

The assassination of life in Egypt: the government and coal merchants cut down 4 thousand acres of trees... and the price is the health of the citizen

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"All our lives, we depend on the Merryland park as a main source of entertainment. We used to ride boats around the entire Merryland park. It was an area of 50 acres. With time, it developed and became an important destination for the entire Cairo population. There were dolphin shows, and it was an outlet for us, but now unfortunately it has been washed away and left in ruins." Engineer Mervat Moussa, a resident of Heliopolis in Cairo, recounts the consequences of removing Merryland Park for the residents of the upscale neighborhood.

Mervat says: "The area will turn into a gray block without a breathing space for us, no one wants to tell us the reason behind [removing the park](#), and what will the government do with the fifty acres of the park?!" Complaints and [distress](#), and several statements issued by residents of the area about Removing hundreds of rare trees that were planted hundreds of years ago, without an answer.



The suffering that Mervat is experiencing as a result of the removal of trees and the bulldozing of the Merryland park in the vicinity of her residence is experienced by millions of others in separate areas in Greater Cairo and other governorates, and, despite the fact that these practices violate Article 21 of the Environmental Law, which obligates every neighborhood and village to allocate an area of not less than 1,000 meters From state lands to set up a nursery, In addition to that Article 162 of the Penal Code punishes anyone who damages or cuts down trees with imprisonment and a fine, but the massacre of tree removal in Egypt continues without stopping until the per capita share of green spaces in Egypt is one square meter. Compared to the world average of 10 meters.

In the investigation, we reveal the involvement of the government and coal merchants in cutting down 4,325 acres of trees for various purposes, in violation of Environmental Law No. 4 of 1994, which causes an increase in pollution rates and one out of every 100,000

people dies annually, in addition to a treatment bill estimated at \$470 per citizen annually.

Evolution Devouring Rare Trees

There are many reasons and the shoveling continues, between the expansion of streets, as in Mohandessin, or the construction of roads and bridges in Heliopolis, or the implementation of a national project, as happens in the project of converting canals into aqueducts in all the villages of Egypt, or the construction of real estate in some high-end areas of Cairo, or for reasons that have not yet been announced. Like in the case of the Merryland park, which Mervat and her peers are struggling to remove.

The government's approach to bulldozing trees and green spaces, in recent years, has resulted in the loss of thousands of durable and rare trees, including nearly 3,000 trees in Heliopolis, in addition to cutting down trees planted during the reign of Khedive Ismail in Agouza, and rare trees that are up to 200 years old on Muhammad Ali Street in Ismailia, the garden of Al-Montaza Palace in Alexandria, and Al-Khalideen Garden, which was established in the 1940s, were also removed.



Fewer Trees... more cars

Dr. Walid Mansour, a sustainable development consultant, confirms that Egypt has not cut down trees in its entire history equal to the amount it cut during the past ten years, justifying this by the lack of a legal environment to defend the environment and confront government practices.

He revealed that cutting down trees did not achieve any of the desired results, because cutting down trees did not reduce the prices of housing units in the areas in which real estate was built, and did not improve the aesthetic aspect of some neighborhoods, and did not facilitate traffic sufficiently in the areas where bridges were built, On the contrary, the number of cars increases in exchange for the reduction of trees, which will soon result in a health and environmental disaster.



Coal pulverizers. Profit at the expense of health

By tracing the reasons and sites for removing trees, we found that the government is not alone in the culprit. We found that the largest percentage of tree removal was in the Delta governorates, far from government practices, [the Global forest watch](#) website Data Analysis revealed that the governorates of Greater Cairo: Cairo, Giza and Dakahlia, have removed about 89 acres of trees during the last 20 years, compared to 1,248 acres from Kafr El-Sheikh governorate alone, and the rate of tree removal was in the governorates: Kafr El-Sheikh, Beheira and Dakahlia is 65% of the total volume of trees removed in Egypt since 2001, equivalent to 2,792 acres.



