

The Hindu

Front Page

Monkeypox is 'public health emergency' (Page no. 1)

(GS Paper 3, Health)

The World Health Organisation has declared the global monkeypox outbreak a 'public health emergency of international concern' (PHEIC), one step below that of a 'pandemic.'

A PHEIC, according to the WHO, constitutes an extraordinary event, which constitutes a public health risk to other States through the international spread, and which potentially requires a coordinated international response.

On January 30, 2020, the organisation had categorised COVID-19 as a PHEIC, when about 7,500 cases of novel coronavirus were reported. On March 11 that year, the agency elevated it to 'pandemic.'

The latest decision of the International Health Regulations Emergency Committee to discuss the monkeypox outbreak in several countries. It is this Committee of the WHO that decides on the seriousness of a public health crisis.

Though the Committee didn't reach a consensus on whether the outbreak constituted a PHEIC, Director General, Dr. Tedros Adhanom Ghebreyesus, decided that the situation merited such a classification.

We have an outbreak that has spread around the world rapidly, through new modes of transmission, about which we understand too little, and which meets the criteria in the International Health Regulations.

For all of these reasons, I have decided that the global monkeypox outbreak represents a public health emergency of international concern," he stated.

WHO considers declaring monkeypox a global health emergency. The WHO has been criticised in the past for not recognising the incipient threat, soon enough, from COVID-19.

States

Kerala researchers detect fungal disease in jackfruit (Page no. 5)

(GS Paper 3, Health)

Compared to other fruits, jackfruit is considered relatively free of diseases, but now, researchers at the Integrated Farming Systems Research Station (IFSRS), a Kerala Agricultural University (KAU) facility at Karamana here, have reported the emergence of a new fungal disease in jackfruit.

It is perhaps the first time that fruit rot caused by the fungus *Athelia rolfsii* is being reported in jackfruit (*Artocarpus heterophyllus*) in India.

A soil-borne fungal pathogen, *Athelia rolfsii* is a major threat to several crops and, hence, the new development warrants immediate attention, a research paper describing the IFSRS findings published in the latest edition of the Journal of Plant Pathology warned.

The disease-infected samples were of mature jackfruit collected from Thiruvananthapuram, Kottayam and Pathanamthitta districts.

While fruit varieties introduced from elsewhere can bring new diseases with them, the fruit rot caused by *Athelia rolfsii* does not fall into this category.

Athelia rolfsii is a soil-borne fungal pathogen with a wide host range which attacks various commercially cultivated crops belonging to different families.

But this is the first time it is being reported in jackfruit in the country. One disease which is found in immature jackfruit is the Rhizopus fruit rot, but it does not affect mature fruit.

Over the past few years, Kerala has been witnessing serious efforts to popularise jackfruit and jackfruit-based products. In 2018, the State government had also declared jackfruit as the official fruit of Kerala.

News

Industry tag for Rajasthan tourism units (Page no. 6)

(GS Paper 3, Economy)

The 'industry' status accorded to the tourism and hospitality sector in Rajasthan earlier this year has given a sure and certain fillip to the State's tourism units that had incurred huge losses during the pandemic.

The power tariff and other taxes levied on tourism operators have now been brought on par with other industries, against the much-higher commercial rates levied earlier.

Chief Minister had announced in his 2022-23 budget speech in the State Assembly in February this year that the tourism and hospitality sector would be granted industry status. The concessions to the tourism sector as an 'industry' would bring a financial burden of ₹700 crore a year on the State exchequer.

Since the formal grant of this status on May 28, the tourism units have been seeking out new ventures especially as international tourism is yet to gain momentum in the State.

The Rajasthan domestic travel mart, dwelt on expanding the scope of tourism by highlighting the desert State's rich and varied culture.

Art and Culture Minister inaugurated the mart, said Rajasthan had a number of tourism products related to its history and heritage, art and culture, wildlife, fairs and festivals, adventures, wedding and film shoot destinations. The mart was organised jointly by Rajasthan Tourism and the Federation of Hospitality and Tourism in Rajasthan (FHTR).

