

The Hindu

States

Prestigious J.C. Daniel Award for filmmaker K.P. Kumaran (Page no. 6)

(Miscellaneous)

Filmmaker K.P. Kumaran has been chosen for the prestigious J.C. Daniel Award for 2021. The award, conferred by the Kerala government annually in recognition of an individual's contributions to Malayalam cinema, carries a purse of ₹5 lakh, a statuette, and a citation. State Minister for Cultural Affairs V.N. Vasavan announced the award.

A jury consisting of playback singer P. Jayachandran, who was the recipient of the award last year, filmmaker Sibi Malayil, Chalachitra Academy chairperson Ranjith and Culture Secretary Rani George chose Mr. Kumaran for the award. According to the jury, he provided Malayalam parallel cinema with a new aesthetic and visual language in a career spanning around 50 years.

They further observed that since his debut with the short film *The Rock* in 1972 and *Athithi* in 1975 and *Gramavrikshathile Kuyil* made in 2020 at the year of 83, he has made sincere and meaningful use of the cinematic medium.

Athithi, in which the real and the surreal are entwined, was one of the pioneering works of Malayalam new wave. Mr. Kumaran was one of the first filmmakers from the State to win an international award when his short film.

The Rock fetched the gold medal at the Expo film festival in Tokyo in 1972. The award ceremony will be held on August 3.

News

'Bhutan-China talks won't focus on Doklam' (Page no. 8)

(GS Paper 2, International Relation)

India's interests on the Doklam tri-junction will not be harmed or "compromised" by the agreement between Bhutan and China for a three-step "road map" to resolve their outstanding border disputes, Bhutan's Foreign Minister Tandi Dorji said.

In the first interview since he signed the road map MoU in October 2021, and ahead of Bhutan's decision to reopen its borders for tourists in September 2022, Mr. Dorji said that in both cases, it is necessary to learn the "lessons" of the pandemic.

He said that neighbours must find the way to "resolve issues" between them, and that Bhutan and China were hopeful of resolving their disputes soon, and would later take up the tricky issue of the Doklam tri-junction area that involves India's interests as well.

Bhutan has announced that after two-and-a-half years, the country would finally reopen its borders to tourists on September 23.

Dr. Dorji, a paediatrician by profession, said this was possible since all eligible Bhutanese had been administered COVID-19 vaccines, while children's vaccination would soon be completed.

Bhutan, which saw about 60,000 COVID-19 cases and 21 deaths during the pandemic, has had one of the strictest lockdowns in the world since March 2020.

Defending Bhutan's latest decision, to triple its entry fee for other international tourists from \$65 to \$200 a day, as well as to implement for the first time, a daily sustainable development Fee of ₹1,200 for Indian tourists, Mr. Dorji said the government's "high-value, low-volume" policy is for tourists who are sensitive to the environment and willing to pay more to visit Bhutan.

Mr. Dorji said that the pandemic had also shown how "connected" the world is, and the necessity of resolving the outstanding border disputes in the interests of "all three countries" — Bhutan, India and China.

The speed of talks last year took New Delhi by surprise, especially as they came after the 2017 Doklam stand-off between the Indian Army and the People's Liberation Army (PLA).

Mr. Dorji said he had not formally discussed with New Delhi the "Expert Group meeting" in Kunming in April 2021 that finalised the roadmap, but that the Indian government was "aware" of the progress.

World

Biden says U.S. will not walk away from West Asia (Page no. 9)

(GS Paper 2, International Relation)

President Joe Biden, speaking at a summit of Arab leaders, said Saturday that the United States “will not walk away” from the Middle East as he tries to ensure stability in a volatile part of the world and boost the global flow of oil to reverse rising gas prices.

His remarks, delivered at the Gulf Cooperation Council on the final leg of a four-day Middle East tour, came amid concerns about Iran's nuclear ambitions and support for militants in the region.

