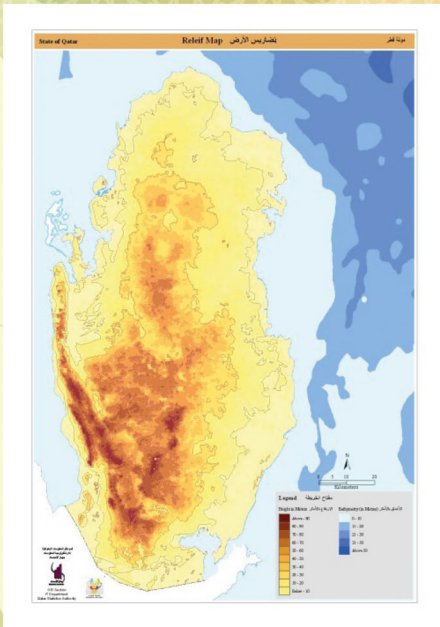




**QATAR  
ENVIRONMENT DAY  
2013**

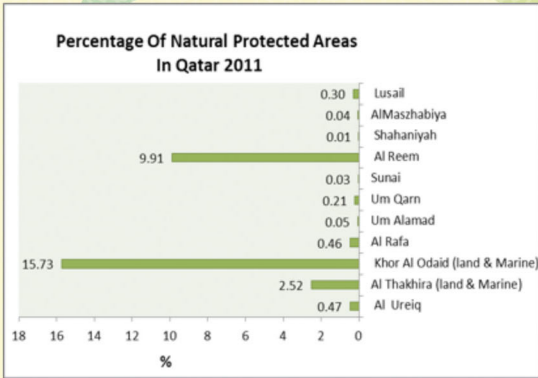
# Qatar Environment Day 2013



Celebrating Qatar's Environment Day on February 26 every year highlights the close attention the country gives to the environment. The Qatar Vision 2030 acknowledges that a sustainable development, balancing environmental, economic, social and human development provides the foundation for the long-lasting well-being of Qatar's people.

A healthy environment provides many environmental services which are important for economic development (such as soil, freshwater or fish) but also for health (clean air) and leisure (e.g. the beauty of the sand dunes, clean sea for water sports, etc.).

## Natural Protected Areas

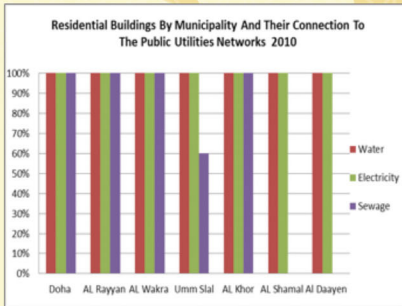


The importance of natural protected areas lies in their conservation of biodiversity and preservation of various kinds of animals, plants and insects.

To achieve this objective, it is necessary that natural protected areas can be found in various natural environments in Qatar. A high degree of biodiversity, a large area and the extent of interest increase the value and importance of the natural protected areas. They are the main "genes banks" of the world, which are important not only for the survival of individual species but also for the development of new pharmaceutical products.

The total area of natural reserves is about 30% of Qatar's area. There are eleven natural protected areas in Qatar, including two which are combined marine and land protected areas.

## Connection to electricity, water and sewerage



The ratio of housing buildings with access to electricity, water and sewerage services is relatively high, which reflects the welfare level in the country. 97% of houses are provided with safe water from the public water network. The high percentage of houses connected to the sewerage network means that waste water is disposed of in a safe manner without affecting groundwater or the natural environment. Large amounts of waste water are re-used after being treated for irrigation in agriculture and green spaces in cities, thus reducing pressure on fresh water resources.

## Air Pollution

**The most relevant air pollutants regulated and monitored in Qatar include particulate matter (PM<sub>10</sub>), sulfur dioxide (SO<sub>2</sub>), nitrogen oxide (NO<sub>x</sub>), carbon monoxide (CO) and ground level ozone (O<sub>3</sub>).**

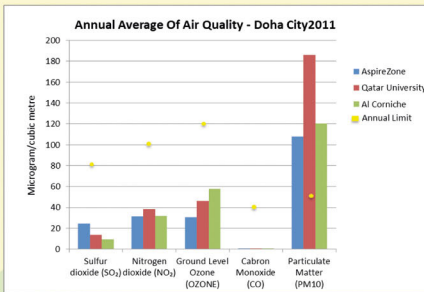
**Particulate Matter (PM):** Is the most harmful to human health compared with other air pollutants. Studies have shown that there is a close link between mortality rates resulting from respiratory system diseases such as asthma, bronchitis, emphysema and the rate of suspended dust (particulate matter) in the air. Concentration of particles in the air exposes man to rickets arising from shortage of ultra-violet rays and causes deformations in the chest as a result of the lack of balance in the rate of calcium, phosphorous and vitamin D. The high concentration of fine dust in the air causes eye diseases such as trachoma and some chest diseases and allergies such as asthma as well as vascular diseases.

**Sulfur dioxide (SO<sub>2</sub>):** It leads to the inflammation of pulmonic capillaries (deterioration of pulmonary functions and coughing), cardiac and lung diseases. Sulfur dioxide irritates the sensitive tissue in the nose, eye and mouth and its high concentration leads to constriction of the vocal cords. It also causes asthma. Increase of exposure to this gas, even in low concentration, leads to various diseases such as fragile smelling, chronic bronchitis, pulmonary hardening, nausea, headache, pain in the throat and heart and cold.

**Nitrogen Oxide (NO<sub>x</sub>):** This oxide leads to the irritation of capillaries in children and contraction of the lung function and constitutes some dangers when asthma patients are exposed to it.

**Carbon Monoxide (CO):** It causes dizziness and heart disorders.

**Ozone (O<sub>3</sub>):** It causes problems in respiration, crisis, reduction of the lungs function and pulmonary diseases as well as irritation of the eyes, pulmonary capillaries and the throat.



### Results Of Air Monitoring Stations:

The results available in the State of Qatar show that all readings are lower than the permitted level of all pollutants and in all stations, except the rate of particulate matter. The annual average of all pollutants for 2011 compared with previous years decreased.



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