

Our Concern, a monthly e-newsletter, is a compilation of news and views from local, and international, media coverage as an attempt to keep our readers abreast on the recent happenings on clean air, energy, and urban mobility and climate change issues.

# Kathmandu Valley Air Quality overview (PM 2.5)



Data retrieved from: https://aqicn.org/city/nepal/kathmandu/us-embassy/



For the Month of August, all of the days except a single day were satisfactory. This happens rarely for Kathmandu Valley.

- 30 days were satisfactory, posing little or no risk with AQI values ranging from 0 to 50.
- Only 1 day was within the acceptable range i.e. AQI value ranging from 51 to 100. During such period, despite air quality being acceptable; there may be a moderate health concern for people sensitive to air pollution. Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion.

## Worsening food insecurity calls for stress-tolerant seeds

Despite 65% population i.e. over 3.2 million Nepalese families depend on agriculture for their livelihood accounting 25% of GDP, farmers are facing a multitude of problems every year from chemical fertilizer shortages to lack of irrigation. However, the climate crisis is the most urgent concern. In Nepal, food production cycles are planned around the alternance of dry and rainy seasons. Global warming deregulates and exacerbates these natural weather phenomena, to the point of undermining crop and vegetable production. On the one hand, excessive rainfall is flooding farmlands and aggravating soil erosion. On the other hand, droughts are hampering cultures that require lots of water, such as rice paddies. As a result, farmers become unable to meet the national demand for food, and the country has to increase its fresh vegetable imports – which takes a toll on the rest of the economy.

One of the solutions envisaged to sustain the country's agricultural productivity is the adoption of climate-resilient seeds that can endure extreme conditions including drought and submergence, brought about by climate change and help sustain agricultural productivity.

Published on: August 6 & 12, 2022

Source:https://kathmandupost.com/national/2022/08/06/worsening-food-insecurity-calls-for-stress-tolerant-seeds

Source:https://earthrefuge.org/can-climate-resilient-seeds-prevent-nepals-imminent-food-crisis/

## Lack of timely rain hits rice farmers

The annual monsoon rains have failed to arrive in Nepal as anticipated ahead of the rice-planting season, leaving farmers facing another season of loss and the country bracing for a food shortage. According to a senior Government Meteorologist; it's still too early to link the lateness of the monsoon to climate change, but what's certain is that climate change is already wreaking havoc with rainfall patterns in Nepal. Further, a report by the Department of Hydrology and Meteorology suggests that the volume of total rainfall hasn't changed much but the intensity has, making the rainfall patterns unpredictable and increasing the chances of flash floods. Contrary to farmers' anticipation, lack of rainfall has created more trouble than chemical fertilizer shortage. Ranju Sharma, a farmer from the rural municipality of Katahari complains about the rice field developing cracks and plants being dried up. Nepal's import-dependent economy, already under huge pressure due to rising fuel prices, could take another hit if rice production takes yet another major hit this year.

Published on: August 8, 2022

Source:https://news.mongabay.com/2022/08/lack-of-timely-rains-fertilizer-hits-rice-farmers-in-nepals-

granary/?fbclid=IwAR1pK6qvkY\_tt\_p925Se0sBAbzB4c7bJ8vL2Zm1nJ30Zlj8a\_a9pDowzZjY

## When will Nepal's high-level bodies on climate change work actively?

Although the Environment Protection Act 2076 provides for the National Council on Environment Protection and Climate Change Management under the chairmanship of the Prime Minister, its meeting has not been held yet. Nor has it been possible to appoint eight other members of the council apart from the ex-officio members as stipulated by the law implemented three years ago. Experts have already argued that a high-level government structure or agency is needed in Nepal to address the issue of climate change, which is becoming nationally and internationally important. Although the Climate Change Management Division at the Ministry of Forests and Environment is the focal body on climate change issues, there is a complaint that this division is not playing a sufficient role in inter-ministerial cooperation and coordination. Climatologist Dr. Bimal Regmi argues that a powerful structure is necessary to address climate change and to fulfill the commitments made by Nepal in the international arena. He believes that the National Council for Environment Protection and Climate Change Management, as provided by the Environmental Protection Act 2076, can be activated as a secretariat. Prime Minister's newly-appointed adviser on climate change, Madhav Karki believes that as much as possible the institution should be 'retrofitted' but new structures can also be created by 'reviewing what the existing structures are doing'

#### Published on: August 10, 2022

Source:https://myrepublica.nagariknetwork.com/news/when-will-nepal-s-high-level-bodies-on-climate-change-work-actively/

## Government prepares for ambassadors-level climate change conference

Nepal will be hosting a conference of ambassadors and stakeholders concerned from the mountain countries on the theme of minimization of climate change risk on the occasion of the International Mountain Day, 2022 on coming December 11. Ambassadors and experts in the related field from 20 countries will join the event aiming to draw global attention to the impact of climate change on mountain nations. Both resident and non-resident ambassadors for Nepal from the mountaineering countries will participate in the event and it will be in preparations for the Mountain Advocacy Summit scheduled to be held in Mustang in March 2023, focusing on the implications of climate change in the high hills. (RSS)