Tourism-friendly budget and the industry status would go a long way in promoting the State as a preferred tourist destination.

Two documents pertaining to the State's film tourism promotion policy-2022 and a memorandum of understanding with UNESCO on the intangible cultural heritage were released on the occasion.

Media running kangaroo courts, says CJI Ramana (Page no. 7)

(GS Paper 2, Judiciary)

Chief Justice of India N.V. Ramana said the media is running "kangaroo courts" on issues even experienced judges find difficult to decide.

Concerted campaigns against judges, particularly on social media, and media trials affect judicial functioning. Doing justice is not an easy responsibility. It is not easy to swallow when false narratives are created about the "easy life" led by judges.

He said ill-informed, biased and agenda-driven debates in the media on issues pending in courts are affecting justice delivery.

New media tools have enormous amplifying ability but appear to be incapable of distinguishing between the right and the wrong, the good and the bad and the real and the fake. Media trials cannot be a guiding factor in deciding cases.

Media has breached its responsibility, taking democracy two steps backwards, affecting people and harming the system. Print media still has certain degree of accountability. Whereas, electronic media has zero accountability as to what it shows vanishes in thin air. Still worse is social media.

Owing to the frequent transgressions and consequent social unrests, there is a growing demand for stricter media regulations and accountability. The top judge said it was best for media to self-regulate and "measure their words".

Judges may not react immediately. Please do not mistake it to be a weakness or helplessness. When liberties are exercised responsibly, within their domains, there will be no necessity of placing reasonable or proportionate external restrictions. Chief Justice Ramana expressed his worry about the increasing burden of cases piling up on a judiciary with a fragile infrastructure.

Except for a few knee-jerk reactions I have not heard of any concrete plan to equip the judiciary to meet the challenges of the foreseeable future, leave alone, a long term vision for the century and ahead.

Farm budget helps Rajasthan farmers (Page no. 8)

(GS Paper 3, Economy)

The measures being taken under the first-ever agriculture budget presented in Rajasthan this year have helped out the farmers with a mission mode adopted for 11 thematic areas.

The small and marginal farmers have benefited from subsidies for solar pumps and farm ponds, while drip irrigation has been promoted as a long-term solution in the arid regions.

Chief Minister had presented the agriculture budget for 2022-23 in the Assembly in February this year with the expectation to gain the support of farmers discontented with the Centre's agricultural policies and consolidate their support for his government. A provision of ₹5,000 crore for Krishak Sathi Yojana was made in the budget.

Reviewing the progress of budgetary actions, Mr. Gehlot said all the announcements would be implemented to extend the benefits to farmers with the emphasis on innovations for the cultivators. The budget has especially promoted drip and sprinkler irrigation systems in view of scarcity of water in the State.

The schemes for small and marginal farmers were being publicised to extend the benefits to the targeted groups, Mr. Gehlot said. Drip irrigation was being promoted for the arid regions with a provision of ₹1,750 crore for four lakh

farmers, while an approval has been issued for providing drip irrigation equipment to 1.60 lakh farmers for use in two lakh hectares under the State micro-irrigation mission. Besides, a subsidy of ₹61.58 crore has been given for solar pumps. The Chief Minister said 1,000 drones would be purchased at a cost of ₹40 crore for distribution to the village cooperative societies and farmer producer organisations for spraying of pesticides in a safe and effective manner.

Seeds of improved varieties were also being distributed to the marginal farmers, while 76% of the crop sowing work has been completed during the current monsoon season.

Chief Secretary Usha Sharma has given instructions for preparing a digital database of all farmers in the State to enable them to get crop loans and various subsidies and make crop insurance claims without hassles. The digital linkage will also facilitate prompt issuance of advisories related to agriculture.

