



**Kurdistan Region Government  
Ministry Of Planning  
Kurdistan Region Statistics Office**



# **Socio-Economic Monitoring System Report**

**Kurdistan Region  
2012**



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## PREAMBLE:

In the last 9 years, Kurdistan region has enjoyed great development in several aspects of life. This development has affected positively on living conditions as in public sector salaries and economical activities specially in housing , tourism and trade .

To pin point these developments, it was deemed a must to collect statistical indicators to highlight these development scientifically.

This will help the government to understand the areas of development in order to boost them and to be able also to find out the gaps to work on them using the statistical indicators.

In this regard, Kurdistan region statistics office has conducted several surveys with the help of UN, WB and central statistical Organization in Bagdad in the last 2 years and collected tens of indicators through these surveys.

This report “socio – economic monitoring system” is intended to present the most important indicators collected from those surveys like (labor force survey, IHSES, IKN and others) and is presented in a way that enables readers to digest its content regardless of their scientific background.

This report is also intended to track charges as time passes and this will help policy makers to review their plans and programs applied accordingly. We hope that we have been able to present a useful tool for the government and the community.

Dr. Ali Othman Sindi

Minister of Planning



## INTRODUCTION

Kurdistan region statistics office is delighted to present it first report of “socio – economic monitoring system “this reports content is comprised from surreys data and indicators and data collection processes conducted by KRSO.

UNFPA and RAND Corp Assisted in making this report prepared and is organized in a way that readers don't need to go to each and every survey report in addition it has a simple analysis that is easy to be digested. KRSO will continue to prepare this report annually to track changes continuously and to shed light on the developments and gaps in the different areas of life.

Serwan Mohamed

Director

Kurdistan Region Statistics office



# Socio-Economic Monitoring System

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## 1. INTRODUCTION

Comprehensive and reliable statistics are crucial for policy formulation in any region or country. Statistics make it possible to identify pressing needs, track the progress of policies and initiatives currently in place, and plan future development. The Kurdistan Regional Government (KRG) has recently undertaken efforts to significantly improve the availability of data for the Kurdistan Region-Iraq (KRI) and the capabilities of the Kurdistan Region Statistical Office (KRSO) in collecting them.

As part of these efforts, this report is the first of planned annual reports presenting key social and economic indicators for the KRI. The United Nations Population Fund (UNFPA) has recommended the establishment of a Socio-Economic Monitoring System (SEMS) covering many dimensions of economic and social well-being, including indicators designed to measure progress toward achieving the Millennium Development Goals (MDGs).<sup>1</sup> Related to this is the need to collect and report “critical indicators” most relevant to high-level policymakers as they develop strategies to address the policy priorities of the KRI.<sup>2</sup>

The above-mentioned critical indicators cover many of the same topic areas included in the SEMS, and there is therefore an overlap between these two sets of indicators. Given this overlap, the KRSO determined that the optimal approach would be to have a single annual report containing both the SEMS indicators and the subset of critical indicators that cover the same topic areas as the SEMS.

The indicators cover the following areas:

- Poverty
- Education
- Gender
- Health
- Agriculture
- Access to Essential Services, Water and Electricity
- Macroeconomics

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<sup>1</sup> Appendix A presents the official MDG goals. See also The Millennium Development Goals Report 2012 <http://www.un.org/millenniumgoals/pdf/MDG%20Report%202012.pdf>.

<sup>2</sup> A recent RAND Corporation report recommends the collection and reporting of critical indicators to address the KRI’s top policy priorities: Sandra H. Berry, Nicholas Burger, HarunDogo, Krishna B. Kumar, Alessandro Malchiodi, Jeffrey Martini, Tewodaj Mengistu, Howard J. Shatz, Alexandria C. Smith, ArturUsanov, and Joanne K. Yoong, *Designing a System for Policy-Relevant Data Collection for the Kurdistan Region-Iraq*, RAND MG-1184-KRG, January 2012.

- Private Sector
- Labor Market
- Tourism
- Transportation
- Governance<sup>3</sup>

The indicators for these topics will provide a broad overview of the state of the economy of the KRI and of specific sectors. They will also provide a comprehensive picture of wellbeing in the KRI along many dimensions, including poverty, access to education, health, and gender equality. Just as importantly, subsequent SEMS reports will indicate how well the KRI is progressing in these dimensions—including how well it is progressing toward attaining the MDGs.

It should be noted that some indicators—including MDG indicators—are expected to change relatively slowly so progress may not be recorded on a year to year basis. Further, many indicators are not even collected on an annual basis but rather once every several years when the requisite survey is carried out. For example, the interval between the last two Iraqi Household Socio-Economic Survey (IHSES)—which provide the data to measure poverty--was five years (2007 and 2012). Other data are collected much more frequently hence allow for year to year tracking, including macroeconomic data, agricultural and tourism sector data, and labor force information (the last from the Kurdistan Region Labor Force Survey (KRLFS), which is planned to be implemented on a quarterly basis). Since this is the first report in this series, we have not included tracking information, that is, how the indicators have changed since the last report or last measurement. Subsequent reports will include summary information on tracking.

Many of the indicators presented in this report exist in published form, including many health measures such as child vaccinations and births attended by a medical professional, which are available from the recent Fourth Iraq Multiple Indicator Cluster Survey (MICS4). Similarly, up to date employment and, to a lesser extent, education indicators are available from the KRLFS, the first round of which was carried out by the KRSO in July 2012 and the second round in December 2012 (referred to as 2012, if figures are for the whole year, and otherwise referred to as 1<sup>st</sup> half or 2<sup>nd</sup> half, if the results are presented for the specific period). However, many other indicators, which should be part of this report, are currently not available, either because they are not yet being collected by the relevant ministries, or are in the process of being collected but could not be accessed in time for this report (for example, the 2012 IHSES). Many in this group are among the critical indicators defined earlier and our expectation is that they will be available for future editions of the SEMS report. The full set of Indicators, including those reported here and those not currently available in this report but planned for inclusion in subsequent reports, are listed in Appendix B.

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<sup>3</sup> Governance indicators are not presented in this version of the report due to a current lack of available data.

### *Intended roles and users of this report*

This and subsequent annual rounds of the SEMS report have several audiences and functions. First, the SEMS will provide a means by which the KRG and various ministries can both understand the current situation and track trends over time in various aspects of the economy and the wellbeing of the population. This includes measuring progress toward meeting the Millennium Development Goals, since the SEMS includes key MDG indicators. Information on a wide range of indicators will be a vital input into efforts by the KRG to create new policies or reform existing policies in specific areas of the economy and to design programs to address specific population groups or needs.

Second, the report is intended for the public and for a range of individual stakeholder groups within the KRI. Information on economic performance and the levels of well-being of the population improves the ability of citizens to contribute to dialogue on policies that affect them. Related to this, the SEMS will serve an important accountability function and enhance the responsiveness of government to society's needs.

Third, the practice of reporting data on a wide range of indicators will serve to build data collection and reporting capability within the KRSO and various ministries of the KRG, as this process become routinized. The SEMS will also provide a tool for assessing where data collection needs to be strengthened.

### *Organization of the report*

The indicators are divided into sections corresponding to the topic areas listed above. The text accompanying the indicators describes the meaning and derivation of the indicators as well as the data source. For many of the indicators we are able to provide comparable data for other countries in the region. The selection of comparison countries is not the same for all indicators, and the selection is based on the available data each indicator. There are essentially three sets of comparisons made in this report. For indicators drawn from the MICS in health and education, we can compare the KRI with several neighboring countries for which directly comparable MICS data has been collected. In other cases, the best comparison available is with the average of the indicator for the full Middle East and North Africa (MENA) region.<sup>4</sup> Third, for many MDG indicators, comparisons are available with the average values for the Western Asia region.<sup>5</sup> While the exact countries thus differ according to data availability, all of the comparisons serve to show the KRI's situation in regional perspective.

Finally, a few notes on presentation in what follows. In the tables, we use 'CI' next to an indicator to

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<sup>4</sup>The MENA region is defined by World Bank as: Algeria, Bahrain, Djibouti, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Malta, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, United Arab Emirates, West Bank and Gaza, Yemen

<sup>5</sup>The Western Asia region is composed of the following countries: Bahrain, Iraq, Jordan, Kuwait, Lebanon, Occupied Palestinian Territory, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, Turkey, United Arab Emirates and Yemen

denote a critical indicator, and 'MDG' to indicate an indicator designed to measure progress toward the MDGs. In addition, the presentation for each topic is divided into tables and figures. The *tables*, appearing at the start of each section, show the indicators for the KRI and where available, for individual governorates and for Iraq overall. The *figures* appearing after the tables present the international comparisons of the KRI with countries in the Middle East region.

## 2. POVERTY

	MDG/CI	KRI	Duhok	Erbil	Sulaimaniyah	Iraq	Source
Poverty rate	MDG	3.5	-	-	-	18.9	IHSES <sup>a</sup>
Proportion of vulnerable workers in employed population	MDG	22.4	25.6	18.2	22.7	-	KRLFS
Underweight Prevalence (Moderate plus Severe)	MDG	6.7	5.9	9.7	4.1	8.5	MICS
Underweight Prevalence(Severe)	MDG	3.9	3.3	6.4	1.8	3.7	MICS
Stunting Prevalence (Moderate)	-	15.4	19.0	17.5	10.0	22.6	MICS
Stunting Prevalence(Severe)	-	6.1	7.1	7.7	3.6	9.9	MICS

*Notes: MICS data is from MICS4 (2011). KRLFS is for 1<sup>st</sup> half of 2012. Both MICS and KRLFS were collected by the KRSO. <sup>a</sup> Calculated from the 2012 IHSES by the Technical Committee for Poverty Reduction Policies in Iraq (see "General Results for Measuring Poverty in Iraq," presentation by the Technical Committee for Poverty Reduction Policies in Iraq, July 9 2013.)*

Poverty indicators include several monetary measures of poverty and inequality, such as the share of the population living on less than \$2.50 per day and less than \$1.25 per day, measured in international dollars, or the cost of basic food and non-food needs (See Appendix B for a full list of SEMs poverty measures). These indicators rely on household survey data to generate a measure of household expenditures, a proxy for income. The most recent such survey for the KRI is the 2012 Iraq Household Socio-Economic Survey (IHSES). Using the 2012 IHSES and a poverty measure based on the cost of basic food and non-food needs, the Technical Committee for Poverty Reduction Policies in Iraq reported that the share of the population in KRI living below the poverty line was 3.5 percent. The rate for Iraq as a whole was much higher: 18.9 percent. Both the KRI and all-Iraq rates represent improvements

from 2007, when they were 4.7 percent and 22.9 percent, respectively (based on the 2007 IHSES).<sup>6</sup>

The SEMS also includes several common non-monetary measures related to poverty. The **Proportion of Vulnerable Workers in the Employed Population** is defined as the share of own-account (self-employed) workers and unpaid family workers in total employment. A high share of workers in vulnerable employment indicates the widespread prevalence of informal work arrangements, under which workers usually have lower social protection and pay and fewer benefits such as health care. The share of vulnerable workers in the KRI is 22.4%. This is similar to the average for Western Asia of 26%, which in turn is much lower than the developing world average of 58%.<sup>7</sup> The low share for KRI and the West-Asian region overall is due largely to the small role agricultural employment plays relative to other regions; much agricultural work is self-employment or unpaid family labor and contributes significantly to the number of vulnerable workers elsewhere. The share of vulnerable workers is lowest in Erbil governorate, which contains the seat of the KRI government and has the lowest share of agricultural employed of the three governorates, as shown below in the section on agriculture.

