المعهد الدبلوماسي
Diplomatic Institute

جهاز الإحصاء
STATISTICS AUTHORITY

Sustainable Development Indicators in the State of Qatar

2011

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Introduction

It is the pleasure of Qatar Statistics Authority (QSA) and the Diplomatic Institute at the Ministry of Foreign Affairs the Permanent Population Committee (PPC) to introduce the third volume of the annual report of the State of Qatar, entitled "Sustainable Development Indicators in the State of Qatar".

This report comes within the framework of achieving the objectives of Qatar vision 2030 and the National Development Strategy 2011-2016, which visualize the development horizons in the State of Qatar, within the axes of social, human, economic and environment development, where they call for balance between the available resources and development options to achieve sustainability.

The report aims at reviewing and assessing the progress achieved by the State of Qatar in utilizing the available resources in sustainable manner, through social, demographic, economic and environment indicators, which shed light on these issues, what was achieved by Qatar when compared with developed and developing countries, and future horizons.

Each indicator mentioned in this report comprises a definition, progress achieved and growth rate, in addition to comparison with regional and international similar indicator, and visualize its future horizons through following-up its progress during (2001-2010), in accordance with the available data.

We avail the opportunity of releasing the third volume to extend our thanks to the team who developed it, for their ongoing devotion and their valuable contributions. We, as well, extend our thanks to relevant ministries and authorities which made some data available.

Hamad bin Jabor bin Jassim Al Thani
President, Qatar Statistics Authority

Dr. Hassan bin Ibrahim Al Mohannadi
Director of the Diplomatic Institute

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Chapter One

Demographic and Social Indicators

Demographic and Social Indicators

Foreword :

The importance of this chapter embeds in shedding light on a group of demographic and social indicators, which measure the progress achieved in the State of Qatar during (2001-2010, and occasionally 2011), in terms of finding a qualitative social environment that enables people to enjoy a healthy life, gain knowledge and live in dignity.

As any other sustainable development indicators, demographic and social indicators do not only contribute to monitoring the progress achieved by social policies towards achieving its goals and recognizing the success accomplished to rise quality of life and prosperity of the society, it also shed light on weakness and problems raised by implementing demographic policies. They also provide the decision maker with comprehensive and integral information about the current situation of the developmental status. They work as guideline for the decision makers in defining the targets and priorities of development plans. They also work as early warning for implementing any development plan or strategy, and through them citizen awareness could rise regarding the reality about sustainable development in the country. This chapter deals with the following indicators :

- Unemployment rate.
- Percentage of average female wages to male wages.
- Under-five mortality rate.
- Life expectancy at birth.
- Proportion of population using improved sanitation facilities.
- Proportion of population using an improved water source
- Population growth rate (urban and rural).
- Total fertility rate.
- Dependency ratio.
- Percentage of Population with Access to Primary Health Care Facilities.
- Percentage of newborns with low birth weight.
- Immunization against childhood infectious diseases.
- Gross Intake Ratio to Last Grade of Primary Education.
- Adult Secondary (Tertiary) Schooling Attainment Level.
- Adult literacy rate.
- Number of crimes per 100,000 populations.

1) Unemployment rate

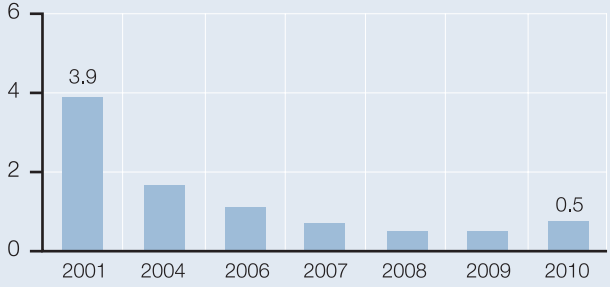
Definition :

It is the number of persons able to, willing to and looking for work in vain. It is expressed as percentage of the total labor force.

Assessment :

Unemployment rates witnessed a remarkable decline, approached (8) folds within nine years. This rate amounted to (%3.9) in 2001, and retreated to (%0.5) in 2010, i.e. a decline rate of (%22.8) per year. The key reason behind this dramatic decline is the sound economic and social changes witnessed by the State of Qatar, represented in a comprehensive revival in all aspects of life, especially in oil and gas industries and construction. This generated new job opportunities and enabled Qatari labor market to occupy huge numbers of newcomers to labor market, especially expatriates. In addition to that, Labor Ministry program of employing Qataris, which commenced at the end of 2007, played a key role in raising the levels of the economically active population participation rate in total labor force, eventually decrease unemployment rates to its minimum.

Graph No. (1) : Unemployment rate (2001-2010)



Source : This indicator was calculated using the following data :
- QSA, Labor force sample survey, several volumes.
- QSA, results of 2010 population, housing and establishments survey.

Where we are ?

Unemployment rate is considered low, when compared to similar rate in developed countries (%9) and developing countries (%16.1).

Source : UNDP, Human Development Report, 2010.

The future :

Due to the honor granted to Qatar in hosting 2022 world cup, it is expected that unemployment rate to decline, where the next decade requires more labor force to participate in completing the infrastructure and mega projects relevant to this event. In addition to that, it is anticipated that Qatarization policy adopted by the government will widely open the door for women and youth in employment, which will contribute in decreasing unemployment among nationals.

2) Percentage of average female wages to male wages

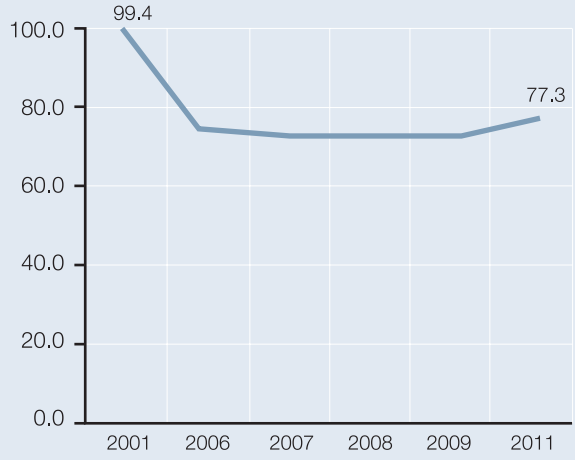
Definition :

Percentage of average cash wage earned by females to average cash wage earned by males.

Assessment :

The gender gap witnessed an essential increase during one decade, where it increased from (%0.6) in 2001 to (%22.7) in 2011 in favor of males, i.e. an annual increase of about (%43.8) per annum. The accurate reasons behind this gender gap are due to the fact that females cease work more than males, who work for more hours, especially expatriates. In addition social allowances are afforded to the male, because he is the main responsible person in the household regarding expenditures, while females receive less amount of these allowances. Moreover, woman empowerment policies could be incapable, to some extent, to direct females toward new specializations required in the labor market, e.g. information technology, business management, private enterprises… etc., which have more revenue and high income generating efficient enough to bridge the gender gap between males and females in terms of average wages.

Graph No. (2) : Percentage of average female wages to male wages 2001-2011)



Source : The indicator was calculated using QSA data, labor force sample survey, and several volumes.

Where we are ?

Despite the increase in gender gap and difficulties in conducting accurate comparisons, the State of Qatar is considered a leading country, capable of achieving justice and equality between males and females in terms of average wage.

The future :

It is expected that the relative difference in average wage of females and males will retreat, due to increase participation of educated and qualified women in high wages work fields. In addition to that, the measures and procedures taken by the State, which allow the women to obtain a profitable work matches her household status and high educational qualifications.

3) Under-five mortality rate

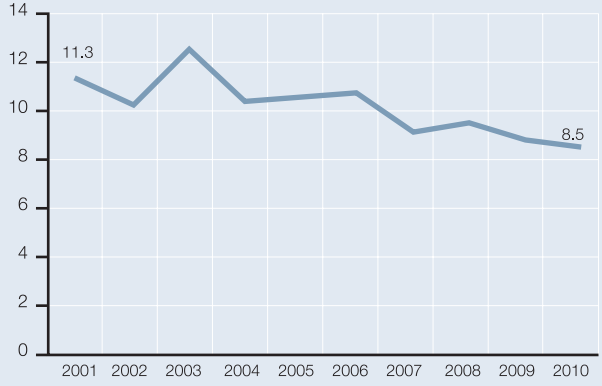
Definition :

Number of children (below 5 years of age) deaths per one thousand live births, i.e. probability of death during the period between birth and age five.

Assessment :

Despite its fluctuation, children (below 5 years of age) death rate witnessed an essential decline, where it was (11.3) per thousand in 2001, it declined to (8.5) per thousand, i.e. an annual retreat rate of (3.1-) per thousand. The main reason for this decline in children (below 5 years of age) death rate, due to the active social, economic and health policies pursued by the State, especially in the last few years, which contributed in providing different basic health needs for all social sects, especially more vulnerable persons, e.g. children, through expansion in constructing child care centers, immunization campaigns against epidemic diseases and implementing school health programs. In this context, the path of children (below 5 years of age) death rate is a witness of the continuity and accessibility all aspects of children health care during their first stages of growth during the last few years. In connection with that, the political and governmental commitment to the Millennium Development Goals played a key role in decreasing children deaths and diseases, until it approached the international rates of the developed countries.

Graph No. (3) : Under-five mortality rate (2001-2011)



Source : The indicator was calculated using QSA data, vital statistics bulletin (births and deaths), and several volumes.

Where we are ?

Qatar is approaching the developed countries level, where the children (below 5 years of age) death rate amounted to (7) per thousand, whereas in developing countries amounted to (63) per thousand and in the least developing countries it was (110) per thousand.

Source : WHO, Levels & Trends in Child Mortality, Report 2011

The future :

Due to the pursuance of child and mother care policy by the State and the increase of preventive health awareness within a wide sects of the society, it is anticipated that children (below 5 years of age) death to decline more, and approach the Millennium Development Goals in 2015.

4) Life expectancy at birth

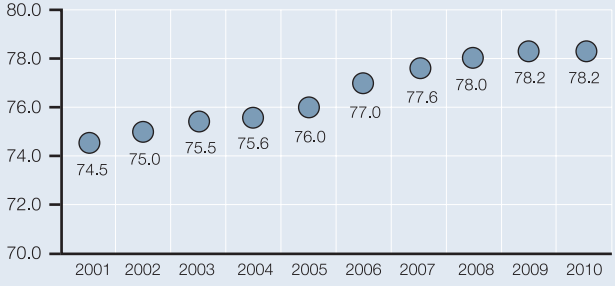
Definition :

Number of years expected to live by males and females at birth.

Assessment :

The life expectancy at birth witnessed a gradual increase, it was (74.5) years in 2001, increased to (78.2) years in 2010, i.e. an annual increase of (0.4) year. The increase in the value of this indicator expresses the large development in the standard of living of the population. In 2010 Qatar was the leader among the richest countries in the world, in terms of per capita share of Gross Domestic Product, and the list of the countries with a very low unemployment rate. These, among other facts related to the high standard of living, were reflected on the health status of nationals and expatriates. Accordingly, child and maternity deaths declined, as well as deaths in general, and health status improved in the State as a whole. This explains the increase in life expectancy at birth.

Graph No. (4) : Life expectancy at birth (2001-2010)



Source : The indicator was calculated using QSA data, vital statistics bulletin (births and deaths), and several volumes.

Where we are ?

The State is approaching the developed countries level concerning age indicator (80.3) years, where it did not exceed (69.3) years in the middle developing countries.

Source : United Nation Development Program, Human Development Report, 2010.

The future :

It is expected that life expectancy at birth will increase in the coming years. The scenarios developed for population projections are projecting that it will approach (81.5) years in 2030, due to the increased attention of the State for health, social status and increase of health awareness among the society.

5) Proportion of population using improved sanitation facilities

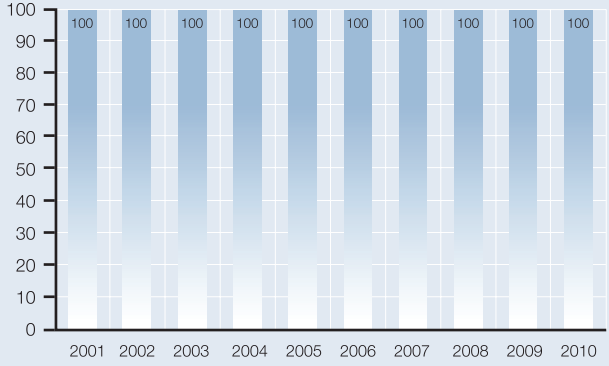
Definition :

The percentage of population with access to sanitary services for immediate disposal of human wastes.