**Any country can use CoWIN free (Page no. 8)
(GS Paper 3, Science and Tech)**

Any country interested can avail CoWIN platform, the platform will be provided free of cost, said Dr. R.S.Sharma, CEO of the National Health Authority.

Selected vendors by the country will be trained on CoWIN technology to customise it for their requirement. Usually, since the vaccination cycle is almost the same in all countries, the customisation will be limited to changes in field and master data configuration.

Complete revamp of the application by any country is not expected,” he elaborated while speaking about (CoWIN) which provided the digital support for the COVID vaccination drive in the country.

Dr. Sharma further said that India has already signed an MoU with the Government of the Co-operative Republic of Guyana for sharing CoWIN; “We are in advanced talks with a couple of other nations to share CoWIN with them,” he confirmed.

India crossed a milestone of administering 2 billion vaccine doses a week ago and talking about its continued importance Dr. Sharma said that as CoWIN is repurposed, it could also help achieve the vision of Universal Vaccination against COVID-19 and further be repurposed for use in the healthcare sector.

On July 5, 2021, the Central Government organised the Co-WIN Global Conclave with the endeavour to share experiences and expertise on the CoWIN platform with the global community.

Over 140 countries participated in the event and nearly a dozen expressed an interest in learning from the platform and evaluating adopting it.

Stating that CoWIN has also become the world’s biggest digitally verifiable vaccination certificate generating platform, Dr. Sharma said that today Co-WIN is highly configurable and adaptable.

It has evolved based on the changing policy landscape and the requirements of the beneficiaries. The platform was developed at record speed with ample consideration to its scalability, modularity and interoperability.

**Bat habitats in South Western Ghats lie mainly outside protected areas, finds study (Page no. 8)
(GS Paper 3, Environment)**

A recent study indicates that more than 50% of habitats suitable for 37 species of bats in the Southern Western Ghats lie outside protected areas, potentially increasing threats faced by the animals due to poaching for their meat, habitat loss and stigma from local communities, especially after the COVID-19 pandemic.

The authors of the paper based their study area around 1,600 km of the Southern Western Ghats, encompassing biodiverse regions in Kerala, Karnataka and Tamil Nadu. Six major biodiversity hotspots— Agastyamalai, Periyar Tiger Reserve, Anamalai, the Nilgiris, the Wayanad-Mudumalai complex and Brahmagiri— were part of the study area.

According to the researchers, the Southern Western Ghats was home to rare and endangered bat species such as Salim Ali’s fruit bat (*Latidens salimalii*) and the Pomona roundleaf bat (*Hipposideros pomona*).

It is said that seven of the 37 bat species studied in the region had broad distribution ranges exceeding 20,000 square km, 19 species had intermediate distribution ranges between 10,000 and 20,000 square km, and 11 species were restricted to ranges less than 10,000 square km.

Worryingly, only two species of bats had a distribution range that was significantly located in protected areas. Meanwhile, the distribution ranges of 35 other species lay primarily outside protected areas.

Different species had different percentages of their ranges protected: five had less than 10% protection; six had between 10% and 20% protection; 10 had between 20% and 30% protection; 14 had between 30% and 40% protection; and two had between 40% and 50% protection.

Moreover, potential suitable areas of forest-dependent species were mostly found to be in unprotected areas,” the researchers noted.

The study will hopefully help local governments and forest departments come up with conservation plans to protect bat species across the Western Ghats, one of the authors of the paper and a wildlife biologist from the molecular biodiversity lab of the department of zoology and wildlife biology.

World

After grain deal, Russia hits Ukraine port (Page no. 9)

(GS Paper 2, International Relation)

Russian missiles hit Ukraine's Black Sea port of Odesa hours after Moscow and Kyiv signed deals to allow grain exports to resume from there. The Ukrainian Foreign Ministry denounced strike as “spit in the face” of Turkey and the United Nations, which brokered the agreements.