We will not walk away and leave a vacuum to be filled by China, Russia or Iran,” Mr. Biden said. “We will seek to build on this moment with active, principled, American leadership.

Although U.S. forces continue to target terrorists in the region and remain deployed at bases throughout the Middle East, Mr. Biden suggested he was turning a page after the U.S. invasions of Iraq and Afghanistan.

He announced \$1 billion in U.S. aid to alleviate hunger in the region and he pressed his counterparts, many of whom lead repressive governments, to ensure human rights, including women's rights, and allow their citizens to speak openly.

The future will be won by the countries that unleash the full potential of their populations,” Mr. Biden said, and that includes allowing people to “question and criticize leaders without fear of reprisal.

Crown Prince Mohammed bin Salman, the de facto ruler of Saudi Arabia, convened the summit, which gave him an opportunity to showcase his country's heavyweight role in the Mideast.

He also hinted that the kingdom could pump more oil than it is currently, something Biden is hoping to see when an existing production deal among OPEC+ member countries expires in September.

Biden’s U-turn on Saudi Arabia (Page no. 9)

(GS Paper 2, International Relation)

After assuming the Presidency in January 2021, Mr. Biden released a U.S. intelligence assessment that concluded that Mohammed bin Salman, the Crown Prince and de facto ruler of Saudi Arabia, ordered the killing of Jamal Khashoggi, the Saudi dissident and Washington Post columnist.

Khashoggi was killed and dismembered in October 2018 inside the Kingdom’s consulate in Istanbul. President Biden refused to talk directly to MBS, as Prince Mohammed is widely called.

The administration also announced that it was ending America’s support for Saudi Arabia’s war on Yemen. Speculation was rife that the U.S.-Saudi strategic alliance that goes back to the 1945 meeting between President Franklin D. Roosevelt and Saudi King Abdul Aziz Ibn Saud was in peril.

One and a half years later, President Biden travelled to Saudi Arabia to reset ties with the Kingdom. In Jeddah, the port city on the Red Sea coast, Mr. Biden fist-bumped with MBS, and held talks with him and other senior officials of the Kingdom.

A week before the meeting, State Secretary Antony Blinken had called Saudi Arabia a “critical partner” in dealing with extremism in West Asia and challenges posed by Iran. Clearly, the Biden administration’s apparent efforts to punish and isolate MBS were over.

Three major geopolitical developments that were not in the White House’s direct control seemed to have pushed Mr. Biden to adopt a more traditional approach towards America’s allies in the region, even at the expense of contradicting the promises candidate Biden had made.

First, the Abraham Accords, the set of agreements that saw Israel and four Arab countries (the UAE, Bahrain, Morocco and Sudan) normalise ties under the aegis of the Trump administration, brought in structural changes in the geopolitical alignment of West Asia. Israel and Arab countries had backroom contacts for decades.

Science and Tech

COVID-19: More retractions in journals than preprints (Page no. 10)

(GS Paper 3, Science and Tech)

Emergency use authorisation, pharmaceutical companies announcing the results of clinical trials first through press releases, free access to all COVID-19 scientific papers published in journals and a sharp increase in the number of preprints posted became more common during the pandemic.

Except free access to all COVID-19 papers in journals, which otherwise would have been behind paywalls, all the others came under severe criticism at some point.

As per a comment in The Lancet, an average of 39.5 COVID-19 preprints were posted each day during the pandemic compared with just 10.5 per day during the Ebola virus epidemic of 2014.

Also, the first preprint was posted just 22 days after health authority notification of the initial cluster of cases in Wuhan, China. In contrast, no preprints were posted for about six months after first cluster notifications in the case of Ebola virus and Zika virus.

Early in the pandemic, bioRxiv added a banner on its home paper and on top of every preprint dealing with COVID-19.

The banner read, “bioRxiv posts many COVID-related papers. A reminder: they have not been formally peer-reviewed and should not guide health-related behaviour or be reported in the press as conclusive”.

