inside the housing unit in urban areas

In six countries, more than 90 per cent of housing units or buildings in urban areas contain flush toilets, with the highest rate in Palestine, at 100 per cent, and the lowest in Yemen, at 50 per cent. Figures on rural areas are 60 per cent and

above for five countries, with the highest in Palestine, at 99 per cent, and the lowest in Yemen, at 5 per cent (see online annex table 3.5).

In countries with available data, urban access to flush toilets is above 90 per cent, except in Yemen, where it is 56 per cent. The size of the differential between urban and rural access to flush toilets varies across countries. In Jordan, Palestine and the United Arab Emirates, urban and rural households have similar levels of access to flush toilets. In all other countries, there are notable differentials in urban and rural access to flush toilets, most notably in Yemen, where few households in rural areas have access to flush toilets. In Iraq, Morocco and the Syrian Arab Republic, the urban-rural differential is, on average, 25 per cent.

**Figure 4.5 Existence of flush toilets inside the housing unit or building, latest available data by country and area**



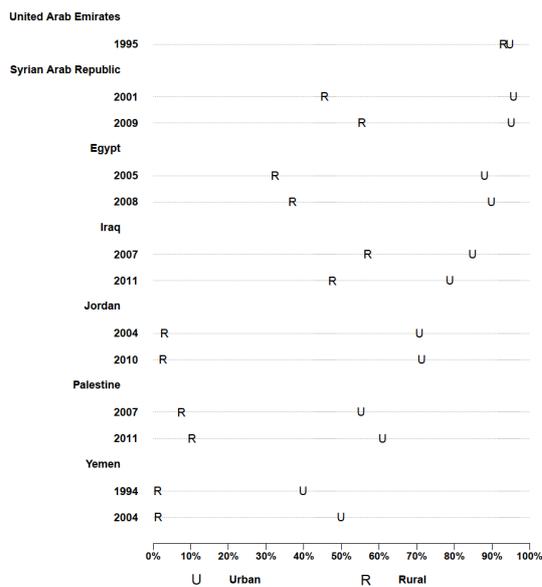
### Wide gap between urban and rural areas in the availability of public sewage network

Adequacy of sanitation facilities in the housing unit should consider accessibility to toilets and sewage disposal systems. To fall under adequate sanitation, toilets or latrines have to be connected to non-clogged sewage disposal systems (UNDESA, 2008).

Seven countries in the region reported recent data on access to public sewage networks (figure 4.6). The differential between urban and rural households in their access to the public sewage network remains large, except in the United Arab Emirates. For the remaining countries, the average differential between

urban and rural access to the public sewage network in the latest available data was 50 per cent. Rural household access to the sewage network in Jordan, Palestine and Yemen was each below 10 per cent, with no measurable improvement observed in rural access between the available measurements (see online annex table 3.6).

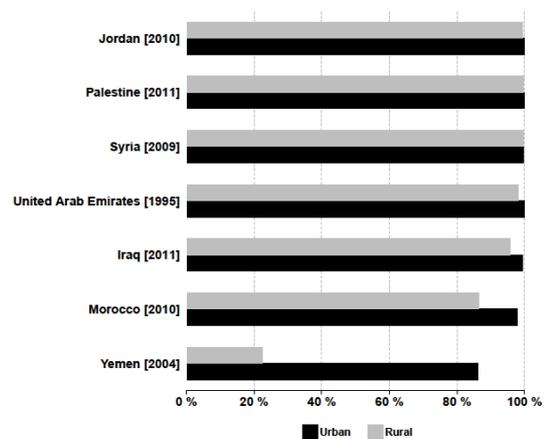
**Figure 4.6 Availability of public sewage network, data from the latest two censuses or corresponding surveys by country and area**



### High access to electricity from public network in most countries

On the one hand, in Iraq, Jordan, Palestine, Syrian Arab Republic, and United Arab Emirates, access to a public electricity network exceeds 94 per cent according to the most recent data available for both urban and rural areas (figure 4.7). In Yemen, on the other hand, the urban-rural differential in access to public electricity grids is still large (see online annex table 3.7).

**Figure 4.7 Access to electricity from public network, latest available data by country and area**



## 5. Education

Education is among the major factors that foster social and economic development.

Formal schooling equips people with skills required by a modern labour market and is directly related to employment and wages. It also contributes to better health and well-being of a population. Data on education are important for designing related policies and plans. As fertility rates in Arab countries are high, the number of pupils increases annually, which necessitates an increase in both human and financial resources for education.

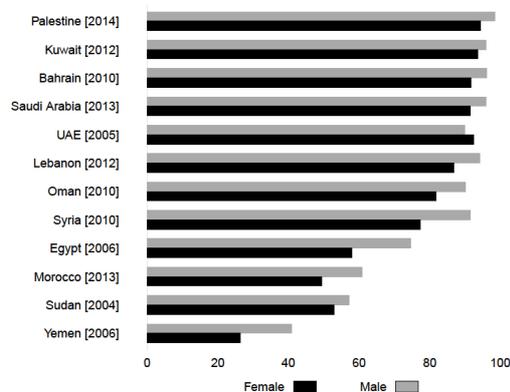
This chapter provides a brief overview of the formal education in ESCWA member countries using data obtained mainly from NSOs and the United Nations Educational, Scientific and Cultural Organization (UNESCO). It focuses on selected indicators on adult and youth literacy, educational attainment, pupil-teacher ratios and Government expenditure on education, among others.

### Highest adult literacy rate in Qatar and Palestine, lowest in Yemen

Qatar and Palestine reported the highest overall adult literacy rate among the responding countries, at 97 per cent and 96 per cent, in 2013 and 2014, respectively. The lowest adult literacy rate of 34 per cent was found in Yemen in 2006.

Figure 5.1 presents sex-specific adult literacy rates for the most recent data provided by countries. The absolute difference between adult female and male literacy was the lowest in Qatar, at 0.5 percentage points in 2014, followed by Oman at 2 percentage points in 2013. The largest gap was noted in Egypt in 2006 at 17 percentage points, while the second- and third-largest gaps were recorded in Yemen and Morocco at 15 and 11 percentage points, respectively. It should be pointed out that sex differences in literacy are largely due to age, as older men were much more literate than older women.

**Figure 5.1 Adult literacy by sex, latest data available (percentage)**

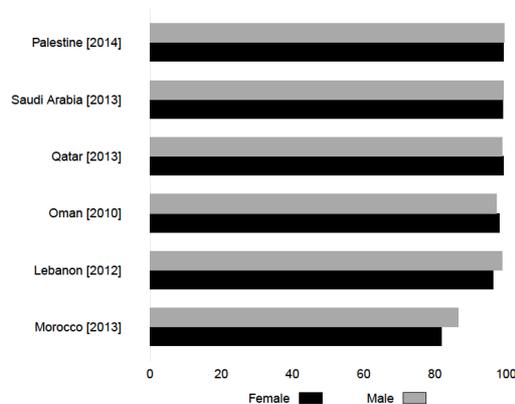


### Highest youth literacy rate in Palestine, lowest in Morocco

Palestine, in 2014, and Saudi Arabia, in 2013, reported the highest overall youth literacy rate among responding countries, at 99 per cent, while the lowest youth literacy rate of 91 per cent was reported by Morocco in 2013.

Figure 5.2 presents the status of sex-specific youth literacy based on the most recent data provided by countries. The absolute difference between the female and male youth literacy rates among the listed countries is small, with the exceptions of Morocco in 2013, where it was reported at 5 per cent, and Lebanon, at 1 per cent. There was essentially no sex differential in youth literacy in Palestine, Saudi Arabia and Qatar in 2013.

**Figure 5.2 Youth literacy by sex, latest data available (percentage)**



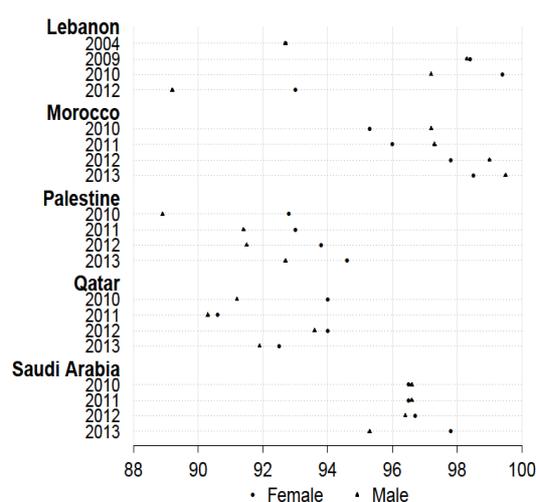
## Closing gender gaps in primary school enrolment in most countries

The net enrolment ratio ranged from 91 per cent to 99 per cent in the reporting countries, with the exception of Yemen. The highest reported net enrolment ratio for primary education was 99 per cent in Morocco in 2009; the lowest was 82 per cent in Yemen in 2011.

Some countries reported an increase in the net primary enrolment ratio for both sexes while others reported a decrease during the latest four years available. The net primary enrolment ratio in Morocco increased from 96 per cent in 2010 to 99 per cent in 2012. It also increased in Palestine from 91 per cent in 2010 to 94 per cent in 2013. However, Qatar witnessed a decrease by less than 1 per cent from 2010 to 2013 and Lebanon by 2 per cent from 2004 to 2012.

Figure 5.3 shows that the gender gap in the net enrolment ratio narrowed in some countries and widened in others. In Palestine, the gender gap decreased by 2 percentage points from 2011 to 2013; however, it increased in Lebanon by 4 percentage points from 2004 to 2013. Among the reporting countries, the largest gender gap was recorded in Lebanon in 2012 (93 versus 89 per cent), while the smallest gap was recorded in Qatar in 2013 (93 versus 92).

**Figure 5.3 Primary enrolment ratio by sex, latest four years available (percentage)**



## Increasing gender gaps in secondary education in most countries, with more women being enrolled than men

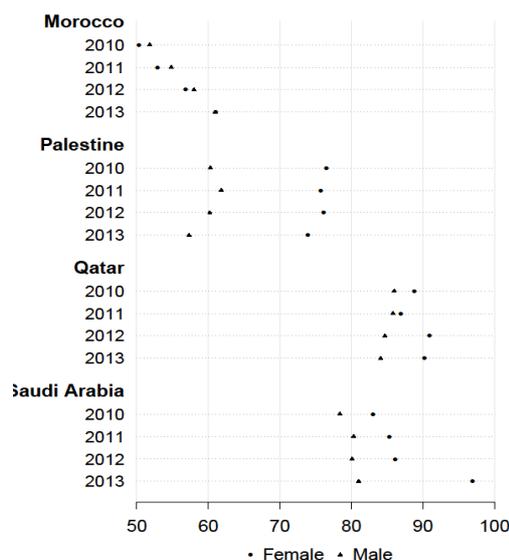
In Lebanon, Qatar, Palestine, Saudi Arabia, and the Syrian Arab Republic, the net enrolment ratio in secondary education was higher for women than it was for men. However, in Yemen and Iraq, the net enrolment ratio for women in secondary education was lower than that for men during the same period. The same was the case in Morocco, except in 2013, when figures show that gender parity is reached.

In 2013, the female net enrolment ratio for secondary education was the highest in Saudi Arabia (97 per cent), followed by Qatar (90 per cent), Palestine (74 per cent) and Morocco (61 per cent).

Figure 5.4 shows that the gender gap in the net enrolment ratio for secondary education narrowed in Morocco while it widened in Palestine, Qatar and Saudi Arabia during the period 2010-2013.

In Morocco, the gender gap decreased by 1 percentage point from 2010 to 2013. However, it reported a slight increase in Palestine and a notable one in Qatar and Saudi Arabia. The largest gender gap, among the reporting countries, was recorded in Saudi Arabia in 2013 (97 versus 81 per cent).

**Figure 5.4 Secondary enrolment ratio by sex, latest four years available (percentage)**



## Wide variation in pupil-teacher ratios at the primary, secondary and tertiary levels

According to UNESCO Institute for Statistics (UIS) definition, the pupil-teacher ratio is the number of pupils per teacher and is an indicator of the quality of education. In crowded classrooms that have a high number of students per teacher, the quality of education may suffer. This is partly because teachers may not be able to dedicate enough time to individual needs in overcrowded settings.

Overall, the pupil-teacher ratio in primary education is higher than in secondary education in the reported countries, with the exceptions of Oman and Qatar in 2011 and 2012, respectively.

In the latest data reported between 2011 and 2013, the pupil-teacher ratio in primary education varied widely from one country to another. At the public level, the lowest ratio was 6 pupils per teacher in Kuwait in 2011 followed by 7 pupils per teacher in Qatar in 2012. The highest ratio was reported in Yemen, followed by Palestine, in 2011 for a ratio of pupils-to-teachers of 40 and 19, respectively. At the level of private institutions, both Kuwait and Qatar in 2012 reported a ratio of 9 pupils per teacher, which is higher than the ratio at public institutions for the same countries and the same year. The highest ratio, namely of 24, was reported by Yemen in 2011. It must be noted that this ratio is almost half of the ratio at public institutions reported for the same year. Figure 5.5 provides more details on the ratio of pupil-to-teacher by sector at the primary education level.

**Figure 5.5 Pupils-to-teacher ratio (primary education), latest data available**

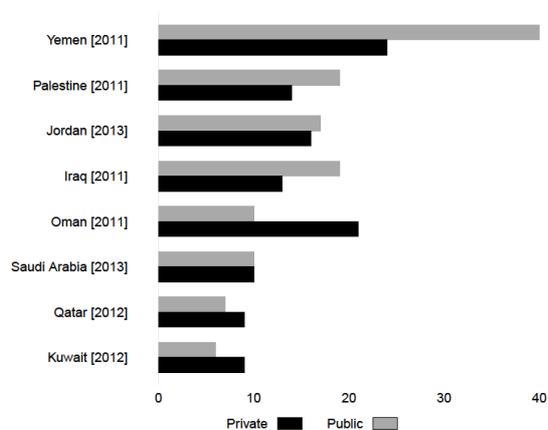


Figure 5.6 reports on the pupils-to-teacher ratio by sector at the level of secondary education and shows that the variance between the ratios of the public and private sectors was highest in Yemen in 2011 (88 for public institutions versus 157 for private institutions). At the public level, Morocco had the second-highest ratio, after Yemen, of 20 pupils per teacher in 2013.