Two Russian missiles hit the port's infrastructure and Ukrainian air defenses brought down two others, the Ukrainian military's Southern Command said. It didn't specify the damage or say whether the strike caused casualties.

It took less than 24 hours for Russia to launch a missile attack on Odesa's port, breaking its promises and undermining its commitments before the U.N. and Turkey under the Istanbul agreement. In case of non-fulfillment, Russia will bear full responsibility for a global food crisis.

Nikolenko described the missile strike on the 150th day of Russia's war in Ukraine as Russian President Vladimir Putin's “spit in the face of U.N. Secretary-General Antonio Guterres and Turkish President Recep Tayyip Erdogan, who made great efforts to reach agreement.”

During signing ceremony in Istanbul, Guterres hailed the deals as "a beacon of hope, a beacon of possibility, a beacon of relief in a world that needs it more than ever.”

The agreements were intended to clear the way for the shipment of millions of tons of Ukrainian grain and some Russian exports of grain and fertilizer held up by the war.

Ukrainian President Volodymyr Zelenskyy said in his nightly video address that the agreements offered “a chance to prevent a global catastrophe – a famine that could lead to political chaos in many countries of the world, in particular in the countries that help us.

Along with the strike on Odesa, Russia's military fired a barrage of missiles Saturday at an airfield and a railway facility in central Ukraine, killing at least three people, while Ukrainian forces launched rocket strikes on river crossings in a Russian-occupied southern region.

The attacks on key infrastructure marked new attempts by the warring parties to tip the scales of the grinding conflict in their favor.

Other countries can join CPEC for mutual benefits: China, Pak. (Page no. 9)

(GS Paper 2, International Relation)

Pakistan and China decided to welcome any third country joining the multi-billion dollar China-Pakistan Economic Corridor (CPEC) for “mutual beneficial cooperation”.

The third meeting of the China-Pakistan Economic Corridor (CPEC) Joint Working Group (JWG) on International Cooperation and Coordination (JWG-ICC) was held in virtual mode and was co-chaired by Foreign Secretary Sohail Mahmood and China's Assistant Foreign Minister Wu Jianguo, according to a statement by the Foreign Office.

During the meeting, both sides reviewed continued implementation of CPEC and its expansion to jointly agreed priority areas.

It was noted that as a flagship of the Belt and Road Initiative (BRI), CPEC had broken new ground in strengthening international and regional connectivity, especially in the context of its extension to Afghanistan.

It was also agreed that CPEC's development had reached a new point, with increasing emphasis on high-quality development of industry, agriculture, IT, and science and technology, while ensuring tangible socio-economic benefits for the people.

The timely completion of CPEC projects and steady progress on realising important projects in the pipeline was energising bilateral cooperation and further strengthening the foundation for Pakistan's economic modernisation and enhancing the capacity for sustained progress and prosperity.

CPEC was launched in 2015 with the objective to increase connectivity in Pakistan and China by building roads, energy projects and industrial zones in Pakistan. Originally valued at \$46 billion, the projects were worth \$62 billion as of 2017. India has protested to China over the CPEC as it is being laid through Pakistan-occupied Kashmir. Launched in 2013, the CPEC is a corridor linking Pakistan's Gwadar port on the Arabian Sea with Kashgar in northwest China's Xinjiang Uygur Autonomous Region, which highlights energy, transport and industrial cooperation.

Science and Tech

Wastewater surveillance reveals infection dynamics (Page no. 10)

(GS Paper 3, Science and Tech)

Wastewater or sewage can tell us volumes about the health of a community. The idea here is very simple — most pathogens of interest, e.g., bacteria, virus or protozoa remain viable in the sewage environment for days.

Wastewater-based health surveillance or environmental surveillance is an excellent tool for tracking the presence of different pathogens in the environment.

All it needs is a regular and consistent testing of wastewater. It is quite economical and provides real-time data, which makes it very useful for developing countries such as India where not everyone has access to healthcare.