Assessment :

The indicator of sanitation facilities witnessed stability since 2001 until date, where it approached (%100). The issue of insuring sufficient sanitation facilities was one of the successes achieved by the State, despite the challenges that Qatar faced, namely the population continuous boom, inflation and convergence of population settlements in major cities, especially Doha, parallel increase of economic and services activities, and eventually increase of sanitation output and increase of environmental pressures. This success could be attributed to the general policy of the State, represented in working on ensuring the environment sustainability, which aims at achieving descent life standards for the population, through a chain of measures, headed by huge investments in sanitation infrastructure, ensuring that dwellings fulfilled sanitary conditions in general, and sanitation in particular. It is evident that sufficient sanitation does not protect the population from the hazards of contamination of human physiological origin only; it also protects them from other contaminations of domestic origin, road origin (rain drainage), industrial, craftsmanship and diversified services.

Graph No. (5) : Proportion of population using improved sanitation facilities. (2001-2010)



Source : The indicator was calculated using QSA data, annual abstract of statistics, and several volumes.

Where we are ?

Qatar surpassed the European countries, where the percentage of population with sufficient sanitation facilities is (%94), while it did not exceed (%40) in Southeast Asia and African countries (%34).

Source : World Health Organization, world health statistics, 2010.

The future :

It is expected that the Qatar will maintain providing sanitary facilities in (%100) level, yet develop this service, due to the huge investments allocated for changing the depreciated sanitation network and installing new ones in all cities and villages.

6) Proportion of population using an improved water source

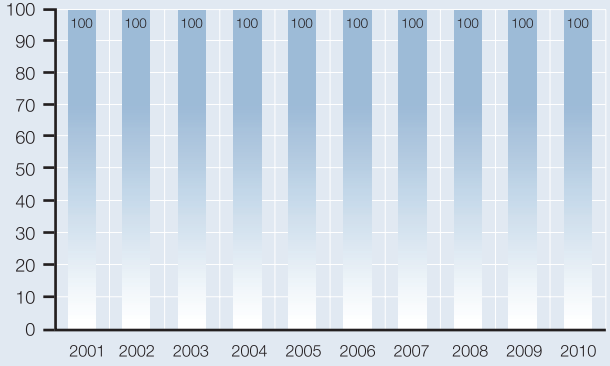
Definition :

The percentage of population with access to sufficient amount of safe water (20 liters per person/day) of the total population.

Assessment :

The indicator of availability of safe water witnessed stability, where It approached (%100) since 2001. Thereby the State achieved the second target of the seventh development objective of the Millennium Development Goals (security of environment sustainability). The achievement of this percentage is not attributed to the availability of sufficient fresh water sources in the State, where it is evident that these sources are very scarce, but it is attributed to the great efforts spared for the desalination of salty and semi-salty water through utilization of desalination technology, encouraging researches and investments in water projects to protect the existing sources and finding unconventional sources and developing its use and management with optimum capacity in accordance with local and international standards and specifications, to achieve water security as a target of Qatar National Vision 2030. In connection, Qatar General Electricity and Water Corporation "KAHRAMAA" continuously upgrades and develops water networks and services and provide safe and permanent drinking water through implementing strict monitoring programs.

Graph No. (6) : Proportion of population using an improved water source (2001-2010)



Source : The indicator was calculated using QSA data, annual abstract of statistics, and several volumes.

Where we are ?

Qatar leads the world, including the developed countries, i.e. European countries where the percentage approached (%98), while in Southeast Asia it did not exceed (%86) and African countries (%61).

Source : World Health Organization, world health statistics, 2010.

The future :

It is expected that the State will maintain safe drinking water to the population in (%100) level, where new desalination stations were established, additions were made to existing stations, expanding the existing water networks to accompany the constructional expansion and provide new areas with fresh drinking water through the network that is being constructed according to state of the art international and technical specifications.

7) Population growth rate (urban and rural)

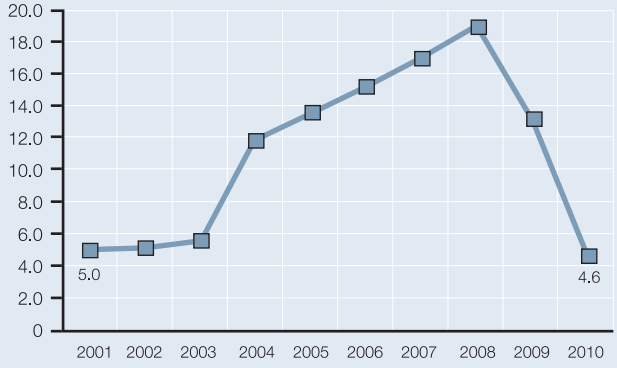
Definition :

Annual increase or decrease in population size within a specific time interval, it expressed as percentage of population at the beginning of the period.

Assessment :

The growth rate witnessed fluctuation during the last ten years. It increased with unprecedented manner in 2008, where it approached (%18.9), i.e. four-folds the rate of 2001, it declined dramatically in 2010 to (%4.6), i.e. a retreat rate of more than (%7) per annum. The actual reason for this huge increase in growth rate in 2008 dues to the economic boom witnessed by the State, which required bringing along great numbers of foreign employment to work in gas, oil and construction projects, along with other mega development projects, which require a high number of employment. The small size of nationals, which results in shortage in human resources, will ultimately lead to bring along expatriate employment to complete the productive and services projects that are increasing and diversifying with the increase of oil and gas production and revenue. It was all changed at the beginning of 2009, and as mentioned above, the growth rate declined dramatically, which could be explained as follow, first, completion of oil and gas projects and infrastructure and retreat of demand for expatriate employment, second, the international financial crisis, which affected in one way or another the real estate market and related projects all over the world, including Qatar.

Graph No. (7) : Population growth rate (2001-2010)



Source : The indicator was calculated using QSA data, annual abstract of statistics, and several volumes.

Where we are ?

Qatar's population growth rate is considered the highest in the world, where it did not exceed (%0.5) in developed countries and (%1.1) in developing countries.

Source : United Nation Development Program, Human Development Report, 2010.

The future :

It is anticipated that the growth rate in the State of Qatar will tend to increase again in the coming years. The population projections and predictions related to hosting 2022 world cup, indicate the possibility of increasing the population growth rate in an unprecedented manner, due to the increasing demand for expatriate employment in all aspects, especially in construction.

8) Total fertility rate

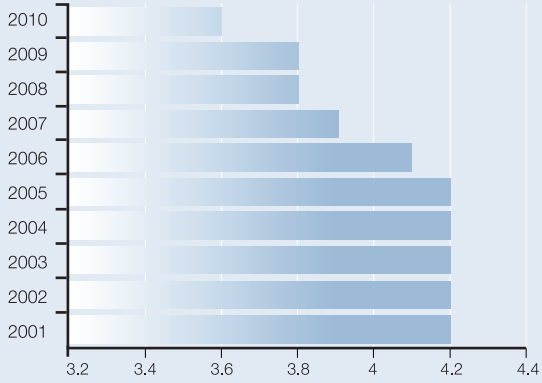
Definition :

It is the average number of children that would be born to a woman over her natural productive span, if she experiences the exact age-specific fertility rates in a specific year throughout her lifetime, with the absence of deaths.

Assessment :

The total fertility rate for Qatari females witnessed stability during 2001-2005, where it remained around (4.2) live birth per woman in childbearing age, then it declined slowly since 2006 to (3.6) in 2010, i.e. an amount of retreat of (0.6) through one decade. The reasons for that decline in total fertility rate for Qatari females is attributed the great and fast development witnessed by the Qatari society regarding urbanization, including education, work and modern life patterns, in addition to the use of fertility control, spacing between pregnancies and prolonged breastfeeding. Despite all that, the total fertility rate for Qatari females remains one of the highest in the world. This is attributed to the culture of society, which is still conventional, in spite of modernization, regarding fertility behavior, in addition to that, the State urges its nationals for more reproduction, in order to correct the defect in population structure, which was confirmed by the population policy, which was in effect in October 2009.

Graph No. (8) : Total fertility rate (2001-2010)



Source : The indicator was calculated using QSA data, vital statistics bulletin (births and deaths), and several volumes.

Where we are ?

The total fertility rate is considered relatively high when compared to other countries, where it was (1.8) in developed countries and (2.7) in developing countries.

Source : United Nation Development Program, Human Development Report, 2010.

The future :

Despite all measures and calls that aim to preserve a high total fertility rate, it is anticipated that this rate will decline increasingly, due to the rapid and huge developments that Qatari society witnesses in terms of urbanization, including education, work and modern life patterns, which lead to the increase of average age at first marriage, as well as tendency of educated women to family planning.

9) Dependency ratio

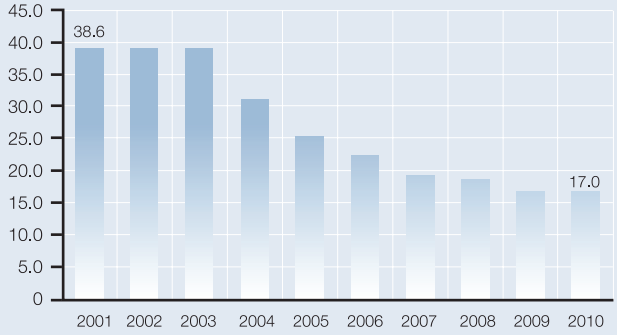
Definition :

Percentage of population less than 15 years of age and more than 65 years to the number of population in working age (15-64) years.

Assessment :

Age dependency ratio declined from (%38.6) in 2001 to (%17) in 2010, i.e. a retreat of (%2.4) per annum. The key reason behind this decline is not attributed to fertility rates decline, but mainly to the great economic boom which was witnessed, and still witnessing, by the State, which requires bringing along a large number of expatriate employment, of young ages and capable of work. This demographic status in Qatar led to a dramatic decline in the percentage of children (less than 15 years) and a limited growth of elderly people (65 years and more), in exchange, increase of population in the age group (15-64) years, and ultimately, growth of economically active population in a greater rate than other depending child and elderly ages, which results in decline in dependency burdens. This contributes to new opportunities of saving and investment, link consumption with household life quality and emergence of development opportunity, which is called the “demographic window”, or metaphorically the “demographic gift”.

Graph No. (9) : Dependency ratio (2001-2010)



Source : The indicator was calculated using QSA data, annual abstract of statistics, and several volumes.

Where we are ?

The total dependency ratio is considered low when compared with developed countries (%49.4) and developing countries (%49.5).

Source : United Nation Development Program, Human Development Report, 2010.

The future :

It is expected that this indicator will witness another decline in the next few years, due to the increase of expatriate employment aged (15-64) years, which is expected to arrive during the second decade of this century, to contribute to the completion of the infrastructure and mega projects of 2022 world cup.

10) Percentage of Population with Access to Primary Health Care Facilities

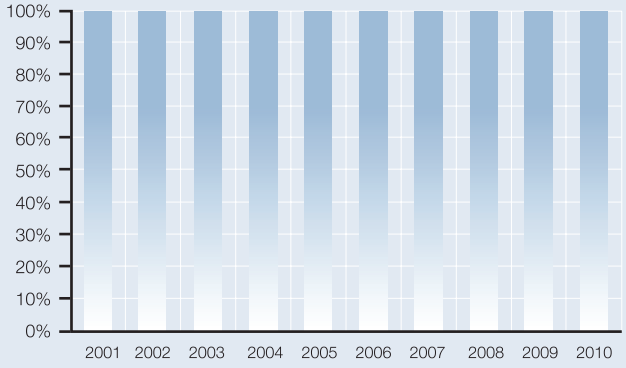
Definition :

Percentage of urban and rural population who are expected to obtain medical treatment of different diseases proportionate to total population.

Assessment :

Percentage of Population with Access to Primary Health Care Facilities approached full coverage (%100) since the beginning of the millennium. This contributed to eradication of many diseases, e.g. polio, neo-natal tetanus, diphtheria, tetanus, whooping cough… etc., where it all almost disappeared from the State. The main reason for the coverage of primary health care for all population in relatively early time could be referred to realization of the State at the beginning of second half of last century, date of establishing the health system, the importance of accompanying health to the increasing population. It worked on constructing modern specialized hospitals and releasing comprehensive and high quality medical and health services, whether preventive or curative, to ensure the highest target of the State "health for all".

Graph No. (10) : Percentage of Population with Access to Primary Health Care Facilities (2001-2011)



Source : The indicator was calculated using QSA data, annual abstract of statistics, and several volumes.

Where we are ?