**Figure 5.6 Pupils-to-teacher ratio (secondary education), latest data available**

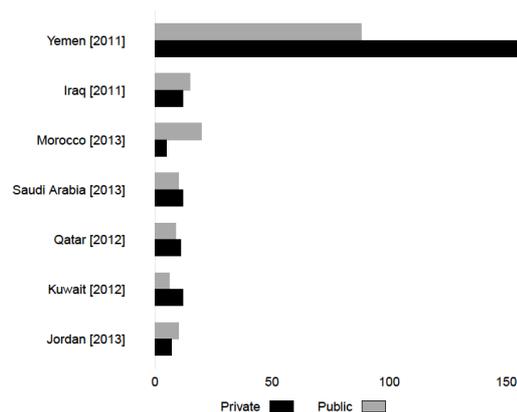
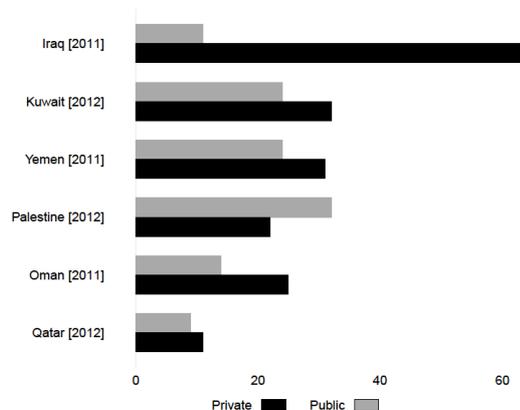


Figure 5.7 presents the ratios of pupils to teachers at the tertiary education institutions by sector. It shows that this ratio is higher at the private sector for all reporting countries except for Palestine in 2012. It is worth noting that, in Iraq, in 2011, the ratio for the private sector was almost six times higher than for the public sector. The lowest ratios for the public and private sectors were 9 and 11, respectively, and reported by Qatar in 2012.

**Figure 5.7 Pupils-to-teacher ratio (tertiary education), latest data available**



## Highest public expenditure on education in Tunisia, lowest in Lebanon

Data on education expenditure are made available by the UIS for 13 Arab countries. Figures are reported as a percentage of the total Government expenditure and as a percentage of the gross domestic product (GDP). This information gives an indication of how a country prioritizes education in relation to its overall allocation of resources.

The trends of countries' expenditure on education differ from one country to another in the region. Data indicate that, in some countries, public expenditure on education as a percentage of total Government expenditure increased over the reported years while it decreased in others. The same applies to public expenditure as a percentage of GDP.

Table 5.1 shows that Bahrain, Egypt, Kuwait, Morocco, Tunisia, and Yemen reported a decrease in public expenditure on education as a percentage of total Government expenditure between 2000 and

2013, while Lebanon, Oman, Palestine, Qatar, Saudi Arabia, the Sudan and the Syrian Arab Republic reported an increase. According to the latest data available for the reported countries, the highest expenditure on education was 21 per cent and reported by Tunisia in 2012; the lowest was 9 per cent and reported by Lebanon in 2013.

By comparing data presented in tables 5.1 and 5.2, it can be noted that an increase in public expenditure as a percentage of total Government expenditure went hand in hand with an increase in the level of expenditure as a percentage of GDP in the reported countries, with the exception of Morocco and Saudi Arabia.

The highest public expenditure on education as a percentage of the GDP for the latest available data was recorded at 6 per cent in Tunisia and Morocco in 2012 and 2013, respectively, while the lowest was at 2 per cent in the Sudan in 2009, followed by 3 per cent in Bahrain and Lebanon in 2012 and 2013, respectively.

**Table 5.1 Public expenditure on education by country and year  
(percentage of total Government expenditure)**

|      | Bahrain | Egypt | Kuwait | Lebanon | Morocco | Oman | Palestine | Qatar | Saudi Arabia | Sudan | Syrian Arab Republic | Tunisia | Yemen |
|------|---------|-------|--------|---------|---------|------|-----------|-------|--------------|-------|----------------------|---------|-------|
| 2000 |         |       |        |         | 22.3    | 9.0  | 16.5      | 8.2   | 16.7         | 9.1   |                      | 25.0    | 30.5  |
| 2001 |         |       | 18.0   | 7.4     | 20.9    | 10.6 |           |       | 19.6         |       | 15.7                 | 25.0    | 30.3  |
| 2002 |         |       | 15.3   | 7.1     | 19.9    | 11.1 |           |       | 19.8         | 11.0  | 16.8                 | 23.1    |       |
| 2003 |         | 14.0  | 15.6   |         | 20.7    | 10.0 |           |       | 19.9         |       | 19.9                 | 28.0    |       |
| 2004 |         | 13.8  | 15.0   | 7.9     | 20.0    | 10.3 |           |       | 18.0         | 7.9   | 17.1                 | 27.7    |       |
| 2005 |         | 14.4  | 13.9   | 8.4     | 22.4    | 10.1 | 19.0      | 9.0   | 17.8         | 6.0   |                      | 26.7    |       |
| 2006 | 11.9    | 10.6  | 13.4   | 7.7     | 18.7    | 11.2 |           |       | 20.1         | 8.3   | 20.0                 | 27.1    |       |
| 2007 | 11.0    | 10.4  |        | 7.3     | 20.0    |      |           |       |              |       | 18.9                 | 27.2    |       |
| 2008 | 10.6    | 10.4  |        | 5.9     | 17.5    |      |           |       | 17.7         | 9.4   | 20.0                 | 25.3    | 12.5  |
| 2009 |         |       |        | 5.5     | 17.3    | 10.9 |           |       |              | 10.8  | 19.2                 | 26.4    |       |
| 2010 |         |       |        | 5.5     |         |      | 20.3      | 11.2  |              |       |                      | 25.6    |       |
| 2011 |         |       |        | 5.7     |         |      | 19.5      | 10.2  |              |       |                      |         |       |
| 2012 | 8.9     |       |        | 7.1     | 17.2    |      | 19.2      | 10.4  |              |       |                      | 21.2    |       |
| 2013 |         |       |        | 8.6     | 18.5    |      | 18.1      |       |              |       |                      |         |       |

Source: UNESCO Institute for Statistics. Last accessed in November 2015.

**Table 5.2 Public expenditure on education by country and year  
(percentage of GDP)**

|      | Bahrain | Egypt | Kuwait | Lebanon | Morocco | Oman | Palestine | Qatar | Saudi Arabia | Sudan | Syrian Arab Republic | Tunisia | Yemen |
|------|---------|-------|--------|---------|---------|------|-----------|-------|--------------|-------|----------------------|---------|-------|
| 2000 |         |       |        |         | 5.8     | 3.2  | 4.2       | 2.6   | 5.9          | 1.0   |                      | 6.2     | 9.7   |
| 2001 |         |       | 6.6    | 2.8     | 5.6     | 4.0  |           |       | 7.8          |       | 4.4                  | 6.2     | 9.2   |
| 2002 |         |       | 6.6    | 2.6     | 5.8     | 4.3  |           |       | 7.7          | 1.4   | 5.0                  | 5.8     |       |
| 2003 |         | 4.9   | 6.5    |         | 5.6     | 3.9  |           |       | 7.1          |       | 6.5                  | 6.8     |       |
| 2004 |         | 4.7   | 5.5    | 2.7     | 5.6     | 4.0  |           |       | 6.3          | 1.6   | 5.4                  | 6.7     |       |
| 2005 |         | 4.8   | 4.7    | 2.7     | 7.3     | 3.5  | 5.4       | 2.8   | 5.4          | 1.6   |                      | 6.5     |       |
| 2006 | 2.9     | 4.0   | 3.8    | 2.8     | 5.5     | 3.9  |           |       | 5.9          | 2.0   | 5.3                  | 6.4     |       |
| 2007 | 2.6     | 3.7   |        | 2.6     | 6.0     |      |           |       |              |       | 4.9                  | 6.5     |       |
| 2008 | 2.5     | 3.8   |        | 2.0     | 5.6     |      |           |       | 5.1          | 2.2   | 4.6                  | 6.3     | 4.6   |
| 2009 |         |       |        | 1.8     | 5.4     | 4.2  |           |       |              | 2.2   | 5.1                  | 6.5     |       |
| 2010 |         |       |        | 1.6     |         |      | 5.7       | 3.6   |              |       |                      | 6.2     |       |
| 2011 |         |       |        | 1.6     |         |      | 5.4       | 3.0   |              |       |                      |         |       |
| 2012 | 2.6     |       |        | 2.2     | 6.2     |      | 5.3       | 3.1   |              |       |                      | 6.2     |       |
| 2013 |         |       |        | 2.6     | 6.3     |      | 4.9       |       |              |       |                      |         |       |

Source: UNESCO Institute for Statistics. Last accessed in November 2015.

## 6. Health

The state of health in a population is shaped by the prevailing sanitary and environmental conditions, the quality and accessibility of health services, and the ability of individuals to make healthy choices in their lives. This section presents available data on reproductive, maternal, newborn, and child health; lifestyle; and health risk factors and health facilities, expenditures and resources across the Arab region.

This section is organized as follows: first, recent trends in contraceptive prevalence, prenatal care rates and maternal mortality ratios across the region are described; secondly, a brief overview of recent trends in children's immunization rates and childhood nutrition are presented; thirdly, key adult health indicators are reviewed, such as smoking prevalence, body-mass Index (BMI), non-communicable disease (NCD) rates, disability rates, and leading causes of death; and finally, the section concludes with a summary of health expenditure patterns and per capita health worker resources across the region.

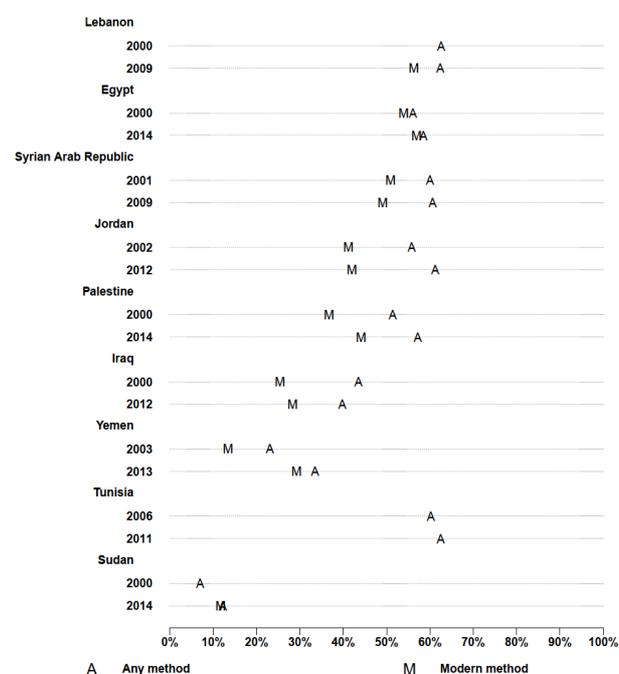
### Contraceptive use becoming more prevalent within the region

The contraceptive prevalence rate refers to the “percentage of married women aged 15-49 years, who are currently using, or whose sexual partner is using, at least one method of contraception, regardless of the method used. The modern types of contraceptive use include female and male sterilization, oral hormonal pills, intrauterine device, male condom, injectables, implant, vaginal barrier methods, female condom, and emergency contraception. Traditional methods of contraception include the rhythm (periodic abstinence), withdrawal, lactational amenorrhea method and folk methods” (UNSD, 2015).

During the latest available data of 2010-2014, Tunisia reported the highest use of any method of contraception, at 63 per cent, followed by Jordan and Egypt, at 61 and 59 per cent, respectively, as shown in figure 6.1. As concerns the use of modern contraceptive methods, Egypt recorded the highest figures during the same period, with 57 per cent usage, followed by Palestine and Jordan, with 44 and 42 per cent, respectively. Most countries reported an increase in the use of contraceptives

between 2000 and the respective dates of the latest data reported; however, Iraq and Lebanon showed a decrease in the use of any method of contraception compared to an increase in the use of modern methods. In further detail, in Iraq, contraception use of any method decreased by 4 per cent (from 40 in 2000 to 36 in 2012) and the use of modern methods increased by 3 per cent (from 25 in 2000 to 28 in 2012). A decrease was also experienced in Lebanon, namely by 1 per cent (from 63 in 2000 to 62 in 2009) in contraception use of any method while contraception use of modern methods increased by 16 per cent (from 40 in 2001 to 56 in 2009).

