

On the Occasion of Qatar Environment Day.. Ministry of Development Planning and Statistics:

# Qatar has remarkably succeeded in environment preservation

- Gradual increase in the number of Arabian Oryx in various reserves during the last few years.
- Doha City enjoys a natural clean atmosphere based on recordings of air quality control stations at Corniche and Aspire Zone.
- Lower per capita domestic waste.
- Solid waste is converted into electrical power of 153 thousand MW and 39 tons of organic fertilizer.

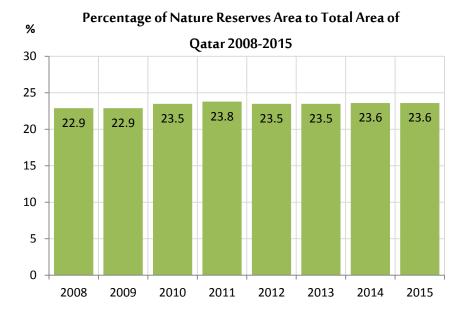
The State of Qatar celebrates Qatar Environment Day, which falls on 26 February, 2016. Qatar Environment Day aims to highlight Qatar's growing environment efforts, as environment development is one of the four pillars of Qatar National Vision 2030. According to QNV 2030, sustainable development is to achieve a balance between environment, economic, social and human development, which provides the basis for a long-term well-being of Qatari community.

#### **Nature Reserves**

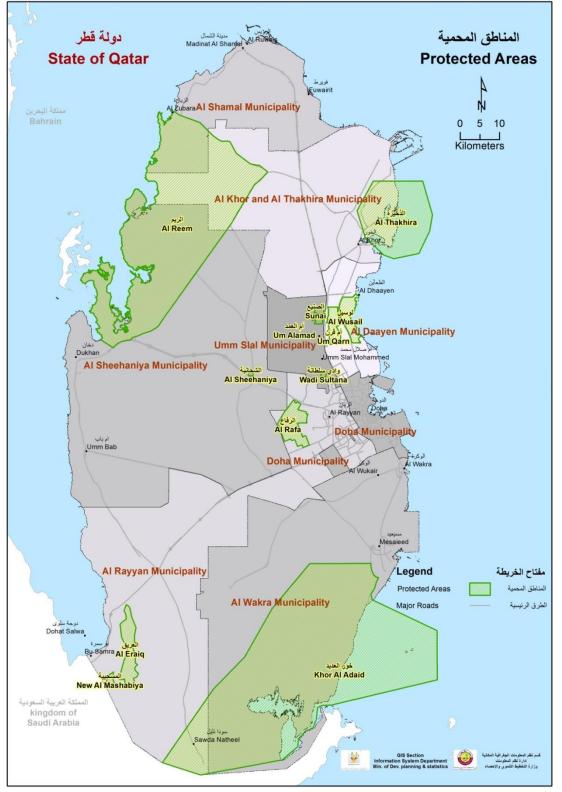
The total area of terrestrial and marine nature reserves amounted to 3,464 square kilometers in 2015, and the number of terrestrial nature reserves amounted to 12 reserves, totaling an area of 2,744 square kilometers. In 2015, the percentage of terrestrial nature reserves amounted to 23.6% of total area of Qatar. This figure was almost invariable over the last five years. It should be noted that Khor Al Odaid reserve comes on top terrestrial reserves in terms of area, which reached 1,293 square kilometers, i.e. 47% of total terrestrial reserves.

Qatar has also two marine nature reserves in Khor Al Odaid and Al Thakhira, stretching over 720 km<sup>2</sup>. Khor Al Odaid is the largest marine reserve, with an area of 540 square kilometers, i.e. 75% of total marine reserves.





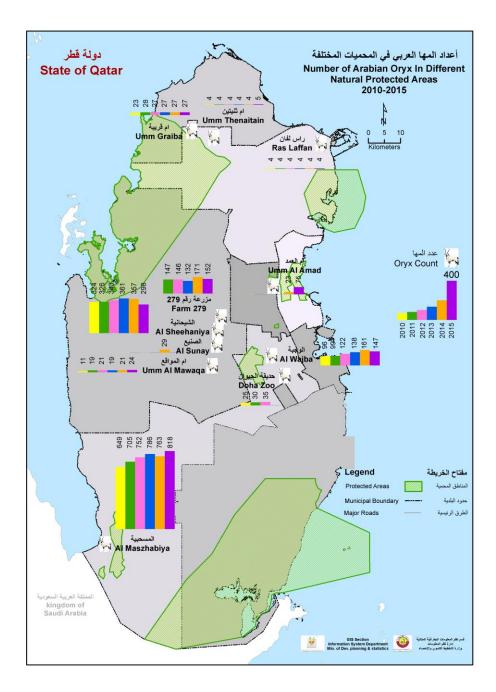






### **Arabian Oryx in Nature Reserves**

The number of Arabian Oryx in various reserves reached 1,658 in 2016. According to statistics, the number of Arabian Oryx has gradually increased in various reserves in previous years, the majority being concentrated in Al Mashabiya reserve with 53% of total Arabian Oryx in nature reserves.