Despite the difficulty of making international comparisons, the State of Qatar is considered one of the countries that achieved the full coverage in primary health care for its people.

The future :

It is expected that the State will continue to preserve its rank among the countries that achieved full coverage in primary health care, due to the increasing interest of the State in health sector, whether the infrastructure or quality of services presented to the population. This was confirmed in Qatar National Strategy regarding development of health care 2011-2016, which was inaugurated in 3 April 2011, which include the necessary policies, plans and programs for continuous progress of health sector.

11) Percentage of newborns with low birth weight

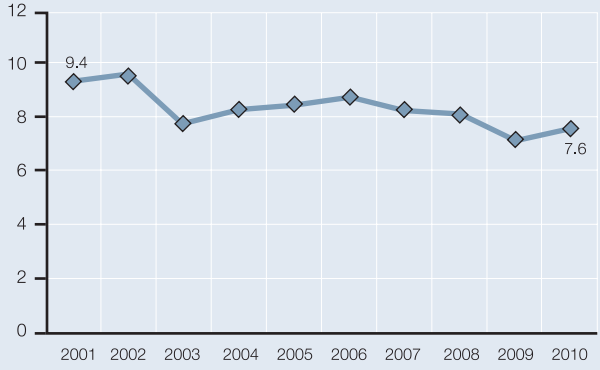
Definition :

Percentage of live births less than 2.5 kg., in a specific year, to the total number of live births in the same year.

Assessment :

The Percentage of newborns with low birth weight witnessed fluctuation; nevertheless, the general trend tends to decline. The percentage approached (%9.4) in 2001, retreated to (%7.6) in 2010, with slight annual decline (%0.2). The main reason of this relative decline could be attributed to the good health care presented to mothers before and after birth and households' good care of its members. The percentage of newborns with low birth rate is one of the indicators that reveal the nature of nutrition composition and levels and the progress of health care in the country. Hence, it is not strange that value of this indicator is declining in a country like Qatar, where households have high income enabling them to spend on major goods of food and beverages. Equally, Qatar has an advanced health system and medical services, capable of presenting best care services to the mother and newborn.

Graph No. (11) : Percentage of newborns with low birth weight (2001-2010)



Source : The indicator was calculated using QSA data, vital statistics bulletin (births and deaths), and several volumes.

Where we are ?

The State of Qatar is considered, to some extent, among the advanced countries, regarding this indicator, where the percentage in European countries reached (%6) and in Southeast Asia (%24).

Source : World Health Organization, world health statistics, 2010.

The future :

It is expected that the State of Qatar will witness a decline in Percentage of newborns with low birth weight, due to health awareness campaigns, building childhood medical organizations and authorities that are deployed all around the State, for children survival, safety and growth, in addition to other measures taken to achieve safe motherhood, represented by care for pregnant mother by experienced gynecologist.

12) Immunization against childhood infectious diseases

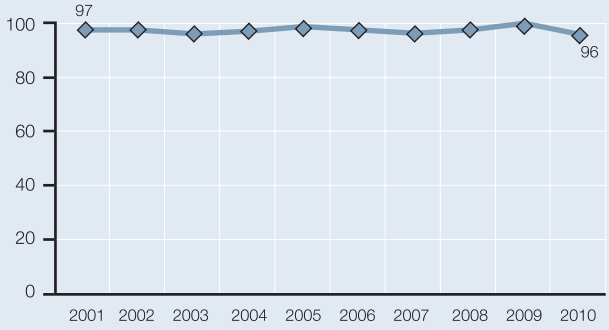
Definition :

Number of children below one year of age, who completed the basic health immunizations within a certain period divided by number of live births below one year of age, multiplied by 100.

Assessment :

Despite its slight fluctuation every year, the percentage of immunization against infectious diseases – tuberculosis (B. C. G.), polio drops (third dose), ternary (third dose), hepatitis (B), measles, parotitis, German measles (third dose), hemophillus flu (third dose), chicken pox – is considered high, It has not gotten below (%96) for about one decade. The increase of this percentage is attributed to the early attention of the State in providing all necessary basic health needs for all social sects, especially the most vulnerable, e.g. children, through the national immunization program and integrated child health. In addition to that, awareness of parents and their observance for immunizing their children against infectious diseases, played great role in enhancing infants' health. In the same context, the political and governmental commitment in achieving the Millennium Development Goals in reducing child mortality, and limitation of infectious diseases, contributed to the reduction of children mortality, as indicated by official statistical data.

Graph No. (12) : Immunization against childhood infectious diseases (2001-2010)



Source : The indicator was calculated using QSA data, vital statistics bulletin (births and deaths), and several volumes.

Where we are ?

The State of Qatar is the leader in this indicator, whether on the global level, where immunization against measles has not exceed (%82), or on country level, where the percentage in European countries is (%94), Middle East countries (%82) and in African countries (%69).

Source : WHO, World Health Statistics, 2011

The future :

It is expected that the percentage of immunization against infectious diseases in the State to approach full coverage, to settle at (%100), as a result of increasing progress in presenting health services and its coverage on one hand; and the strict measures taken to prevent transfer of infectious diseases into the State on the other hand. Despite the increase of population, nationals and expatriates, it is expected that Qatar will be free of infectious diseases, e.g. measles, German measles, parotitis and whooping cough, just like polio.

13) Gross Intake Ratio to Last Grade of Primary Education

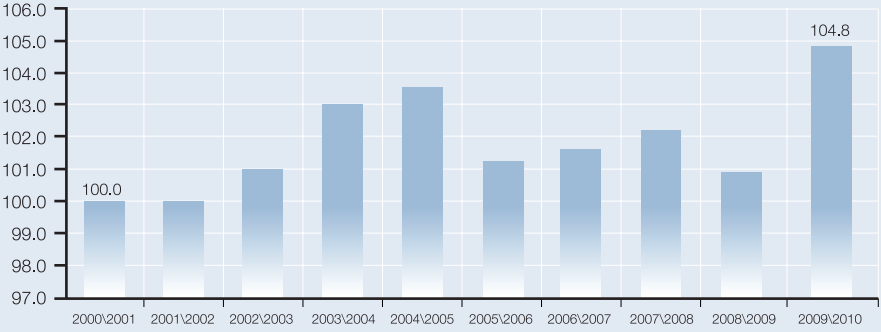
Definition :

Number of registered pupils in the final stage of primary education divided by total population aged 11 years, multiplied by 100.

Assessment :

The Gross Intake Ratio to Last Grade of Primary Education witnessed fluctuation, however, it exceeded (%100) to reach (%104.8) in 2009-2010. The reason for increase of Gross enrollment rate in the final stage of primary education is attributed to the State's directives and investments in education, which lead to ensuring that children living on its soil, regardless of their nationality and sex, are capable of enrolling in the first grade and continue to the sixth grade of primary education. This indicates the health and activity of the educational system. In connection, the effective implementation of compulsory education on one hand, and increase of awareness of education importance and its positive impact on the individual and society on the other hand, contributed to eradication of drop-out, and eventually, increase of Gross enrollment rate in the final stage of primary education. Regarding the slight decline in this indicator in 2006 when compared to 2005, it is attributed to enrollment of some pupils in early age (five years).

Graph No. (13) : Gross Intake Ratio to Last Grade of Primary Education (2001-2010)



Source : The indicator was calculated using QSA data, the annual statistical report of the Ministry of Education, and several volumes.

Where we are ?

Despite the difficulty of making international comparisons, the State is considered as one of the developed countries in education coverage.

The future :

It is expected that the Gross intake ratio to Last Grade of primary education will remain high, due to the measures implemented by the competent authorities of the State, to ensure continuous enrollment in education, represented in allocation of necessary budgets, providing places for the increasing number of pupils, strict implementation of compulsory education and eradication of drop-out in all possible means.

14) Adult Secondary (Tertiary) Schooling Attainment Level

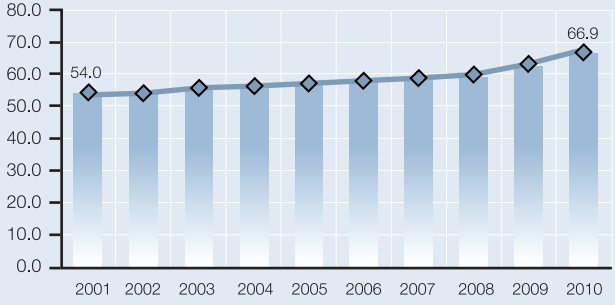
Definition :

Percentage of population in age group (25-64) who obtained secondary degree proportionate to total population in the same age group, multiplied by 100.

Assessment :

The Percentage of adults who obtained secondary degree increased from (%54) of total population in 2001 to (%66.9) in 2010, i.e. an annual increase of (%1.4) per annum. This increase is attributed to adherence of the State to develop education as the most important tool for making civilized, economic, cultural and social development; on one side it represents an important aspect of human development and its main objective, on the other side, it represents an investment in human capital, which is the most important and promoted investment. Ultimately, the human being is the genuine fortune of nations because the civilizational development of societies is not measured with material accomplishment and financial wealth, but most importantly through scientific achievements, knowledge, and the impact of education in developing human capabilities, skills, mental and creativity. In addition to that, the social awareness of the importance of education and its role in human development, played a significant role in creating a supporting and encouraging environment for both sexes to enroll in different educational stages, and obtain the educational qualifications, including secondary degree, which is considered a measure for accumulative attainment of the educational process during the last decades, as reflected in the population spectrum in age 25 and 64 years.

Graph No. (14) : Adult Secondary (Tertiary) Schooling Attainment Level (2001-2010)



Source : The indicator was calculated using QSA data, 2004 population census and labor force sample survey, and several volumes.

Where we are ?

The percentage of persons who obtained secondary degree is considered reasonable, where it is less than the similar percentage in developed countries (%70.3).

Source : Education at a Glance 2010: OECD Indicators

The future :

It is expected that the percentage of persons who obtained secondary degree will increase, due to the educational policy implemented by the State, which considers its real and permanent wealth is in the ideal investment in its human resources. Accordingly, the State spares no effort to develop education in all stages, and increase expenditure on education on one hand, and taking necessary measures to eradicate drop-out in secondary stage, especially among males, where some prefer to join the labor market before completing secondary education on the other hand.

15) Adult literacy rate

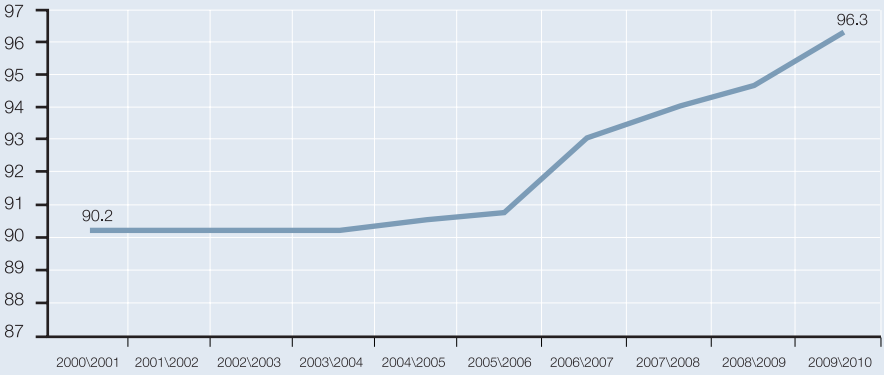
Definition :

Percentage of population aged 15 years and above who are able to read and write.

Assessment :

The adult literacy rate witnessed an increase in general, and during the last two years in particular. It increased from (%90.2) in 2001 to (%96.3) in 2010, i.e. an annual increase of (%0.7). The credit for this increase is to be awarded to the package of measures implemented by the State to control illiteracy, e.g. compulsory education in Qatar and illiteracy eradication programs. If the education system had succeeded in Qatar in expanding the educational map to cover all the country and achieving high standards in all educational stages, it succeeded as well in allowing the opportunity to the adults of both sexes to enroll in illiteracy eradication classes, according to an ambitious and well designed plan to free nationals, who missed the basic and systematic education, from their illiteracy, and raise them to the required level, which enables them to continue their education and develop their skills, to become useful members of society, and participate actively in the development and progress path of Qatar. In this context, an important factor should not be forgotten, which is the role of increase of public awareness of the importance of education and being necessary for both sexes in the issue of literacy, and even continue, whoever desires, to advance further.

Graph No. (15) : Adult literacy rate (2001-2010)



Source : The indicator was calculated using QSA data, annual abstract of statistics, and several volumes.

Where we are ?

The State of Qatar is somewhat considered one the advanced countries, where this indicator approached (%100) in the developed countries, (%80) in the middle developed countries and (%63) in the least developing countries.