Another non-monetary measure of wellbeing is the nutrition of young children under 5 years of age. Poor nutrition early in life, especially as measured by stunting or chronic malnutrition, may have severe negative consequences for a child's long-term cognitive and physical development, and for his or her productivity in adulthood. *Underweight*, also known as low weight for age, is based on comparison of a child's weight with the median weight of children of the same age in a reference (healthy) population. **Moderate or Severe Underweight Prevalence** is the share of children under 5 with weight for age more than two standard deviations below the median of the reference population. **Severe underweight prevalence** is the share of children under 5 whose weight for age is more than three standard deviations below the reference population median. In the KRI, 6.7% of children under 5 were moderately or severely underweight. This is notably lower than in Iraq as a whole (8.5%) but remains higher than in the immediate region in 2011: the average for all of Western Asia was 5%.

*Stunting* is a reflection of chronic malnutrition resulting from a failure to receive adequate nutrition over a long period and from recurrent or chronic illness. **Moderate or Severe Stunting Prevalence** is the share of children under 5 with height for age more than two standard deviations below the median of

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<sup>6</sup>It should be noted that other methodologies produce other poverty rates. A very recent World Bank study recalculates poverty rates using the 2012 IHSES data and finds a poverty rate of 12.35 percent in the KRI and 19.82 percent in all of Iraq. While this poverty rate is substantially higher for KRI, the pattern of significantly lower poverty in KRI than the rest of Iraq is consistent across methods.

<sup>7</sup>Data from the Millennium Development Goals Report 2012. As noted earlier, the Western Asia region is comprised of Bahrain, Iraq, Jordan, Kuwait, Lebanon, Occupied Palestinian Territory, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, Turkey, United Arab Emirates and Yemen.

the references population. **Severe Stunting Prevalence** is the share of children whose height for age is more than three standard deviations below the reference population median. In the KRI, 15.4% of children under 5 are moderately or severely stunted, and 6.1% are severely stunted (note that the prevalence of stunting is typically greater than the prevalence of underweight). As with underweight prevalence, these shares are significantly below the averages for all Iraq (22.6% for moderate or severe prevalence and 9.9% for severe prevalence).

For both underweight and stunting, the KRI-wide average prevalence masks significant variation across governorates; information which can be useful for targeting nutrition programs. These indicators tend to be worse in Erbil and better in Sulaimaniyah. For example, 6.4% of children under 5 are severely underweight and 7.7% severely stunted in Erbil compared with 1.8% and 3.6% in Sulaimaniyah.

### 3. EDUCATION

	MDG/CI	KRI	Duhok	Erbil	Sulaimaniyah	Iraq	Source
Net Primary School Enrollment Rate	MDG	95.9%	94.7%	94.7%	98.2%	90.4%	MICS
Gross Primary School Completion Rate	MDG	104.6%	91.1%	110.1%	109.6%	83.9%	MICS
Net Primary School Completion Rate	-	64.9%	61.9%	69.7%	61.8%	44.4%	MICS
Net student enrollment in secondary education	CI	88.9%	86.2%	88.2%	91.2%	-	KRLFS
Gross student enrollment in secondary education	CI	103.7%	91.6%	101.3%	114.6%	-	KRLFS
Literacy 15-24 year old males	MDG	92.3%	91.0%	89.2%	95.9%	-	KRLFS
Literacy 15-24 year old females	MDG	81.6%	77.3%	77.8%	88.1%	-	KRLFS

Notes: MICS data is from MICS4 (2011). KRLFS data are from 1<sup>st</sup> half of 2012. Both MICS and KRLFS were collected by the KRSO.

The KRI has realized impressive successes in providing access to education for its population. The **Net Primary School Enrollment Rate** is the percentage of children of primary school age (6 to 11 years of age) who are currently attending primary school or already in secondary school. The net primary school enrollment rate for Kurdistan was 95.9%, 4.5 percentage points higher than Iraq as a whole. All governorates, and particularly Sulaimaniyah, are close to achieving universal primary enrollment.

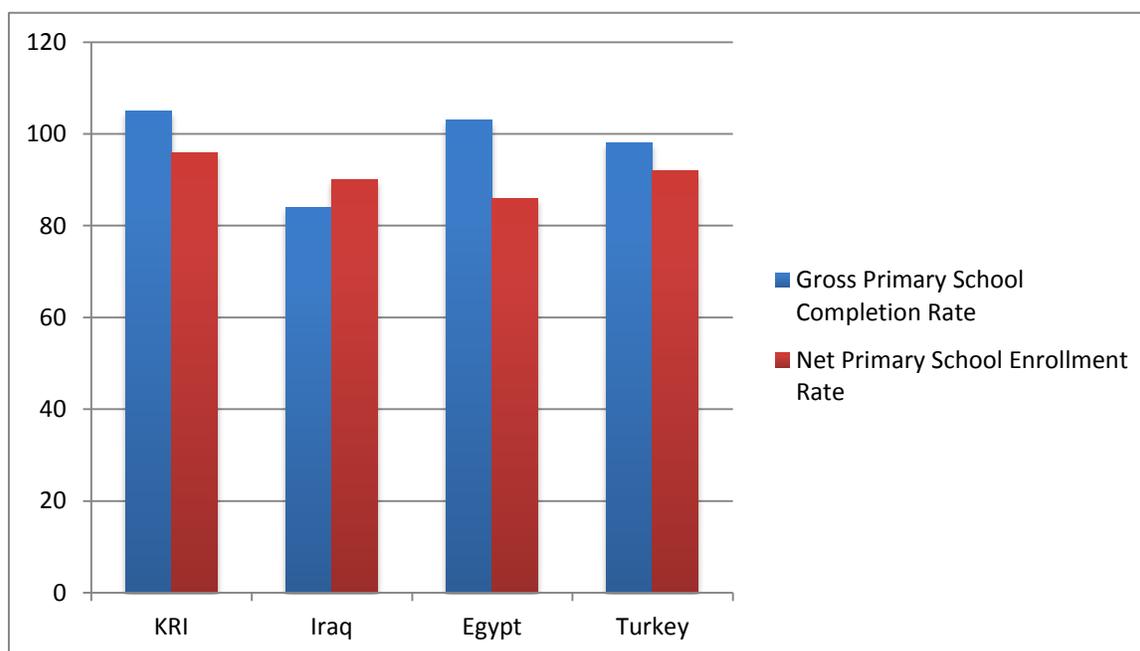
The **Gross Primary School Completion Rate** is defined as the number of children of any age who are attending the final grade of primary education, as a percentage of the population of primary school

completion age. It is usually important to distinguish between primary enrollment and completion given that many children may enroll in primary school but fail to complete the level. In the case of Kurdistan, however, primary completion rates are very high; in fact, the gross primary completion rate is higher than 100% because there are more children enrolled in the last year of primary school than the total number of 11 year olds (presumably because some children repeat the final grade).

The **Net Primary School Completion Rate**, in contrast, equals the number of children *of official primary school completion age* (not any age) who are in their final grade of primary education, as a percentage of the total population of that age. In principle all such children should be completing primary school. This measure is considerably lower than gross primary completion, only 64.9%, reflecting that many children do not complete primary school in their 11<sup>th</sup> year. Still, both this and the gross primary completion rates are notably higher in the KRI than in Iraq overall, which also means that the proportion reaching the final year of primary school is higher in the KRI than in the rest of Iraq: the gross primary school completion rate in the KRI is 20.7percentage points higher, and the net primary school completion rate is 20.5 percentage points higher, than in Iraq as a whole.

Figure 3.1 compares the KRI to several countries in the region for net primary enrollment and the gross primary completion rate. Net primary enrollment in the KRI is higher than in Iraq overall, as noted above, and generally higher than in other countries such as Egypt and Turkey. The gross primary school completion rate in the KRI is similar to those of the other countries.

FIGURE 3.1: PRIMARY ENROLLMENT AND COMPLETION RATES



Note: The source for all countries is the most recent MICS.

**Net Student Enrollment in Secondary Education** is the share of secondary school age children (age 12-17) who are enrolled in school at the secondary level or higher. Secondary enrollment is very high in the KRI: almost 90% of individuals 12-17 are attending school.<sup>8</sup> This indicator ranges from 86% in Duhok to 91% in Sulaimaniyah. **Gross student enrollment in secondary education** is the ratio of the number of students in secondary school of *any age* divided by the total number of individuals of official secondary school age. This is over 100% (103.7%) in the KRI, reflecting the fact that some older students are still studying in secondary school, and varies from 91.6% in Duhok to 114.6% in Sulaimaniyah.

Youth literacy is a basic measure of young people's preparedness for success in life. The indicators **Literacy: 15-24 year old males** and **Literacy: 15-24 year old females** measure the percent of 15-24 year old young men and women who can read and write. 92.3% of young men in the KRI are literate but only 81.6% of young women say they can read and write.<sup>9</sup>The variation across governorates in literacy seems

<sup>8</sup> While the education indicators that follow could be computed from other sources, we rely on the KRLFS, since updates on these indicators will then be available more frequently.