Ahmed Sabaa, An Environmental activist explained that many citizens tended to remove fruitful trees to sell them to the owners of coal pulverizers, to generate a large profit from them, and an informed source told us that the price of a perennial tree reaches 10,000 pounds, and coal pulverizers owners resort to exporting their production abroad.

The Environmental Protection Fund (official) estimated the number of coal pulverizers in Egypt at 3,000 pulverizers, emit emissions up to 5,000 millimeters, although the maximum emissions according to the environment law should not exceed 800 millimeters.

Vedio: Transferring trees to hexagonal charcoal rams after cutting them

<https://drive.google.com/file/d/1DCg4mt1Mp8JYvhIP5858JI30YrCL3Ghq/view?usp=sharing>

Tracing the logging in Egypt

We tracked the rates of logging in Egypt through [the Global forest watch](#) website, which extracted tree cover data in Egypt by GLAD Laboratory of the University of Merryland in partnership with Google. In 2000, 0.16% of the area of Egypt was covered with trees, but it was lost 4 thousand and 325 acres of trees between the years 2001 and 2020, and the rate of removal increased during the last ten years by 128 percent. Egypt lost 983 hectares of green space between 2010 and 2011, compared to 767 hectares between 2001 and 2010.

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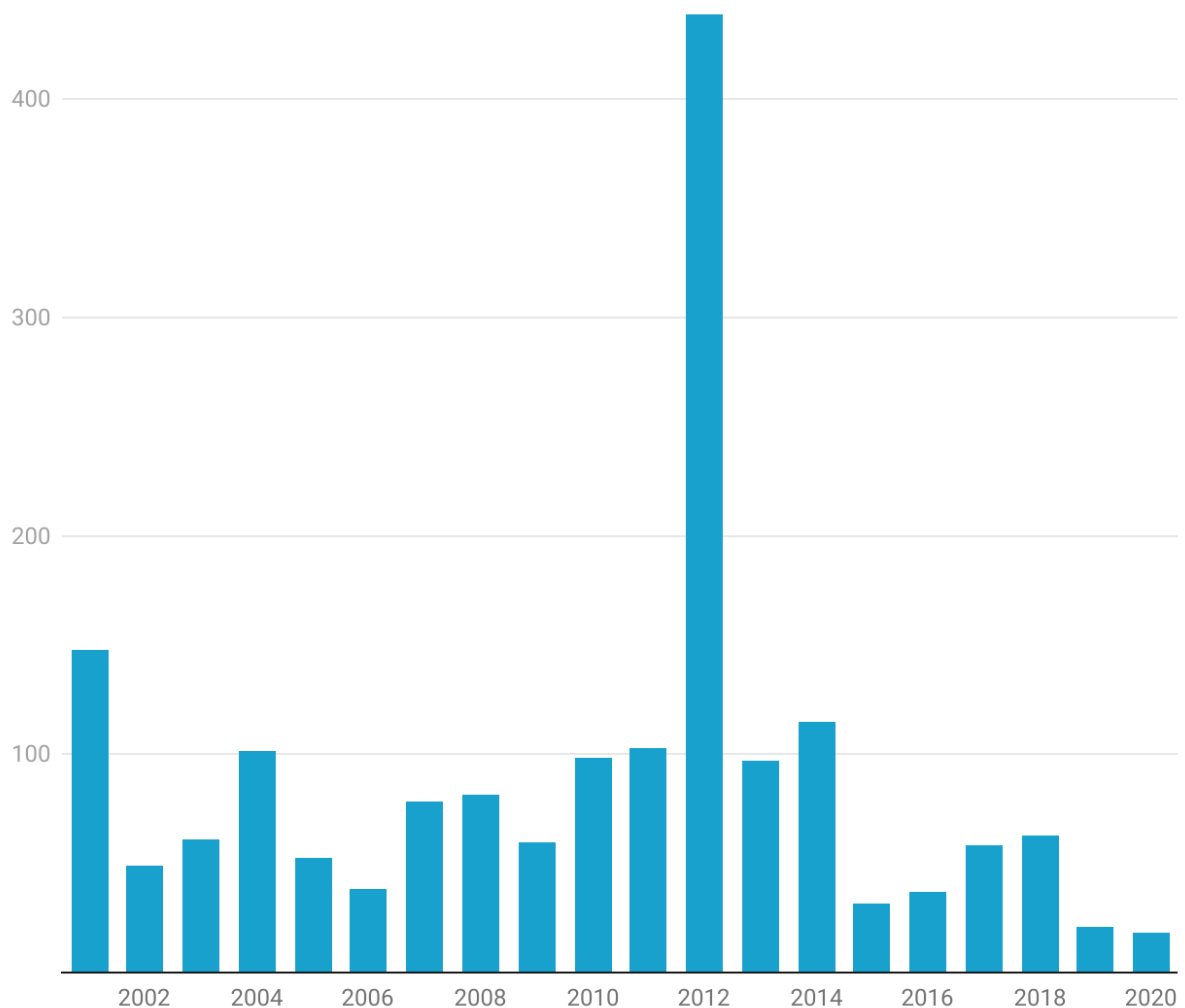
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InterActive Data Visualization:

[Tree Cover Loss In Egypt from 2001 till 2020]



Created with Datawrapper

The results of data analysis showed that the rate of tree removal in Egypt increased by 190 percent during the last ten years compared to the previous one, as it lost 488 hectares during the period between 2011-2019, compared to 257 hectares between 2001 and 2010.

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The governorates of Kafr El-Sheikh, Beheira, and Dakahlia have the highest rate of tree removal, during the last 20 years at 65%, Kafr El-Sheikh alone lost 1,300 acres, which proves that the crime of removing trees is responsible for the greater responsibility of the citizens and not the government.

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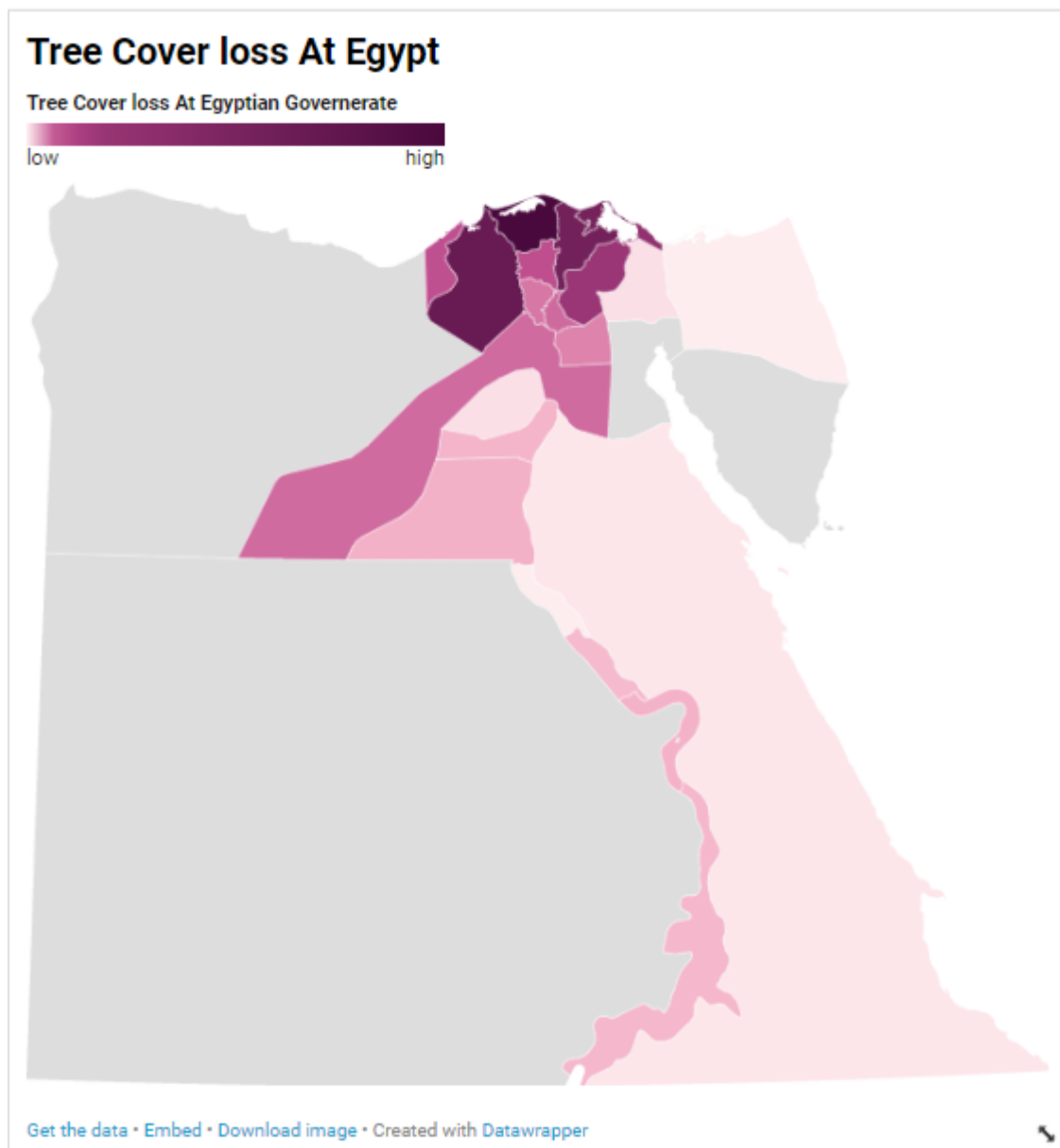
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InterActive map:



Trees, Climate and Biodiversity... Integral Triangle

Removing the Merryland park will cause a lot of damage to Mervat and her neighbors. The biodiversity inside cities benefits humans, and trees are the first habitat for living organisms inside cities, and cutting them down will reduce the cycle of biological diversity within cities, according to Dr. Abdullah Nagy, a professor of environmental sciences at Al-Azhar University.

He stressed that the presence of green spaces in cities is not a luxury. In Germany, roadsides are now converted into green spaces, and they have started linking green areas to connect biological environments and complete ecological balance chains.