Source : WHO, World Health Statistics, Demographic and socioeconomic statistics, 2011

The future :

It is anticipated that this indicator will increase, thanks to the measures implemented by the State of Qatar within the framework of its educational policy emerging from the importance of education in the advancement of nations and investment human sources as an important element to launch toward the horizons of knowledge and sustainable development society, which aims at eradicating illiteracy uprooting it from the roots, and linking literacy to vocational training and vital aspects of students to provide them with life skills and educational qualifications, which qualify them to go forward in their working life.

16) Number of crimes per 100,000 populations

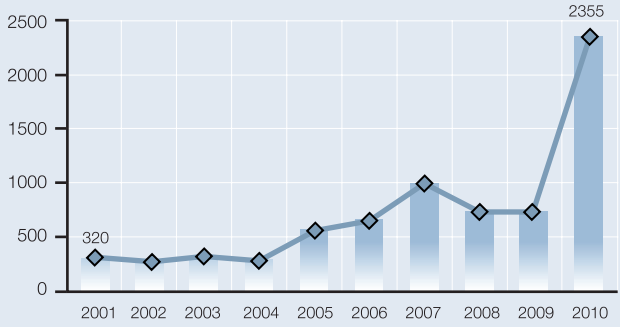
Definition :

Number of crimes registered annually by security forces multiplied by 100.000, divided by the midyear population.

Assessment :

Despite the low number of crimes registered in the State (traffic, theft, assault, fraud… etc.) when compared with other countries, however, the number had doubled more than seven times with one decade. It increased from (320) crime per 100.000 population in 2001, to (2355) crime in 2010. It is difficult to explain the increase in crime rate in Qatar as domestic reasons discharged by the Qatari society, which until recently, enjoying a high level of social security and rareness of crimes. The real and more rational explanation for the increase of crime rates in Qatar is attributed the great openness witnessed by the State, which was accompanied by arrival of numerous number of people from all over the world, in addition to the development occurred to the techniques followed by criminals, which are extrinsic crimes and deeds, that were not common or known previously by the Qatari society.

Graph No. (16) : Number of crimes per 100,000 populations (2001-2010)



Source : The indicator was calculated using QSA data, annual abstract of statistics, several volumes.

Where we are ?

Despite the hardship of making international comparisons, however, the State is considered one of the lowest regarding registered crime.

The future :

Because the State has become one of the most attracting to expatriate workers, who are flowing in huge numbers, and crimes are higher than any previous period committed by latest technological means, it is more likely that crime rates will continue to increase, especially after winning the bid to host 2022 world cup, which requires bringing along more labor force in all fields.

2

Chapter Two

The Economic Indicators

The Economic Indicators

Foreword :

This chapter deals with the economic aspects of the sustainable development indicators. It aims to display the progress in economic sectors in the shape of indicators during (2001-2010), according to availability, or for the closest years.

The economic indicators contribute in showing the actual progress of the State of Qatar in different economic aspects, they assess mainly, the State's status through numeric standards that could be calculated and compared with other countries. They contribute in providing a clear image of the status-quo and points of weakness and strength in economic development. They also expose the progress or retreat in implementing macro economic policies.

This chapter deals with the following indicators :

- Gross Domestic Product Per Capita
- Percentage of Investment to Gross Domestic Product.
- Inflation Rate.
- Employment Rate.
- Crude Activity Rate by Sex.
- Fixed Telephone Lines per 100 of Population
- Mobile Cellular Lines per 100 of Population.
- Number of Internet Users per 100 of Population.
- Number of Personal Computers per 100 of Population.
- Current Account as Percentage of the Gross Domestic Product.
- Exports and Imports as Percentage of the Gross Domestic Product.
- Official Development Assistance Given as Percentage of the Gross Domestic Product.
- Remittances as Percentage of the Gross Domestic Product.
- Foreign Direct Investment Inflow as Percentage of the Gross Domestic Product.
- Foreign Direct Investment Outflow as Percentage of the Gross Domestic Product.
- Energy Use
- Generation of Hazardous Waste.
- Wastes Recycling.

1) Gross Domestic Product Per Capita

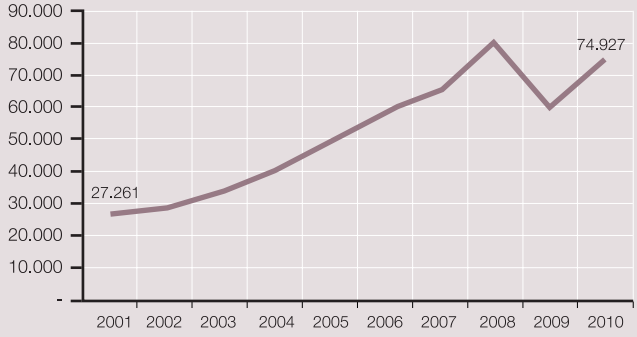
Definition :

The gross domestic product at current prices divided by the total number of population. This indicator is considered an important measure for the level of economic development and the overall performance of the economy.

Assessment :

The per capita share of gross domestic product witnessed a remarkable development during the period under study (2001-2010). It increased from about (US$ 27.3) thousands in 2001 to (US$ 74.9) thousands in 2010, achieving an annul growth rate of (%11.9) in current prices. This progress is attributed the remarkable increase witnessed by the gross domestic product, that was resulted from the huge increase in production of oil sector, supported by increase in oil prices. It increased from about (63.8) billion Qatari Riyals in 2001 to about (463.5) billion Qatari Riyals in 2010, with an annual growth rate of (%24.6) during that period.

Graph No. (17) : Gross Domestic Product Per Capita during (2001-2010) US$



Source : The indicator was calculated using :
- QSA, Annual Statistical Abstract, Several Volumes.
- Qatar Central Bank, Quarterly Statistical Bulletin, volume (31), No. (2), June 2011.

Where we are ?

Qatar is classified, in the international organizations reports, within the countries of high income, where gross domestic product per capita, amounting to (US$ 74.9) thousands in 2010, where the similar share in developed counties was (US$ 37) thousands.

Source : United Nation Development Program, Human Development Report, 2010.

The future :

It is expected that gross domestic product per capita will increase within the next few years, as a result of the economic growth from the revenues of liquefied gas projects and petrochemical industries. In addition to that, increase of revenues from the State's investments abroad in different activities and investment assets (the external assets of Qatar investment authority is estimated to be about (US$ 120) billions in 2011).

2) Investment share in Gross Domestic Product

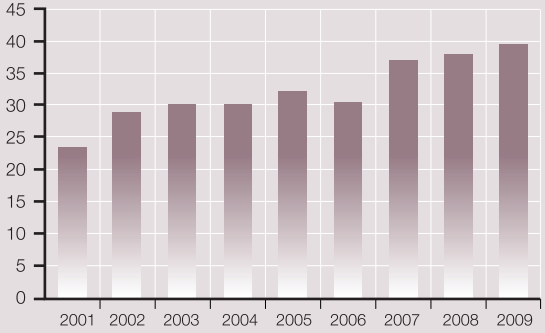
Definition :

Total capital formation in a specific year divided by the gross domestic product. This indicator helps in measuring capital growth, development of capital accumulation in the national economy available for financing economic development and an important element of the sustainable development process.

Assessment :

The Percentage of investment to gross domestic product witnessed a noticeable increase during the period under study, it raised from (%23.4) in 2001 to (%37.6) in 2008, then to (%39.6) in 2009, achieving an average annual growth rate of (%6.8). This increase is attributed to the huge investments witnessed by infrastructure projects, e.g. roads, constructions, the first stage of Doha international airport, communications, electricity, water, drainage and investment in some vital sectors, e.g. oil and gas during that period.

Graph No. (18) : Percentage of Investment to Gross Domestic Product (2001-2009)



Source : The indicator was calculated using :
- QSA, Annual Statistical Abstract, Several Volumes.
- Gulf Organization for Industrial Consulting, Gulf statistical Profile.
- Qatar Central Bank, Quarterly Statistical Bulletin, Several Issues.

Where we are ?

The percentage of investment to gross domestic product in Qatar, which was amounting to (%39.6) in 2009, surpasses the similar in developed countries (%21.0), and the global level (%23.9).

Source: International Monetary Fund, World Economic Outlook, April 2010.

The future :

It is expected that percentage of investment to gross domestic product will continue to rise, as a result of executing many investment projects by the State in all sectors, on top of them, Mushaireb project, Doha port, The Bridge connecting the State with Kingdom of Bahrain, rail road projects, sports projects, roads, projects related to oil and gas and others.

3) Inflation Rate

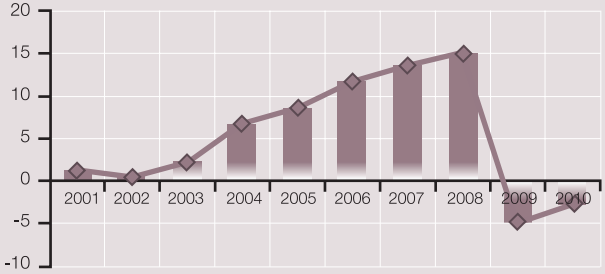
Definition :

Average annual increase in the consumer price index of goods and services. It is considered one of the most important measures for macro economy and economic stability; it is as well, one of the indicators that are followed-up by monetary policies, and one of the factors affecting investment climate and income distribution.

Assessment :

The inflation rate witnessed a reasonable increase during the period (2001-2003), however, it escalated during the period (2004-2008), where it raised from (%6.8) in 2004 to (%15.2) in 2008, achieving an increase of (%8.4) with an annual average increase of (%2.1). The reasons for this increase during this period are attributed to increase of demand on housing and increase of rents, accompanied with increase in food stuff prices. Nevertheless, the inflation started to retreat during 2009 and 2010, to record (%4.9-) and (%2.4-), due to the availability of more dwellings, decline of actual exchange rate of the Dollar in about (%4.4) in 2010, and moderation of food stuff prices.

Graph No. (19) : Inflation Rate (2001-2010)



Source : The indicator was calculated using :
- QSA Annual Statistical Abstract, Varous Volumes.
- QSA, Unpublished Data
- Qatar Central Bank, Quarterly Statistical Bulletin, Volume (31), No. (2), June 2011.

Where we are ?

The current inflation rate is acceptable, when compared with Gulf Cooperation Council States, which amounted in 2010 in Kingdom of Bahrain to (%2), Kuwait (%4.10), Oman (%3.30), Kingdom of Saudi Arabia (%5.40) and United Arab Emirates (%0.90), and when compared with developed countries, where inflation rate amounted to (%1.6) in the same year.

Source : IMF, World Economic and Financial Survey, Sept. 2011.

The future :

It is anticipated that the inflation rate will continue in a low and acceptable level during the coming years, due to increase of dwelling supply and retreat of rents, eventually, recession if real estate market on one hand, and retreat of increase of food stuff prices on the other hand.

4) Employment Rate

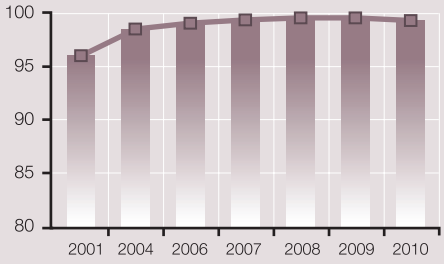
Definition :

Percentage of workers of both sexes, out of total economically active population (15 years and above). Employment rate is an economic and social indicator, due to its contribution in measuring the economic performance, quality of life and social partnership. The sustainable development looks forward to providing job opportunities, through an employment policy works toward full employment.

Assessment :

The employment rate witnessed remarkable increase during the period of study, it increased from (%96.1) in 2001 to about (%99.7) during 2009-2008, it retreated a little to (%99.5) in 2010, i.e. the Qatari labor market approaching the full employment. This indicator varied between men and women, it increased for men from about (%97.7) in 2001 to about (%99.9) in 2008-2009, and to (%99.8) in 2010, due to the economic boom witnessed by the Qatari economy in all sectors on one hand, and accelerated flux of expatriate employment, to fulfill the demand for employment in all economic activities on the other hand. The employment rate for women rose from about (%87.1) in 2001 to nearly (%98.3) in 2008, and to (%98.3) in 2009, however, it retreated to (%97.2) in 2010.

Graph No. (20) : Employment Rate (2001-2010)



Source : The indicator was calculated using :
- QSA, Labor Force Sample Survey, Several Years.
- QSA, 2004 and 2010 Population, Housing and Establishment Censuses.

Where we are ?