<sup>9</sup> It should be noted that the indicator is based on self-reports of young men and women in the KRLFS, not actual tests of reading and writing ability.

quite pronounced for females, ranging from just 77.3% in Duhok to 88.1% in Sulaimaniyah—consistent with the general pattern of better overall education outcomes in Sulaimaniyah. Given the current almost universal enrollment in primary school, it is expected that youth literacy rates will rise in the coming years.

#### 4. GENDER

	MDG/ CI	KRI	Duhok	Erbil	Sulaimaniyah	Iraq	Source
Gender Parity index for primary school	MDG	0.99	0.98	0.98	0.99	0.94	MICS
Gender Parity index for secondary school	MDG	0.98	0.90	0.96	1.04	0.85	MICS
Gender Parity Index for tertiary schooling	MDG	0.91	0.86	0.80	1.05		KRLFS
Young women aged 15-19 who are currently married	-	9.9%	9.1%	11.7%	8.8%	20.7%	MICS
Total Fertility Rate	-	3.1	3.9	3.5	2.3	4.5	MICS
Proportion of Seats Held by Women in National Parliament	MDG	32.4%	-	-	-	-	KRG website
Proportion of women who are widowed	-	7.6%	6.2%	7.5%	8.6%	-	KRLFS
Proportion of families headed by women	-	11.6%	10.0%	11.2%	12.8%	-	KRLFS
Share of Women in Wage Employment in the Non-Agricultural Sector	MDG	16.7%	12.7%	15.8%	19.7%	-	KRLFS

Notes: MICS data is from MICS4 (2011). KRLFS data are from the 1<sup>st</sup> half of 2012. Both MICS and KRLFS were collected by the KRSO. The KRG web site for female participation in parliament is:

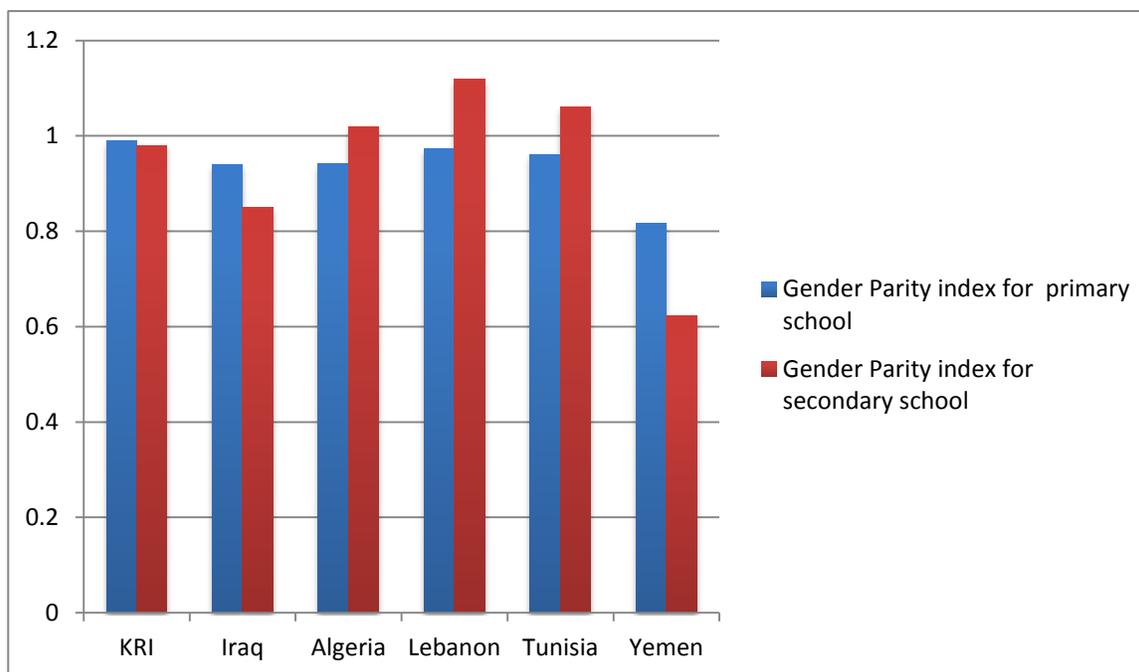
<http://www.krq.org/a/d.aspx?r=160&l=12&s=04070000&a=15057&s=010000>

The Gender indicators presented here permit the tracking of progress towards attainment of several MDGs for promoting gender equality and the empowerment of women. Achieving parity in education is widely recognized as a key step toward achieving equal opportunity for men and women. Moreover, increasing the education of women is a key step in socio-economic development. The **Gender Parity Index (GPI) for Primary School** is the ratio of the enrollment rates of girls to boys in primary school. This is calculated by dividing the enrollment rate for girls by the enrollment rate for boys. This indicator for the KRI is 0.99, meaning that the percentage of girls who attend school is 99% that of boys. This ratio falls within the plus or minus 3-point margin of 100 per cent, which is the accepted range for parity. The ratio is no lower than 0.98 in any governorate. The GPI for primary school in Kurdistan is 0.05 higher than that of Iraq as a whole.

The **Gender Parity Index for Secondary School**, which measures the ratio of female to male secondary enrollment rates, is only slightly lower than for primary school (0.98 compared with 0.99), though with more variation across governorates. The **Gender Parity Index for Tertiary Schooling**, calculated for 2012 with the KRLFS, is markedly lower, at 0.91. It is noteworthy that in Sulaimaniyah, the Gender Parity Indices for both secondary and tertiary schooling are above 1.0, indicating that there are more girls than boys enrolled in this governorate at these school levels. In contrast, for Duhok, the GPI is .90 or less for both of these levels.

Figure 4.1 presents some comparisons of the primary and secondary GPIs with several countries in the region. As implied above, the KRI has greater gender parity in education than Iraq as a whole. Indeed, the KRI more closely resembles the other countries of the region with the exception of Yemen, which has very low gender parity in education. Still, the gender parity ratio in secondary enrollments in the KRI remains below that of a number of the other countries shown, where it is often over 1.0.

FIGURE 4.1: GENDER PARITY INDICATORS



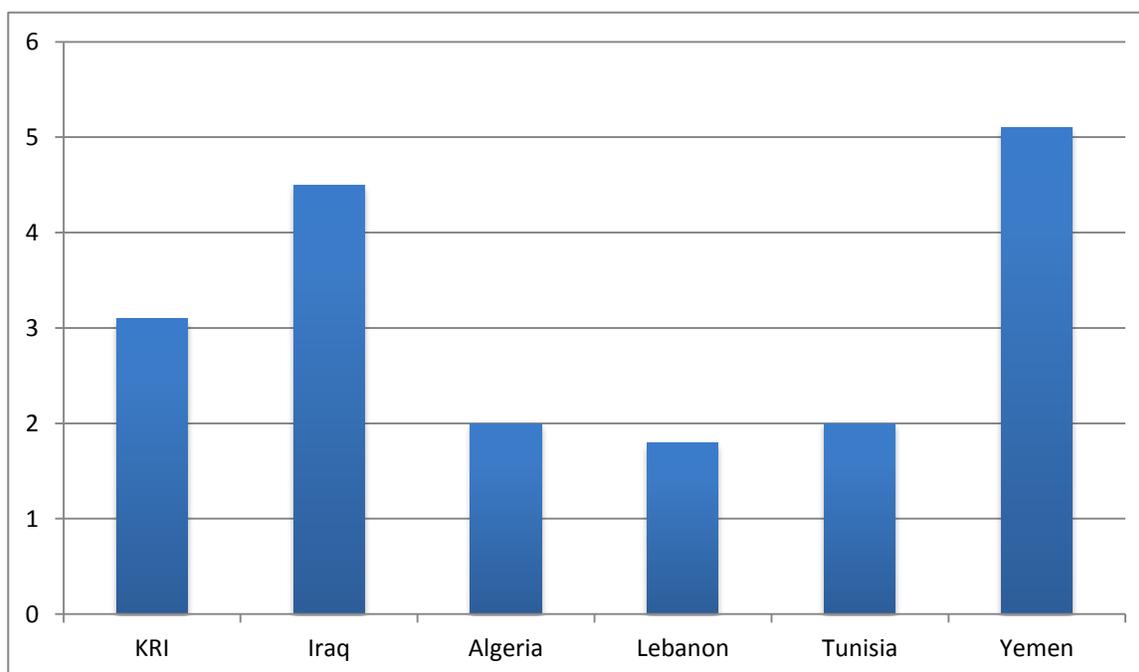
Note: The source for all countries is the most recent MICS.

Turning to the involvement of women in public affairs, a key MDG measure is the **Proportion of Seats in Parliament Held by Women**. In the case of the Kurdistan Regional Parliament, 32.4% of the seats are held by women. This represents 36 out of 111 seats, two seats higher than the minimum required by law (30%, which would require a minimum of 34 seats). The share compares quite favorably to the region overall. In 2011, the average for Western Asia was just 11%.

Traditions of early marriage and childbearing for women are considered a significant barrier to female post-primary schooling, and consequently, meaningful participation in the labor force. The prevalence of early marriage is measured by the proportion of **Young Women Aged 15-19 who are Currently Married**. In 2011 in the KRI, 9.9% of women aged 15 to 19 were married. This is less than half the proportion for Iraq as a whole, and is less than the average for the MENA region of approximately 14% based on data as of 2009 (OECD 2009).

The **Total Fertility Rate**, which is the average number of number of children a woman is projected to bear over her lifetime, is 3.1 in the KRI.<sup>10</sup> While this is 1.4 below the average for Iraq as a whole, it remains higher than the average in 2010 for the MENA region of 2.9 children (for low and middle income economies; it is 2.7 including high income countries).<sup>11</sup>

FIGURE 4.2. FERTILITY RATE



Note: The source for all countries is the most recent MICS.

In societies where women have limited employment opportunities, widowhood may lead to extreme vulnerability to poverty and consequently widows may require targeted assistance. The **Proportion of Women who are widowed** in the KRI in 2012 is 7.6%. Similarly, female headed households may be particularly vulnerable economically. The **Proportion of Families Headed by Women** in 2012 equaled 11.6%.