**Figure 6.1 Contraceptive prevalence rates, 2000-2014**



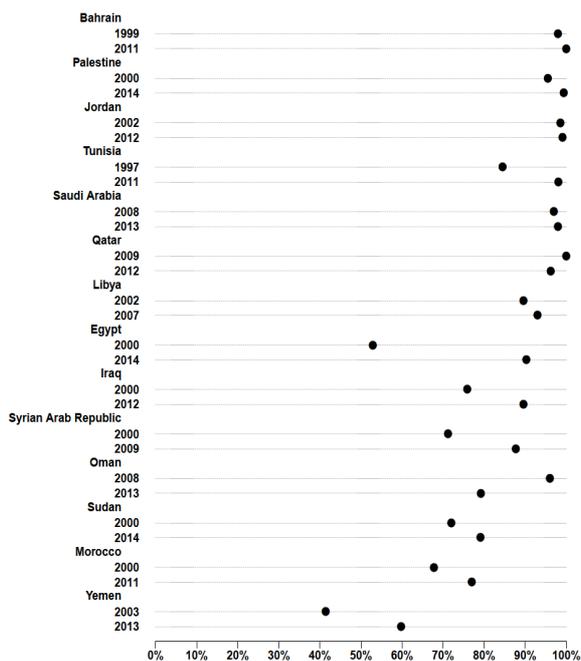
### Increase in prenatal care over the years

Pregnant women who receive prenatal care are defined as those women who are attended at least four times by skilled health personnel for reasons related to pregnancy (UNSD, 2015). Although the World Health Organization (WHO) recommends a minimum of four antenatal visits (WHO, 2011) to include blood pressure measurement, urine analysis, blood analysis, and weight/height measurement, due to data limitations, the indicator in the current issue measures women who received health care by skilled health personnel at least once.

The most recent data provided by NSOs for the period 2010-2014, show that the number of women receiving prenatal care for at least one visit ranged from 60 per cent in Yemen (followed by 77 per cent in Morocco) to 100 per cent in Bahrain.

Seven countries, namely Jordan, Palestine, Tunisia, Saudi Arabia, Qatar, and Egypt, had rates between 90 and 99 per cent. Three countries, namely Oman, Morocco and the Sudan, had prenatal care rates between 77 and 79 per cent. Over the last decade, Oman and Qatar experienced a decrease in women receiving prenatal care, namely 17 per cent (from 96 in 2008 to 79 in 2013) and 4 per cent (from 100 in 2009 to 96 in 2012), respectively. In contrast, the highest increase in prenatal care was reported in Egypt, at 37 per cent (from 53 in 2000 to 90 in 2014), followed by Yemen, at 19 per cent (from 41 in 2003 to 60 in 2013), and the Syrian Arab Republic, at 17 per cent (from 96 in 2008 to 79 in 2013).

**Figure 6.2 Prenatal care rates, 1999-2014**



### Improvements in births attended by skilled health personnel

According to the WHO (WHO, 2011), a skilled birth attendant is “an accredited health professional – such as a midwife, doctor or nurse – who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated)

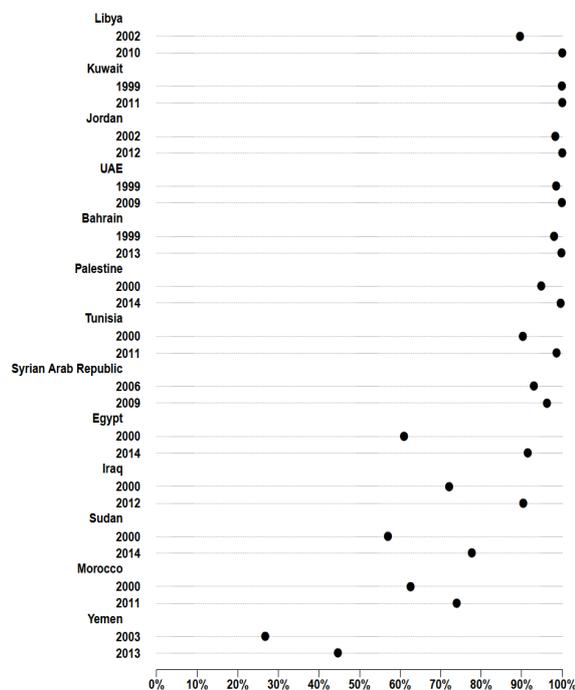
pregnancies, childbirth and the immediate postnatal period and in the identification, management and referral of complications in women and newborns”.

The most recent data available from NSOs showing the percentage of women who received skilled health assistance during delivery ranged from 48 per cent in Yemen to almost 100 per cent in the Gulf countries and Libya (figure 6.3). The remaining countries reported between 90 and 98 per cent of births attended by skilled health personnel, except for the Sudan and Morocco that reported 78 and 74 per cent, respectively, of births attended by skilled health personnel.

Although Yemen reported the lowest percentage of women receiving skilled health assistance, it has improved by 18 per cent during the period from 2003 to 2013 (from 27 per cent to 45 per cent).

During 2000-2014, all countries witnessed an improvement in the percentage of births attended by skilled health personnel. Egypt and the Sudan improved the most, with an increase of 31 per cent (from 61 in 2000 to 92 in 2014) and 21 per cent (from 57 in 2000 to 78 in 2014), respectively.

**Figure 6.3 Births attended by skilled health professionals, 1999-2013**



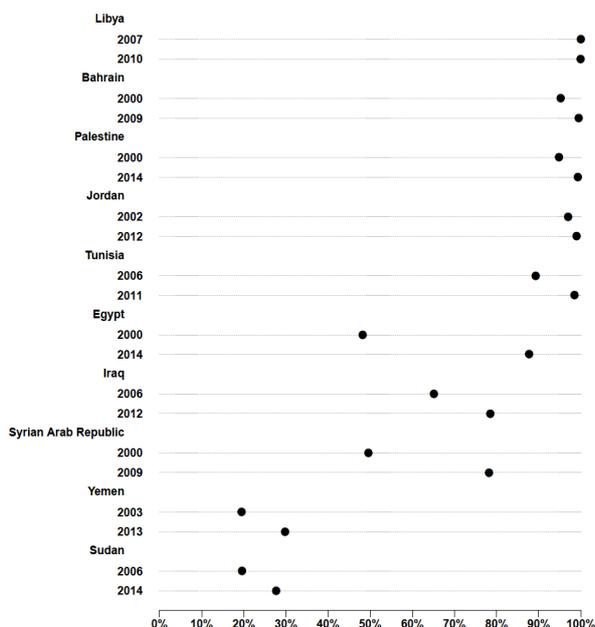
## Improvements in births delivered in health facilities

Health facilities, which can range from small clinics to large hospitals, are defined as any location where health care is provided (Medline Plus, 2015). Giving birth in a health facility is an important factor to reduce the health risks (infections, complications, morbidity, and mortality) for both mother and child.

The most recent data available from NSOs on the percentage of women who gave birth in a health facility ranged from 28 per cent in the Sudan to almost 100 per cent in Bahrain and Libya. Four countries, namely Jordan, Palestine, Tunisia, and Qatar, ranked between 98 and 99 per cent. The remaining countries (Egypt, Iraq and Syrian Arab Republic) reported between 78 and 88 per cent of babies delivered in health facilities.

The highest improvements were noticed in Egypt and the Syrian Arab Republic, with an increase of 40 per cent (from 48 in 2000 to 88 in 2014) and 28 per cent (from 50 in 2000 to 78 in 2009), respectively.

**Figure 6.4 Births delivered in health facilities, 2000-2014**

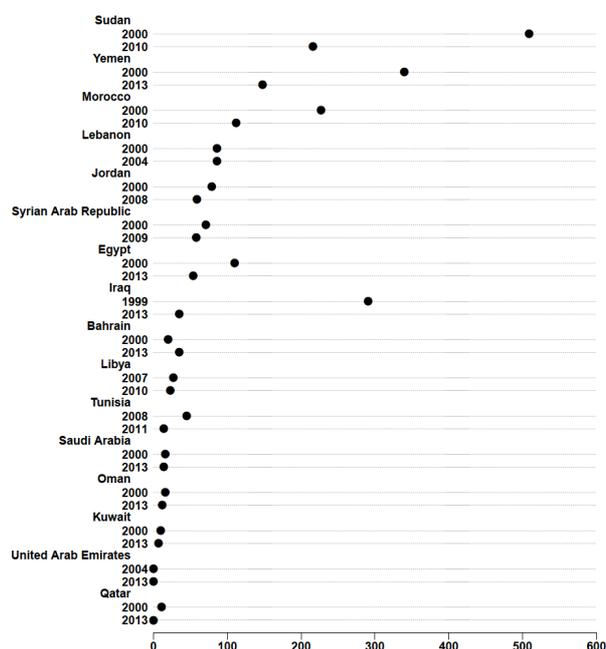


## Dramatic decreases in maternal mortality in Iraq, the Sudan, Morocco, and Yemen

The maternal mortality ratio (MMR) is the number of deaths of the mother during pregnancy or delivery or within 42 days after delivery, reported per 100,000 births (WHO, Indicator and Measurement Registry, 2015c).

Figure 6.5 shows that maternal mortality declined in most ESCWA member countries between 2000 and 2013. The one exception was Bahrain, where the MMR increased from 20 to 35 per 100,000 births between 2000 and 2013. The most notable decreases were observed in Iraq, the Sudan, Yemen, and Morocco, where MMRs declined by 88 per cent, 58 per cent, 57 per cent, and 40 per cent, respectively. According to the most recent national data, the highest MMRs in the region continue to be experienced in the Sudan, Yemen and Morocco. In recent years, MMRs in all other countries in the region have been below 100 maternal deaths per 1000,000 births.

**Figure 6.5 Maternal mortality ratios, 2000-2013**



## Increase in immunization coverage rates in most of the countries

Immunization is an effective approach to reducing under-five mortality. According to the WHO and UNICEF (UNICEF, 2014), a child is considered fully immunized if he or she received a bacillus Calmette-Guerin (BCG) vaccination against tuberculosis, three doses of diphtheria, tetanus and pertussis (DTP) vaccine, at least three doses of polio vaccine, and one dose of measles vaccine (WHO, 2015c) by the age of 12 months.

Figure 6.6 summarizes the vaccination rates of children for DPT, measles, BCG, polio, and hepatitis across the region in recent years. In recent years, almost all children in Palestine, Libya, Jordan, Egypt, Oman, and Tunisia have received the five main vaccinations. In Lebanon, over 90 per cent of children were vaccinated against polio and hepatitis as of 2009, whereas DPT and measles vaccination rates were notably lower at 75 per cent and 79 per cent, respectively. In Iraq, the Sudan and Yemen, vaccination rates varied between 60 per cent and 90 per cent in recent years, with BCG vaccination rates being systematically higher than those for DPT, measles, polio, and hepatitis. In the Gulf States of Bahrain, Kuwait, and Qatar, only vaccination rates for BCG were available for recent years, and they were all above 95 per cent.

## Steady improvements in DPT immunization coverage

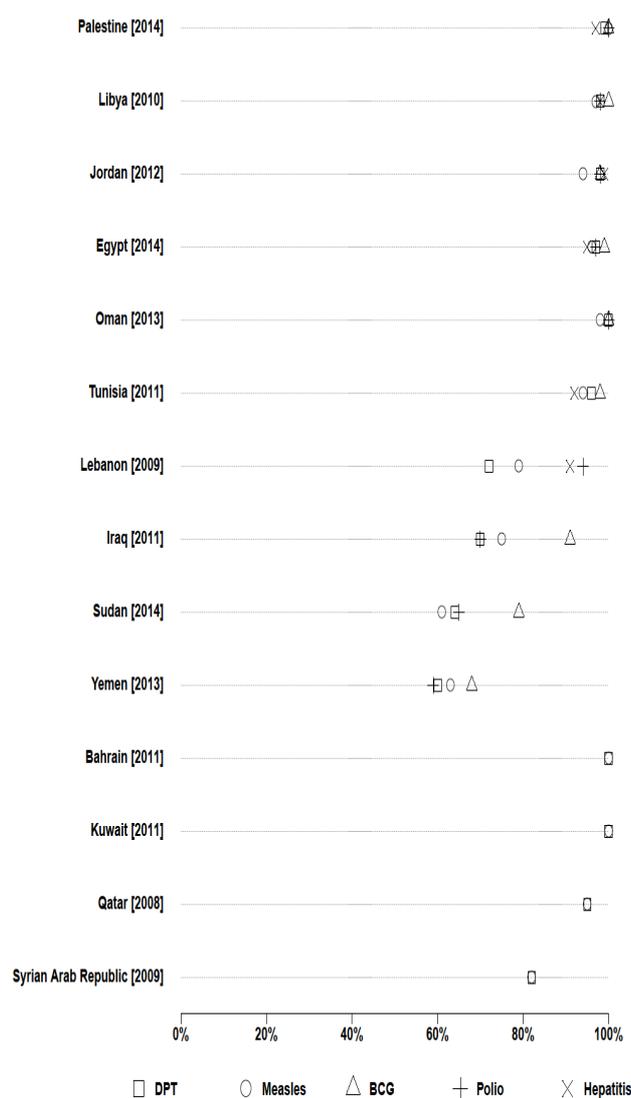
According to WHO, about 86 per cent of infants worldwide received three doses of DPT vaccine, protecting them against infectious diseases that can cause serious illness and disability or even death (WHO, 2015i).

In the Arab region, countries that had already attained more than 90 per cent DPT vaccination coverage by 2000, namely, Oman, Jordan and Egypt, maintained their high levels of DPT vaccination coverage over the next decade, as shown in figure 6.7. In the period of 2000-2014, Palestine, Lebanon and Libya all increased their DPT vaccination coverage rates from between 75 per cent and 82 per cent to above 90 per cent. The Sudan and Yemen increased their DPT vaccination

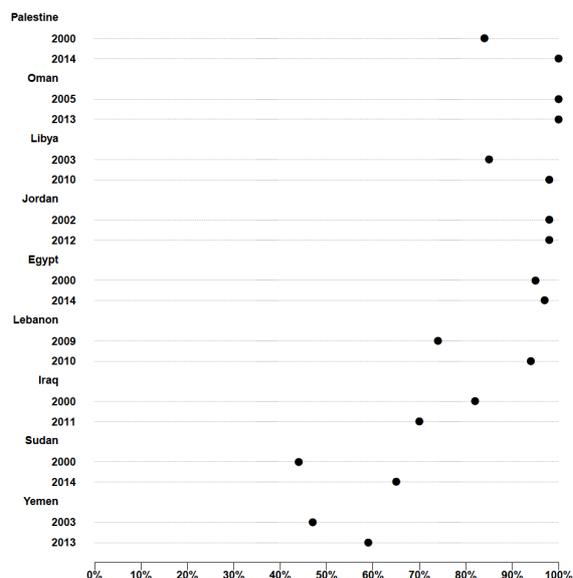
coverage rate from below 50 per cent around 2000 to above 60 per cent in the last few years. Iraq was the only country in the region where DPT coverage rates fell over the recent decade, from 83 per cent to 70 per cent between 2000 and 2011.