On the impact of cutting trees, Dr. Hossam Muharram, former advisor to the Minister of Environment, says that removing trees disrupts the water cycle in nature, as ocean waters evaporate and condense in clouds, and trees extract groundwater and release it into the atmosphere during photosynthesis, in addition to high temperatures on Land, where forests shade large areas of land, absorb sunlight in the process of

photosynthesis and reflect between 12 and 15% of it, and plants release water vapor into the air through their leaves in the process of transpiration.

Muharram added that removing trees increases the spread of desertification and increases the rate of soil erosion, as the roots of trees work to stabilize the soil, and when large trees are cut down, soil erosion becomes a serious problem, which may lead to catastrophic collapse.

The economic return of trees

According to [the Food and Agriculture Organization of the United Nations](#) (FAO), the forest sector contributed to the Egyptian economy with 6.5 million US dollars in 2000, equivalent to less than 0.1% of Egypt's GDP, ranking Egypt 11th in the world, which explains the great demand for tree removal in Egypt.



Logging is illegal

Lawyer Ahmed Al-Saeedi says that Environment Law No. 4 of 1994, amended by Law No. 9 of 2009, stipulates that anyone who trespasses on trees by cutting down shall be punished by imprisonment and a fine of not less than 5,000 pounds and not more than 50,000 pounds, and the confiscation of tools and equipment used in committing the offense.