The decision to publish the disclaimer was prompted by a highly questionable study by Indian researchers posted on bioRxiv preprint server, which was soon withdrawn.

Scientists submit their early drafts to the preprint server, where an in-house team weeds out “obvious spam and clear garbage,” as well as submissions that are not scientific in nature, Richard Sever, co-founder of bioRxiv preprint server, was quoted as saying following the Indian researchers’ study.

Wastewater surveillance for COVID-19 reveals dynamics of infection (Page no. 10) (GS Paper 3, Science and Tech)

In ensuring sufficient precautions and preventive measures be taken in pandemic-driven situations, a very important estimate is of the number of people infected, regions where infection is high and decreasing or increasing trends in viral load.

Based on this, civic bodies can decide on targeted vaccination drives, lockdowns and the like. One way to estimate this is by getting people to take COVID test.

However, people do not always comply with testing protocols. In the case of SARS-CoV-2, the high number of asymptomatic and mild infections, also lead to low testing.

Finally, if there are one lakh people in a locality, testing one lakh persons every day to monitor the rise and fall of infections is expensive and impractical.

Waste-water based surveillance for COVID-19 comes as an efficient and foolproof way of gauging these parameters. Such a study has been carried out in Hyderabad and Bengaluru by a collaboration between Tata Institute for Genetics and Society (TIGS), Bengaluru, and Centre for Cellular and Molecular Biology (CCMB), Hyderabad.

The study in Hyderabad was carried out for a period of about a year, from July 2020 to August 2021 and obtained data on a population size of about 2.5 lakh.

The aim of this study was to develop a protocol and standard operating procedures for doing this, which the researchers hope to hand over to the industry, who can then act as service providers, according to Rakesh Mishra, Director of TIGS, who designed and led the study.

In one year of testing and observations, the researchers were able to spot the temporal dynamics in the viral load in drainage water, which was consistently high from July to November 2020.

A slight increase in February 2021 hinted at the second wave which set on in March 2021. This has been published in International Journal of Environmental Research and Public Health.

The intellectual troika that helped understand heredity (Page no. 10) (GS Paper 3, Science and Tech)

We are celebrating the 200th birth anniversary of Gregor Johann Mendel and Sir Francis Galton this year. Mendel was born on July 20, 1822; Galton on February 16.

Both men sought to understand heredity, transmission of characteristics from parents to children. Galton was Charles Darwin’s half-cousin; they shared a common grandparent, Erasmus Darwin.

Galton was a polymath; an explorer, a geographer, a meteorologist, a psychologist and a statistician. And so was Charles Darwin; a naturalist, a geologist, a tireless walker, a brave adventurer and the originator of the theory of evolution by natural selection. Darwin published *The Origin of Species* in 1859, which as Galton has said “gave me freedom of thought”.

In his book, Darwin had used fancy pigeons to illustrate how natural selection might work. This sparked Galton’s interest in whether humans can be improved through selective breeding.

Galton’s bright mind reasoned that if the human stock were to be improved through selection, he would first have to show that desirable human characteristics were inherited.

Galton set out to identify men of accomplishment and determine whether any of their male relatives were also similarly accomplished.

He generated evidence in support and concluded that talent and character were probably inherited. He published his findings in 1865 in an article titled 'Hereditary Talent and Character' in Macmillan's Magazine, a popular Victorian periodical.

Galton then collected and analysed family-trees of well-known statesmen, judges, poets, painters, musicians, military commanders, etc.

His basic tenet was that if talent and character were inherited, the closest male relatives of a distinguished man (say, a son or father) would be more likely to be talented than those farther removed (e.g., an uncle or a nephew).

He generated affirmative evidence using mental and intellectual qualities as well as physical ones such as height and eye colour.

He published his findings in the book, Hereditary Genius in 1869. The word 'genius' was used to denote high level of talent or ability. Galton propounded the 'Law of Ancestral Heredity.'