<sup>10</sup>Specifically, the Total fertility rate represents the number of children that would be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with current age-specific fertility rates

<sup>11</sup> World Bank on-line statistics: <http://data.worldbank.org/data-catalog/world-development-indicators>

## 5. HEALTH

	MDG/ CI	KRI	Duhok	Erbil	Sulaimaniyah	Iraq	Source
Infant Mortality rate	MDG, CI	28	33	27	24	32	MICS
Under-Five Mortality Rate	MDG	32	37	34	25	37	MICS
Measles Immunization Coverage at 12 months	MDG	75.2%	-	-	-	65.8%	MICS
Tuberculosis Immunization Coverage at 12 months	-	97.1%	-	-	-	89.7%	MICS
DPT Immunization Coverage at 12 months	CI	75.2%	-	-	-	64.8%	MICS
Polio Immunization Coverage at 12 months	-	78.7%	-	-	-	70.6 %	MICS
Full Immunization Coverage at 12 months	-	60.7%	-	-	-	45.4%	MICS
Births delivered by skilled attendant	MDG	92.4%	-	-	-	90.9%	MICS
Contraceptive Prevalence Rate	MDG	64.5%	52.4%	62.3%	66.6%	52.5%	MICS
Comprehensive knowledge about HIV 15-24 years	MDG	3.7%	1.7%	3.5%	5.2%	3.1%	MICS

Notes: MICS data is from MICS4 (2011). MICS data were collected by the KRSO.

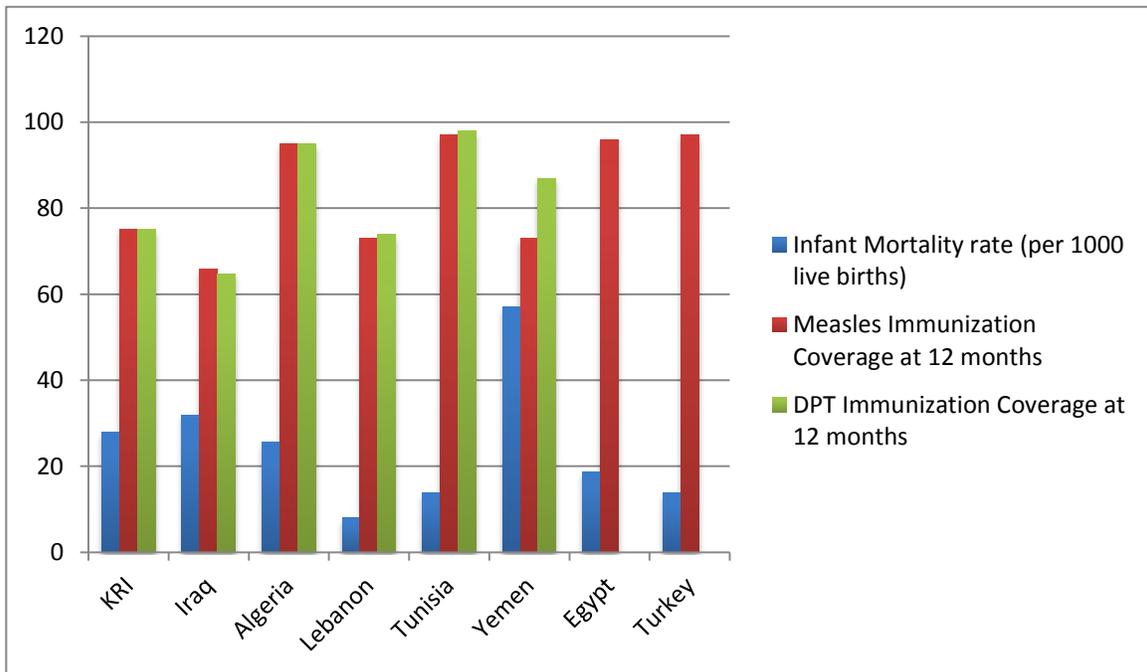
A range of health indicators are available for the KRI, many through the Fourth Iraq Multiple Indicator Cluster Survey (MICS4) of 2011. The **Infant Mortality Rate** (IMR) measures the probability of death

before the first birthday, and is expressed as the number of such deaths per every 1,000 live births. The infant mortality rate in the Kurdistan Region of Iraq is 28 per 1000 live births. This is 4 percentage points lower than the infant mortality rate for Iraq as a whole. However, the KRI does not compare favorably with other countries of the region; out of the seven comparison countries shown in Figure 5.1, the IMR was higher only in Yemen. In contrast, IMRs in Lebanon, Tunisia, Egypt and Turkey were all well under half the rate for the KRI.

Immunization coverage against childhood diseases is measured as the share of children between 12 and 24 months of age (at the time of the survey) who had received vaccinations for a given disease before their first birthday. Focusing on children under two years of age allows the measure to capture recent trends with respect to immunization, since these children were of appropriate vaccination age (under than 12 months) no more than 1 year ago. In 2011, **Measles Immunization Coverage at 12 months** in the KRI was 75.2%, meaning that three quarters of children age 12-23 months had been vaccinated before their first birthday. This is a substantial 9.4 percentage points higher than for Iraq as a whole. **Tuberculosis Immunization Coverage at 12 months** was almost universal, at 97.1%, and higher than Iraq's 89.7%

On the other hand, **DPT Immunization Coverage at 12 months** and **Polio Immunization Coverage at 12 months** are only 75.2% and 78.7% respectively. Because of the lower shares for DPT and Polio, almost 4 out of 10 children fail to receive **Full Immunization Coverage at 12 Months** (getting all four vaccinations). Following the pattern seen for infant mortality, immunization coverage in the KRI is superior to the rest of Iraq but poorer than in other countries of the region as Figure 5.1 shows for measles and DPT. For DPT, KRI is on par with Lebanon but lower than the other countries shown, including Yemen.

FIGURE 5.1: CHILD MORTALITY AND IMMUNIZATION INDICATORS

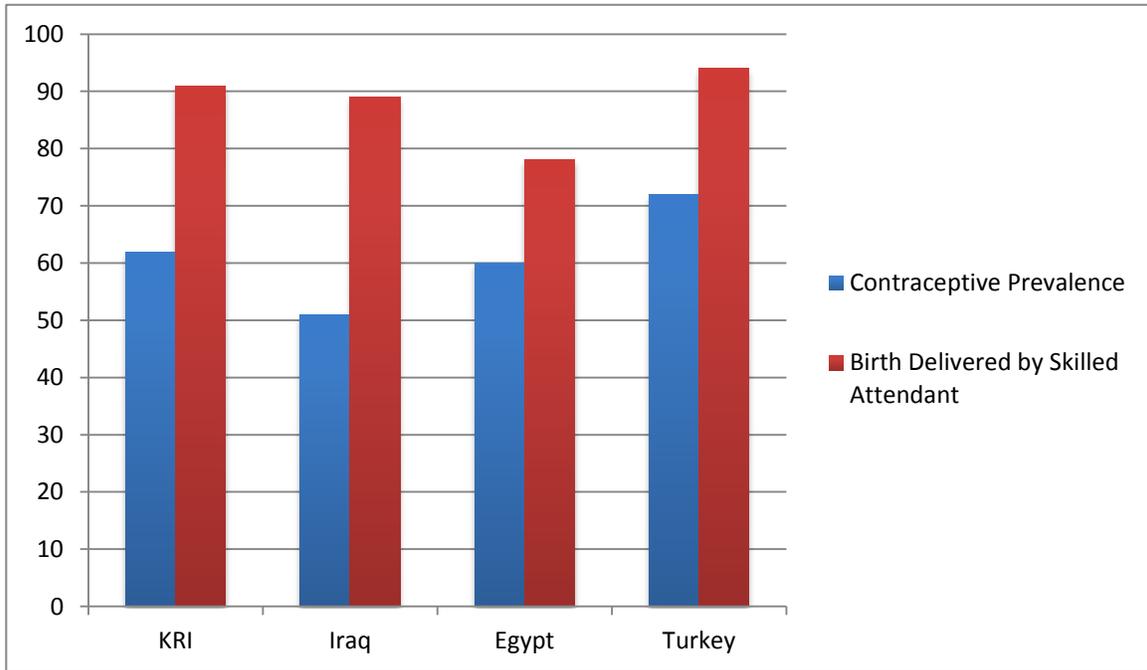


Note: The source for all countries is the most recent MICS.

Among indicators of access to health care services, the percentage of **Births Delivered by Skilled Attendant** is the share of births in the past two years attended by appropriately trained personnel. As seen in the table, the vast majority of births (92.4%) in the KRI are attended births (and 80% are in a formal health facility). As shown in Figure 5.2, this is significantly higher than Egypt (79%) but below Turkey (95%).

**Contraceptive Prevalence** measures the share of currently married women age 15-49 reporting use of modern contraceptives. This indicator equaled 64.5% in 2011. As shown in Figure 5.2, this was on par with Egypt though lower than Turkey; it was also slightly higher than the overall average for Western Asia of 56% in 2010 (MDG Report 2012).

FIGURE 5.2: HEALTH INDICATORS – MATERNAL HEALTH



*Note: The source for all countries is the most recent MICS.*

Finally, knowledge about HIV/AIDS is exceedingly low in the KRI. This is measured with the indicator **Comprehensive knowledge about HIV 15-24 years**, which is the proportion of women aged 15-24 years who (1) can identify at least two HIV prevention methods, (2) can reject two common misconceptions (HIV cannot be transmitted by sharing food or through mosquito bites), and (3) know that a healthy looking person may have HIV. The share of young women with this level of knowledge was only 3.7% in the KRI and 3.1% in Iraq as a whole.