In India, tracking of COVID-19 pandemic relies heavily on testing symptomatic individuals for the presence of SARS-CoV-2 RNA and counting the positive tests over time.

With high population density, many infected persons are likely to be asymptomatic or oligosymptomatic (few symptoms). They are generally not tested, leading to underestimation of COVID-19 cases.

Furthermore, infected or asymptomatic individuals start to shed the virus via the faecal route four-seven days in advance of actual testing or symptoms showing up, which means the increase in viral load in sewage water ahead of reported cases works as an early warning system and complements the routine diagnostic surveillance by capturing near real-time virus circulation at the community level.

Using this conceptual background, the Tata Institute for Genetics and Society (TIGS) in collaboration with Biome Environmental Trust and National Centre for Biological Sciences (NCBS), led a longitudinal study (January-June 2022) across 28 Bangalore sewer-shed sites capturing data from more than 11 million people.

The study posted as a preprint in the medRxiv server (preprints are yet to be peer-reviewed) investigated the relationship between SARS-CoV-2 concentrations in wastewater and COVID-19 cases reported on a daily basis. Each sewer-shed site/sewage treatment plant has a specific catchment area i.e., wards served by the treatment plant.

By normalising the viral load for population size of that catchment, water inflow etc, we could estimate the number of infected individuals in that catchment area which was estimated to be higher than the reported cases in the city.

Rise and fall of cholera-causing bacteria lineage (Page no. 10)

(GS Paper 3, Science and Tech)

Cholera is a life-threatening infectious disease and a public health hazard. It is caused by a comma-shaped bacterium known as *Vibrio cholerae*.

More than two hundred serogroups of this bacterium are known, of which only O1 and O139 are known to cause such infection that leads to epidemics and pandemics. Most of the serogroups only cause mild cholera-like diarrhea and food-associated outbreaks.

Of these two serogroups, O1 was responsible for seven pandemic waves, only to be temporarily displaced by O139. This emerged late and came up around 1992. It was first spotted in Chennai (then Madras).

It was anticipated that this would cause the eighth round of pandemic but it subsided as mysteriously as it had originated.

A group of researchers, including from India and the U.K., have studied the genome of O139 and traced the reason for its dying down after taking over from O1.

They trace it to two key genomic evolutionary changes that took place in O139, the first related to the type of cholera toxin it produced and the second related to a loss of anti-microbial resistance.

Clinical isolates of *V. cholerae* O139 serogroup collected between 1993 and 2015 from several parts of India at the ICMR-National Institute of Cholera and Enteric Diseases, Kolkata and other Asian regions were included in the study.

The *V. cholerae* DNA were sequenced at the Wellcome Sanger Institute, U.K. and analysed at the Cambridge Institute of Therapeutic Immunology and Infectious Diseases, U.K. and Translational Health Science and Technology Institute, Faridabad, India.

A total of 330 *V. cholerae* O139 isolates were included in this study. In addition, 340 genomes from published sequences were included in this study.

FAQ

Will Russia-Ukraine deal ease global food crisis? (Page no. 11)

(GS Paper 2, International Relation)

In their first major deal since the February 24 war began, Russia and Ukraine agreed to resume grain exports from Black Sea ports as part of a deal negotiated by the United Nations and Turkey.

The UN had initiated talks in April to unblock the millions of tonnes of wheat and other food items stuck in Ukraine's Black Sea ports that have been blockaded by Russia.

The breakthrough appeared to have come in Russian President Vladimir Putin's summit meeting with his Turkish counterpart Recep Tayyip Erdogan in Tehran last week.

The agreement, signed separately by Russia and Ukraine with Turkey and the UN, is expected to ease a looming global food crisis.

Russia and Ukraine together account for more than a quarter of the world's wheat supplies. Russia's share in the global exports of wheat, the world's most widely grown crop, is some 20% according to 2020 figures, while Ukraine accounts for 8%.

