

The Devastating Impact of Lebanon’s Environmental Failures

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International cooperation and support—with appropriate safeguarding measures to prevent the misappropriation of funds—are crucial for Lebanon to effectively combat environmental degradation and work toward a more sustainable future.

For decades, Lebanon has suffered under a systematic and intentional mismanagement of country resources and capital, with devastating repercussions. Poverty rates in Lebanon have skyrocketed, and the healthcare and education systems have crumbled, leaving millions vulnerable.

Less discussed but no less dangerous is the environmental degradation that the country’s elite have allowed to occur. Lebanon’s deteriorating environment adds another layer of tragedy to the widespread economic crisis; sewage contaminates drinking water, generators spew toxic fumes, excessive groundwater usage renders it saline, and irrigation with sewage water contaminates agricultural produce. The price for Lebanese is becoming increasingly well documented. [Cancer cases have surged \(https://gco.iarc.fr/today/data/factsheets/populations/422-lebanon-fact-sheets.pdf\)](https://gco.iarc.fr/today/data/factsheets/populations/422-lebanon-fact-sheets.pdf), and the Lebanese people can expect to continue to suffer in the future as well.

This situation was not, however, a foregone conclusion, or due solely to global climate change outside of Lebanese control. Rather, Lebanon’s significant environmental degradation is due in large part to systemic corruption and a total lack of effective regulation. Understanding the scope of this issue is vital to realizing what the people of Lebanon are facing, along with developing a plan to address some of these interconnected environmental and governance challenges.

Lebanon's Generator Problem

Case in point is Lebanon's ubiquitous reliance on generators to bridge the gap between the state's limited electricity generation and Lebanese electricity needs. Daily, Lebanon's electricity shuts off, leaving residents in a moment of darkness before private generators—often owned by corrupt businessman—take over. The resulting pollution interacts with numerous facets of Lebanon's environmental degradation, and helps highlight how interconnected these issues are.

Fossil Fuels and Climate Change: Lebanon, like the rest of the world, is experiencing the impacts of climate change. This includes rising temperatures, changing precipitation patterns, and more frequent extreme weather events. These changes can exacerbate existing man-made environmental issues and pose additional challenges for the country. The burning of fossil fuels in generators releases carbon dioxide (CO₂) and other greenhouse gases into the atmosphere. Lebanon's heavy reliance on generators adds to the overall carbon footprint of the country and exacerbates global climate challenges. This dependence on fossil fuels not only exposes the country to global energy market fluctuations and supply chain disruptions, but it makes transitioning to greener sources of energy nearly impossible.

Waste Management Issues : Lebanon has struggled with proper waste management for years, leading to the accumulation of garbage in many areas. Due to unpredictable blackouts and soaring fuel prices, generators have become the only reliable source of energy for many Lebanese citizens. The regular use of generators results in the accumulation of waste products such as used oil, filters, and other components. In the absence of proper disposal mechanisms and recycling facilities, this waste can contribute to environmental degradation and pose challenges for waste management. This can have long-term environmental consequences, affecting the quality of water resources and posing risks to ecosystems and human health. This issue became a rallying call in 2015-2016 during the "You Stink" anticorruption protests, and again during the 2019 movement, yet Lebanon's waste management issues remain unaddressed.

Air Pollution: Lebanon's air quality has been severely affected by factors such as vehicle emissions, industrial activities, and the widespread use of generators during power shortages. These pollutants can cause respiratory problems, cancer, and other health issues in humans and animals.

Moreover, generators create significant noise pollution, impacting both urban and rural environments. Prolonged exposure to high levels of noise can lead to stress, sleep disturbances, and other health issues for individuals living in close proximity to these generators.

Deforestation: Lebanon has faced deforestation due to illegal logging, urbanization, and agricultural expansion. Trees play a vital role in maintaining ecological balance, and their loss can lead to soil erosion, disrupted water cycles, and reduced biodiversity. Lebanon's cedar forests were once a point of pride and an ecological landmark, with a history spanning thousands of years. Now, the Lebanese cedar tree is listed as vulnerable, and is threatened by man-made forest fires and a black market for cedar wood fuel. Lebanon's increasingly cost-prohibitive fuel market and lack of access to reliable electric heating sources has driven increased deforestation as a means to provide basic fuel and survive winter temperatures, which in turn will further erode the resources available for future generations.

Lebanon's Dwindling Resources: Water and Land Degradation

Lebanon's generators are but one facet of the country's pollution problem. Just as worrying is the significant degradation of the country's natural resources, once an important feature of the Lebanese economy and sense of identity. Lebanon's bodies of water, including rivers and coastal areas, now suffer from pollution due to illegal ground wells, untreated sewage, industrial discharges, and agricultural runoff. This pollution poisons aquatic life

and contaminates drinking water sources. In addition to pollution, Lebanon’s marine environments now face pressures from overfishing. Depletion of the country’s fish stocks threatens the delicate balance of marine ecosystems while carrying dire economic implications for local fishermen.

On land, the situation is equally bleak. Unsustainable agricultural practices, including overgrazing and improper irrigation, have led to widespread land degradation. This improper stewardship of arable land results in reduced agricultural productivity, loss of biodiversity, and increased vulnerability to natural disasters like landslides and floods.

Addressing these challenges requires good governance and a comprehensive approach, including the implementation and enforcement of environmental laws, promoting sustainable practices in agriculture and industry, investing in waste management infrastructure, and raising awareness among the public about the importance of environmental conservation.

While Lebanon has numerous NGOs, few focus on environmental concerns, and in several cases when international efforts to coordinate with local NGOs have been attempted, there have been several cases of this money siphoned off due to the country’s rampant corruption. Nevertheless, international cooperation and support—with appropriate safeguarding measures to prevent the misappropriation of funds—are crucial for Lebanon to effectively combat environmental degradation and work toward a more sustainable future. ❖

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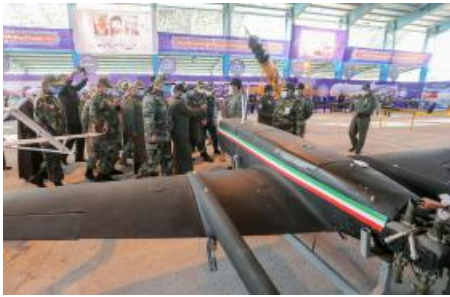
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