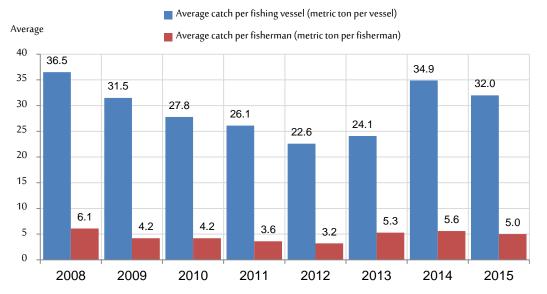




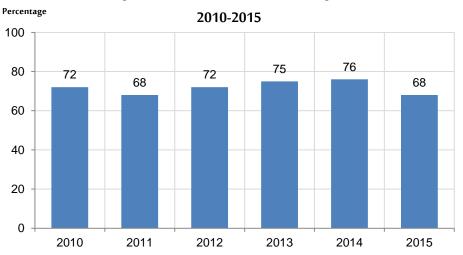
### Fishery

With regard to fishery statistics, the total fish catch dropped from 17,688 metric tons in 2008 to 15,202 metric tons in 2015. The average catch per fishing vessel decreased from 37 metric tons in 2008 to 32 metric tons in 2015. The amount of fish catch per fisherman decreased from 6 metric tons in 2008 to 5 metric tons in 2015.

## Average catch per fishing vessel and fisherman 2010-2015



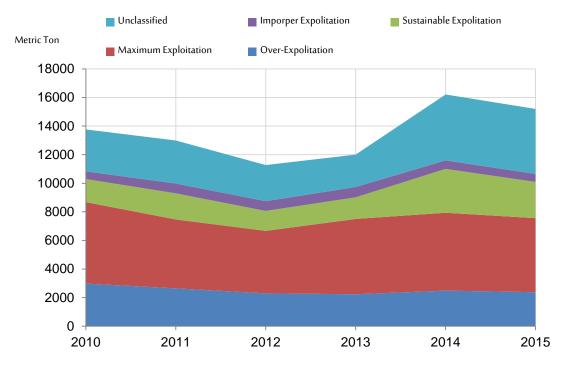
The index of percentage of fish stocks within safe biological limits indicates a decrease from 72% in 2010 to 68% in 2015.



## Percentage of fish stocks within safe biological limits



We notice that the current rate of over-exploitation of stocks of "kingfish, greyish grunt and painted sweetlip fish" exceeds the maximum exploitation rate, indicating that their stocks are exposed to overfishing pressure, reaching 2,379 tons of fish. On the other hand, the rate of fish catch in maximum fishing exploitation category has increased to 5,181 tons that includes toothless trevally, grouper and emperor fish. As for the longnose cavalla, jish, red snapper, naiser, goldlined seabream and rabbit fish, they are within sustainable exploitation rate, amounting to 2,536 metric tons in 2015.



### Fish catch by expolitation rate (metric ton) 2010-2015

## **Air Quality**

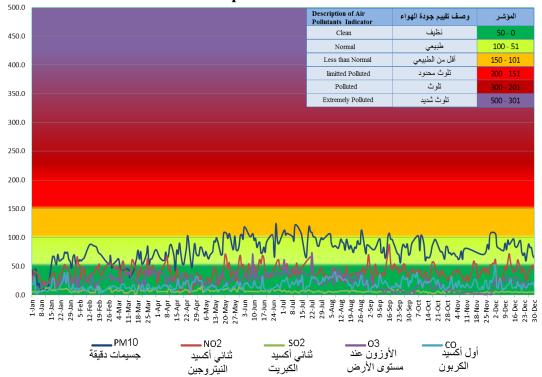
On the other side, Doha City enjoys a natural clean atmosphere according to air quality assessment conducted by Ministry of Municipality and Environment and based on recordings of air quality control stations at Corniche and Aspire Zone. This reflects the efforts exerted in achieving environment sustainability strategy. It should be noted that air pollution may result from natural factors that vary depending on the nature of the area, or from human activities, such as agricultural practices, car exhausts and various construction works that produce smoke and dust particles. However, the current rates of concentration of dust particles are normal in countries of desert nature, such as Qatar, since they are almost constantly exposed to dust and dirt.