It is noticed that there is no difference in the DPT immunization coverage for the available data according to gender (see annexed tables).

**Figure 6.6 Immunization coverage rates, latest data available**



**Figure 6.7 DTP immunization rates, 2000-2014**



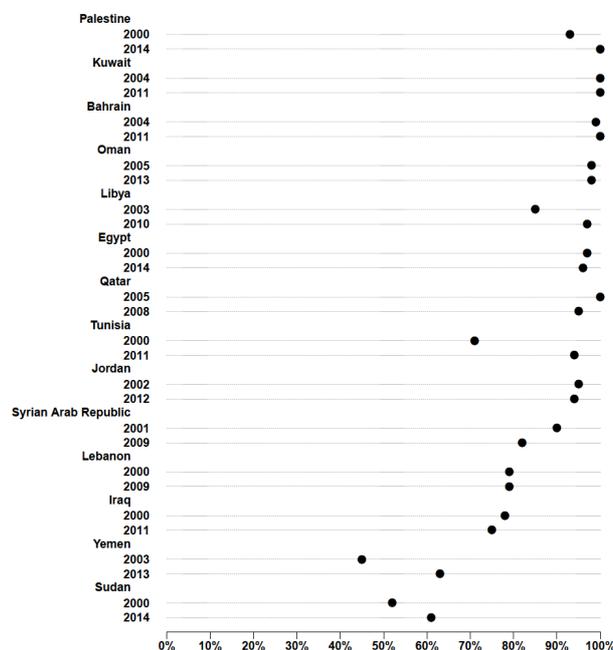
**Measles immunization rates above 95 per cent in most countries**

Measles is a highly contagious disease caused by a virus, which usually results in a high fever and rash, and can lead to blindness, encephalitis or death. Measles immunization coverage, according to WHO, is “the percentage of children aged 12-23 months who received at least one dose of measles vaccine either any time before the survey or before the age of 12 months” (WHO, Indicator and Measurement Registry, 2015d). By the end of 2013, 84 per cent of the world’s children had received one dose of measles vaccine by their first birthday (WHO, 2015h).

In recent years, several countries in the region, namely, Palestine, Kuwait, Bahrain, Oman, Libya, Egypt, Qatar, Tunisia, and Jordan, have attained measles vaccination rates exceeding 90 per cent, as shown in figure 6.8. Tunisia and Libya, in particular, have achieved notable gains in coverage over the recent decade. Between 2001 and 2009, measles vaccination coverage declined in the Syrian Arab Republic from 90 per cent to 81 per cent. In both Yemen and the Sudan, measles immunization rates increased to more than 60 per cent of children over the last decade.

In all countries and throughout the years, no difference was recorded in the immunization against measles by sex (see annexed tables).

**Figure 6.8 Measles immunization rates, 2000-2014**



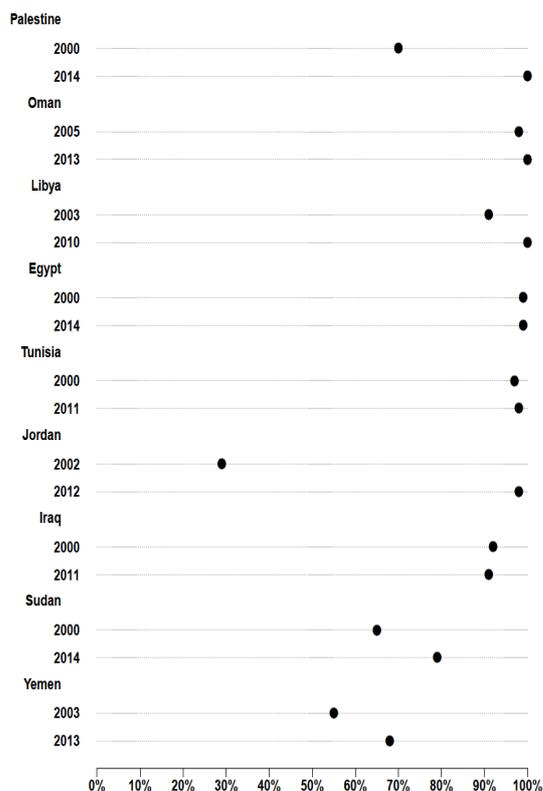
**Increase in BCG immunization in all of the reported countries**

Tuberculosis (TB) is a highly infectious and potentially fatal disease. The Bacille Calmette-Guérin (BCG) vaccine is an important tool in preventing TB. According to WHO, BCG immunization coverage is defined as the percentage of children aged 12-23 months who have received one dose of Bacille Calmette-Guérin (BCG) vaccine in a given year (WHO, Indicator and Measurement Registry, 2015a).

Almost all of countries in the region have attained complete BCG vaccination coverage in recent years, as shown in figure 6.9. The exceptions to this trend are the Sudan and Yemen, each of which steadily increased their BCG vaccination coverage rates to 80 per cent by 2014 and 69 per cent by 2013, respectively.

Similarly to other immunizations, there was no difference in the vaccine coverage for boys and girls (see annexed tables).

**Figure 6.9 BCG immunization rates, 2000-2014**



### Increase in polio vaccination coverage

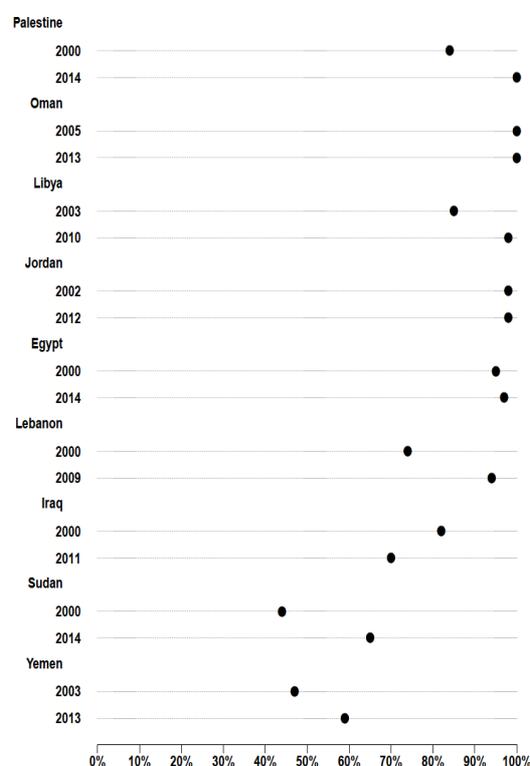
Polio, which is short for poliomyelitis, is a highly infectious viral disease that invades the nervous system, and can lead to total paralysis in a matter of hours and even death. Polio cases have decreased by over 99 per cent since 1988, from an estimated 350,000 cases then to 416 reported cases in 2013. This drastic reduction is the result of the global effort to eradicate the disease (WHO, 2015d). In 2013, 86 per cent of infants around the world received three doses of polio vaccine (WHO, 2015i). There is no cure for polio, it can only be prevented. The polio vaccine, given multiple times, can protect a child for life. According to WHO, polio coverage is calculated as the percentage of one-year-olds who have received three doses of polio vaccine in a given year (WHO, Indicator and Measurement Registry, 2015c).

In recent years, several countries in the region, namely Palestine, Oman, Libya, Jordan, Egypt, and Lebanon, and have achieved polio vaccination coverage rates exceeding 95 per cent, as shown in

figure 6.10. Palestine and Lebanon both were able to dramatically increase their polio vaccination coverage rates since 2000. Sudan and Yemen increased their polio vaccination coverage rates by 16 per cent and 11 per cent to 61 per cent and 63 per cent, respectively. In Iraq, however, the immunization rate dropped from some 82 per cent in 2000 to 70 per cent in 2011.

Similarly to the other vaccines, there is no notable difference in the coverage between boys and girls (see annexed table).

**Figure 6.10 Polio immunization rates, 2000-2014**



### Small gender disparity in children's nutritional status

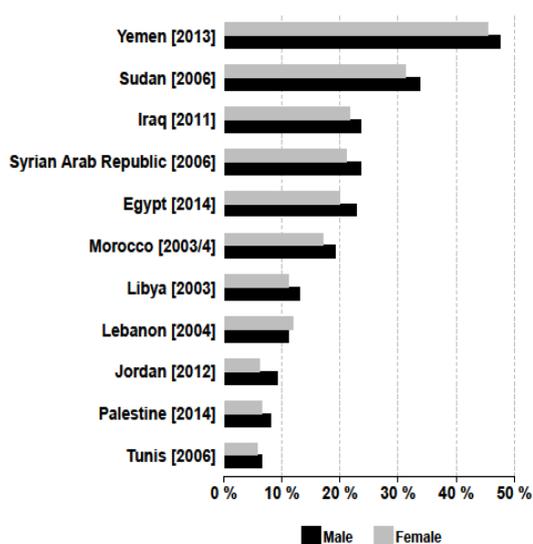
Nutrition is a primary determinant of a child's health and well-being (Ministry of Health and Population [Egypt], 2015). Nutritional levels in children are generally assessed through three standard indices of physical growth, namely, height for age (stunting), weight for height (wasting) and weight for age (underweight). Stunted children are considered short for their age, and this may be the result of a failure to receive

adequate nutrition over a long period of time or of the effects of recurrent or chronic illness. Wasting, meaning that children are too thin for their height, represents the failure to receive adequate nutrition. It may be the result of recent episodes of illness or acute food shortages. Underweight children can be underweight for their age because of stunting or wasting, or both.

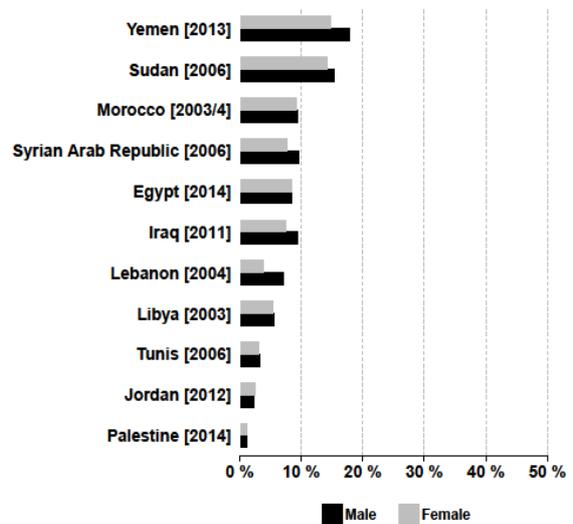
Figures 6.11, 6.12 and 6.13 display available sex-specific data on the incidence of stunting, wasting and low weight for age, respectively, for children across the region. According to these data, stunting is particularly high as compared to wasting in the region. About one in five children are stunted in such middle-income countries as Egypt, Iraq, the Syrian Arab Republic, and Morocco. The nutritional status of children in low-income countries, namely, Yemen and the Sudan, is particularly poor, with almost 40 per cent of children in Yemen and 30 per cent of children in the Sudan being underweight for their age. Approximately 10 per cent of children in Morocco and the Syrian Arab Republic are also underweight for their age, according to the most recently available data.

Across all countries for which data are available, boys uniformly experience higher incidences of stunting, wasting and low weight for age than girls.

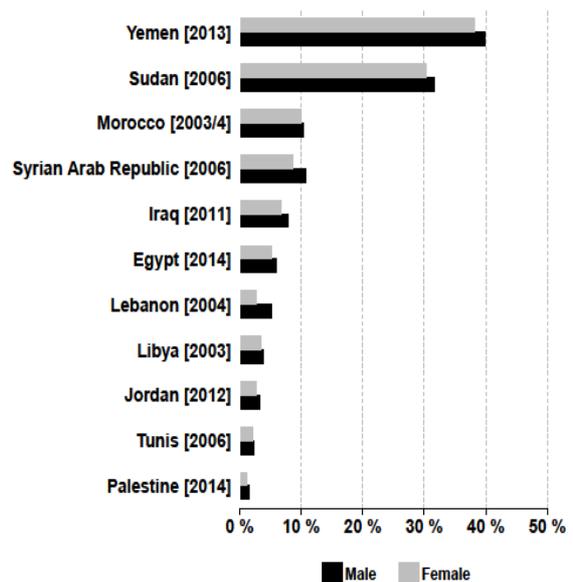
**Figure 6.11 Stunting by sex, latest data available**



**Figure 6.12 Wasting by sex, latest data available**



**Figure 6.13 Underweight by sex, latest data available**



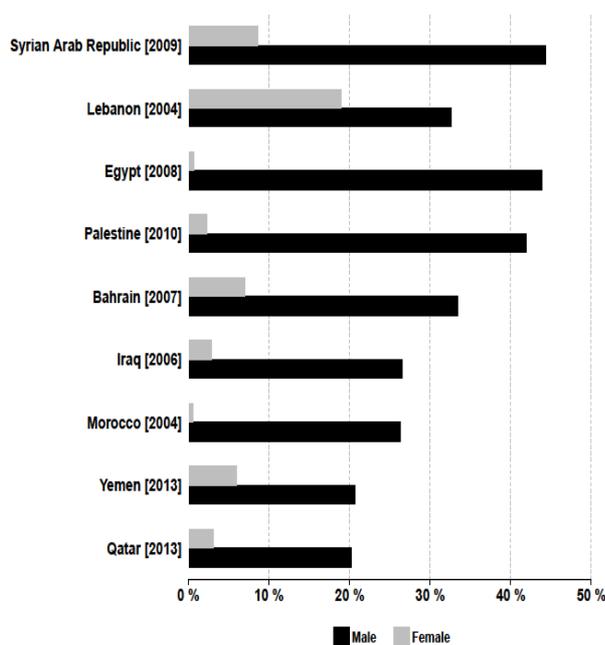
### Decrease in smoking over the years

Smoking is a major cause of lung cancer, cardiovascular disease and chronic pulmonary disease, in addition to asthma, and has been shown to reduce life expectancy by seven to eight years (Department of Health, United Kingdom, 1998).