## 6. Access to Essential Services, Water, and Electricity

	MDG/CI	KRI	Duhok	Erbil	Sulaimaniyah	All Iraq	Source
Proportion of population using solid fuel	-	0.2%	0.4	0.1	0.2	1.2%	MICS
Proportion of population using an improved drinking water source	MDG, CI	96.7%	98.9%	96.8%	95.3%	91.4%	MICS
Proportion of population using an improved sanitation facility	MDG	97.7%	97.3%	98.7%	96.9%	93.8%	MICS

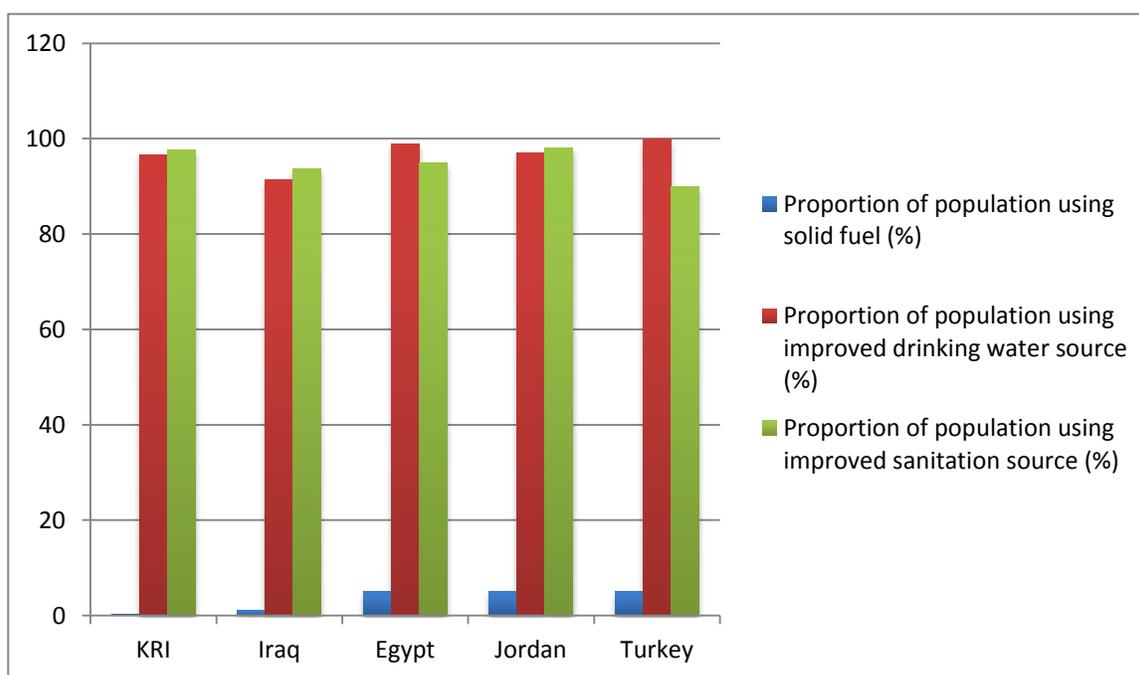
*Notes: MICS data is from MICS4 (2011). MICS data were collected by the KRSO.*

The indicators for access to essential services provide information on the extent to which households in the KRI use important services and resources that influence health and well-being. These include access to improved water and sanitation, and whether households use solid fuel sources, which often have adverse health effects.

Two of the indicators in this category are MDGs: use of improved water, which means that the household uses a drinking water source such as piped water, a public tap or standpipe, or a tube-well or borehole; and use of improved sanitation, meaning the household has a toilet, latrine, or septic tank. In the KRI, the **proportion of population using an improved drinking water source** is close to universal—96.7%—and is five percentage points higher than the rate throughout Iraq. Sulaimaniyah has the lowest use of improved drinking water (95.3%), while Dohuk has the highest (98.9%). Rates of improved sanitation are similarly high. The **proportion of population using an improved sanitation facility** ranges from 97.3% in Sulaimaniyah to 98.7% in Erbil, with an overall rate of 97.7% in the KRI. The national rate for Iraq is 93.8%. Access to improved water and sanitation rates in the KRI are comparable to various MENA countries, as shown in Figure 7.1. The KRI has higher rates of improved sanitation use than the comparison countries, while rates of improved water access in the KRI are lower than in Egypt, Jordan, and Turkey.

The third indicator in this category that is currently available for the KRI is the share of the population using solid fuels as a household energy source for cooking. Solid fuels include wood, charcoal, peat, and other combustible energy sources that can produce indoor air pollution that is harmful to human health. The **proportion of the population using solid fuel** is close to zero in the KRI (0.2%), as shown in Figure 7.1. It is also very low in all of Iraq (1.2%). Both the KRI and Iraq have lower solid fuel use than the four comparison countries shown in Figure 7.1, all of which have rates of approximately 5% in 2010.

FIGURE 7.1: ACCESS TO ESSENTIAL SERVICES



Notes: KRI/Iraq data from MICS (2011). Data for the four comparison countries for access to water and sanitation are from the 2012 World Development Indicators; solid fuel use data are from UN Data and are for 2010.

## 7. Agriculture

	MDG/CI	KRI	Duhok	Erbil	Sulaimaniyah	Source
Proportion of employees in agricultural activities	-	6.1%	5.8%	5.9%	6.5%	KRLFS
Land in use for agricultural production (millions of donums)	CI	4.89	1.21	2.51	1.17	KRG Agricultural Summary Tables

Notes: KRSO summary tables, "Agricultural Areas In The Governorates Of Kurdistan Region, Sep 2012," <http://www.krso.net/en/reports>, accessed December 27, 2012. Agricultural Summary data were collected by KRSO. KRLFS data are for 2012 and were collected by KRSO.

The **proportion of employees in agricultural activities** allows the tracking of the labor force in agriculture. Employees in agriculture are more vulnerable to weather and other shocks and, as noted in the section on Poverty indicators, are also typically not part of formal social safety nets. From this point of view, it is advantageous to not have a large share of the labor force in agriculture. Further, agricultural employment as a share of total employment normally declines in the process of economic development as the industrial and service sectors expand. On the other hand, a too rapid reduction in the agricultural workforce can occur as a result of inadequate investments in land and technology in the sector, leading to imbalanced growth and inadequate food production or food insecurity.

The share of employees in agriculture in the KRI is low, barely over 6%. In contrast, 77% of the KRI labor is employed in the services sector and 16% in industry. Agriculture accounts for a higher proportion of employment in Sulaimaniyah (6.5%) than the other two governorates and has the smallest share in Duhok (5.8%). The share of employment in agriculture is low both for men (6.0%) and women (6.8%).

The other input that is crucial for food production is the **land in use for agricultural production**. The KRI has close to 4.9 million donums under cultivation, which represents nearly 35% of its total area. Erbil governorate has more than twice the arable land than each of the other two governorates. Over 87% of the arable land is rain fed (rather than irrigated), which leaves it vulnerable to the vagaries of weather. This adds to the above-mentioned concern about inadequate food production arising from a low share of the labor force employed in agriculture.

## 8. Macroeconomics

	MDG/CI	KRI	All Iraq	Source
Total government expenditure, 2010	CI	10.5 TID (45% of GRP)	83.0 TID (49.4% of GDP)	KRG*
Consumer Price Index / Inflation, Year on Year rate, December 2011-December 2012	CI	5.6%	6.35%	KRG Consumer Price Survey**

*Notes:* \*TID is Trillion Iraqi Dinars. GRP is gross regional product. Budget figures of 2010 are used for government expenditures. (2012 budget is discussed in the text.) KRSO estimate of GRP for 2011 is used for percentage calculation ([www.krso.net](http://www.krso.net)). Iraq's 2010 budget estimate is from <http://www.iraq-businessnews.com/2010/04/05/breakdown-of-iraq%E2%80%99s-2010-budget/>, accessed December 27, 2012. Iraq's 2010 GDP estimate is from <http://www.gfmag.com/gdp-data-country-reports/252-iraq-gdp-country-report.html#axzz2G185ef5m>, accessed December 27, 2012. The exchange rate estimate for 2010 between the US Dollar and Iraqi Dinar is from [www.xe.com](http://www.xe.com), accessed December 27, 2012.

\*\*The CPI data in the table and the text are drawn from the KRSO Press Release, dated 13 January 2013. The inflation rate for all of Iraq is from the Central Bank of Iraq, <http://www.cbi.iq/>, accessed January 17, 2013. The year-on-year inflation rate between September 2011 and September 2012 is the latest figure available and presented here.

**Total government expenditure** is an indicator that is critical for understanding the extent of the government's role in an economy. Along with consumption, investment, and net exports, it is one of the components that enter the calculation of the gross domestic or regional product (GDP for a country, GRP for a region) of an economy. For emerging economies, the breakdown of government expenditures into current or operational expenses (spent for current needs) and capital or investment expenses (spent for the future) is important. An excessive amount of government expenditures, especially operational expenses, relative to the GRP could be a sign of a government-driven rather than a private sector-driven economy. On the other hand, inadequate government expenditure, especially in health and education and investment in sectors lacking private-sector investment, would not augur well for the long-term growth of an economy.

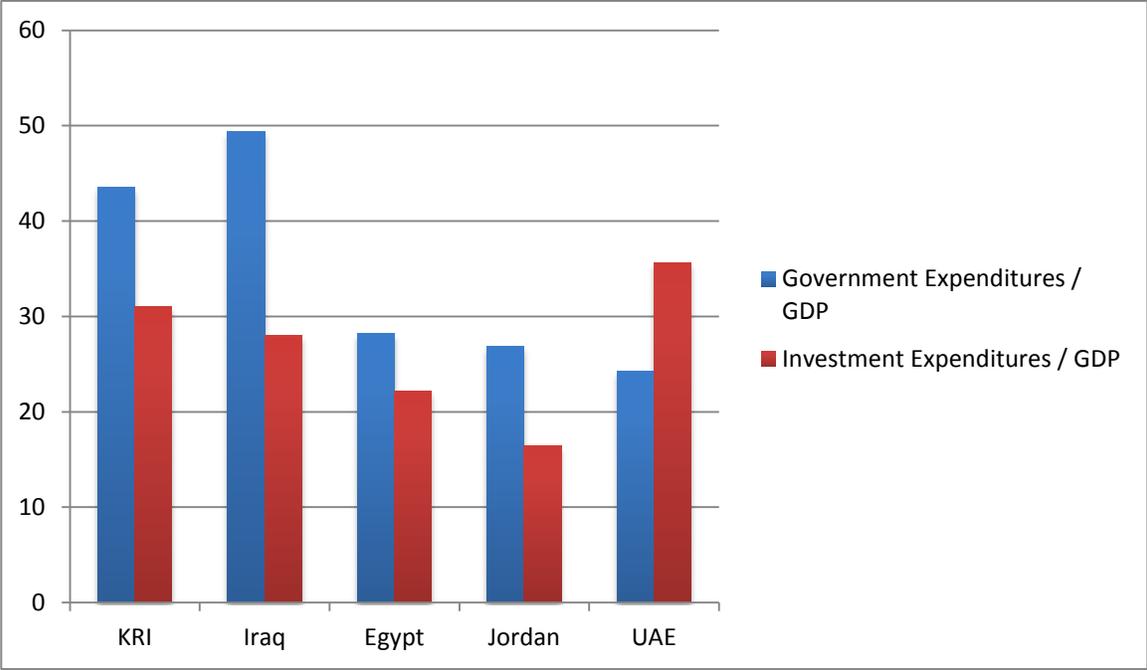
In 2012, the total budget for the KRG, which is our best estimate for actual government expenditures, was 15.5 trillion Iraqi Dinars (TID). Out of this, 4.72 TID (30.5%) was intended for investment. While it would be useful to focus discussion of these latest figures, for the comparison group of countries we discuss below, 2010 is the latest year for which government expenditure data is available. Therefore,

we focus on the 2010 figures for the KRI and the comparison group of countries. Since the share of investment expenditures in the total KRI budget has remained relatively stable at around 30% during the last few years, use of the earlier data is not a significant concern.