The total employment rates in Qatar, which amounts to (%99.9) in 2009, surpass it counterparts in Gulf Cooperation Council States, where these rates were in United Arab Emirates (%96.1), Kingdom of Bahrain (%96), Kingdom of Saudi Arabia (%94.6) and in Kuwait (%98.6).

Source : The Unified Arab Economic Report, 2010.

While these rates were in some developed countries, e.g. United States of America (%90.7), United Kingdom (%92.5) and the Euro zone (%89.9).

Source : ILO: Short Term Indicators of the Labor Market: Arab States and Territories and North African Countries.

The future :

It is expected that employment rates remain high during the coming period, due to continuity of the strong economic performance and diversify of its activities, accompanied with flux of expatriate employment, to execute many projects in all economic activities.

5) Crude Activity Rate by Sex

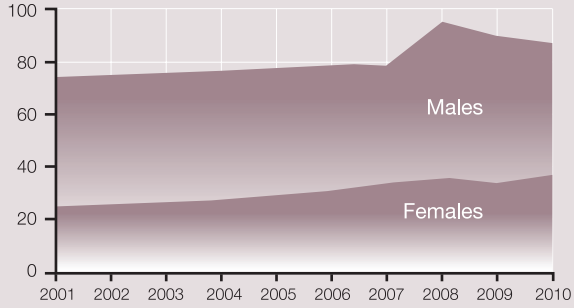
Definition :

Total economically active population (15 years and above) divided by total population, multiplied by 100, for women (total economically active females (15 years and above) divided by total females, and multiplied by 100), for men (total economically active males (15 years and above) divided by total males, and multiplied by 100). The Crude Economically Active Population Rate measures the participation rate of the economically active population in production, and assists in predicting size of labor force by knowing population estimates and age groups.

Assessment :

The increase in number of economically active population lead to increase in crude economically active population rate from about (%49.8) in 2001 to (%80.9) in 2008, it retreated a little to (%77.2 and %75.1) in 2009 and 2010, due to the international economic crisis and its impact on decreasing number of expatriate employment. The crude economically active population rate varied for men and women during that period, according to employment policies followed by the Ministry of Labor, and implementation of Qatarization policy, accompanied with flux of expatriate employment, that is required by development process and its different projects.

Graph No. (21) : Crude Activity Rate by Sex (2001-2010)



Source : The indicator was calculated using :
- QSA, Labor Force Sample Survey, several years.
- QSA, 2004 and 2010 Population, Housing and Establishment Censuses.

Where we are ?

The crude economically active population rates in Qatar surpasses its counterparts in most Gulf Cooperation Council States (Kingdom of Saudi Arabia %49.9 in 2009, United Arab Emirates %72.6 in 2009), and in some Arab countries (Egypt %50.3 and Jordan %39.5 in 2010), and in some developed countries (France %56.7, Germany %59.5 and United Kingdom %62.4 in 2010).

Source :
ILO: Short Term Indicators of the Labor Market.

The future :

It is anticipated that crude economically active population rates for males will increase slightly during the short coming period, due to continuation of the work in most projects of the economic activities and commencing others. Ultimately, it is expected that slight increase will occur in number of expatriate employment, while the crude economically active population rates for women will increase, even though with lower rates, due to continuation of economic and social development witnessed by the State, enhancing the role of women in development, and allowing more job opportunities before them.

6) Fixed Telephone Lines per 100 Population

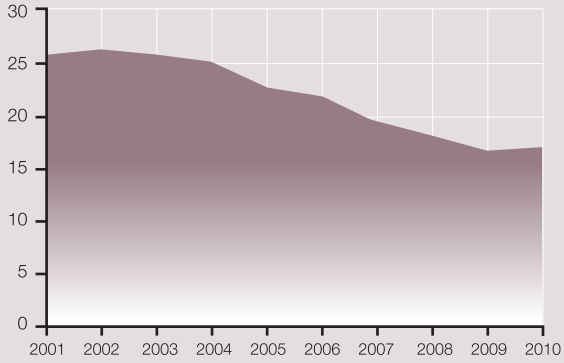
Definition :

Number of fixed telephone lines divided by total population in the State, multiplied by 100. This indicator is considered the most important one for measuring wire and wireless communication in any country, and expresses the deployment of telephone services across the country.

Assessment :

The deployment rate of fixed telephone lines among people witnessed a remarkable decline during (2001-2010), where it declined from (25.8) lines per hundred people in 2001, to (18.2) lines in 2008, then declined to (16.7) and (16.9) lines in 2009 and 2010 respectively. This decline is attributed to the increase in use of mobile telephones, and the increase of population in accelerating rates during (2004-2010), due to flux of expatriate employment, who are mostly prefer to use mobile telephones rather than land lines.

Graph No. (22) : Fixed Telephone Lines per 100 of Population (2001-2010)



Source : The indicator was calculated using :
- QSA, Annual Statistical Abstract, Several Volumes.
- QSA Annual Statistical Abstract, Economic Statistics, 2011.
- Qatar Telecom (QTEL), unpublished data.

Where we are ?

The fixed telephone line per hundred of population rate in Qatar is less than half of its counter part in developed countries (47), and surpasses the rate in developing countries (13), and slightly less than the global rate (19).

Source : The World Bank, World Development Indicators, 2010.

The future :

It is expected that the rate of deployment of fixed telephone lines among population will witness a decline during the coming years, due to tendency of people to use mobile telephones, which goes along with the international trend, which witnesses retreat in use of fixed lines.

7) Mobile Cellular Telephone per 100 Population

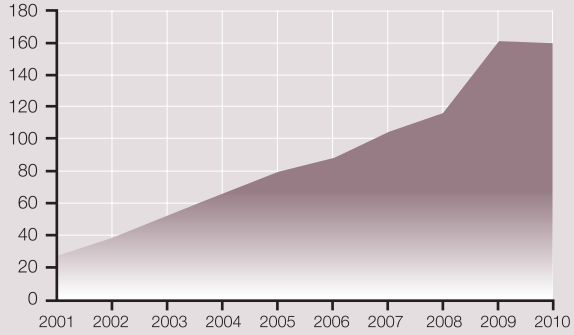
Definition :

Number of subscribers in mobile cellular telephone service in the State divided by total population in the State, multiplied by 100. This indicator is considered a measure of the country's development, easiness of communication, and making use of digital economy technologies.

Assessment :

The deployment rate of mobile cellular telephone among people witnessed a remarkable increase during the period under study, where it increased from (28.0) lines per one hundred people in 2001 to, (116.2) lines in 2008, then to (161) lines in 2010, achieving an annual rate of increase of (%21.5). This increase is attributed mainly to the increase of population, due to flow of expatriate employment, in addition to development of life pattern, increase of per capita share in gross domestic product, and what business environment requires of communication technology products, which leads to increase in demand on mobile telephones, as well as openness of communication market in countries.

Graph No. (23) : Number of Mobile Cellular Telephone per 100 of Population (2001-2010)



Source : The indicator was calculated using :
- QSA, Annual Statistical Abstract, Several Volumes.
- Supreme Council of Information and Communication Technology, Qatar's ICT Landscape, 2011.
- QSA, Annual Statistical Abstract, Economic Statistics, 2011.

Where we are ?

The rate of deployment of mobile cellular telephone in Qatar surpasses its counterpart in developed countries (106), exceeds the rate in developing countries (52), and much higher on the global level (61).

Source: The World Bank, World Development Indicators, 2010.

The future :

It is anticipated that rate of deployment of mobile cellular telephones will witness a remarkable increase during the coming years, due to increase of population, strategies developed by the State for developing the communication sector, and openness of the Qatari communication market on the international communication companies, where the market is open, after it was monopolized by one company.

8) Number of Internet Users per 100 Population

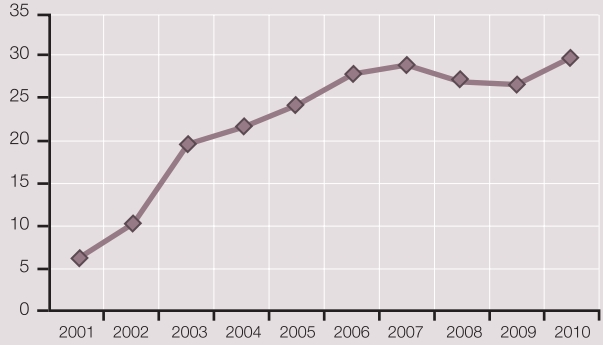
Definition :

Number of internet users in the State divided by the total population, multiplied by 100. This indicator is considered a measure for the density of access to world information network services (Internet access and use) and hence bringing education and information for all.

Assessment :

The rate of internet user on the State level witnessed a remarkable increase during (2001-2010), where it increased from (6.2) users per one hundred people in 2001 to (27) users per one hundred people in 2008, it retreated to (26.6) users per one hundred people in 2009, due to immigration of some expatriate employment because of the international crisis, it then increased to (29.8) users per one hundred people in 2010, achieving an annual growth rate of (%19.2) during the period (2001-2010). This increase is attributed to diversity of economic and social activities witnessed by Qatar, accompanied with increase of educational level of the majority of the population, and development of internet services within the framework of plans and strategies of the supreme council for communication and information technology.

Graph No. (24) : Number of Internet Users per 100 of Population (2001-2010)



Source : The indicator was calculated using :
- QSA, Annual Statistical Abstract, Several Volumes.
- Supreme Council of Information and Communication Technology, Qatar's ICT Landscape, 2011
- QSA, Annual Statistical Abstract, Economic Statistics, 2011.

Where we are ?

The deployment rate of internet use in Qatar (26.6) in 2008 is less than its counterpart in some of the Gulf Cooperation Council States (United Arab Emirates %52, Kuwait %39.2, Kingdom of Bahrain %38.3 Kingdom of Saudi Arabia %29.7, and it is more than Oman %21.1), it is less than the developed countries (55), and surpasses the rate in developing countries (15), and much higher than the global level (20).

Source : World Bank data, http://data.worldbank.org/indicator

The future :

It is expected that rate of deployment of internet use among the people of Qatar will witness a remarkable increase during the coming period, due to adoption of policies works toward reduction of subscription and use costs in communication sector, development of different application services, that increase the interaction of the nationals and expatriates with government, educational, social bodies, and businesses, increase of educational level of the majority of the population, and expansion and diversity of economic and business sectors.

9) Number of Personal Computers per 100 Population

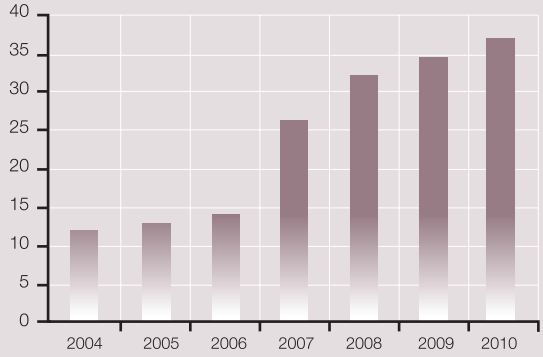
Definition :

Number of personal computers (used or available for use) divided by the number of population, multiplied by 100. The deployment of computers indicator is considered one of the key indicators for development of information technology and communications.

Assessment :

The indicator of deployment of personal computers witnessed an increase during the period (2004-2010), where it increased from (%17.1) in 2004 to (%26.3) in 2007, to (%32.3) in 2008, then to (%37) in 2010, achieving a growth rate of (%13.7) during that period. This increase is attributed to the direction of the State toward knowledge and electronic information based economy, increase of applications and products, and need of business world, students and universities for the use of personal computers.

Graph No. (25) : Number of Personal Computers per 100 of Population (2004-2010)



Source :
- Supreme Council of Information and Communication Technology, Qatar's ICT Landscape, 2011.
- NationalMaster.com
- Escwa, Statistical Abstract, No. (2010 ,(29.

Where we are ?

The deployment of personal computers rate per 100 people in Qatar of (%32.3) is less than its counterpart in some Gulf Cooperation Council States (Kingdom of Bahrain 74.6, Kingdom of Saudi Arabia %68.3), European Union (%54.1), and it surpasses the global rate (%14.9) in 2008.

Source : UNDATA, Explorer

The future :

It is expected that deployment of personal computers indicator among the population of Qatar will rise, due to adoption of enhancing information and knowledge society policies by the State, e.g. electronic education initiatives, electronic trade, electronic money exchange, electronic government applications, in addition to that, adoption of measures that enhance deployment of digital education by the State, through availability of free internet in parks and public plazas.

