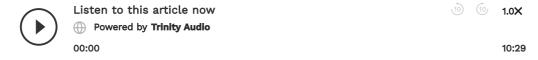
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Is COVID-19 a symptom of climate change?

ENVIRONMENTAL AFFAIRS: Some indirect connections can be made between climate change and COVID-19, say Israeli researchers.



ISRAELI MOTORISTS line up at a drive-through COVID-19 test complex in Modi' in, last week. (photo credit: YOSSI ALONI/FLASH90)



Is coronavirus a symptom of climate change and did COVID-19 help cure the environment?

After 18 months of living in the shadow of the coronavirus crisis, some experts are starting to evaluate the relationship between the pandemic and the planet.

At the same time, as Israel emerges – at least partially – from the crisis, the government is starting to look at new steps toward environmental sustainability.

Back in the beginning of last year, when the World Health Organization declared the SARS-CoV-2 outbreak a global pandemic, climate change was at the forefront of the world's agenda.

The young Greta Thunberg had just delivered her powerful "the eyes of all future generations are upon you. And if you choose to fail us, I say: We will never forgive you" speech at the United Nations, and many countries were prepared to take action to help protect the planet.

But as the coronavirus crisis continued, all eyes turned to the disease that was taking lives daily, and away from the long-term but increasingly acute and irreversible impacts of climate change on human living conditions.

"Whilst many aspects of our lives have been disrupted in 2020, climate change has continued unabated," said World Meteorological Organization (WMO) Secretary-General Prof. Petteri Taalas at the United Nations Educational, Scientific and Cultural Organization event last year at which his organization presented a joint report on behalf of the organization, highlighting increasing environmental challenges.

AS THE coronavirus crisis peaked in many countries at the beginning of 2021, some scientists started to ask the question as to whether climate change caused COVID-19.

"There is no definitive evidence or answer that it affects it one way or another," Steve Brenner, a professor in the department of geography and environment at Bar-Ilan University told *The Jerusalem Post*.

But "you may be able to indirectly make some connections," according to Meidad Kissinger, a professor in the geography department at Ben-Gurion University who specializes in sustainability sciences.

This is what a team of scientists from the United Kingdom, Germany and the United States did in their paper "Shifts in global bat diversity suggest a possible role of climate change in the emergence of SARS-CoV-1 and SARS-CoV-2," which was published in the peer-reviewed journal Science of the Total Environment earlier this year.

According to their research, "climate change may have played a key role in the evolution or transmission" of both the current and the previous coronaviruses by driving several species of pathogen-carrying bats into closer contact with humans.

The team tracked temperature and rainfall data over the last century to model populations of bat species based on their habitat requirements, ultimately showing that "the southern Chinese Yunnan province and neighboring regions in Myanmar and Laos form a global hot spot of climate change-driven increase in bat richness," in which some 100 strains of coronavirus were now concentrated.

While the paper's lead author, Robert Beyer of the University of Cambridge's zoology department, told AFP, "Our paper is a long way away from saying the pandemic would not have happened without climate change," the study stressed the need to focus on environmental efforts to preserve the habitats of wild species so that they don't end up accumulating near where humans live.

ON THE other hand, some scientists are starting to look at the impact that COVID-19 is having on the environment and climate change, asking whether months of lockdowns and new work-from-home policies in many parts of the world are reducing our carbon footprint.

Ori Adam, the academic head of the Hebrew University Climate Science Center, said that the world saw reduced air pollution and emission of greenhouse gases in 2020. But he cautioned that there has been no direct impact on global warming and "we don't expect to see one.

"We need to differentiate between the amount of air pollution and emissions and what effect we expect that to have on climate change," he told the Post.

Part of the challenge is that when one looks at climate change, one has to ask what time scales are involved. Climate change is the result of centuries of human interaction with the environment. As such, a one-off event like the coronavirus crisis is most likely to have limited effect.

"It is difficult to come to any conclusive statements," Brenner told the Post, noting that if corona affected climate change, "it would be very minimal."

Kissinger said that coronavirus has had both "positive and problematic" implications on the environment.

