

New Zealand scientists invent volcano warning system

New Zealand scientists have invented a warning system to predict volcanic eruptions that may prevent future tragedies such as the blast that killed 21 people on White Island Whakaari, New Zealand in 2019. University of Auckland academics David Dempsey and Shane Cronin say their research shows patterns of seismic activity before an eruption that make advance warning possible.



New Zealand is well served by a series of monitoring instruments, operated by GNS Science, which measures earth movements and tremors. The GeoNet system reports back data from the country's thousands of earthquakes, and less frequent volcanic events, each year as they happen, but they are not predictive. Dempsey and Cronin have applied past eruption data to machine learning algorithms, allowing them to look for patterns in the build-up to eruptions.

The geologists admit it is not fool-proof and probably only larger events will be detected. The trade-off is that the alerts, if acted upon, would keep the island off-limits to visitors for about one month each year.

The scientists are now working with GNS Science to make the system operational. They have also made their data and software open source, allowing others to use the data in the hope of improving the tool.

Greta Thunberg wins one million euro prize, says she will donate it to environmental groups



Climate activist Greta Thunberg plans to donate 1 million euro (\$1.14 million) prize to organizations focused on the environment and climate change. The 17 year old Swede was named winner of the inaugural **Gulbenkian Prize for Humanity** on Monday. *"All the prize money will be donated through my foundation to different organizations and projects who are working to help people on the front lines affected by the climate crisis and ecological crisis."*

Theme of World Environment Day 2020



BURHANI FOUNDATION (INDIA)

Amatullah Manzil, 65 Bazargate Street, Fort, Mumbai-1.

Phone: 22678480 / 22634326

Youtube: Burhani Foundation India Channel

Website: burhanifoundationindia.org

Facebook: Burhani-Foundation-India

Email: bfi52@yahoo.co.in

Twitter: BFI_environment

bfi5253@gmail.com

Instagram: burhani.foundation



Eco-World

Environment Wellness & Lifestyle Monthly Newsletter



Coronavirus pandemic threatens to undo the progress on plastic pollution

Before the coronavirus pandemic, the plastic bag was in retreat. Single-use plastics had become the subject of aggressive and successful restrictions. Consumers were becoming mindful of the need to reduce the amount of plastic used. Companies were switching over to more sustainable materials.



Now, rollbacks of regulations, sanitary concerns and the plummeting prices of new plastics threaten to undo years of progress. The pandemic has created a base for brands or consumers to not be as focused on those environmental goals and really just to focus on whatever's cheaper.

Just 8% percent of plastic is recycled globally. The rest ends up disposed off in landfills, incinerated — contributing to harmful greenhouse gas emissions — or polluting oceans, rivers and other parts of the environment.

Although plastic plays an important role in medical supplies and protective equipment to fight the pandemic, the plastic industry is trying to exploit this crisis to wind the clock back on the past five years of measures to combat plastic pollution. Environmentalists echo the fear. Even though single-use plastics are the safest option, all the science we've seen to date indicates COVID-19 sticks longest to plastic. For now it seems that **Reduce, Reuse and Recycle** are our only options.

Eco Friendly Products are available abundantly in many categories. Lets use as much as possible

Clothing	Clothes, towels, footwear
Kitchen	Cutlery, waste bags, coffee cups, drink bottles, sandwich wraps
Home Items	Furniture, paper, pouches, table covers, rugs, aluminum foil, toothbrushes, toys, LED lights
Gadgets	Computer accessories, laptops, watches, cell-phones, chargers, speakers, wallets, phone cases, food bags
Accessories	Belts, sunglasses, backpacks, handbags
Solar Powered	Lights, grills, lawn mowers, charging stations

Five Environmental Lessons Coronavirus Could Teach Humanity

Since COVID-19 swept across the globe earlier this year, scientists have documented the ways that the virus emerged from—and worsened because of—human interaction with the air we breathe, the food we eat, the wild spaces that surround us. Among the lessons learnt are :

1 Clean The Air

Air pollution is known to cause many of the underlying conditions for some patients. Early in Italy's outbreak, a team of scientists led by the University of Bologna's Leonardo Setti found COVID-19 RNA attached to particles of air pollution in Bergamo. Setti's discovery raises the possibility that COVID-19 travels on particulate air pollution, thus suggesting that, in conditions of atmospheric stability and high concentrations of particulate matter (PM), SARS-CoV-2 could create clusters with outdoor PM and, by reducing their diffusion coefficient, enhance the persistence of the virus in the atmosphere. In spite of being considered primarily transmitted by indoor bioaerosols, droplets and infected surfaces, or direct human-to-human personal contacts, it seems that high levels of air pollution, weather and specific climate conditions have a significant impact on the increased rates of confirmed COVID-19. There are two ways air pollution may influence how COVID affects people: by causing preconditions and by keeping the virus afloat longer.