Figure 6.14 displays recent available data on the sex-specific smoking rates across the region. Male smoking rates are uniformly and notably higher than those for females across the region. Throughout the region, smoking rates for males ranged from 20 per cent in Qatar in 2013 to 45 per cent in the Syrian Arab Republic in 2009. For females, smoking rates spanned a range from 1 per cent in Morocco in 2004 and Egypt in 2008 to 19 per cent in Lebanon, in 2004. The smallest sex difference in smoking rates in the region was recorded in Lebanon in 2004, where both men and women smoke at relatively high rates (33 per cent for men and 19 per cent for women). The largest sex difference in smoking rates was recorded in Egypt, where 44 per cent of men but only 1 per cent of women smoke, according to 2008 data.

Over the years, most of the countries showed a decrease in smoking rates for both women and men. The highest drop in percentage of smoking men was recorded in Egypt (from 56 to 44), and the lowest drop for women in Yemen (from 10 to 6). Palestine reported an increase of 1 per cent in smoking among men (from 41 to 42) (see annexed table).

**Figure 6.14 Smoking status by sex, latest data available**



### Women more obese than men in all countries

Being overweight can contribute or lead to a range of health conditions, such as heart disease, high blood pressure, diabetes, and indigestion. Obesity can be measured using the BMI, which measures an individual's weight relative to their height. A BMI of 25-29.9 is considered overweight; a score of 30 or above is considered obese (WHO, Indicator and Measurement Registry, 2015b).

In this compendium, WHO estimates of obesity among adults aged 18 years and above for the years 2010 and 2014 were used. These estimates are predictions from models based on available data from surveys and surveillances systems. The data for the year 2014 show a gender gap between men and women: women tend to be more obese than men in all countries (figure 6.15)

As shown in this figure, compared to other countries, the Sudan and Yemen have the lowest percentage of obesity for both men and women (4.10 and 9.19, respectively).

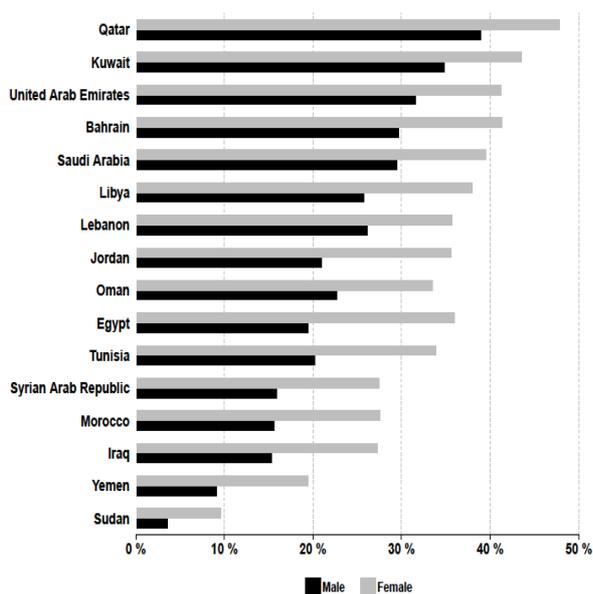
Gulf countries had the highest rates of obesity in 2014, with Qatar being the leading country (38 and 48 per cent for men and women, respectively). Oman ranked the lowest among the Gulf countries in having obese adults (23 per cent for men and 34 per cent for women).

The highest gender gaps in 2014 were noted in Egypt and Jordan with a difference of 17 and 15, respectively. The lowest gender gap, namely, 6 percentage points, was observed in the Sudan for the same year.

### High blood pressure, diabetes, heart disease and asthma among the most common non-communicable diseases

NCDs (WHO, 2015g), also known as chronic diseases, are not passed from person to person. According to WHO, the four main types of non-communicable diseases are cardiovascular diseases (such as heart attacks and strokes), cancers, chronic respiratory diseases (such as asthma), and diabetes. All age groups and all regions are affected by NCDs. The major risk factors for chronic diseases include tobacco, harmful use of alcohol, unhealthy diet, insufficient physical activity, overweight/obesity, raised blood pressure, raised blood sugar and raised cholesterol (WHO, Global Health Observatory Data, 2015a).

**Figure 6.15 Adults (18+) with obesity problem by sex, 2014**



WHO reported that out of the 38 million deaths due to NCDs in 2012, more than 40 per cent were premature, affecting people under 70 years of age. The majority of premature NCD deaths are preventable, which makes NCDs one of the major health and development challenges of the 21<sup>st</sup> century (WHO, 2014).

Recent data from 2003-2013 on NCDs were available only for Iraq, Lebanon, Morocco, Palestine, and Yemen. Figure 6.16 shows that Morocco had the highest percentage of people suffering from chronic diseases (11 per cent high blood pressure, 10 per cent diabetes, 14 per cent joint diseases, and 6 per cent heart disease), while Yemen had the lowest percentage in all of the mentioned chronic diseases (2, 1, 2, and 1 per cent, respectively).

### Disability highest in the Sudan and lowest in Qatar

The International Classification of Functioning, Disability and Health (ICF) defines disability as an umbrella term for impairments, activity limitations and participation restrictions (WHO, 2015e). The experience of disability is a complex interaction between the health condition and environmental and personal factors (AIHW, 2004).

**Figure 6.16 Non-communicable diseases reported by country, latest data available**

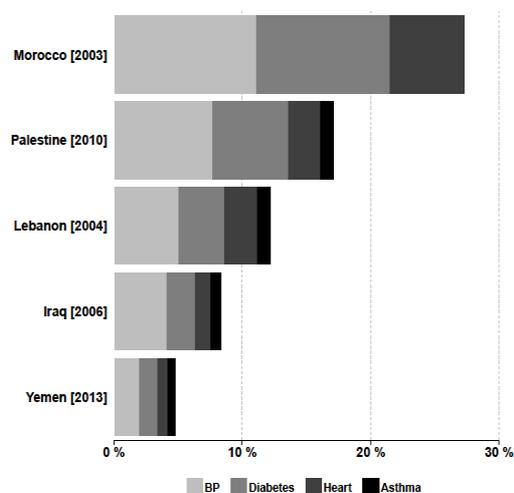


Figure 6.17 displays recent data from across the region on disability prevalence rates (per 100,000).

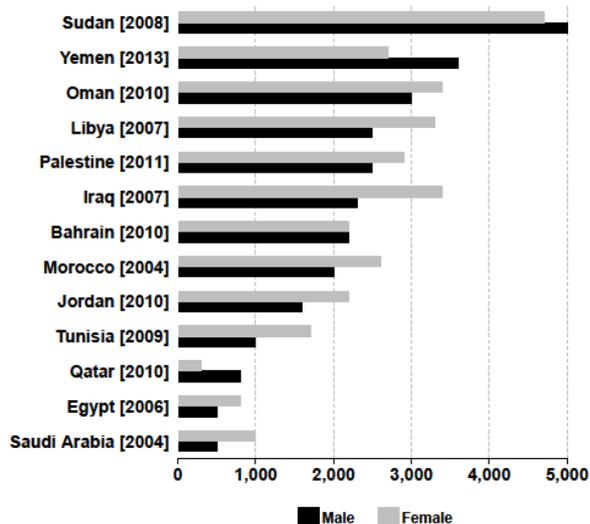
Latest national data for the Arab region show that the prevalence of disability differed widely between countries. The lowest disability prevalence was noticed in Qatar (400), followed by Egypt (700), Saudi Arabia and United Arab Emirates (each 800). The highest disability prevalence was reported in the Sudan (4900), Palestine (4600), Oman and Yemen (each 3200).

The data show very minimal discrepancy between male and female in disability prevalence: female tend to have a little higher percentage in having more disability than male except for Qatar and Yemen, where the percentage for male was higher than for female (800 and 300; 3600 and 2700, per 100,000, respectively).

One of the limitations of the reported data on types of disability was that most of the NSOs do not report the types of the disability present in their respective country as per the international classification of disability group or the Washington Group classification.

However, it was noticed that the main two types prevalent in almost all the member countries were either physical or visual disabilities. In fact, out of 16 countries with data available, 12 countries had the highest prevalence in physical disability compared to 4 countries with highest in the visual disability.

**Figure 6.17 Disability prevalence per 100,000 by sex, latest data available**



### Highest causes of death due to diseases of circulatory system, neoplasms and respiratory system

According to WHO, ischaemic heart disease, stroke, lower respiratory infections, and chronic obstructive lung disease have remained the top major killers during the past decade (WHO, 2015f).

Moreover, in 2012, NCDs were responsible for 68 per cent of all deaths worldwide. As mentioned previously, the four main NCDs are cardiovascular diseases, cancers, diabetes, and chronic lung diseases. Communicable, maternal, neonatal, and nutrition conditions collectively were responsible for 23 per cent of global deaths, and injuries caused 9 per cent of all deaths (WHO, 2015f).

In this publication, causes of death were classified as per the 10<sup>th</sup> revision of the International Statistical Classification of Diseases and Related Health Problems (ICD10) (WHO, 2015a). Figure 6.18 shows that the highest causes of death in all countries in the region, for which data are available, fall under the category of diseases of the circulatory system, followed by neoplasms and diseases of the respiratory system.

In 2000, Egypt and Kuwait had the highest percentages of deaths caused by diseases of the circulatory system (43 and 40 per cent, respectively), while the United Arab Emirates scored the lowest percentage among the reporting countries in this category.

Over the last decade, some countries showed a decrease in the percentage of deaths due to diseases of the circulatory system, such as Bahrain (from 26 to 16), Oman (35 to 31) and Qatar (30 to 12), while Palestine experienced an increase in the percentage of deaths due to diseases of the circulatory system (38 to 50).

In the second category discussed, namely, deaths due to neoplasms, Palestine, in 2012, ranked highest, at 17 per cent, followed by Kuwait, at 14 per cent.

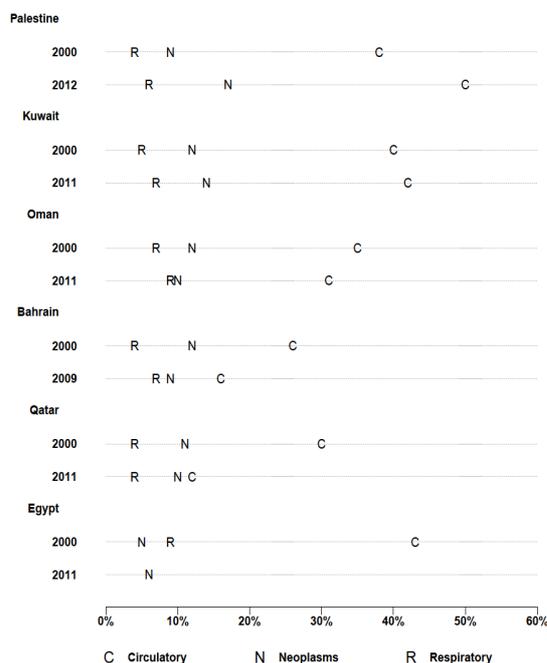
Over time, Bahrain and Oman showed a decline in the percentage of deaths due to neoplasms (12 to 9 and 12 to 10, respectively), and a slight decline in the percentage of deaths due to neoplasms was witnessed in Qatar (11 to 10). Palestine and Kuwait experienced an increase in the percentage (9 to 17 and 12 to 14, respectively); similarly, Egypt reported a slim increase in the percentage of deaths due to neoplasm (5 to 6).

Concerning death due to diseases of the respiratory system, the latest available data of 2000-2012 identify Oman as the country with the highest percentage (9), followed by Bahrain (7). The lowest percentage was noted in Qatar. During the period 2000-2011/2012, most of the reporting countries observed an increase in the percentage of deaths due to diseases of the respiratory system (Bahrain from 4 to 7, Palestine from 4 to 6 and Kuwait from 5 to 8). Qatar was the only country experiencing a slight decline in its percentage of deaths due to diseases of the respiratory system, dropping from 5 to 4 per cent.

### Increase in health expenditure in all countries

In this compendium, health expenditure (WHO, 2015b) is measured as a percentage of GDP, a share of total Government spending and in per capita terms.