In 2010, the KRG budget was 10.5 trillion Iraqi Dinars (TID). Out of this, 7.2 TID (69%) was operational, and the remaining 3.3 TID (31%) was set aside for investment. Using an exchange rate of 1 US Dollar (USD) = 1,165 Iraqi Dinars appropriate for 2010, the total budget works out to 9 billion USD. The KRSO estimates the GRP for the KRI to be 20 billion USD (though this is for 2011, not 2010). The government expenditures as a fraction of this GRP measure is 45%.

Figure 8.1 compares the KRI government expenditure indicators to those of several countries in the region:

FIGURE 8.1: GOVERNMENT EXPENDITURES – TOTAL AND INVESTMENT



Notes: KRI and Iraq data are from the sources mentioned in the table above. For other countries, we obtained ratios from the World Bank’s *World Development Indicators* and the IMF on total investment to GDP, private investment to GDP, and total government expenditures to GDP. The government investment to GDP ratio was calculated as the total investment to GDP minus private investment to GDP. When government investment to GDP is divided by total government expenditures to GDP, we get investment expenditures as a fraction of total expenditures by the government.

The KRI's government expenditures as a fraction of GRP (45%) is somewhat lower than that of Iraq as a whole (49.4%). However, it is substantially higher than in Egypt (28.9%), Jordan (26.9%), and the U.A.E. (24.3%). The concern of whether there is excessive government involvement in the economy of the KRI is partly allayed by the high fraction of government expenditures set aside for investment. The 31% of the KRI budget that is allocated for investment compares favorably with the figures for countries in the comparison group in Figure 8.1, other than the U.A.E. For all of Iraq the investment share is 27.7%; for Egypt, 22.2%; and for Jordan, 16.4%. In contrast, the U.A.E. spent 35.6% of its government expenditures on investment.

The general price level, often called the **Consumer Price Index (CPI)**, reflects the cost of a selection or a "basket" of goods and services purchased by the "typical consumer." The KRSO gathers data on the prices of the selected goods and services on a continual basis. **Inflation** is the rate of increase of the price level or CPI. The two are often used interchangeably, even though the index is by itself not meaningful; it is the rate of change of the index that really matters. The inflation rate is a closely watched indicator since it affects the real value of an economy's currency, and therefore the purchasing power of consumers.

The "Year on Year (YoY)" inflation between December 2011 and December 2012 was 5.6%. As a point of comparison, the YoY rate was higher for all of Iraq at 6.35% (though this was for the period between September 2011 and September 2012). The annual inflation was also higher in Turkey (6.4%). On the other hand, since 2009, the annual inflation rate of the KRI has steadily increased, with annual rates of 0.8%, 1.9%, and 7.1%. The annual rate of inflation is the change in *average* prices between two years, which is different from the YoY rate between the same month in two successive years (say, December 2011 to December 2012) reported in the table above.

## 9. Private Sector

	MDG/CI	KRI	Duhok	Erbil	Sulaimaniyah	Iraq	Source
Share employed in private sector	-	48.5%	46.6%	46.9%	51.0%	-	KRLFS
Share employed in public sector	-	50.5%	53.0%	50.9%	48.7%		KRLFS
Percentage of workers by economic activity: Agriculture	CI	6.1%	5.8%	5.9%	6.5%	-	KRLFS
Percentage of workers by economic activity: Industry	CI	16.6%	15.9%	14.9%	18.4%	-	KRLFS
Percentage of workers by economic activity: Services	CI	77.3%	78.4%	79.2%	75.1%	-	KRLFS

*Notes: KRLFS are for 2012 and were collected by KRSO.*

A range of indicators are used to track private sector development in the KRI. The **Share Employed in Private Sector** measures the share of the employed population (including employees, self-employed and all other individuals classified as employed) that works in the private sector. Using the KRLFS Q42012, this is estimated to be 48.5% in the KRI. As in most economies of the region, public sector employment is a dominant source of employment in the KRI: approximately half of the working population (50.5%) is found in the public sector (a tiny percentage are classified as neither public or private, for example, working in non-governmental organizations). Reflecting the presence of the capital city, Erbil governorate has the highest prevalence of public sector jobs, amounting to 55.4% of all employment, and correspondingly the lowest share of private sector employment. The share of private employment in total employment is highest in Sulaimaniyah (51%).

Considering next the **Percentage of Workers by Economic Activity** or industrial sector, three quarters of all employment in the KRI is found in the services sector (77.3%). Industry is a distant second (16.6%), followed by agriculture with a very small share (6.1%). Note that these are shares of all employment in the KRI, including the public sector. The overall shares of services, industry and agriculture are consistent across governorates, with modest variations. Within the smaller industrial sector, construction dominates, accounting for three-fourths (76%) of industrial employment. Manufacturing accounts for 9.4% of industrial employment and less than 2% of all employment in the KRI.

In this section we have viewed the private sector (and activity sectors) from the perspective of employment shares. Subsequent SEMS reports will expand the indicators for private sector activity beyond the labor market and are expected to include the number of enterprises by economic activity, foreign direct investment inflow, fixed investment by firms, and mobile phone and Internet usage (See Appendix B for the complete list of indicators).

## 10. Labor Market

	MDG/Ci	KRI	Duhok	Erbil	Sulaimaniyah	Iraq	Source
Labor Force Participation Rate for age 15+	-	38.4%	35.6%	38.1%	40.3%	-	KRLFS
Labor Force Participation Rate for age 15+, males	-	65.8%	64.1%	66.2%	66.6%	-	KRLFS
Labor Force Participation Rate for age 15+, females	-	12.1%	8.0%	11.6%	15.0%	-	KRLFS
Unemployment Rate, age 15+	-	7.9%	8.3%	7.5%	8.1%	-	KRLFS
Unemployment Rate, age 15+, males	-	5.2%	6.9%	4.8%	4.6%	-	KRLFS
Unemployment Rate, age 15+, females	-	22.0%	17.8%	22.1%	22.8%	-	KRLFS
Youth Unemployment Rate (15-24)	-	18.3%	19.1%	17.6%	18.6%	-	KRLFS
Youth Unemployment Rate (15-24), males	-	13.4%	16.5%	12.4%	11.7%	-	KRLFS
Youth Unemployment Rate (15-24), females	-	48.3%	42.5%	42.4%	58.5%	-	KRLFS
Number of paid Employees (thousands)	-	819.3	169.8	308.0	341.5	-	KRLFS

Notes: KRLFS data are for 2012 and were collected by KRSO.

The *labor force* is defined as the total number of individuals 15 years and older who are in labor force or “economically active”, meaning that they are currently working or, if not working, are available and actively searching for work. “Work” is defined, following international conventions, to include having a wage job or working on one’s own or a family business or a farm, whether directly for pay or not. The **Labor Force Participation Rate for age 15+** is the percentage of individuals 15 years old or older who are part of the labor force. The KRLFS data show that the labor force of the KRI in 2012 constitutes 38.4% of the total population aged 15 years and older—a relatively low participation rate. Though this rate is essentially the same as in Jordan (38%), it is significantly lower than in Turkey (approximately 50%) and

Egypt (approximately 48%).

The low overall participation rate in the KRI is largely driven by the very low participation of women. Indeed, men greatly outnumber women in the labor force. Among men 15 years and older, about two thirds, or 65.8%, are in the labor force, while only 12.1% of women are in the labor force. However, among male youth (aged 15 to 24), only 37.7% are in the labor force, in part because many are still studying. For female youth, the participation rate is only 6.4%.

The **unemployment rate** is the share of the labor force that is unemployed, that is, not currently working but available and searching for work. The overall unemployment rate in the KRI for 2012 is 7.9%. The unemployment situation in the KRI compares favorably to most countries in the region. For example, in 2012 Turkey had an unemployment rate of 8.4%, while Egypt had an unemployment rate of 12.6%. In Jordan (in 2011), the unemployment was 11%, respectively.

Preliminary analysis from the KRLFS data for the first half of 2013 shows an unemployment rate of 5.2% for the KRI. It is important to note that this is based on data only for part of the year.

As with participation, there are striking differences by gender in unemployment. The unemployment rate is four times higher for women than men in the KRI (22% vs. 5%). It should be kept in mind that the number of men in the labor force is much greater than the number of women, so the higher rates for women do not translate into greater numbers of unemployed women than men.

**Unemployment rates for youth** are closely watched, as they indicate whether the economy is generating economic opportunities for those entering the labor market, thereby aiding both economic growth and social stability. Within the KRI, youth unemployment (age 15-24) is 18.3%, significantly higher than the 7.9% rate for the entire labor force. The phenomenon of high youth unemployment is well known among countries of the region. However, as with unemployment overall, youth unemployment in the KRI is among the lowest in the region. While in Turkey the unemployment rate for the 15-to-24 age group dropped in the second quarter of 2012 to 16.1%, in Jordan it was 28%, and in Egypt for those age 20-24, 41.4% (though the Egypt figures, which are from 2012, in part reflect the effects of the 2011 Revolution on the economy). Nevertheless, while youth unemployment in the KRI is somewhat less serious than in many countries of the region, it is still quite high and therefore a concern for policy.