For starters, "a big chunk" of the world's attention has been focused on the pandemic and hence not on climate change or other environmental challenges, after there had been such growing momentum of interest on the subject.

The WMO report documented how the coronavirus crisis impeded the international ability to monitor greenhouse gas emissions and climate change through the global observing system.

Additionally, while lockdowns did reduce pollution on the one hand, Kissinger said that countries – including Israel – are starting to see more cars on the streets, as the quality and availability of many public transit systems declined during the last year and a half. Also, as fear of infection continues, many people are opting to stay off crowded buses or trains to avoid contact with other people. Instead, they take a car.

On the positive side, he said, for many years there was no economic justification for implementing measures to deal with climate change, which can be very expensive and hurt the economy.

"With the pandemic, we identified a threat, and we addressed that threat like we have an enemy, a war, and governments all over the world put their hands deeply into their pockets and started to find budgets to deal with COVID," Kissinger said. "If we have managed to deal with COVID, then if we identify climate change as a major threat, we could find resources to deal with that, too."

FOR THE first time, the Israeli government has included the issue of climate change as part of its platform.

Earlier this month, Finance Minister Avigdor Liberman and Environmental Protection Minister Tamar Zandberg announced an initiative to place a purchase tax on disposable cups, plates, bowls, cutlery and straws in an effort to reduce the use of these products. The move came after a report by the Environmental Protection Ministry showed that doubling the price of these products could reduce their usage by around 40%, according to a press release their offices distributed.

On Sunday, the cabinet voted to commit to reducing greenhouse gas emissions by 85% from 2015 levels by 2050, including setting an interim target to reduce emissions by 27% by 2030.

In 2015, Israel became one of nearly 200 countries to sign what is known as the Paris Agreement, committing to create a plan by 2020 to cut the country's climate pollution.

Brenner, Kissinger and Adam all praised the government's efforts, but said they needed to be put into perspective.

"On a global scale, we are a tiny speck," Brenner said, meaning any reduction that Israel makes in greenhouse gas emissions is "what I would call good citizenship" but would have little impact on a global scale.

China is the No. 1 producer of greenhouse emissions, followed by the United States and India. China alone is responsible for close to 30% of emissions, and the country has been consistently increasing its per capita output of greenhouse gases each year for the past 15 to 20 years.

The US is responsible for around 15%, and India 7%. The other 50% of the world, including Israel, is responsible for the rest.

Israel, according to Brenner, has reduced its per capita emissions by 10% to 15% over the past 15 years.

"Obviously, if members of the other 50% of the world can reduce their emissions, it would be a welcome change, but you have to put it into perspective," Brenner stressed.

On the other hand, he said taking action for the environment is something Israelis should definitely do for themselves. Brenner noted that in the past 25 years he has seen some significant improvements in the way people relate to the environment in the country, but there is a lot more than can be done.

"It is important not to impose some kind of reduction that the public will in no way abide by," he said. "My perspective is that it makes sense to do things gradually rather than to come with a sledgehammer and say we have to reduce everything in Israel."

Kissinger said that he tends to be cautious about declarations until they are enforced.

"We hear about taxes and ambitious reduction goals, and in general I am very positive about this," he said, "but I still think we are very far from

actually getting there and actually implementing these declarations."

Adam said that Israel is missing an opportunity to be a leader "in this new, exciting and emerging field of green tech and green energy. Israel would be wise to make it a sort of national project, something Israel is willing to lean into and fund, and I think we would see a lot of economic and environmental gain from that."

Several scientific studies have shown that less air pollution makes people healthier and happier.

"We know that there is a direct effect on the health of the people who breathe the air that is polluted," Adam said. "We should try as fast as we can to rid ourselves of coal emissions, gas and other fuels. We are such a small island that we have enough wind, sun and nuclear energy to sustain ourselves."

But in the end, the path to a cleaner and more sustainable Israel starts with education – putting issues of the environment at the forefront of the formal and informal education systems, the experts said.

"Our generation is lost," Brenner said. "Increase education in elementary schools and high schools. Then, you will pass on a concern and interest in the importance of the environment to the next generation."

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