**Figure 6.18 Main causes of death as reported by available country, 2000-2012**

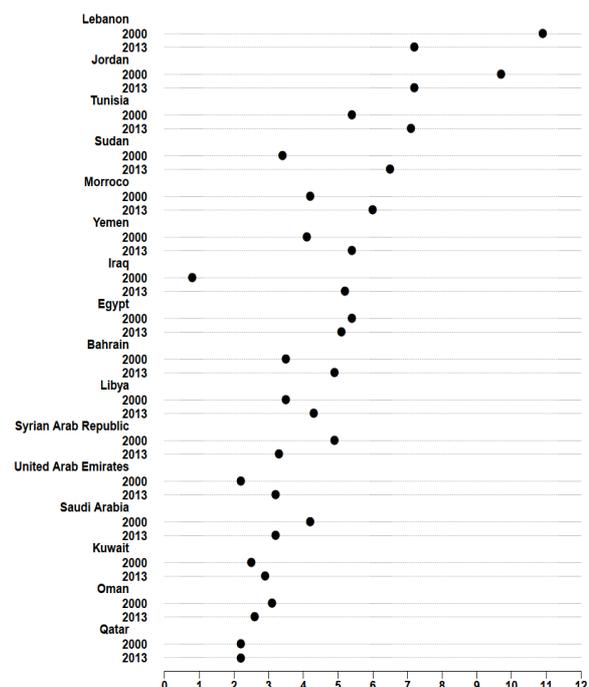


Health-care expenditure statistics portray the financing of health care in member countries, which is a critical component of health systems. In 2013, according to data collected by WHO, expenditure on health as a percentage of GDP ranged from 2 per cent in Qatar to 7 per cent in Jordan, Lebanon, the Sudan, and Tunisia. As shown in figure 6.19, during the period 2000-2013, the highest increase in per capita health expenditures was experienced in Iraq and the Sudan (increases of 4 and 3 per cent, respectively). During the same period, Lebanon and Jordan decreased their per capita health expenditures by 4 and 3 per cent, respectively.

Figure 6.20 presents health expenditure as a percentage of Government spending in 2000 and 2013 across the region. While the general order of countries in the region is similar to the evaluation of health expenditure as proportion of GDP (figure 6.14), there are some notable differences in general patterns. For example, health expenditure in Yemen, Libya and the Syrian Arab Republic as part of their Government expenditures is among the lowest, suggesting that their health financing may be heavily reliant on overseas development assistance. Furthermore, across the region, countries with high health expenditures as a share

of their Government expenditures even increased their health expenditure as a share of Government expenditures between 2000 and 2013, whereas those with lower levels of health expenditure as a share of their Government spending tended to decrease their health spending relative to their total Government expenditures between 2000 and 2013. The highest increase in the share of Government spending on health during the period 2000-2013 was reported in Iraq and Tunisia, with an increase from 0 to 6 per cent and 8 to 13 per cent, respectively). During the same period, Yemen and Saudi Arabia recorded the largest declines in their shares of Government spending on health, namely, from 8 to 4 per cent and 9 to 5 per cent, respectively).

**Figure 6.19 Total expenditure on health as share of gross domestic product (GDP), 2000 and 2013 (percentage)**



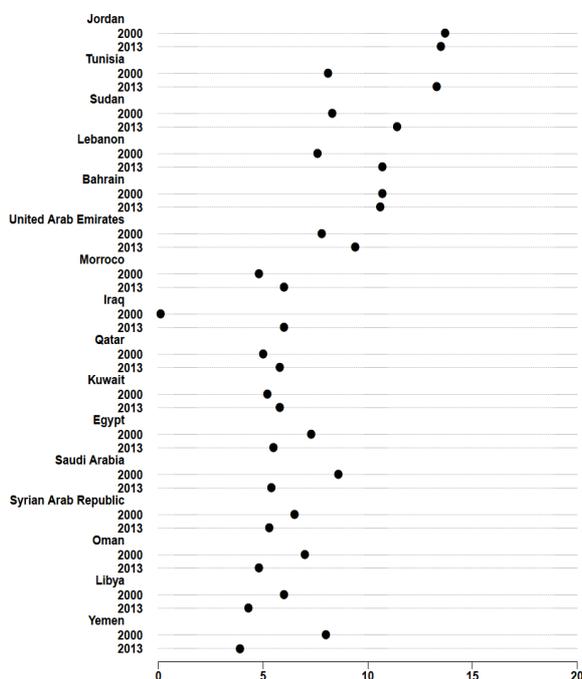
Source: WHO, Global Health Observatory Data, 2015b.

Per capita health expenditure is an important indicator of the average amount of financial resources available for each person, independent of the country's economic standing.

Figure 6.21 presents the trend from 2000 to 2013 in per capita health expenditure across the region calculated at average exchange rates in

United States dollars. This measure smoothes out short-term exchange rate fluctuations and therefore provides a robust measure of overall health spending trends. In 2013, the countries with highest per capita health expenditure were the Gulf countries, most notably Qatar, the United Arab Emirates and Kuwait, with per capita health expenditures of U\$2,043, U\$1,569 and U\$1,507, respectively. The countries with the lowest per capita health expenditures were the Syrian Arab Republic and Yemen, which spent U\$43 and U\$74, respectively, per person on health.

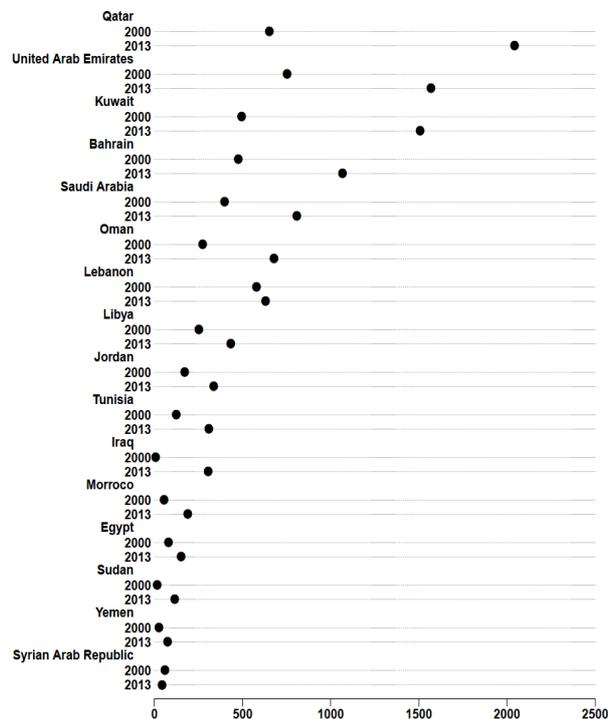
**Figure 6.20 Expenditure on health as share of total Government expenditure, 2000 and 2013 (percentage)**



Source: WHO, Global Health Observatory Data, 2015b.

During the period 2000-2013, almost all ESCWA member countries increased their per capita expenditures on health. During this period, the Syrian Arab Republic decreased its per capita health expenditure from U\$59 to U\$43. The most noticeable increases ranging from U\$816 to U\$1,392 were recorded in Qatar, Kuwait and the United Arab Emirates, and per capita health expenditure increased on average by 213, 208 and 71 per cent, respectively.

**Figure 6.21 Total per capita expenditure on health at average exchange rate, 2000 and 2013 (US dollars)**



Source: WHO, Global Health Observatory Data, 2015b.

### Improvements in the density of health personnel in most countries

Many factors combined affect the health of individuals and communities. The availability and accessibility of health-care personnel and institutions are among them.

Due to limitations in the availability of data, three basic indicators were compiled from the League of Arab States (League of Arab States, Department of Statistics and Databases, 2008, 2010, 2011, 2013, and 2015): average population size per physician, average population size per nurse and average population size per dentist. As each of these indicators is a national average, they are not able to identify subnational inequalities (for example, between urban and rural areas) in access to health-care resources and personnel. As a result, these indicators provide only a coarse measure of human resources for health care across the region.

## Improvements in the density of physicians in most countries

In 2013, the average population size per physician ranged from 350 in Kuwait to 3,744 in Yemen, as shown in figure 6.22. Four Gulf countries, namely, Bahrain, Kuwait, Oman, and Saudi Arabia, and Libya had the lowest ratios of population size to number of physicians, all below 500 physicians per individual. The majority of countries in the region have ratios between 500 and 1,750 persons per physician. Yemen and the Sudan reported particularly high ratios of population per physician, with 3,744 and 2,838, respectively.

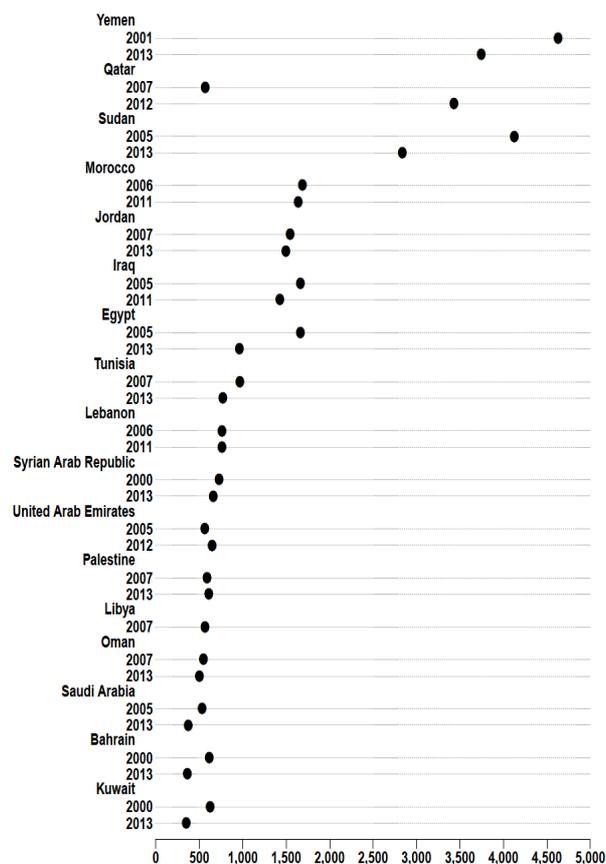
The period 2000-2013 saw a decline in the ratio of population size to physicians in most countries in the region. The largest declines materialized in the Sudan and Yemen, at 31 and 19 per cent, respectively. More moderate declines during this period were observed in Oman, Jordan and Morocco. Palestine and the United Arab Emirates, however, reported small increases in population size per physician for the periods 2007-2013 and 2005-2012, respectively. Lebanon reported negligible change between 2006 and 2011.

## Improvement in the density of nurses in most countries

Data reported on the distribution of nurses and midwives in 2013 vary widely; Kuwait, Bahrain, Saudi Arabia, and Oman, were the countries with the lowest density of population per nurse (200 persons per nurse). In contrast, Yemen and the Sudan had a low aggregate supply of nurses, with an average of almost 2,000 persons per nurse. Palestine, Tunisia, Egypt and the Syrian Arab Republic scored between 300 and 600 persons per nurse (300, 300, 500, and 600, respectively). Jordan experienced a decrease in its rate to around 1000 persons per nurse.

During the period 2000-2013, almost all countries in the region observed modest declines in the number of people per nurse, implying that fewer people rely on the same nurse. The main progress was observed in Egypt. The least decrease was noted in Tunisia, followed by the Syrian Arab Republic.

Figure 6.22 Average population size per physician, 2000-2013

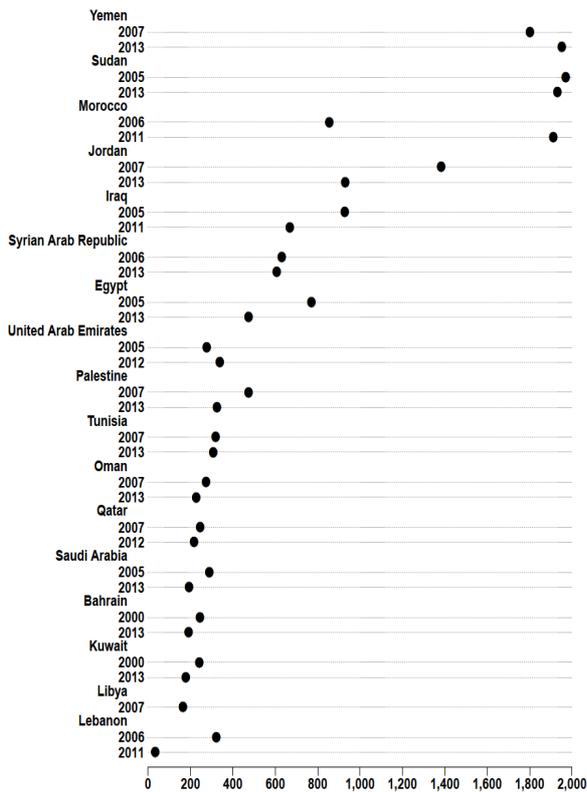


In contrast, the number of people per nurse increased from already high ratios of 855 to 1,912 and from 1,802 to 1,952 persons per nurse in Morocco and Yemen, respectively.

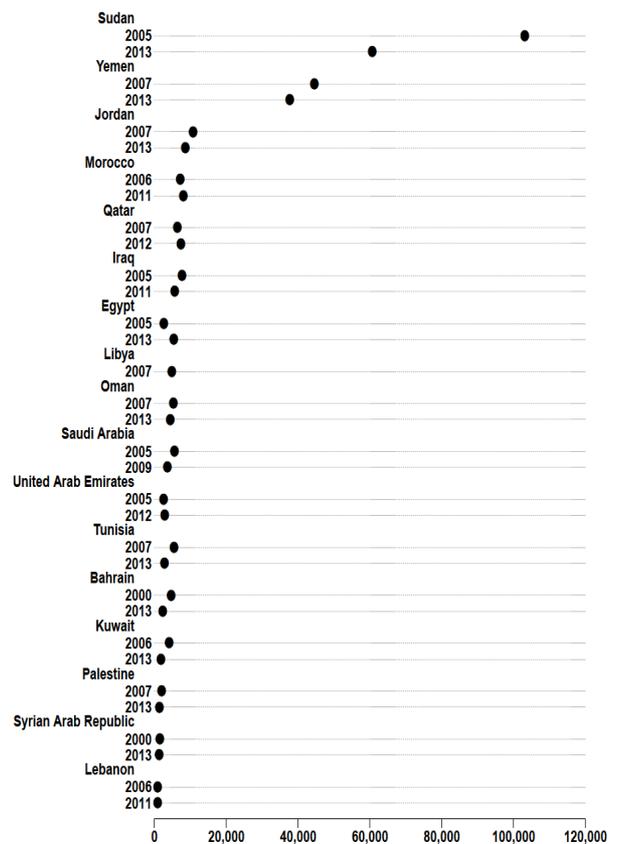
## Improvement in the density of dentists in most of the countries in the region

In recent years, as shown in figure 6.24, the average number of persons per dentist in countries across the region varied markedly. It ranged from 859 persons per dentist in Lebanon to a ratio of 37,664 persons per dentist in Yemen. Nine countries from the region, namely Bahrain, Kuwait, Libya, Oman, Palestine, Saudi Arabia, the Syrian Arab Republic, Tunisia, and the United Arab Emirates, recorded ratios between 1,000 and 5,000; five countries, namely Egypt, Iraq, Jordan, Morocco, and Qatar, reported ratios between 5,000 and 10,000. The Sudan and Yemen had the highest number of persons per dentist, namely, 60,651 and 37,664, respectively.