About 50 countries depend on Russia and Ukraine for more than 30% of their wheat imports. Besides wheat, Ukraine is the world's eighth largest producer and fourth largest exporter of corn, accounting for 16% of global exports.

Further, Ukraine, which produces up to 46% of sunflower-seed and sunflower oil is the world's largest exporter of sunflower oil.

The Ukraine war has therefore clearly hit one of the breadbaskets of the world. This heaped additional pressure on global food prices, which were already under strain due to climate shocks and the COVID-19 pandemic.

The UN's Food Price Index averaged 154.2 points in June, 23% higher than its value a year ago. Food price inflation has soared across economies in recent weeks. The exports agreement, if implemented, would see Russian and Ukrainian grains flowing back into the market, easing prices.

What is the controversy over GST levies on food? (Page no. 11)

(GS Paper 3, Economy)

From July 18, a 5% Goods and Services Tax (GST) has been levied on several food items and grains that are sold in a pre-packed, labelled form even if they are not branded.

So far, these items, which include curd, lassi, buttermilk, puffed rice, wheat, pulses, oats, maize and flour, were exempted from the GST net.

The fresh tax levies have attracted an outcry from traders as well as Opposition parties, with proceedings in Parliament's Monsoon session repeatedly disrupted over the issue.

The 5% tax on unbranded packed food items was approved by the GST Council in late June, and was part of a broader set of changes in the GST structure to do away with tax exemptions as well as concessional tax rates.

Some of the other items to have lost their tax-exempt status include bank cheques, maps and atlases, hotel rooms that cost up to ₹1,000 a night, and hospital room rents of over ₹5,000 a day.

While the decision was signed off by the Council, chaired by Finance Minister Nirmala Sitharaman, after a two-day meeting in Chandigarh last month, the ground for such changes in the GST regime was set at the Council's previous 'regular' meeting at Lucknow in September 2021.

During that meeting, the Centre and States had discussed the need to raise revenues from the GST, which at the time of its launch five years ago, was premised on levying a 'revenue-neutral' rate of 15.5%.

Officials made a detailed presentation to show that several changes in rates since 2017 had brought down the effective rate to 11.6%.

Shoring up GST revenues was the driving force for the Council's decision to form two groups of Ministers (GoMs) — one to consider steps to rationalise the tax rates and correct anomalies, and another to tap technology to improve compliance.

The current rate changes stem from an interim report of the first ministerial group, led by Karnataka Chief Minister Basavaraj Bommai based on officials' recommendations.

How will SC ruling on abortion impact women? (Page no. 11)

(GS Paper 2, Judiciary)

The Supreme Court of India allowed an unmarried woman to end her pregnancy at 24 weeks, after the Delhi High Court refused to allow it, citing the provisions of the Medical Termination of Pregnancy (MTP) Act.

The top court said if a medical board assessed that the pregnancy could be terminated without any harm to the mother, then she could go ahead and have an abortion.

The 25-year-old unmarried woman came to the Supreme Court on appeal after the Delhi High Court turned down her plea to allow her to have a medical termination of her pregnancy because the terms of her relationship with her partner had changed.

Her plea was that she had had a consensual relationship with her partner, but he had refused to marry her after she discovered her pregnancy at about 22 weeks. Being unmarried and raising a child carries a stigma in society and therefore she would like to terminate her pregnancy, she said.

The Delhi High Court had taken the view that she was unmarried and since the Medical Termination of Pregnancy Act allowed only married women to terminate the pregnancy after 20 weeks, she would not be eligible to get an abortion.

The Court said it would amount to killing the foetus, since she was in the 23rd week of her pregnancy. “As of today, Rule 3B of the Medical Termination of Pregnancy Rules, 2003 stands, and this court, while exercising its power under Article 226 of the Constitution of India, 1950, cannot go beyond the statute,” it observed in its order on July 15.

The bench of Justices Satish Chandra Sharma and Subramonium Prasad suggested she give birth to the child and offer up the child for adoption.