10) Current Account as percentage of the Gross Domestic Product

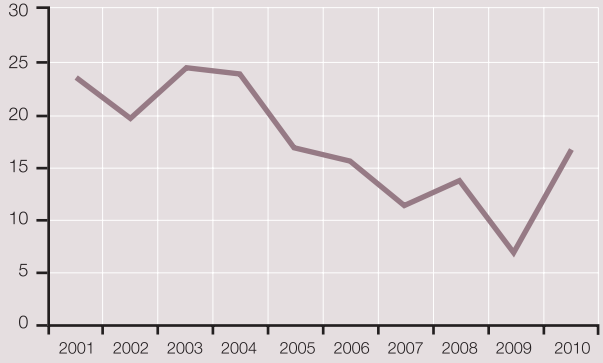
Definition :

Total current account (total net exports of goods and services, net income and net remittances) divided by gross domestic product. This indicator reflects openness of the economy and its international participation.

Assessment :

The percentage of the current account to the gross domestic product declined from (%23.7) in 2001 to (%13.8) in 2008, then it retreated to (%6.8) in 2009, due to decline in exports of goods, which ultimately lead to the decline of the absolute value of the current account from (57.8) billion Qatari Riyals in 2008 to (24.3) billion Qatari Riyals in 2009, it raised again to (76.6) billion Qatari Riyals in 2009, i.e. increase of the percentage to (%16.5) in 2010. This increase is attributed to continuation of Qatari exports of liquefied gas and petrochemical industries, where Qatar is witnessing a remarkable expansion.

Graph No. (26) : Current Account as percentage of the Gross Domestic Product (2001-2010)



Source : The indicator was calculated using Qatar Central Bank data, Quarterly Statistical Bulletin, Several Issues.

Where we are ?

According to this indicator, Qatar is classified among the countries that achieved positive surplus in the percentage of the current account to the gross domestic product, which amounted to (%16.5), compared with about (%4.6) for Kingdom of Bahrain, (%11.6) for Oman, (%8.7) for Kingdom of Saudi Arabia, (%7.7) for United Arab Emirates and (%31.8) for Kuwait, while the developed countries witnessed a deficit of (%0.2-), Euro zone (%0.6-) and Middle East countries (%6.5) in 2010.

Source: International Monetary Fund, World Economic Outlook, October 2010.

The future :

It is expected that the Qatari economy will continue obtaining surplus in the current account balance during the coming years, due to the anticipated increase in value of liquefied exports and exports of petrochemical products and industries, where Qatar will occupy the leading position global wise.

11) Exports and Imports as percentage of the Gross Domestic Product

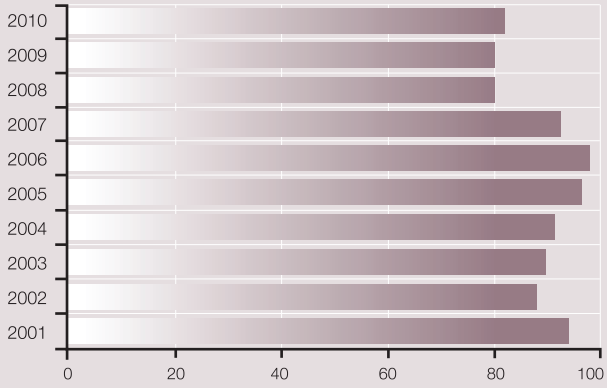
Definition :

Total exports of goods and services plus total imports of goods and services divided by the gross domestic product, multiplied by 100. This indicator is a measure of openness of the local economy on the international economy.

Assessment :

The exports and imports as percentage of the gross domestic product indicator witnessed an increase, specially in 2006, where the percentage was (%98.6), then retreated to (%80.1) in 2008, and to rise slightly to (%80.5) and (%82.3) in 2009 and 2010 respectively, due to decline in goods and services in on hand, and increase of the gross domestic product on the other hand. However, these high percentages demonstrate reliance of the State on freedom of trade programs, in order to enhance merging with the global economy.

Graph No. (27) : Exports and Imports as percentage of the Gross Domestic Product (2001-2010)



Source : The indicator was calculated using :
- QSA, Annual Statistical Abstract, Several Years.
- Escwa, Economic and Social Development Survey in Escwa Region, 2010-2009.

Where we are ?

The trade openness of Qatar (%80.5) is considered high when compared with Gulf Cooperation Council States, e.g. Kingdom of Saudi Arabia (%72) and Kuwait (%59) in 2009, but it is less than the United Arab Emirates (%117).

Source : (ESCWA, Economic and Social Development Survey in ESCWA region, 2010-2009).

The future :

It is anticipated that the exports and imports as percentage of the gross domestic product indicator in Qatar will remain high during the coming period; specially that Qatar had joined the greater Arab free trade zone, which was in-effect in 2005 and Gulf Common Market, which officially commenced its work at the beginning of 2008. The State, as well, aims to conclude commercial and investment exchange agreements with many developed and developing countries, in addition to establishment of free zones and continuation of the strong economic performance.

12) Official Development Assistance Given as percentage of the Gross Domestic Product

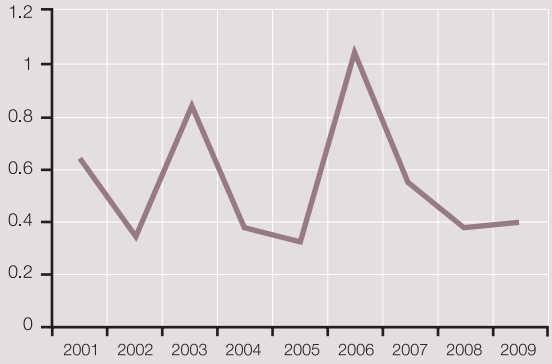
Definition :

The official development assistance given, include grants and/or easy loans that the official sector presents to some countries and regions, aiming to raise the development in a year divided by the gross domestic product, multiplied by 100. This indicator is an important measure of contribution of countries in achieving global partnership in development, where it measures easy terms assistance levels, which aims to achieving the international development.

Assessment :

The official development assistance indicator as percentage of gross domestic product in Qatar witnessed fluctuation during the period of study, where it retreated from (%0.63) in 2001 to (%0.38) in 2008, then rose slightly in 2009 to (%0.39). This fluctuation is attributed to non-proportionality between growth rates of gross domestic product and development aids during the period of study.

Graph No. (28) : Official Development Assistance given as percentage of the Gross Domestic Product (2001-2009)



Source : The indicator was calculated using QSA data, Annual Statistical Abstract, Several Years.

Where we are ?

The official development assistance given, despite its fluctuation during the period of study, surpassed its counterparts in Development Aids Committee (DAC) countries throughout the period of study, rather surpassed it by more than one-fold in some years. The percentage of (%0.39) in 2009 was higher of its counterpart of DAC (%0.31).

Source : OECD-Development Assistance Committee, Development Co-operation Report 2010.

The future :

It is expected that the development assistances granted by Qatar will increase, due to expansion of cooperation with developing countries, and increase of the role played in the international level, in addition to commencement of the activity of Qatar Development Fund, which supervises the State's policy in granting development aids to different countries.

13) Remittances as percentage of the Gross Domestic Product

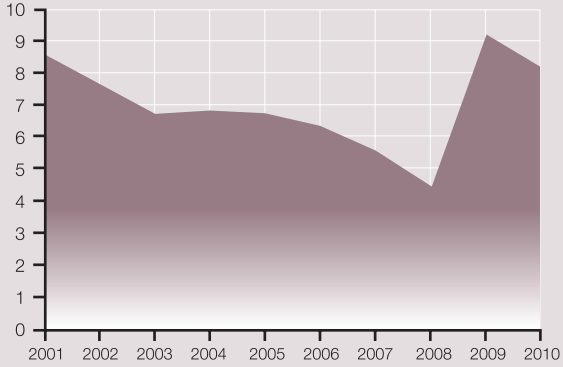
Definition :

Total amounts of transfers by expatriate employment in a year divided by gross domestic product. The size of remittance is usually related to size of expatriate employment, and bank measures followed in that regard. These remittances play a key role for employment exporting countries, where it forms a financial source, affect its external accounts and balance of payment, eventually, its economic stability, and important means of implementation of sustainable development goals, same as for employment importing countries, it as well, works toward enhancing partnership in development, which was stated in the Millennium Development Goals.

Assessment :

The economic boom witnessed by Qatar during the last years was accompanied by increase of expatriate employment, which resulted in raise in cash remittance from about (5.5) billion Qatari Riyals in 2001 to about (19) billion Qatari Riyals in 2008, then to (38) billion Qatari Riyals in 2010, achieving an annual growth rate of (%24) during (2001-2010). However, the percentage of cash remittance to gross domestic product witnessed fluctuation, yet retreat, during (2001-2008), due to the raise of gross domestic product with an average of (%30.1) per annum, which surpassed the cash remittance growth rate of (%19.5), which resulted in retreat in the percentage of cash remittance as percentage of gross domestic product, from about (%8.6) in 2001, to (%8.2) in 2010.

Graph No. (29) : Remittances as Percentage of the Gross Domestic Product (2001-2010)



Source : Qatar Central Bank, Quarterly Statistical Bulletin, Several Issues.

Where we are ?

Qatar is a leading State among Gulf States in terms of cash remittances growth rate, in spite of the fluctuation of cash remittance as percentage of gross domestic product during (2001-2010).

The future :

It is expected that cash remittances of expatriate employment will increase during the coming years, due to continuation of flux of expatriate employment, in addition to the existing, to execute the projects in all sectors. However, its percentage to gross domestic product will continue to fluctuate, coinciding with the progress in bidding the infrastructure projects pertaining 2022 world cup in one side, and increase of oil revenues in the other side.

14) Foreign Direct Investment Inflow as percentage of the Gross Domestic Product

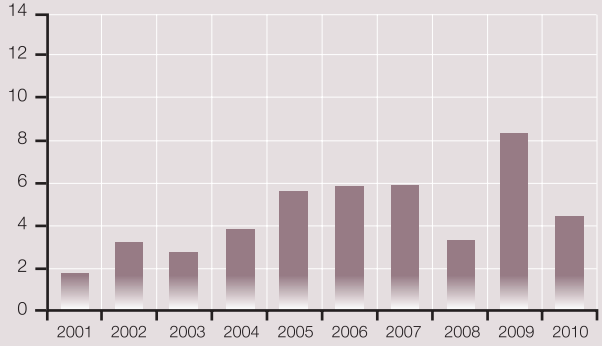
Definition :

Total foreign direct investment inflow (international investment performed by a resident in a country, whether sharing in or owning a project in another country, provided that percentage of ownership or voting power is %10 or more of the company's assets, it is done through sharing in capital or reinvesting of revenues) to the gross domestic product. The foreign direct investment inflow provides financial resources to the country, and is an indicator of the general investment climate in that country.

Assessment :

The foreign direct investment inflow as percentage of gross domestic product witnessed a remarkable increase from (%1.7) in 2001 to (%8.3) in 2009, it is attributed to the increase of the foreign direct investment inflow value from (US$ 296) millions in 2001 to (US$ 8128) millions in 2009, achieving an annual growth rate of (%52.6) during (2001-2009), it retreated slightly to (US$ 5534) millions in 2010, forming (%4.4) of gross domestic product, due to completion of gas projects, where foreign direct investment were contributing.

Graph No. (30) : Foreign Direct Investment Inflow as Percentage of the Gross Domestic Product (2001-2010)



Source : UNCTAD, World Investment Report, Various Issues.

Where we are ?

The percentage of foreign direct investment inflow stocks as percentage of gross domestic product in Qatar (%24.3) in 2010 is less than its counterparts in Gulf Cooperation Council States, e.g. Kingdom of Saudi Arabia (%39.2) and United Arab Emirates (%27.4), and the average of West Asia (%28.8), developing countries (%29.1), and the world (%30.3).

Source : UNCTAD, World Investment Report, 2010, Country Fact Sheet, Qatar.

The future :

It is expected that the foreign direct investment inflow will continue to rise during the coming years, due to the good performance of the Qatari economy, high growth rates, attracting investment climate, and limited impact of the international financial crisis.

15) Foreign Direct Investment Outflow as percentage of the Gross Domestic Product

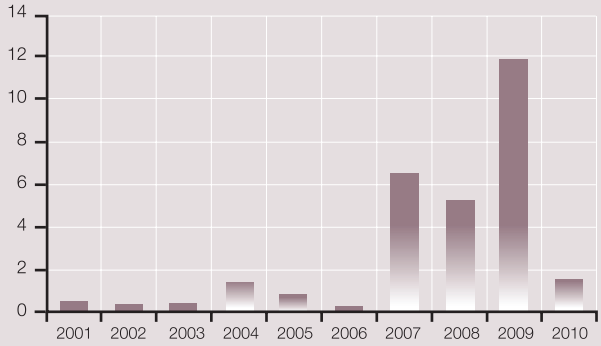
Definition :

Total foreign direct investment outflow (performed by Qataris living abroad) to the gross domestic product. The foreign direct investment outflow composes a contribution to the international partnership, through providing external financial sources for the receiving countries, and the international financial markets.