He suggested that hereditary qualities were embedded in the reproductive organs and the germ plasm, which were passed on from one generation to the next.

FAQ

Where is population growth taking place? (Page no. 11)

(GS Paper 1, Social Issues)

Coinciding with the World Population Day on July 11, the United Nations Department of Economic and Social Affairs, Population Division, released the World Population Prospects 2022, an estimate on likely trends in global population.

The global population, which stood at almost 7.9 billion in 2021, is projected to reach 8 billion on November 15, 2022, the report underlines, with India expected to surpass China as the world's most populous country in 2023.

The projections suggest that the world's population could grow to around 8.5 billion in 2030 and 9.7 billion in 2050, before reaching a peak of around 10.4 billion in 2100.

The population is expected to remain at that level until 2100. Globally, life expectancy reached 72.8 years in 2019, an increase of almost 9 years since 1990. Further reductions in mortality are projected to result in an average longevity of around 77.2 years globally in 2050.

Life expectancy at birth for women exceeded that for men by 5.4 years globally, with female and male life expectancy standing at 73.8 and 68.4, respectively. In 2021, the average fertility—or the number of children born to a woman in her reproductive lifetime — of the world's population stood at 2.3 births per woman, having fallen from about five births per woman in 1950.

Global fertility is projected to decline further to 2.1 births per woman by 2050. Countries of sub-Saharan Africa are expected to continue growing through 2100 and to contribute more than half of the global population increase anticipated through 2050.

More than half of the projected increase in global population up to 2050 will be concentrated in just eight countries: the Democratic Republic of the Congo, Egypt, Ethiopia, India, Nigeria, Pakistan, the Philippines and the United Republic of Tanzania.

The 46 least developed countries (LDCs) are among the world's fastest-growing and several are projected to double in population between 2022 and 2050, putting additional pressure on resources and posing challenges to the achievement of the UN-prescribed Sustainable Development Goals (SDGs).

Bail law reform (Page no. 11)

(GS Paper 2, Governance)

On July 11, the Supreme Court urged the Centre to bring a new law to simplify and streamline the process of bail, referring to the Bail Act of the U.K. A Bench of Justices S.K. Kaul and M.M. Sundresh said there is a "pressing need" to reform bail laws considering the "abysmally low" conviction rate.

Stating that such detentions reflect a colonial mindset and create the impression of a "police state", the apex Court issued directions to courts and investigation agencies to prevent "unnecessary" arrests.

The Supreme Court judgment issued clarifications to a 2021 ruling on guidelines for considering bail for offences under the Criminal Procedure Code (CrPC), 1973.

The Court observed that arrest is a "draconian" measure that should be used "sparingly". It held that bail continues to be the rule and jail an exception, the touchstone of Article 21, and highlighted the presumption of innocence until proven guilty.

It said unwarranted arrests are carried out in violation of Section 41 (empowers police to arrest without a warrant) and Section 41A (deals with the procedure for appearance before police) of the CrPC.

Though there isn't any separate law in the Indian legal system that defines bail, related provisions are mentioned in the CrPC and punishments under the IPC. The CrPC categorises offences as bailable and non-bailable. As per Section 436, bail is a right in bailable offences and the police or court, whoever has custody, is bound to release the accused following furnishing of a bail bond, with or without surety.

For a non-bailable offence, an accused cannot claim bail as a right. The discretion lies with the courts. In such cases, Section 437 empowers the Magistrate to deal with pleas, except for offences 'punishable with death or imprisonment for life'.

A provision mandates the court to consider granting bail to an accused below 16 years, someone who is sick, or is a woman. The CrPC also lists provisions for the cancellation of bail.

Will RBI move help greater trade in rupee? (Page no. 11)

(GS Paper 3, Indian Economy)

The Reserve Bank of India (RBI) issued a circular that detailed 'additional arrangement' for invoicing, payment, and settlement of exports and imports in Indian rupees.