2 Preserve Wild Spaces

In the wake of HIV, Ebola and SARS, scientists documented a potential path for viruses from bats, who have an enviable immunity to them, through other mammals to humans. Some scientists and doctors have further argued that path is paved by deforestation. *"Deforestation and the sale of live wild animals or bushmeat, such as bats and monkeys, make the emergence of new viruses inevitable, while population growth, dense urbanization and human migration make their spread easier."*, said Dr. Seth Berkley, head of the GAVI Alliance—a non-profit international vaccine initiative—writing in Scientific American. Bats are not the problem, scientists agree. In fact, their immune systems may hold the answer to viral epidemics, they are not the primary carrier of these viruses to humans. When these zoonotic diseases do reach humans, it is typically through human activity.



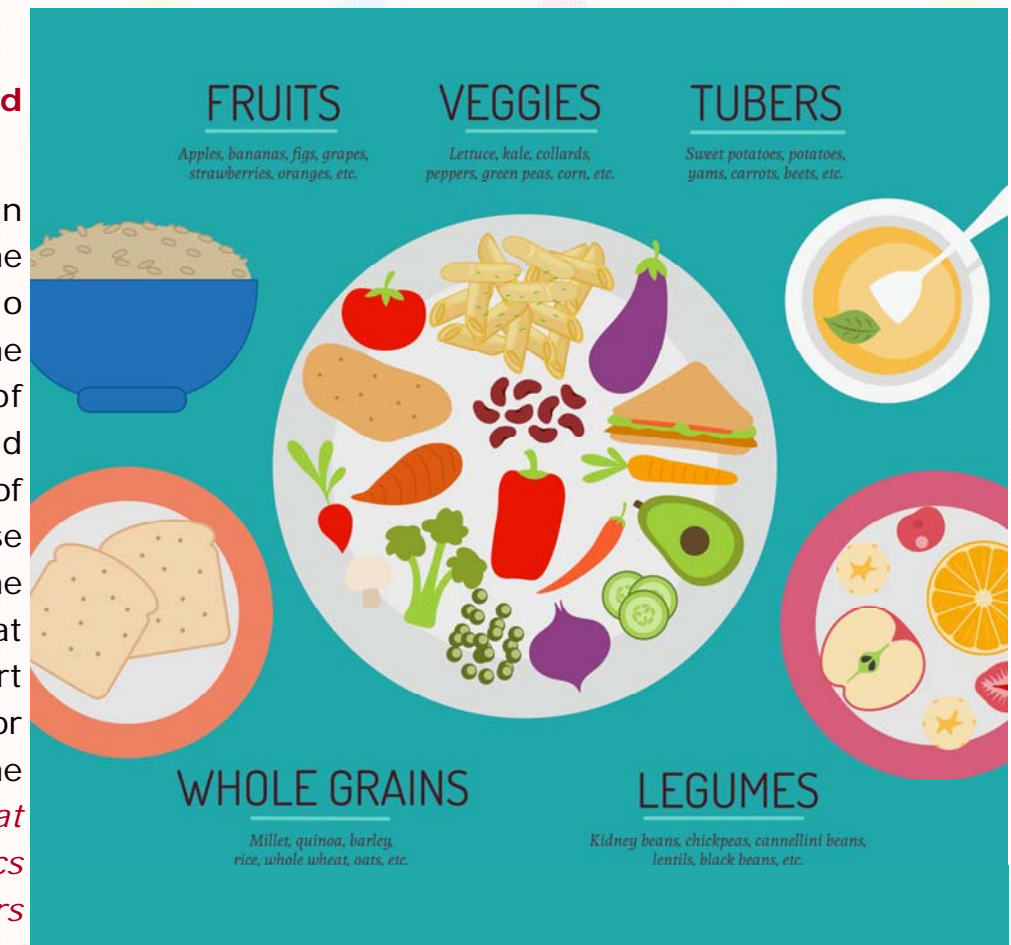
3 Broaden Our Notion of Health

"COVID-19 is one of the worst zoonotic diseases, but it is not the first." said UNEP's Anderson. Ebola, SARS, MERS, HIV, Lyme disease, Rift Valley fever and Lassa fever preceded it. In the last century we have seen at least six major outbreaks of novel coronaviruses. Anderson believes we must stop thinking of human health separately from animal health and environmental health. *"Part of this process is the urgent adoption of integrated human, animal and environmental health expertise and policy – a One Health approach. One Health is not new. The weakest link in the chain is environmental health. We have to fix this."*

4. Prefer plant based foods

There are 15 diseases in cattle and poultry with the potential to leap to humans. Writing in the brand-new Journal of Disease Reversal and Prevention, a group of Chicago doctors cited these facts, as well as the relationship between meat consumption and heart disease, as they called for a reassessment of the human diet. *"Given that the two largest pandemics in the past 100 years revolve around our food*

choices specifically the consumption of animals, we would propose a global moratorium on this and a re-evaluation of our food sources and nutritional choices to prefer plant based foods in a greater quantity." writes Dr. Mashaal Ikram of Mercy Hospital.



5 Listen To Science

On the bright side, the coronavirus pandemic has demonstrated a human ability to respond to environmental threats at the individual level on a global scale. The general public has been compliant, accepting changes in their lives that are uncomfortable if not wrenching. As long as we don't heed to pollution, climate change and biodiversity loss, they will continue to throw more and more immediate threats, including more pandemics, in our direction. So the coronavirus pandemic offers vital lessons for future threats.