**Figure 6.23 Average population size per nurses and midwives, 2000-2013**



**Figure 6.24 Average population size per dentist, 2000-2013**



The period 2000-2013 witnesses a change in the average population size per dentist in the region. The number of persons per dentist decreased in the Sudan, Yemen and the Syrian Arab Republic by 41 per cent, 15 per cent and 12 per cent, respectively. In contrast, the number of persons per dentist increased in Egypt and Morocco by 105 per cent and 11 per cent, respectively. The ratio of people to dentists in Lebanon changed negligibly.

## 7. Poverty

Reducing poverty has been one of the main priorities on the international development agenda, and it is the first of the 17 Post-2015 Sustainable Development Goals. In the Arab region, increased attention by policymakers has been given to reducing poverty and eradicating extreme forms of deprivation.

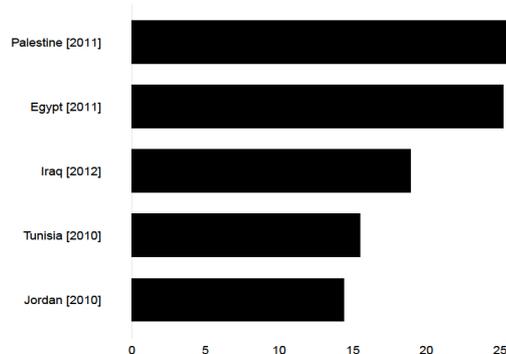
The aim of this section is to provide a brief overview of living standards and patterns of expenditures in member countries, using data provided by NSOs and the World Bank. Specifically, it provides and describes recent data on poverty using national poverty lines, inequality measured by the Gini index and income/consumption share held by the highest and lowest 20 and 10 per cent of the population. The analysis is based on national poverty lines rather than the international poverty lines of the World Bank. These lines are typically not adjusted for the cost of living or demographic characteristics of households, and may pose problems in comparability across countries (ESCWA, 2014).

Moreover, data is provided on the distribution of total share of consumption expenditure in general and distribution according to the highest and lowest 20 and 10 per cent of the population. The latter is based on national data provided by NSOs of the reporting countries. The phrase ‘latest data available’ in this section refers to the latest data for which data are provided for a particular indicator.

### Poverty lowest in Jordan, highest in Palestine

According to the data of the latest available data during the period 2010-2012, Jordan recorded the lowest percentage of population, namely, 14 per cent, living below the national poverty line in 2010. Contrary thereto, Palestine reported the highest proportions of people living below the national poverty line in 2011, namely, at 26 per cent. Figure 7.1 lists the reported countries during the specified period.

**Figure 7.1 Poverty headcount ratio according to the national poverty line (percentage of population)**



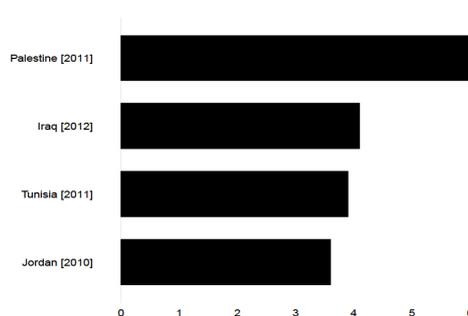
Source: World Bank, n.d.

### Highest poverty gap in Palestine

The poverty gap, a measure of the intensity or depth of poverty, is defined as the average shortfall from the poverty lines expressed as a percentage of the poverty lines. Unlike the headcount ratio which simply counts the people below the poverty line, this measure estimates how far, on average, the poor are from the poverty line.

When comparing the poverty gap across the countries of the region during the period 2010-2012 (figure 7.2), we note that Palestine records the highest gap, at 6 per cent, in 2011, followed by Iraq, Tunisia and Jordan at approximately 4 per cent in 2012, 2011 and 2010, respectively.

**Figure 7.2 Poverty gap at national poverty line**



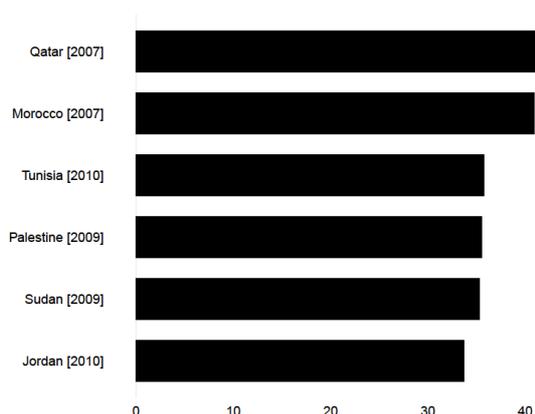
Source: World Bank, n.d.

### Highest inequality in Tunisia and lowest in Egypt

The Gini index is a measure of the extent to which the distribution of income or consumption expenditure among individuals or households within an economy deviates from a perfectly equal distribution.

When comparing inequality of income or consumption expenditure (figure 7.3), we can note that the majority of countries in the region have relatively low to moderate levels of inequality. Available data between 2001 and 2010 show that, in 2007, the most unequal society was Qatar at 41 per cent, followed by Morocco at 41 per cent for the Gini index. The most equal society among the countries providing data was Iraq, at 29 per cent, in 2007.

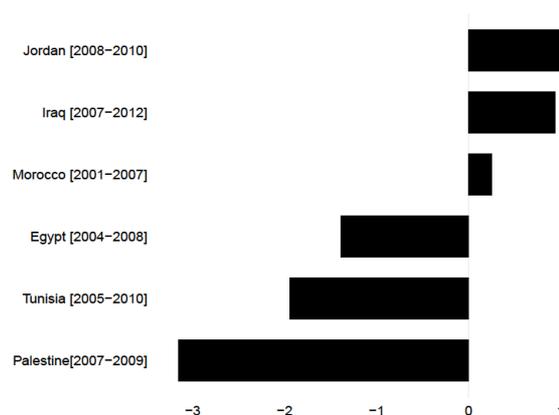
**Figure 7.3 Gini index, latest data available**



Source: World Bank, n.d.

Trends in inequality as measured by changes in the Gini index for the latest two available data are shown in figure 7.4. Overall, there has not been much change in any of the six countries for which data are available. Palestine experienced the greatest increase in inequality: the Gini index increased by 3.2 per cent from 2007 to 2009. Morocco experienced the least change in inequality: the index essentially remained the same, decreasing by merely 0.3 per cent from 2001 to 2007.

**Figure 7.4 Gini index, difference between two latest data available (percentage)**



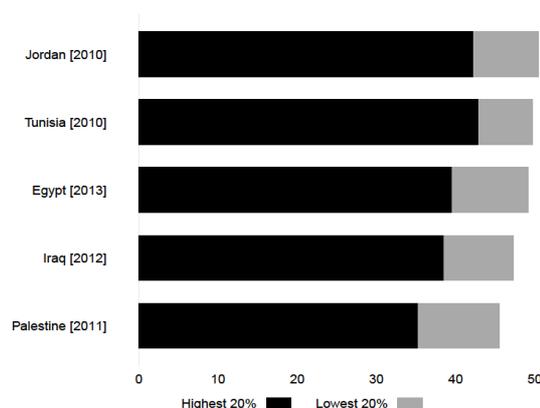
Source: World Bank, n.d.

### Highest share of expenditure of the poorest 20 per cent of the population in Palestine and lowest in Morocco

The latest available data show that the richest 20 per cent of the people in selected Arab countries accounted for over 40 per cent of the total consumption, while the poorest 20 per cent consumed less than 10 per cent.

Palestine recorded the highest difference (35 per cent) in the total population's income or consumption by the richest and poorest 20 per cent of the population in 2011. The lowest share (7 per cent) was noted in Tunisia in 2010. Figure 7.5 compares the shares of total income earned by the poorest and richest 20 per cent of the population.

**Figure 7.5 Income share held by highest and lowest 20 per cent**



Source: World Bank, n.d.

Note: The data value of Egypt, Morocco and Palestine for the income share held by lowest and highest 20 per cent is provided by the respective NSO.

### Highest share of consumption expenditures on food and non-alcoholic beverages in Egypt, Morocco and Palestine

Below, we provide an overview of the distribution of consumption expenditures on major expenditure groups, as follows:

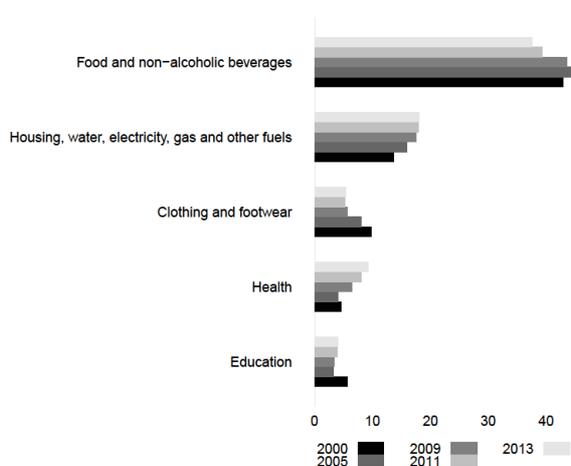
- Clothing and footwear;
- Education;
- Food and non-alcoholic beverages;
- Health;
- Housing, water, electricity, gas, and other fuels.

Only three Arab countries, namely, Egypt, Morocco and Palestine, provided detailed national data on consumption expenditure. Therefore, this section will focus on each of these countries and draw a comparison between them.

### Egypt: Food and non-alcoholic beverages take highest share of consumption expenditure, education takes lowest

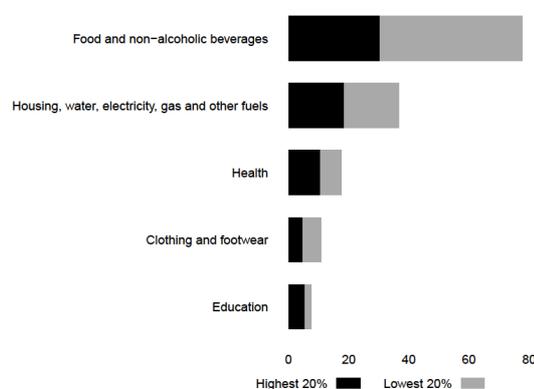
By analyzing the data for Egypt for the period 2000-2013 (figure 7.6), the highest share of consumption expenditure in 2013 was recorded for food and non-alcoholic beverages, followed by housing, water, electricity, gas, and other fuels. The least share was reported for education. This has been the case since the year 2000. The share of expenditure on food and clothing has decreased over time, while the share of expenditure on housing and health has steadily increased.

**Figure 7.6 Share of consumption expenditure, Egypt, 2000-2013 (percentage)**



An examination of the upper and lower quintiles of the population (figure 7.7) reveals differences in the shares of consumption expenditures. Although the highest share of consumption expenditures is common for both the upper and lower quintiles of the population, namely, food and non-alcoholic beverages, the lowest share for the upper quintile is on clothing and footwear at 5 per cent whereas it is on education for the lower quintile at 2 per cent.

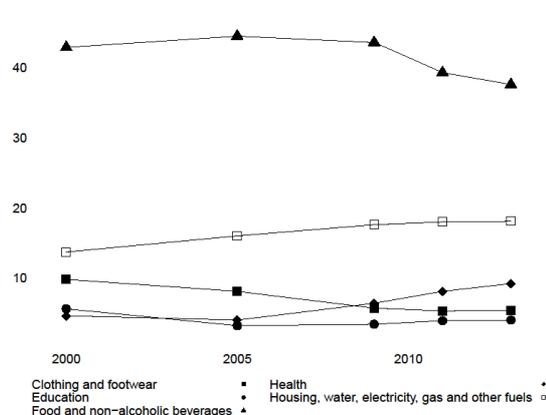
**Figure 7.7 Share of consumption expenditure for the lower and upper quintiles, Egypt, latest data available (2013)**



Source: NSO, Egypt.

During the period 2000-2013 (figure 7.8), the share of consumption expenditure on both food and non-alcoholic beverages and clothing and footwear decreased whereas it increased for the remaining categories.

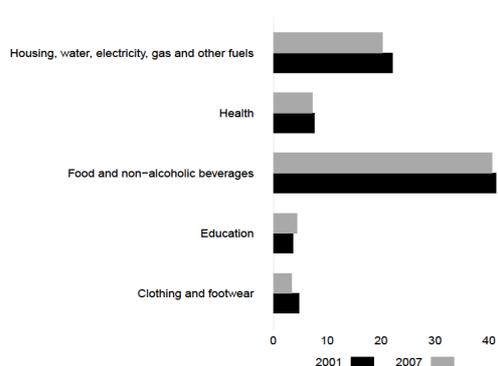
**Figure 7.8 Development in share of consumption expenditure, Egypt (percentage)**



**Morocco: Food and non-alcoholic beverages take highest share of consumption expenditure, clothing and footwear take lowest**

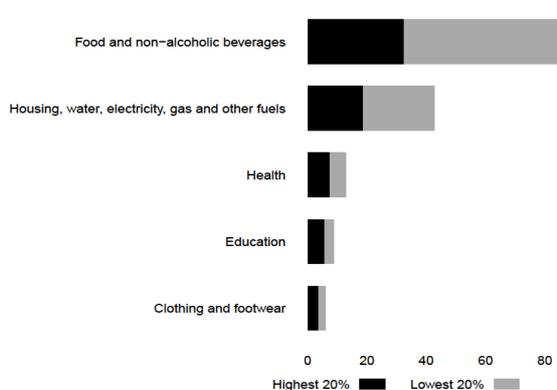
In the case of Morocco (figure 7.9), the available national data for the years 2001 and 2007 indicate a change in the lowest share of consumption expenditure from education in 2001 to clothing and footwear in 2007. The highest share of expenditure in 2001 was recorded for food and non-alcoholic beverages with a share of 41 per cent, and it remained unchanged in 2007.