Further, gender differences in youth unemployment are noteworthy. In the KRI, the unemployment rate for female youth is exceedingly high, at 48.3%, compared to 13.4% for young men. As with the figures for all adults, it bears keeping in mind that far fewer young women than men are in the labor force, so the actual number of young men who are unemployed is higher than young women. The higher unemployment rates for females, particularly young women, point to barriers to hiring for women entering the workforce. Further, the low participation rate of young women (and women overall) may also be evidence of such barriers, if many women do not enter or stay in the labor force because of difficulties in finding work.

There are also notable differences by governorate in labor force indicators. A larger proportion of individuals age 15+ are part of the labor force in Sulaimaniyah (40.3%) than in Erbil (38.1%) or Duhok (35.6%). At the same time, the highest unemployment rate is also in Duhok (8.3%), followed by Sulaimaniyah (8.1%), and Erbil (7.5%).

Finally, the **Number of Paid Employees** counts the total number of workers who are paid wages or salaries. This therefore excludes those who are self-employed, business owners or contribute unpaid labor to a family business or farm. In 2012, according to the KRLFS, there were about 820 thousand paid employees in the KRI. With larger populations than Duhok, it is not surprising that Sulaimaniyah and Erbil have more paid employees (342 and 308 thousand, respectively).

## 11. Tourism

	MDG/CI	KRI	Duhok	Erbil	Sulaimaniyah	Iraq	Source
Foreign Arrivals, number of visitors (excluding other Arab countries)	CI	106,889	38,505	37,980	30,404	-	KRSO
Foreign Arrivals, total days visiting (excluding other Arab countries)	CI	261,755	12,068	65,936	68,751	-	KRSO
Foreign Arrivals, number of visitors - from other Arab countries	CI	46,379	2,089	26,084	18,206	-	KRSO
Foreign Arrivals, Total days visiting – from other Arab countries	CI	120,654	5,431	63,898	51,325	-	KRSO

*Notes: Statistics from KRSO reports based on data from the Ministry of Municipalities and Tourism*

With a wealth of ancient historical and religious sites, and natural attractions combined with economic and political stability in recent years, tourism as well as business travel to the KRI has been rising rapidly. This contrasts with declines in many areas of the region due to fears of violence or political instability. The SEMS report will keep track of the development of the tourist and hospitality sector through several indicators related to visitors and establishments (See Appendix B). For this report, we show data on the number of foreign guests visiting hotels in the KRI and the total nights visiting. Note that this indicator captures not just tourist travel but other travel to the KRI, including for business.

The table distinguishes international visitors from non-Arab countries and from Arab countries (outside of Iraq). In the last year there were close to 107,000 visits of individuals from foreign non-Arab countries, staying a total of about 262,000 days. While the number of visits was roughly similar across governorates, the number of days (hence average duration per stay) was substantially higher in Erbil than in the other governorates, reflecting the presence of the capital city in Erbil as a destination. The total number of visits from Arab countries (which as noted excludes visitors from the rest of Iraq) was less than half the total of other international visits.

## 12. Transportation

	MDG/CI	KRI	Duhok	Erbil	Sulaimaniyah	Iraq	Source
Extent of paved roads, total (kilometers)	CI	14841	3777	5391	5673	-	<i>KRG Road Statistics</i>
Extent of main roads (kilometers)	-	3825	1047	1469	1309	-	<i>KRG Road Statistics</i>
Extent of central roads (kilometers)	-	3984	980	1452	1552	-	<i>KRG Road Statistics</i>
Extent of rural roads (kilometers)	-	7033	1750	2470	2813	-	<i>KRG Road Statistics</i>
Extent of highways (kilometers)	-	0	0	0	0	-	<i>KRG Road Statistics</i>

*Notes: Statistics from KRSO based on data from the Department of Transportation*

As data collection and coordination develop, we expect that this category will include indicators such as the extent of paved roads, the number of passenger vehicles travelling between major cities, tonnage of goods transported on roads, and data on traffic injuries (See Appendix B). For the present report we are limited to the first indicator, **Extent of Paved roads (kilometers)**, and its breakdown by various categories. As shown, there is a total of 14,841 km of paved roads in the KRI. Of this, almost half (7,033 km) are rural roads. The road system is more developed in Erbil and Sulaimaniyah than in Duhok, though this also reflects the lower population of Duhok. Overall, the road infrastructure in the KRI is not well developed, as indicated by the fact there currently are no highways connecting major cities in the region.

## 13. Conclusion

In this report, we have presented a first snapshot of economic conditions and the socio-economic well-being of the population of the KRI. While data are not currently available to construct the complete set of indicators listed in Appendix B, we have nevertheless been able to present a fairly comprehensive analysis of the current situation.

Some of the data highlights of our report are:

- Access to primary education is essentially universal in the KRI, and higher than in the rest of Iraq. Enrollments in and completion of secondary school are also high and comparable to other countries in the region.
- The KRI has essentially achieved gender parity in primary schooling and is close to doing so in secondary education, but is further away from that goal for tertiary schooling. The KRI is broadly in line with other countries of the region with regard to gender parity in education but is slightly below parity levels for other countries with regard to secondary enrollments specifically.
- Also with regard to gender indicators, rates of early marriage for girls 14-19 are lower than in the rest of Iraq and the region, though fertility rates remain higher than in the region overall (while still lower than in the rest of Iraq). The KRI has an unusually high representation of women in parliament, about one third, which is about three times the regional average.
- For multiple health indicators the KRI lags somewhat behind other MENA countries. Infant mortality is lower than in the rest of Iraq but significantly higher than in Lebanon, Tunisia, Egypt and Turkey. A similar pattern holds for immunization coverage.
- Only 7% of the labor force is employed in agriculture. Coupled with the very high percentage of the land that is rain fed rather than irrigated (87%), this suggests that the government of the KRI needs to consider policies to increase agricultural output.
- While government expenditures account for a very high 45% of the GRP of the KRI, over 30% of these expenditures are earmarked for investment, which is a favorable (high) ratio.
- The inflation rate in the KRI has been steadily increasing in the last few years, with the latest year-on-year rate close to 9%.

Our aim is to make this report an annual compendium of policy-relevant data that KRG policymakers can use to identify strengths and challenges in their decision-making process, and the KRI public can use to stay informed about the state of their region. As the KRSO and other agencies within the KRG collect more data, we are confident that we will be able to provide a more complete list of socio-economic indicators in future editions, while also tracking changes in these indicators.



## APPENDIX A: OFFICIAL MILLENNIUM DEVELOPMENT GOALS (MDG) INDICATORS FOR MONITORING PROGRESS

Goals and Targets (from the Millennium Declaration)	Indicators for monitoring progress
<b>Goal 1: Eradicate extreme poverty and hunger</b>	
Target 1.A: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day	1.1 Proportion of population below \$1 (PPP) per day <sup>12</sup> 1.2 Poverty gap ratio 1.3 Share of poorest quintile in national consumption
Target 1.B: Achieve full and productive employment and decent work for all, including women and young people	1.4 Growth rate of GDP per person employed 1.5 Employment-to-population ratio 1.6 Proportion of employed people living below \$1 (PPP) per day 1.7 Proportion of own-account and contributing family workers in total employment
Target 1.C: Halve, between 1990 and 2015, the proportion of people who suffer from hunger	1.8 Prevalence of underweight children under-five years of age 1.9 Proportion of population below minimum level of dietary energy consumption
<b>Goal 2: Achieve universal primary education</b>	
Target 2.A: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling	2.1 Net enrolment ratio in primary education 2.2 Proportion of pupils starting grade 1 who reach last grade of primary 2.3 Literacy rate of 15-24 year-olds, women and men
<b>Goal 3: Promote gender equality and empower women</b>	
Target 3.A: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015	3.1 Ratios of girls to boys in primary, secondary and tertiary education 3.2 Share of women in wage employment in the non-agricultural sector 3.3 Proportion of seats held by women in national parliament
<b>Goal 4: Reduce child mortality</b>	
Target 4.A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate	4.1 Under-five mortality rate 4.2 Infant mortality rate 4.3 Proportion of 1 year-old children immunised against measles
<b>Goal 5: Improve maternal health</b>	
Target 5.A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio	5.1 Maternal mortality ratio 5.2 Proportion of births attended by skilled health personnel

<sup>12</sup> For monitoring country poverty trends, indicators based on national poverty lines should be used, where available.



Target 5.B: Achieve, by 2015, universal access to reproductive health	5.3 Contraceptive prevalence rate
	5.4 Adolescent birth rate
	5.5 Antenatal care coverage (at least one visit and at least four visits)
	5.6 Unmet need for family planning
<b>Goal 6: Combat HIV/AIDS, malaria and other diseases</b>	
Target 6.A: Have halted by 2015 and begun to reverse the spread of HIV/AIDS	6.1 HIV prevalence among population aged 15-24 years
	6.2 Condom use at last high-risk sex
	6.3 Proportion of population aged 15-24 years with comprehensive correct knowledge of HIV/AIDS
	6.4 Ratio of school attendance of orphans to school attendance of non-orphans aged 10-14 years
Target 6.B: Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it	6.5 Proportion of population with advanced HIV infection with access to antiretroviral drugs
Target 6.C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases	6.6 Incidence and death rates associated with malaria
	6.7 Proportion of children under 5 sleeping under insecticide-treated bednets
	6.8 Proportion of children under 5 with fever who are treated with appropriate anti-malarial drugs
	6.9 Incidence, prevalence and death rates associated with tuberculosis
	6.10 Proportion of tuberculosis cases detected and cured under directly observed treatment short course
<b>Goal 7: Ensure environmental sustainability</b>	
Target 7.A: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources	7.1 Proportion of land area covered by forest
	7.2 CO2 emissions, total, per capita and per \$1 GDP (PPP)
	7.3 Consumption of ozone-depleting substances
Target 7.B: Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss	7.4 Proportion of fish stocks within safe biological limits
	7.5 Proportion of total water resources used
	7.6 Proportion of terrestrial and marine areas protected
	7.7 Proportion of species threatened with extinction
Target 7.C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation	7.8 Proportion of population using an improved drinking water source
	7.9 Proportion of population using an improved sanitation facility
Target 7.D: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers	7.10 Proportion of urban population living in



slums<sup>13</sup>

**Goal 8: Develop a global partnership for development**

Target 8.A: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system

Includes a commitment to good governance, development and poverty reduction – both nationally and internationally

Target 8.B: Address the special needs of the least developed countries

Includes: tariff and quota free access for the least developed countries' exports; enhanced programme of debt relief for heavily indebted poor countries (HIPC) and cancellation of official bilateral debt; and more generous ODA for countries committed to poverty reduction