Assessment :

The percentage of foreign direct investment outflow to gross domestic product witnessed fluctuation during (2001-2010), where it amounted to (%0.6) in 2001, raised to (%1.4) in 2004, then to (%6.5) in 2007, then retreated to (%5.2) in 2008, then raised to (%11.9) in 2009, and retreated once more to (%1.5) in 2010. This fluctuation due to instability of the international economic developments on one side, and increase of gross domestic product in high rates on the other side, and diversity and dissimilarity of the invested assets on the third side.

Graph No. (31) : Foreign Direct Investment Outflow as percentage of the Gross Domestic Product (2001-2010)



Source : UNCTAD, World Investment Report, Various Issues.

Where we are ?

The data of percentage of foreign direct investment outflow to gross domestic product is limited; however, it is acceptable, due to fluctuations in the international economic status, requirements of investment, and economic stability in the State. The percentage of foreign direct investment outflow stocks to gross domestic product in Qatar (%19.9) in 2010 surpasses its counterparts in Kingdom of Saudi Arabia (%15.7), average of East Asia (%8.2), and developing countries (%15.7), and it is equivalent to United Arab Emirates (%20).

Source: UNCTAD, World Investment Report, 2011, Country Fact Sheet, Qatar.

The future :

It is expected that percentage of foreign direct investment outflow to the Qatari gross domestic product will rise during the coming years, due to direction of Qatar Investment Authority, and its companies, to condense their external investments, in different economic sectors and assets in several areas of the world.

16) Energy Use

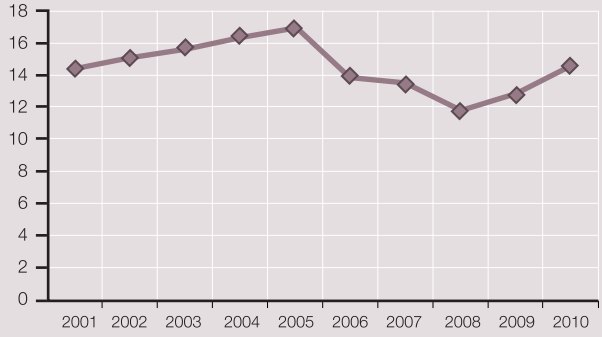
Definition :

Total electric power consumed by all sectors in a year divided by number of population in the same year. This indicator helps in recognizing the relation between per capita share of electric power and economic, social and prosperity progress, that the individual enjoys, it as well shows amount of power required to meet the consumption and progress achieved in use efficiency.

Assessment :

Power use witnessed fluctuation during the period of study, where share of per capita of electric power per year retreated from (15.3) thousands kilowatt/hour in 2001 to (13.5) thousands kilowatt/hour in 2007, then to (11.8) thousands kilowatt/hour in 2008, to rise to (12.7) thousands kilowatt/hour in 2009, and to (14.5) thousands kilowatt/hour in 2010. This fluctuation can not be attributed to reduction in power use, rather to stability of the produced power with increase of population, expansion of manufacturing, and rise of standards of living. As per the increase in 2010, it is attributed to commissioning a new power production unit in Ras Laffan station.

Graph No. (32) : Per Capita share of Annual Consumption of Power (2001-2010) kilowatt/hour



Source : Qatar General Electricity and Water Corporation, Annual Statistical Report, Different Years.

Where we are ?

The per capita annual consumption of electric power surpasses the global one. Qatar ranked tenth on the global level, where Iceland ranked first, where the indicator amounted to (50) thousands kilowatt/hour, followed by Norway (24.8) thousands kilowatt/hour. Qatar ranked third among Gulf Cooperation Council States, after Kuwait, where the per capita share on annual consumption was (17.9) thousands kilowatt/hour, and United Arab Emirates (11.9) thousands kilowatt/hour in 2009.

Source : The World Bank, World development indicators, 2010.

The future :

It is expected that the per capita share on annual consumption of electric power will continue to rise during the coming years, being electricity is the main source of power in the State, continuation of economic progress (and amount of electricity required), its reflection on individual income, continuation of the increase of population, and commissioning new stations.

17) Generation of Hazardous Waste

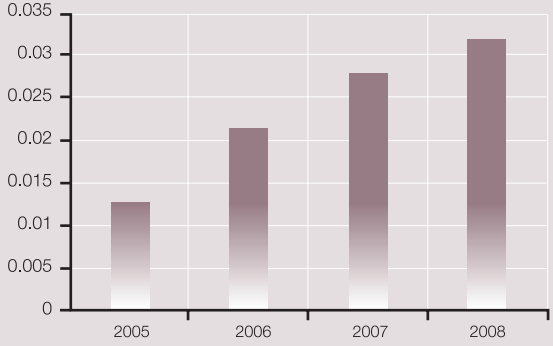
Definition :

Total amount of hazardous waste generated from industrial operations or any other operations that result in generation of hazardous waste, in accordance with Basel Convention of definition of hazardous waste or any other relevant conventions, divided by gross domestic product. This indicator shows type of industrial activities and technology used, its operations, resulting waste, consumption pattern of the population, and size of population living in the State.

Assessment :

Generation of hazardous waste indicator witnessed a limited increase during (2008-2005), where it increased from (0.0127) ton/unit of gross domestic product in 2005, to (0.0319) ton/unit of gross domestic product in 2008, however, it retreated in 2009-2010 to (0.0179) and (0.0166) ton/unit of gross domestic product, due to disposal of about (%60) of it, through burning, tight filling up, chemical and physical treatment, and recycling about (%30-%20), as exhaust oils and solvents, and exporting about (%1.5) for treatment and final disposal in some European facilities.

Graph No. (33) : Generation of Hazardous Wastes (2005-2008)
Metric ton per unit of Gross Domestic Product



Source : Ministry of Environment, unpublished data.

Where we are ?

Generation of hazardous waste still low, when compared with some Gulf Cooperation Council States (Bahrain) and some developed countries (Germany, Sweden and Holland).

Source : Waste Without Frontiers, Secretariat of the Basel Convention for the years -2004 2006, Geneva, 2010.

The future :

It is expected that the intensity of increase of Generation of hazardous waste will ease in the coming years, where the State is working on decreasing it, especially in the industrial cities. The State established a factory for hazardous refuse in Mesaieed in 2004, utilizing state-of-the-art and most efficient technology, in addition to activation of legislations, forms for waste disposal and transfer, environment administration bodies, modern technologies in petrochemical industries, and management of health care refuse.

18) Wastes recycling

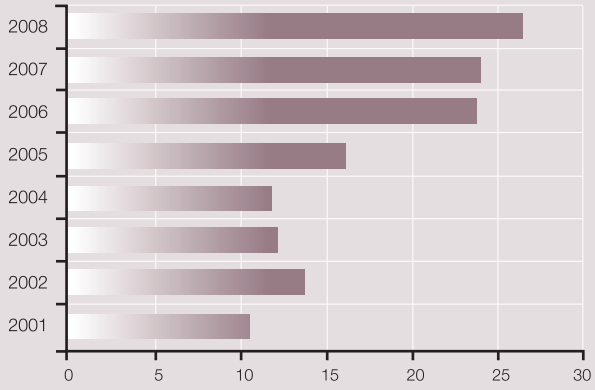
Definition :

Percentage of remanufactured material from metal, plastic and paper wastes from total wastes. This is an important indicator to judge the waste management and environment management in the country.

Assessment :

The waste recycling indicator witnessed a remarkable increase, where the amount increased from (10480) tons in 2001, to (26319.6) tons in 2008, achieving an annual growth rate of (%14) as an average during 2001-2008. In spite of the increase in the amount of recycled wastes, its percentage of the total wastes still low, where it amounted to (.%9) in 2008.

Graph No. (34) : Recycled Wastes (2001-2008) Ton per year



Source : Ministry of Environment, unpublished data.

Where we are ?

Waste recycling operations still low in Qatar, when compared with Malaysia (%5), Lebanon (%6), Italy (%24.3), and Switzerland (%50).Also compared with Canada (%43), United Kingdom (%70) and MENA (%33) in 2009.

Source : http://sustainability11.carillionplc.com/environment/performance-data.html

The future :

It is expected that percentage of wastes recycling will increase during the coming period, due to increase in production capacity of recycling factories, and the state directions toward adopting the basis and applications of green economy, where the integrated center for wastes management will operate in Mesaieed at the end of 2011, which will raise the level of wastes recycling from (%8) to about (%20-25) in the first stage of operating. This percentage will increase to (%38) in 2016, in addition to other projects for wastes recycling, e.g. school wastes recycling network project, which is expected to accommodate (500) units, distributed all around the State, which is sponsored by five companies: RasGas, Oxy, Waqood, Exxon Mobil, and HSBC.

3

Chapter Three

The Environment Indicators

The Environment Indicators

Foreword :

This chapter deals with sustainable development from environment perspective, and aims to demonstrate the Qatari environment status in the shape of indicators during (2001-2010), according to availability, or closest years.

The environment indicators that will be tackled in this chapter are considered a measure of progress achieved by Qatar, in terms of preserving all components of the natural environment, and limiting breaches that affect it on one hand, and providing healthy environment for the population on the other hand. Similar to any other sustainable development indicators, the environment indicators does not only contribute to monitoring the progress achieved by countries toward achieving its goals, and recognizing successes achieved in preserving the environment, it also shed light on weak points and problems arising from implementing local and international environment measures and laws, which assist decision makers to attain to the most correct and accurate decision for public interest.

Despite limitation of data for Qatari environment, compared to demographic, social and economic information, due to recentness interest of the State in environment statistics. However, this chapter deals with a group of indicators that could assist in monitoring changes that happen to the Qatari environment.

This chapters deals with the following indicators :

- Air pollutant concentration in urban areas.
- Ozone depleting substances.
- Arable land.
- Use of agricultural pesticides.
- Annual fishing.
- Percentage of preserved areas to total area.

1) Air pollutant concentration in urban areas

Definition :

Amount of basic gases concentration that pollutes urban areas. This indicator helps in measuring the impact of population growth, and accompanying activities on the air condition in urban areas.

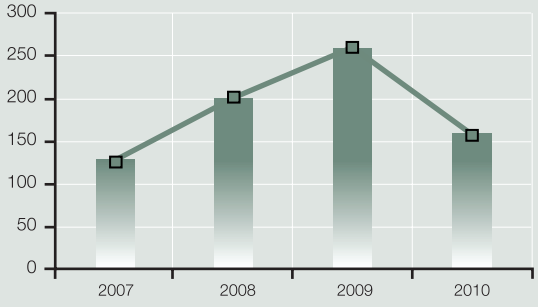
Assessment :

Air pollutants in urban areas (Doha city) witnessed a remarkable increase during (2007-2010), below is an explanation of these indicators:

A) Amount of minute particles indicator :

Results of monitoring minute particles in the air show increase in pollution rates in Doha, where minute particles amount raised from (128.78) microgram/cubic meter of air in 2007, to (155.7) microgram/cubic meter in 2010, i.e. an annual growth rate of (%5.4). This increase is attributed mainly to sand storms, that Qatar face as natural phenomenon, without omitting other pollutant sources, e.g. transportation, where Doha is considered one the most car using cities in the world compared to its population, in addition to that the effect of manufacturing, specially cement industry, which discharge many aerial plankton and dust, and the unprecedented activity in construction of infrastructure witnessed by the State, and its impact of pollutants.

Graph No. (35-A) : Concentration of minute particles in urban areas (2007-2010) microgram/cubic meter of air



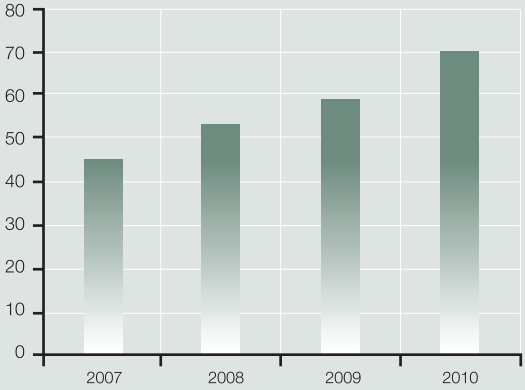
Source : The indicator was calculated using QSA data, annual abstract of statistics, several volumes.