**Figure 7.9 Share of consumption expenditure, Morocco (percentage)**



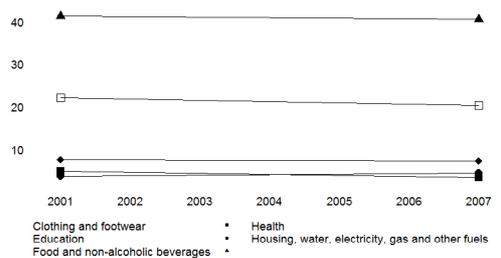
According to the latest available data (2007), the upper and lower quintiles of the population in Morocco spent the highest share and lowest share on food and beverages and clothing and footwear, respectively (figure 7.10). The upper quintile allocated 33 per cent of its consumption expenditures to food and non-alcoholic beverages, while the lowest quintile allocated to it 53 per cent of its share of expenditures.

**Figure 7.10 Share of consumption expenditure for the lower and upper quintiles, Morocco, latest data available (2007)**



An analysis of the numbers for both 2001 and 2007 reveals a slight decrease in consumption expenditures for all reported sectors, except for education, which increased slightly. These trends are illustrated in figure 7.11.

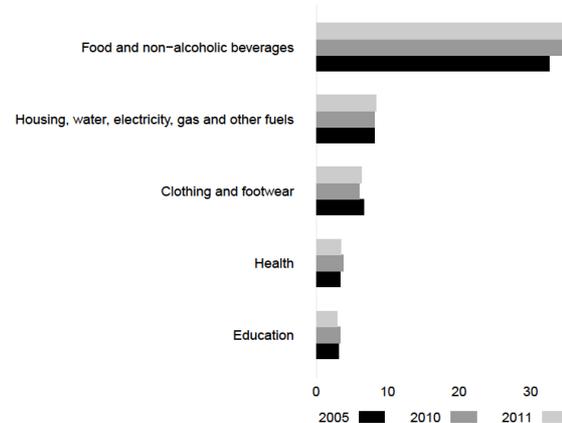
**Figure 7.11 Development in share of consumption expenditure, Morocco (percentage)**



**Palestine: Food and non-alcoholic beverages take highest share of consumption expenditure, education and health lowest**

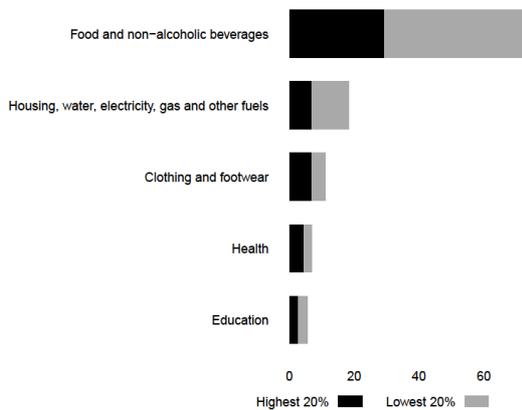
Similar to Egypt and Morocco, also in Palestine, the highest share of consumption expenditures was taken by food and non-alcoholic beverages, at 36 per cent, in 2011, followed by housing, water, electricity, gas and fuels, and clothing and footwear, at 8 and 6 per cent, respectively. The lowest shares of consumption expenditures were recorded for health and education, with shares of 3 per cent and 4 per cent, respectively (figure 7.12).

**Figure 7.12 Share of consumption expenditure, Palestine (percentage)**



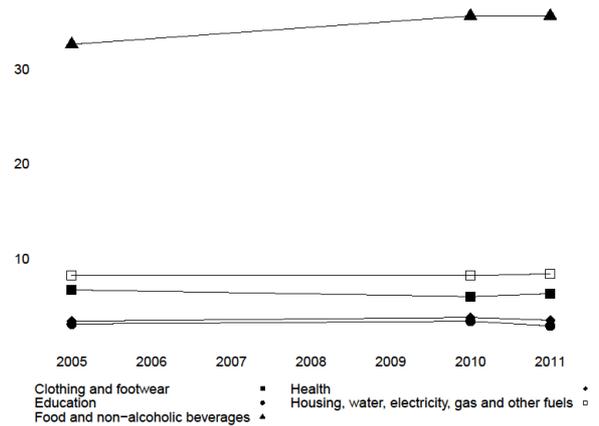
An analysis of the upper and lower quintiles of the population in Palestine for 2011 (the latest available data) reveals differences in the shares of consumption expenditures. Although the highest share of consumption expenditures equally was attributed to food and non-alcoholic beverages for both the upper and lower quintiles of the population, the lowest share for the upper quintile is on education at 3 per cent whereas it is on health for the lower quintile at 2 per cent (figure 7.13).

**Figure 7.13 Share of consumption expenditure for the lower and upper quintiles, Palestine, latest data available (2011)**



Analysing the numbers for the period 2005-2011, a minimal decrease in consumption expenditures in relation to education and clothing and footwear and a noticeable increase for food and non-alcoholic beverages can be noted (figure 7.14).

**Figure 7.14 Development in share of consumption expenditure, Palestine (percentage)**



## 8. Culture

A country's art, history, heritage, music, folklore, food, values, and religions, to name a few, all fall under the umbrella of culture. The culture in the Arab region is particularly rich and varied.

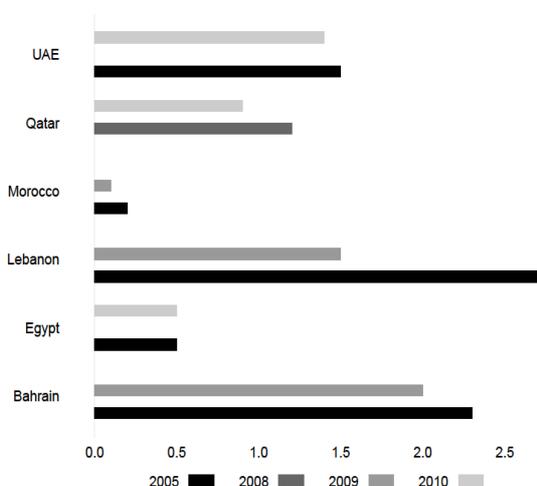
This section provides a descriptive analysis of culture-related indicators in the Arab region. In addition to conventional measures of culture, this section describes recent information technology indicators, including internet usage and active mobile subscriptions. Data on cultural consumption, including participation in the arts at the population level, are only available for Palestine, and are therefore not reviewed here.

### Bahrain had the highest cinema film attendance frequency per capita

Created towards the end of the 19<sup>th</sup> century, cinema is one of the world's most recent art forms.

The frequency of cinema attendance varied across Arab countries. Figure 8.1 shows the top five countries by cinema attendance in 2005 and 2009/2010. Lebanon and Bahrain appeared in the top two both in 2005 and 2009. However, a slight decrease was reported in Lebanon and Bahrain from 2.7 and 2.3 in 2005 to 1.5 and 2 in 2009, respectively. In Egypt, cinema attendance remained stable at 0.5 in 2005 and 2010. As for the United Arab Emirates, it dropped slightly from 1.5 in 2005 to 1.4 in 2010.

**Figure 8.1 Cinema attendance per capita, population aged 5-79 years, 2005-2010**



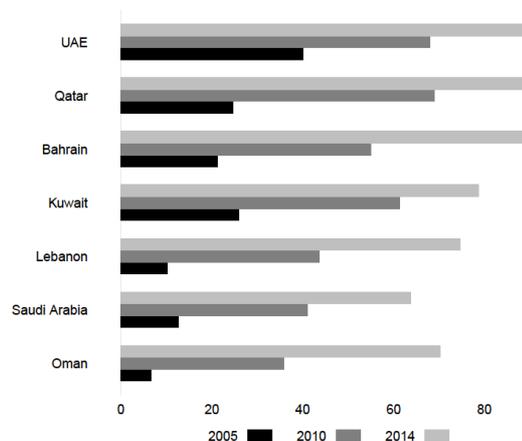
Source: UNESCO, n.d.

### Dramatic increase in Internet use

The Internet has become a major part of modern culture in the Arab region. Internet usage increased sharply between 2005 and 2014. Some countries, such as Bahrain, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, and the United Arab Emirates, experienced an almost tenfold increase in Internet usage. In 2014, Qatar experienced the highest growth among Arab countries, increasing its Internet usage from only 69 per cent in 2010 to 91.5 per cent in 2014. In Bahrain and the United Arab Emirates, Internet usage increased notably over the past decade, rising from 55 and 68 per cent in 2010 to 91 and 90.4 per cent in 2014, respectively.

The data show a continuous growth in the number of Internet users. In 2014, usage rates of over 50 per cent were found in 9 out of the 17 member States, 3 of which had usage rates of 80 per cent and above.

**Figure 8.2 Internet users, 2005-2014 (per 100 inhabitants)**

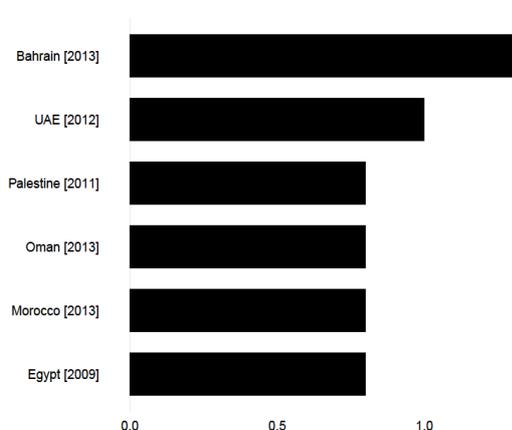


Source: ITU, 2015a.

There is no evidence of a large gender gap in internet usage in the region. Latest data, available only for six countries however, indicate that gender parity in internet usage has more or less been attained in these countries. According to these data, two GCC countries, namely Bahrain and the United Arab Emirates, have bridged the gap, with their gender parity index (GPI) marking 1.3 and 1, respectively. The remaining four countries, namely

Egypt, Morocco, Oman, and Palestine, had the same GPI of 0.8.

**Figure 8.3 Gender parity index of Internet users by latest data available**



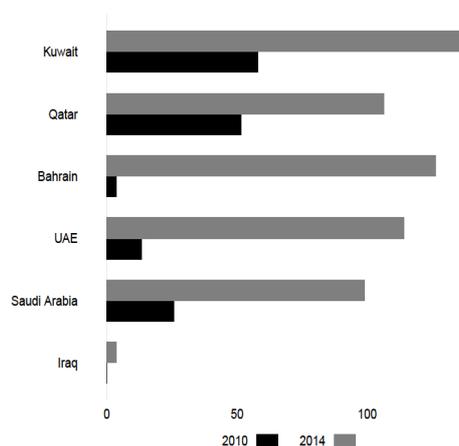
Source: ITU, 2015b.

### Highest ratios of active mobile broadband subscriptions per 100 inhabitants in Kuwait

Mobile broadband is one of the strongest growing market segments. In many instances, its services provide a response to the demand for high-speed Internet access in view of the lack of affordable fixed broadband services. The mobile broadband in the Arab region is mainly driven by the roll-out of 3G mobile networks. Advanced 4G mobile networks began their roll-out in GCC countries in 2012 (ESCWA, 2013).

Figure 8.4 shows that Kuwait had the highest rate of active mobile broadband subscriptions among Arab countries in 2014 (increasing from only 58.1 in 2010 to 139.8 in 2014). Broadband subscriptions in Bahrain and the United Arab Emirates increased notably over the past decade, rising from 3.6 and 13.4 in 2010 to 126.2 and 114 in 2014, respectively. Two other GCC countries achieved relatively high rates in 2014, namely Qatar (106.3 per cent) and Saudi Arabia (99 per cent). The Iraqi Government granted the country's national mobile operators the permission to use 3G frequencies in 2014. Upon the introduction of the service, the active mobile broadband subscriptions (per 100 inhabitants) reached 3.6 per cent.

**Figure 8.4 Active mobile broadband subscriptions, 2010-2014 (per 100 inhabitants)**



Source: ITU, 2015a.

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#### **Note**

Tabulated data used throughout this issue of the compendium is available from <http://www.escwa.un.org/divisions/sd/pubs/index.asp?PubNUM=CSSI-2015>.

Arab Society: A Compendium of Social Statistics, Issue No. 12 is the latest in a series of biennial compendiums of the Statistics Division of the Economic and Social Commission for Western Asia (ESCWA). It provides a general view of Arab society in the region and the changes it has known over time. Drawing on data provided mainly from national statistical offices (NSOs), it focuses on issues of population, labour, housing conditions, education, poverty, health, and culture. Each issue of the Compendium focuses on a single theme; the twelfth issue concentrates on household composition and family formation.

Data were drawn primarily from NSOs of ESCWA member states and supplemented by publicly accessible data from international agencies, such as the International Labour Organization, World Health Organization, United Nations High Commissioner for Refugees, United Nations Educational, Scientific and Cultural Organization, and the World Bank. Not all available indicators are displayed in the body of this publication. A more exhaustive set of tables can be found on the ESCWA website.