Target 8.C: Address the special needs of landlocked developing countries and small island developing States (through the Programme of Action for the Sustainable Development of Small Island Developing States and the outcome of the twenty-second special session of the General Assembly)

Target 8.D: Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term

*Some of the indicators listed below are monitored separately for the least developed countries (LDCs), Africa, landlocked developing countries and small island developing States.*

Official development assistance (ODA)

- 8.1 Net ODA, total and to the least developed countries, as percentage of OECD/DAC donors' gross national income
- 8.2 Proportion of total bilateral, sector-allocable ODA of OECD/DAC donors to basic social services (basic education, primary health care, nutrition, safe water and sanitation)
- 8.3 Proportion of bilateral official development assistance of OECD/DAC donors that is untied
- 8.4 ODA received in landlocked developing countries as a proportion of their gross national incomes
- 8.5 ODA received in small island developing States as a proportion of their gross national incomes

Market access

- 8.6 Proportion of total developed country imports (by value and excluding arms) from developing countries and least developed countries, admitted free of duty
- 8.7 Average tariffs imposed by developed countries on agricultural products and textiles and clothing from developing countries
- 8.8 Agricultural support estimate for OECD countries as a percentage of their gross domestic product
- 8.9 Proportion of ODA provided to help build trade capacity

Debt sustainability

- 8.10 Total number of countries that have reached their HIPC decision points and

<sup>13</sup> The actual proportion of people living in slums is measured by a proxy, represented by the urban population living in households with at least one of the four characteristics: (a) lack of access to improved water supply; (b) lack of access to improved sanitation; (c) overcrowding (3 or more persons per room); and (d) dwellings made of non-durable material.



	number that have reached their HIPC completion points (cumulative)
	8.11 Debt relief committed under HIPC and MDRI Initiatives
	8.12 Debt service as a percentage of exports of goods and services
Target 8.E: In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries	8.13 Proportion of population with access to affordable essential drugs on a sustainable basis
Target 8.F: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications	8.14 Fixed telephone lines per 100 inhabitants
	8.15 Mobile cellular subscriptions per 100 inhabitants
	8.16 Internet users per 100 inhabitants

Source: <http://mdgs.un.org/unsd/mdg/Host.aspx?Content=indicators/officiallist.htm>

### APPENDIX B - COMPLETE LIST OF SEMS INDICATORS

(note: \* designates indicators that are planned for future reports)

<i>Indicator</i>	<i>Critical Indicator (CI)?  Millennium Development Goal Indicator (MDG)?</i>	<i>Source  (survey or agency; for '*' indicators, source is planned future source)</i>
<b>POVERTY</b>		
Proportion of population living on less than \$2.50 a day*		IHSES 2012
Proportion of population living on less than \$1.25 a day*	MDG	IHSES 2012
Poverty gap	MDG	IHSES 2012
Poverty rate	MDG	IHSES 2012
Share in total income (consumption) of the poorest 20% of the population*	MDG	IHSES 2102
Proportion of vulnerable workers (own-account and contributing family workers) in the employed population	MDG	KRLFS2012
Underweight Prevalence (Moderate and severe) among children under 5	MDG	MICS
Underweight Prevalence(Severe) among children under 5		MICS
Stunting Prevalence (Moderate and severe) among children under 5		MICS
Stunting Prevalence(Severe) among children under 5		MICS



<b>EDUCATION</b>		
Net Primary School Enrollment Rate	MDG	MICS 2011
Gross Primary School Completion Rate	MDG	MICS 2011
Net Primary School Completion Rate		MICS 2011
Literacy 15-24 year old males	MDG	KRLFS 2012
Literacy 15-24 year old males	MDG	KRLFS 2012
Number of new schools completed during the year*	CI	Ministry of Education
Number of new teachers trained during the year*	CI	Ministry of Education
Gross student enrollment in secondary education	CI	KRLFS 2012
Net student enrollment in secondary education	CI	KRLFS 2012
Completion rate in secondary education	CI	Ministry of Education
Grade repetition rates*		Ministry of Education
Dropouts*		Ministry of Education
Expenditures on Education*		Ministry of Finance
<b>GENDER</b>		
Gender Parity index for primary school	MDG	MICS 2011
Gender Parity index for secondary school	MDG	MICS 2011
Gender Parity index for tertiary schooling	MDG	KRLFS2012
Proportion of seats held by women in	MDG	Official sources



national parliament		
Proportion of women who are widowed		KRLFS2012
Proportion of families headed by women		KRLFS2012
Young women aged 15-19 who are currently married		MICS
Total Fertility Rate		MICS
<b>HEALTH</b>		
Under-five mortality rate	MDG	MICS
Infant Mortality rate	MDG, CI	MICS
Measles Immunization Coverage at 12 months	MDG	MICS
Tuberculosis Immunization Coverage at 12 months		MICS
DPT Immunization Coverage at 12 months	CI	MICS
Polio Immunization Coverage at 12 months		MICS
Full Immunization Coverage at 12 months		MICS
Births delivered by skilled attendant	MDG	MICS
Contraceptive prevalence	MDG	MICS
Comprehensive knowledge about HIV 15-24 years	MDG	MICS
Maternal mortality ratio*		MOH
Cancer related deaths*		MOH



Tuberculosis Incidence*		MOH
Citizen trust of health services*		IHSES 2012
Proportion of tuberculosis cases detected and cured under DOTS (Directly Observed Treatment Short Course)*		MOH
Number of health centers per 10,000 individuals*	CI	MOH
Number and density of physicians per 10,000 population*	CI	MOH
Number of hospital beds per 10,000 population*	CI	MOH
Percentage of districts meeting standards for number of main public health centers (1 per 10,000 population)*	CI	MOH
Percentage of districts meeting standards for number of branch public health centers (1 per 5,000 population)*	CI	MOH
<b>AGRICULTURE</b>		
Proportion of employees in agricultural activities		KRLFS2012
Land in use for agricultural production	CI	KRSO/Ministry of Agriculture and Water Resources (MOAWR)
Water used for irrigation*	CI	MOAWR
% of agricultural land that is irrigated *		MOAWR
Production of staple crops (wheat, rice)*	CI	MOAWR

Production of high-value crops (grapes, pomegranate)*	CI	MOAWR
Prices and volumes agricultural products (local)*		KRSO
Prices and volumes agricultural products (Imported)*		KRSO
Agricultural income/year*		KRSO
<b>ACCESS TO ESSENTIAL SERVICES, WATER, AND ELECTRICITY</b>		
Proportion of population using solid fuels		MICS
Proportion of population using Improved Sanitation Facility	MDG	MICS
Proportion of population using improved drinking water sources	CI, MDG	MICS
Surface water stocks*	CI	MOAWR
Flows of water from inland water resources to economy*	CI	MOAWR
Losses of water in distribution*	CI	MOAWR
Unit nameplate capacity*	CI	MOAWR
Unit feasible capacity*	CI	MOAWR
Peak demand (load)*	CI	MOAWR



<b>MACROECONOMICS</b>		
Total government expenditures	CI	KRSO
Inflation (Change in Consumer Price Index)	CI	KRSO
Personal expenditures on goods and services*	CI	KRSO
Exports of goods*	CI	Ministry of Trade and Industry, Ministry of Finance
Imports of goods*	CI	Ministry of Trade and Industry, Ministry of Finance
<b>PRIVATE SECTOR</b>		
Share of workers employed in private sector		KRLFS2012
Percentage of workers by economic activity (Agriculture, Services, Industry)	CI	KRLFS2012
Number of enterprises by economic activity*	CI	Ministry of Trade and Industry/ KRSO
Foreign direct investment inflow *	CI	Ministry of Trade and Industry/ KRSO
Fixed investment by firms*	CI	Ministry of Trade and Industry/ KRSO
Mobile phones per 1,000 people*	CI	Ministry of Transport and Communication
Internet users per 100 people*	CI	Ministry of Transport and Communication
<b>LABOR MARKET</b>		
Labor Force Participation Rate for age		KRLFS 2012



15+		
Labor Force Participation Rate for age 15+, males		KRLFS 2012
Labor Force Participation Rate for age 15+, females		KRLFS 2012
Unemployment Rate, age 15+	CI	KRLFS 2012
Unemployment Rate, age 15+, males		KRLFS 2012
Unemployment Rate, age 15+, females		KRLFS 2012
Youth Unemployment Rate (15-24)		KRLFS 2012
Youth Unemployment Rate (15-24), males		KRLFS 2012
Youth Unemployment Rate (15-24), females		KRLFS 2012
Number of paid Employees(thousands)		KRLFS 2012
<b>TOURISM</b>		
Foreign Arrivals, number of visitors (excluding other Arab countries)	CI	Ministry of Municipalities and Tourism / KRSO
Foreign Arrivals, total days visiting (excluding other Arab countries)	CI	Ministry of Municipalities and Tourism / KRSO
Foreign Arrivals, number of visitors - from other Arab countries	CI	Ministry of Municipalities and Tourism / KRSO
Foreign Arrivals, Total days visiting – from other Arab countries	CI	Ministry of Municipalities and Tourism / KRSO
Average expenditure per day*	CI	Ministry of Interior (administrative records) / Ministry of Municipalities and Tourism / KRSO

<b>TRANSPORTATION</b>		
Extent of paved roads, total (kilometers)	CI	Ministry of Housing and Reconstruction(MOHR)/ Ministry of Municipalities and Tourism (MOMT; for urban roads)
Extent of main roads (kilometers)	CI	MOHR/MOMT
Extent of central roads (kilometers)	CI	MOHR/MOMT
Extent of rural roads (kilometers)	CI	MOHR/MOMT
Extent of highways (kilometers)	CI	MOHR/MOMT
Passenger vehicles traveling between major cities*	CI	Ministry of Transportation
Goods transported by road (tons/hour)*	CI	Ministry of Housing and Reconstruction
Injury collisions*	CI	Ministry of Interior/Ministry of Health
<b>GOVERNANCE</b>		
Code of conduct implemented (de jure)*	CI	Office of Governance and Integrity
Public access to laws*	CI	Office of Governance and Integrity
Public access to regulations*	CI	Office of Governance and Integrity
Time to start a business (domestic enterprise)*	CI	KRSO

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