## مؤشر جودة الهواء لجميع العناصر لعام 2015 في محطة اسباير زون

# Air Quality for all itemes in 2015

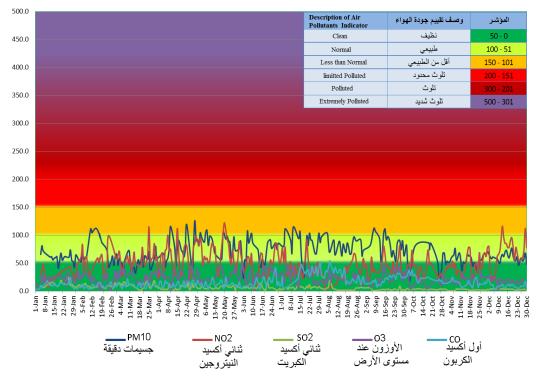
**Aspire Zone** 





## مؤشر جودة الهواء لجميع العناصر لعام 2015 في محطة الكورنيش

## Air Quality for all itemes in 2015 AlCorniche



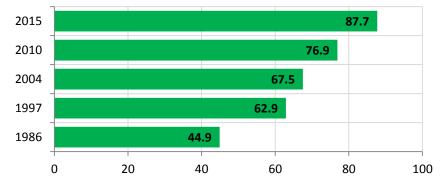
## **Connection to Wastewater Network**

The statistics on buildings connected to sewage network indicate a rise in the number of completed buildings connected to public sewage network from 25 thousand in Census 1986 to 142 thousand in Census 2015, an increase from 44.9% to 87.7% of total number of completed buildings.



#### Percentage of buildings connected to public sewage

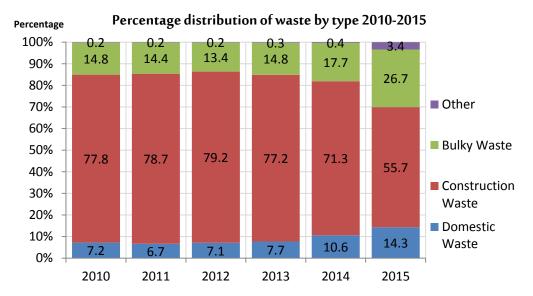
network of total buildings, Censuses 1986-2015



People living in completed buildings not yet connected to sewage network are usually served through wastewater tankers that transfer wastewater to treatment plants or discharge it in sewage lakes. This brings the percentage of sewage service coverage in Qatar to 100%. The percentage of coverage of sewage networks in Al Rayyan Municipality reached (97.9%) of total number of completed buildings, which is the highest percentage of coverage among municipalities. However, the percentage decreases in Umm Salal and Al-Shamal Municipalities.

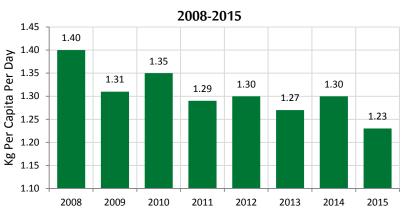
### **Municipal Solid Waste**

Statistics indicate an increase in total waste, which includes construction, domestic, tires and bulky waste, as well as many other waste types. The volume of such waste stood at 8 million metric tons in 2015, as construction waste occupied the biggest share of total waste produced in 2015, accounting for 56%.





The domestic waste production amounted to 1.2 kg per capita per day in 2015, which is a better indicator than the 1.6 Kg target set by NDS 2011-2016.

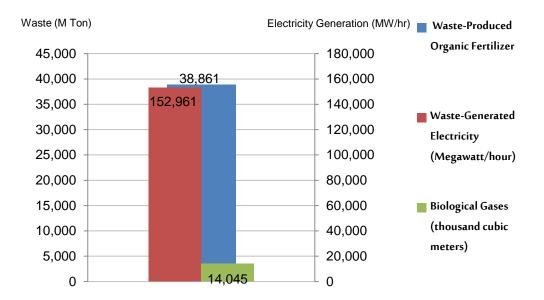


## Per capita domestic waste production (kg per day)

As for the waste recycled in the Domestic Solid Waste Management Center (DSWMC) in Mesaieed, it amounted to 53,171 metric tons in 2015, where recycled waste is distributed by type as follows: 92.8% timber, 3.1% glass, 1.8% plastics, 1.8% paper (cardboard) and 0.4% metal junk.

It is worth mentioning that DSWMC converts waste into energy, and that most of the waste delivered at the center is recycled according to regulations in practice, and a small percentage is buried in the form of ashes after being dried, so as not to affect the subsoil and groundwater. DSWMC has taken a quality leap in converting waste or solid waste into energy and recyclable materials, and also in producing organic fertilizer to support the agricultural sector. DSWMC produces about 153 thousand megawatts of electricity, which is utilized for operating the center, i.e. DSWMC is self-operated. The remaining produced electricity goes to government grid.





## DSWMC's production capacity by type 2015

## Climate

Qatar is characterized by a desert climate with high temperatures, especially in the summer times. The average high temperatures are linked to high relative humidity, especially in coastal areas. Qatar's winter is generally warm, and temperatures in winter fall to low levels from time to time, particularly at Doha International Airport station. The highest temperatures in the summer periods range from 42.7° C to 48.1° C, and in the winter they fall to 10.7° C. The hottest day was 30 July 2015, where the maximum temperature reached 48.1° C, while 26 December 2015 was the coldest day, recording 10.7° C.

In general, statistics indicate an increase in the average annual rainfall at Doha Airport from 33.1 mm in 2010 to 114.5 mm in 2015. The average minimum relative humidity amounted to 32%, while the average maximum in the same year was 72%. In 2015, the lowest mean annual air pressure stood at 1003.5 hPa, while the highest reached 1016.1 hPa. The highest average daily sunshine hours in 2015 were 12.2 hours in June, and the lowest were 6.9 hours in December.