Under this mechanism, Indian importers could make payment in rupees to the Special Vostro account of the correspondent bank of the partner country, against invoices for the supply of goods or services from the overseas seller.

Indian exporters shall be paid proceeds in rupees from the balances in the designated vostro account of the correspondent bank of the partner country.

Vostro accounts have been around for a while. They were likely not widely used because exporters in any country typically prefer settlements in a strong and stable currency.

Also, there are at least three new aspects to the newly-issued circular, as G. Padmanabhan, former executive director at the RBI, points out.

First, the RBI has explicitly said that exchange of messages in a safe, secure and efficient way may be agreed upon mutually between the banks of partner countries. Mr. Padmanabhan says, "I don't think RBI has ever gone into the nuances of messaging standards in the past. The SWIFT system was seen as an acceptable standard for international transactions."

It may be recalled that soon after Russia invaded Ukraine, the Belgium-based SWIFT, or Society for Worldwide Interbank Financial Telecommunication, a system that allows instant messaging among banks, began excluding Russian banks from transacting through this channel.

The aim was to make it difficult and tedious for Russian entities to transact with the rest of the world. The RBI's circular could be taken to mean that partnering banks may use any messaging system they deem fit and not confine themselves to the SWIFT platform.

Two, Mr. Padmanabhan points out, "RBI has allowed for surplus to be invested". That is, the rupee surplus balance held in the vostro accounts may be used by the foreign entities for payments for projects and investments in India as also for investment in Indian government treasury bills and government securities.

Three, vostro accounts did not need permission earlier. Now the RBI has specified that banks acting as authorised dealers need to secure prior approval from the regulator to put in place this mechanism.

This is likely because the RBI may seek to understand which countries are interested in this mechanism, and whether the accounts are being used for the purpose for which the RBI intended them to be.

What will be the impact of Euro-Dollar parity? (Page no. 11)

(GS Paper 3, Economy)

The euro and the U.S. dollar reached parity on Tuesday, meaning one dollar could buy one euro in the foreign exchange market. For over two decades, it took more than one U.S. dollar to purchase one euro.

Just a year ago it took about 1.2 U.S. dollars to purchase one euro. Since the beginning of the year the euro has lost about 12% against the U.S. dollar and it is expected to lose more value going forward.

The price of any currency in a market economy is determined by supply and demand. The supply of a country's currency in the foreign exchange market is determined by various factors such as central bank policy and the local demand for imports and foreign assets.

The demand for a country's currency, on the other hand, is determined by factors such as central bank policy and the foreign demand for exports and domestic assets.

Analysts believe that the divergence in the monetary policies of the U.S. Federal Reserve and the European Central Bank is the primary reason behind the euro's significant depreciation against the U.S. dollar. In response to the

economic crisis caused by lockdowns imposed to fight the coronavirus pandemic, both the Federal Reserve and the ECB expanded their balance sheets to boost spending.

But this soon led to a rise in prices. Inflation in the U.S. hit a four-decade high of 9.1% in June while inflation in the Eurozone reached its highest-ever level of 8.6% during the same month.

The U.S. Federal Reserve responded to the rising prices by raising the interest rates this year in order to slow down U.S. money supply growth. The ECB, however, has been far less aggressive in tightening policy even though the inflation rate is as high as 22% in some European countries.

This has caused the value of the euro to slide against the dollar as currency traders witness, or at least expect, the supply of euros in the market rising relative to the supply of dollars.

The euro, however, is not the only currency that is depreciating at the moment. The Japanese yen is another major currency that has lost about 20% of its value against the U.S. dollar this year as the Japanese central bank continues to stick to its easy monetary policy.

The value of euro has been affected by the uncertainty in energy supplies in the wake of Russia's invasion of Ukraine and the ensuing actions against Russia. Europe now has to shell out more euros to import limited energy supplies, which in turn has adversely affected the value of the euro against the U.S. dollar.