B) Nitrogen oxides indicator :

The level of air pollution with nitrogen oxides (nitrogen monoxide and dioxide) recorded an accelerating rise during (2007-2010), where it increased from (45.13) microgram/cubic meter in 2007, to (70.41) microgram/cubic meter in 2010, i.e. with a growth rate of (%9.3). This increase dues to vehicles movement in Doha, as a result of increase of population during the last years, in addition to that, increase of development projects in the country in infrastructure and construction sectors.

Graph No. (35-B) :
Concentration of nitrogen oxides in urban areas (2007-2010) microgram/cubic meter of air

Source : The indicator was calculated using QSA data, annual abstract of statistics, several volumes.

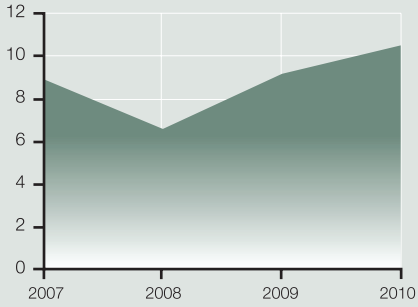


C) Sulfur dioxide indicator :

The results of environment monitoring of sulfur dioxide in the air in urban areas, indicate that amount of this gas has risen from (8.9) microgram/cubic meter in 2007, to (10.6) microgram/cubic meter in 2010, i.e. with annual growth rate of (%3.6). It is worth mentioning that level of concentration of sulfur in oil products, including engine and boiler fuels, are the main source of discharging of this gas, which require work toward reducing its concentration in these products.

Graph No. (35-C) :
Concentration of sulfur dioxide in urban areas (2007-2010) microgram/cubic meter of air

Source : The indicator was calculated using QSA data, annual abstract of statistics, several volumes.



Where are we ?

Sulfur oxides are much lower that the internationally permitted levels of (80) microgram/cubic meter, as well as nitrogen oxides (100) microgram/cubic meter, while it surpasses the international permitted level of (50) microgram/cubic meter for minute particles.

The future :

It is expected that pollutants from sulfur and nitrogen oxides and minute particles will increase, due to the increase of population, which is accompanied with increase in transportation and construction. Under the absence of strict measures to limit these pollutants, specially minute particles, which requires developing a national strategy to manage discharge of greenhouses gases and air pollution, where all sects of the society should participate, including the private sector.

2) Ozone depleting substances

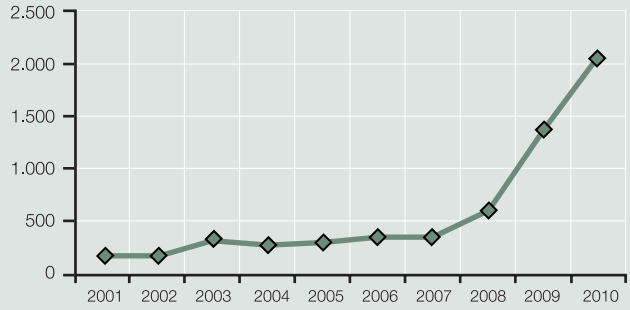
Definition :

Amount of ozone depleting substances imported by the State, and it is measured by depleting potential. This indicator has great importance in monitoring effect of development activity in depleting the ozone layer, which protects the earth from ultraviolet ray, where its increase result in many diseases, specially dermatosis.

Assessment :

The amount of ozone depleting substances witnessed a remarkable increase, where it was (179.30) metric ton in 2001, it amounted to (2027) metric ton in 2010, i.e. an annual growth rate of (%27.4). This is attributed to the increase in importing organic chlorine and fluorine compounds-22. This indicates that the measures taken to limit import and use of ozone depleting substances, did not contribute in reducing of industrial and personal demand of chlorine and fluorine compounds.

Graph No. (36) : Ozone exhausting material (2001-2010) metric ton



Source : The indicator was calculated using QSA data, annual abstract of statistics, several volumes.

Where we are ?

We cannot make comparisons in amounts of ozone depleting substances, because it is related to the population size and their environment awareness, in addition to size of industrial sector, and efficiency of the measures taken to limit use of these substances.

The future :

It is expected that ozone depleting substances will decline in the long term, with adopting measures to ban importing ozone depleting substances by the State, work with neighboring countries to combat illegal trade with ozone depleting substances, and receiving the State support from the assistance program to comply with Montreal protocol, of the United Nations Development Program, under the auspice of the multiparty fund, to fulfill its commitments, which imposes gradually dispose ozone depleting substances.

3) Arable land

Definition :

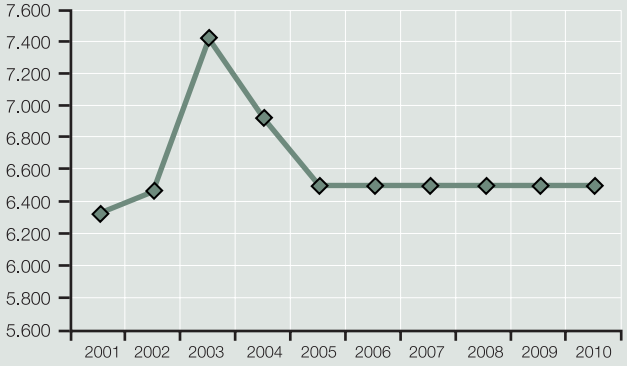
Total agricultural land, which is continuously planted with crops. This indicator indicates the encouragement of the State for agricultural activity, which assists in providing a reasonable level of food security for the population, in addition to the possibility of contribution of this activity in reducing the impact of greenhouse gases.

Assessment :

The indicator of arable land witnessed an increase during (2001-2003), where it raised from (6329) hectare in 2001 to (7419.9) hectare in 2003, achieving an increase of (%14.3), however, it dropped to (6500) hectare in 2005, i.e. a drop of (%14.1). As per the period (2005-2010), it did not witness any increase in arable land.

In general, the planted area is still high, compared to the harsh natural environment, specially scarceness of natural water, low quality, soil saltiness, and limitation of use of technologies that help in land reform.

Graph No. (37) : Arable land (2001-2010) hectare



Source : The indicator was calculated using QSA data, annual abstract of statistics, several volumes.

Where we are ?

Due to the relation of arable land with natural environment, specially soil type and other climate elements, which differ from one area to another, in addition to new technologies used in land reform, it is difficult to compare Qatar's indicator with other countries.

The future :

It is expected that area of arable land will remain stable in the short term, to slightly retreat afterwards, due to decline of ground water quality, and increase saltiness, which will result in wasteland, and increase of number of abandoned farms.

Despite the efforts currently spared, to achieve food security, within the framework of Qatar national program for food security, which concentrates on the use of state of the art technology in agriculture, nevertheless, will not affect the area of arable land, because policies that are intended to be followed, within this program, concentrate on vertical expansion in agriculture, rather than horizontal.

4) Use of agricultural pesticides

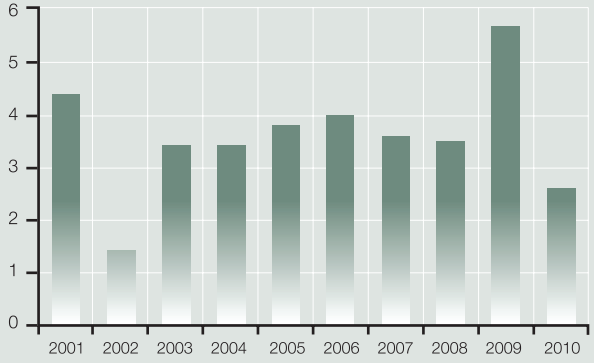
Definition :

Use of agricultural pesticides per unit of area of land. This indicator helps in measuring contribution of agricultural sector in affecting the ecological systems, through usage of different chemicals, in the shape of pesticides, which contribute in damaging soil type and ground water.

Assessment :

The indicator of use of agricultural pesticides witnessed fluctuation during (2001-2010), where it declined from (4.4) kilogram/hectare in 2001 to (1.4) kilogram/hectare in 2002, achieving a decrease of (%69), it then started to rise gradually to settle on (5.7) kilogram/hectare in 2009, i.e. an annual growth rate of (%7.7) during (2003-2009), it then declined to (2.6) kilogram/hectare in 2010, with a decline of (%55). It is unquestionable that there is no strong relationship between use of agricultural pesticides and area of planted land, because these pesticides are used in commercial farms and for some plants.

Graph No. (38) : Use of agricultural pesticides (2001-2010) kilogram/hectare



Source : The indicator was calculated using QSA data, annual abstract of statistics, several volumes.

Where we are ?

It is difficult to establish comparison in terms of use of agricultural pesticides, due to its relation to natural environment, specially climate, type of plants and nature of agricultural production.

The future :

It is expected that average use of agricultural pesticides will settle at its current levels, however, the slight decline of arable land, in the medium and long range, will result in slight retreat in the long range.

5) Annual fishing

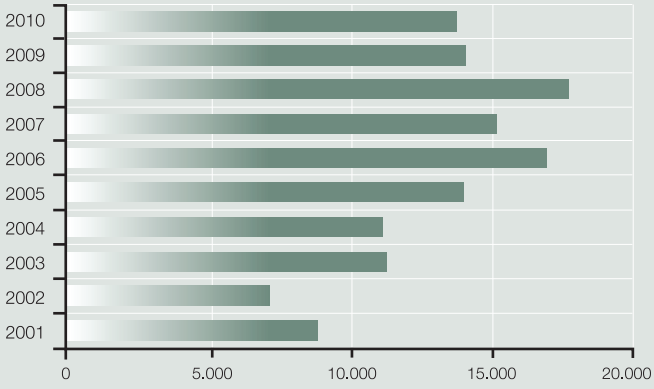
Definition :

Percentage of annual fishing of main economic fish to the highest fishing in a time series. This indicator helps in measuring the effect of demand, including population growth, on the most important vital sources in marine environment.

Assessment :

Annual fishing witnessed fluctuation during (2001-2010), while it declined in 2002 by (%19.3) from 2001, it raised during (2003-2008), until it approached (17688) tons in 2008, then the production decreased to about (13760) tons in 2010, achieving a decline of (%20.2). The increase achieved in fishing, by an annual growth rate of (%4.5) during (2010-2001), to the increase in demand, as an important nutrition source for the population.

Graph No. (39) : Annual fishing (2001-2010) ton per year



Source : The indicator was calculated using QSA data, annual abstract of statistics, several volumes.

Where we are ?

The current production of fish covers about %18 of self sufficiency of fresh fish in Qatar. The State aims to develop the fish wealth, through enriching storage of Hamour, in partnership with Kingdom of Bahrain, as well as the project of aquaculture of some of local marine fish in floating cages.

The future :

It is expected that amount of fishing will increase in the near future, to accompany the expected population increase, especially when projects of developing the fish wealth are completed, which are currently under construction, e.g. project of aquaculture of some of local marine fish, which will be positively reflected on self sufficiency of fish.

6) Percentage of preserved areas to total area

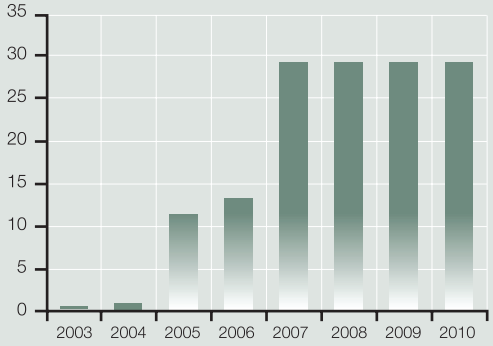
Definition :

Area of land preserved areas to total area of the State. This indicator helps in measuring the efforts of preserving the natural life and different ecological systems.

Assessment :

The percentage of preserved areas to total area witnessed a remarkable increase, where the percentage did not exceed (%0.17) in 2003, it increased with accelerating rate to (%29.3) in 2007, i.e. with an annual growth of (%180.1) during (2003-2008). Despite stability of this percentage during (2008-2010), it remains high, and reflects interest of the State in protecting vital diversity, where it established some authorities and bodies that care for environment protection and preservation, most important, the Ministry of Environment in 2009.

Graph No. (40) : Percentage of preserved areas to total area (2003-2010)



Source : The indicator was calculated using QSA data, annual abstract of statistics, several volumes.

Where we are ?

The percentage of preserved areas to total area is higher than the international standard, which defines percentage of reservations by (%10) of total area of the country.

The future :

It is expected that percentage of preserved areas of total area to settle, due to its high percentage in the first place, and it covers most areas that are good to be natural reservations. For that, it is difficult to add new eye catching areas in the State.