Published on: August 23, 2022

#### Source: https://risingnepaldaily.com/news/15763

### **Alarming pollution: Pokhara**

Pokhara, Nepal's tourism capital, well known for its beauty and cleanliness lately, has been occupied with waste and foul odor. The sewage is mixed in almost all the rivers not only by the residents and business houses but also by the government institutions like Armed Police Force Training Centre. This has not just polluted the natural and cultural heritage monuments but has disgraced the entire city too. A committee under Ministry of Energy, Water Resources and Irrigation reports that the Seti River has been contaminated by excrement and waste from local households, cold stores and hospitals. Even the aborted foetuses are seen flowing in the rivers. Likewise, the skulls, bones and carcasses of various animals are also polluting air with their bad odour besides water bodies. Earlier, cleaning campaigns were held to maintain the beauty of the city though none of them were effective. Around 50 offenders' names were sent to the metropolitan city office, but none of them was brought to legal action. It seems the serene city is becoming the next Kathmandu as far as waste management is concerned.

#### Published on: August 8, 2022

Source:https://english.onlinekhabar.com/pokhara-waste-management.html

## Breathing is hazardous to health

New studies warn that Kathmandu's air is even more toxic than previously known; pointing to very high concentrations of poisonous nitrous oxides as well as tiny suspended particulates, due to the increase of vehicles in Kathmandu Valley. Dirty air is reducing the lifespan of Nepalese by nearly 7 years in the Terai, by 3 years in Kathmandu Valley, and Nepal has the highest lung disease death rate in the world, new research papers warn. Released on 17 August, A State of Global Air Report 2022, Kathmandu is surprisingly not on the list of top 20 most polluted cities, but the Valley has seen a dangerous increase in the concentration of both pollutants since 2000. Household fires, brick kilns, open garbage burning and diesel vehicles are primary sources of PM2.5. Pallavi Pant, Health Effects Institute explains "Kathmandu does not feature among the cities with the highest PM 2.5 levels, but average annual exposures to these dangerously small particles are higher than the WHO Air Quality Guidelines, and even the least stringent interim target of 35 µg/m3." Published on: August 26, 2022

Source:https://www.nepalitimes.com/banner/warning-breathing-is-hazardous-to-health/?fbclid=IwAR3E40PzqPEke9W2Qi-yjK-afd9sJBS2Ci56AlCIZ8JScf-ai2pIyZLU0Jo

## Nepal has 'world's highest' lung disease death rate

A study reported that Nepal had the highest reported death rate from chronic obstructive pulmonary disease in 2019, primarily due to air pollution. According to Jay Kaufman, McGill University, the main causes of chronic obstructive pulmonary disease are smoking, indoor air pollution from cooking and heating, and outdoor air pollution in the context of poorer Asian countries. Nepal had the highest death rate from COPD caused by air pollution, 26% COPD deaths caused by exposure to this risk factor. With rapid urbanization, Nepal has failed to effectively regulate air pollutants and implement air quality control measures.

#### Published on : August 22, 2022

Source: https://www.scidev.net/asia-pacific/news/nepal-has-worlds-highest-lung-disease-death-rate/?fbclid=IwAR0vMUGEjPgxh3X9ZBKEpYfYmvOSPIRZKefyxQyXy87bLukD9AXQPxM 4bzc

### **Solution to Pollution by youths**

Three youths of Lalitpur have created Chow Bio Tech, an Algae Bio Reactor as 'Solution to Pollution' for urban areas with increasing levels of air pollution. The device like a tree absorbs carbon dioxide and gives oxygen. The algi bio reactor has green particles (chlorophyll)-rich plants (levees) in the given artificial environment and does the photosynthesis process to produce oxygen. The reactor takes in 1.8 tons of carbon dioxide and gives 1.5 tons of oxygen in a month. Until plantation programs to promote greenery and maintain clean air is effective, this device will support to some extent.

#### Published on : August 30, 2022

Source:https://ekantipur.com/news/2022/08/30/166184773104921559.html?fbclid=IwAR0MKY VQkogaHswGgioDxWw8uokjDBHYXqobV0go1Nc9\_ZPvNGQzfXsr9Nc

# NEA brings into operation EV charging station built at its head office in Kathmandu

An electric-vehicle (EV) charging station built by Nepal Electricity Authority (NEA) at Ratnapark, Kathmandu, has come into operation. According to the NEA, big vehicles including public buses, cars, SUV cars and microbuses can get recharged at the rates of 1.20, 70 80 &90 paisa (NPR) per unit . In a bid to facilitate the use of EVs, the NEA has been constructing 51 charging stations across the country. The NEA will also be providing an advance booking system through an online platform to service seekers. Similarly, motorists can pay by using online payment services via mobile apps. The vehicles can get fully charged between half an hour to one hour of time period.

Published on: August 30, 2022

Source:https://myrepublica.nagariknetwork.com/news/nea-brings-into-operation-ev-charging-station-built-at-its-head-office-in-kathmandu/

## **Good reads:**

https://kathmandupost.com/editorial/2022/08/10/the-pedal-on-evs

https://english.onlinekhabar.com/plastic-roads-kathmandu-possibility.html

https://myrepublica.nagariknetwork.com/news/when-will-nepal-s-high-level-bodies-on-climate-change-work-actively/?categoryId=81

https://news.un.org/en/story/2022/08/1124242

https://risingnepaldaily.com/news/15763

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