Article 367 of the Penal Code stipulates that “Whoever cuts down or damages unharvested crops, trees or other plants that he has created or planted, and whoever destroys a seeded field or spreads weeds or harmful plants in a field, and anyone who uproots One or more trees or any other plant, or cut them down, or peel them to kill them, and anyone who destroys the graft of a tree”.



He pointed out that the law imposed on any natural or legal person to submit an environmental impact assessment study for his facility or project to the administrative authority granting the license before starting the implementation of the project following the specifications

determined by the Environmental Affairs Agency, to review it and express his opinion, and he can compel the study presenter to amend what was stated to avoid environmental damages.

added that Article 46 of the Constitution states, "Every person has the right to a healthy environment, and its protection is a national duty, and the state is obligated to take the necessary measures to preserve it".

The relationship between greenhouse gases and trees

Trees are of great importance in reducing the impact of global warming, says Dr. Assem Abdel Moneim, a member of the Global Assessment on Biodiversity and Ecological Services, and an expert in "Africa 21", that the reports of the Intergovernmental Panel on Climate Change stated that planting one billion hectares of forest removes 300 gigatons of carbon from human activities, and a 2018 report recommended planting one billion hectares of forests, to reduce temperature rise by 1.5 degrees Celsius by 2030.

Between 2001 and 2020, Egypt's trees contributed to the withdrawal of 252 carats of CO₂ annually, trees in Egypt released 18.5 kilotons of CO₂ annually, compared to the removal of 271 kilotons of CO₂, according to an analysis of GFW website data.

On the other hand, Egypt ranks 84th in the world in carbon storage rates, with a total carbon stock of 1.11 gigatonnes, including 1.10 gigatons in soil. Egypt ranked 145th in the world in the average density of living woody biomass above the earth's surface in 2000 at a rate of 77.6 tons/ha.

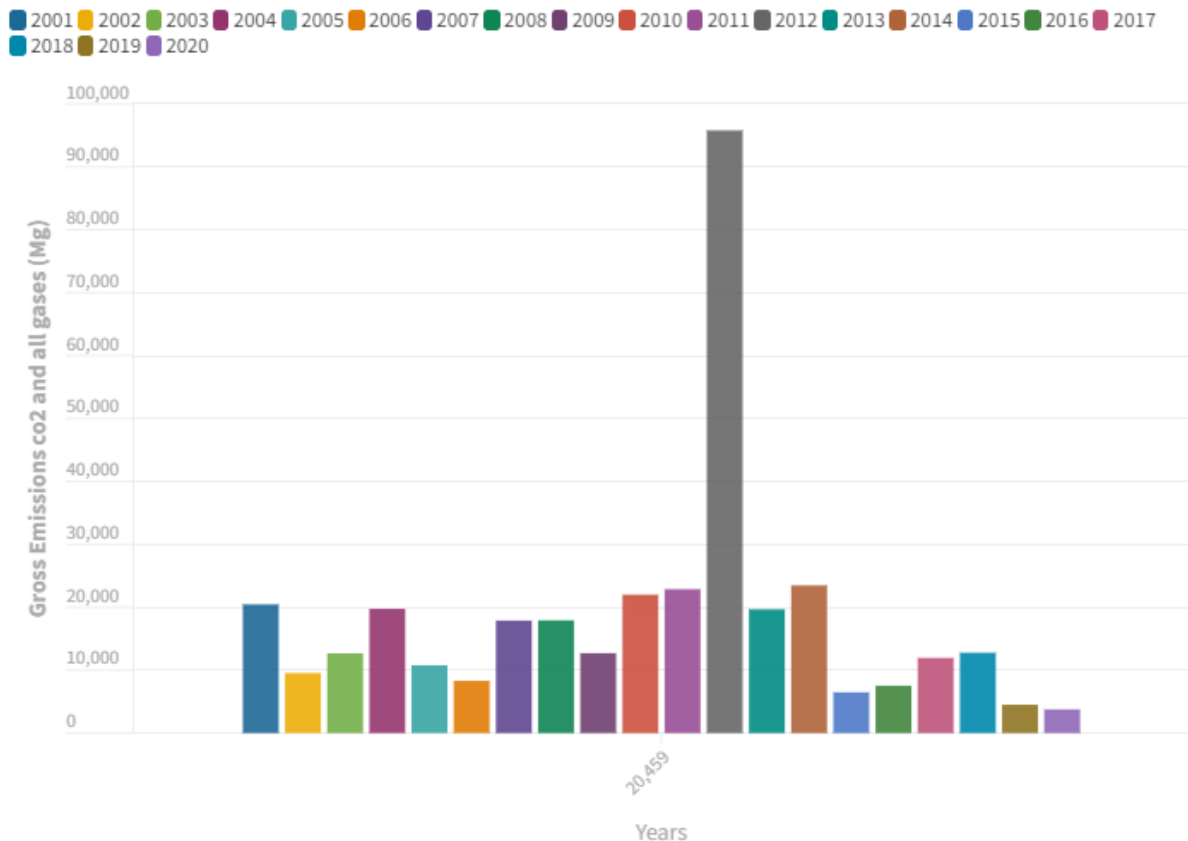
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InterActive Data Visualization:



Effect of Logging on Health

Mervat fears from the consequences of bulldozing gardens are true. The World Bank ¹ mentioned that air pollution in Greater Cairo alone [cost Egypt about 47 billion pounds during 2017](#), meaning that each citizen costs the government 470 dollars for air pollution.

Nagi says that reducing green spaces has the biggest impact on human health because it withdraws urban pollutants and CO₂ gas, which is generated from cars, factories, and fire exhaust, and therefore reducing green spaces means a higher health maintenance bill.

A study conducted last year revealed that Cairo [is the most polluted city in the world](#), out of 48 cities covered by the report of the Eco-Experts website and [Forbes](#) magazine.

During 2017, Greater Cairo witnessed about 12,600 premature deaths due to air pollution, meaning that one person out of every 100,000 is exposed to premature death, in addition to 3 billion workdays lost due

to diseases resulting from air pollution in Greater Cairo, and the lack of clean water and sanitation Health and hygiene in general in Egypt, according to a World Bank report.

[Air pollution is measured by the concentration of PM2.5 particles in the atmosphere](#), and the average rate of “PM2.5” in Greater Cairo was 84 micrograms / cubic meter of air, during the period between 1999 and 2016, while the lowest rate was 66 micrograms per cubic meter, which is the highest several times the safe level set [by World Health Organization](#) of 10 mcg/m³.

The World Bank report stated that of the 12,600 deaths annually due to exposure to PM2.5 particles in Greater Cairo, during 2017, heart and chest diseases caused 59% of deaths, 14% of acute respiratory infections, and 13% of strokes. and 14% due to lung diseases, lung cancer, and type 2 diabetes.

Strategy to Combat Climate Change

Sustainable development consultant Walid Mansour points out that the [Egyptian strategy to combat climate change 2050](#), launched by the Ministry of Environment, is a commitment for Egypt to reduce carbon emissions, which requires an increase in green spaces, and we are waiting to see the government's strategy to deal with the matter.

For its part, the Ministry of Environment launched the "Ethadar Lel Akhdar" [Get Green] initiative, which aims to spread environmental awareness and raise awareness of the importance of afforestation, waste recycling, rationalization of food and energy consumption, reducing the use of plastic, preserving marine creatures, reducing air pollution, and protecting nature reserves. The campaign cooperates in providing Trees to be planted in various governorates of the Republic.

Engineer Mervat and her neighbors hope the new strategy will help them, and the government realizes the mortal danger of removing 50 acres of trees and green space in the Merryland park, perhaps giving them the kiss of life.