

NEWSPAPER HIGHLIGHT

The contribution of stubble burning in neighbouring States to the daily levels of PM2.5 – a chief pollutant – in Delhi was as high as 48% on November 7 and averaged 33.5% during the week after Deepavali (November 5-11). This is the same period when air pollution spiked in the Capital, National Capital Region and several other north Indian States. The average contribution of stubble burning to Delhi's PM2.5 level in November was 14.6%, according to data from the government run monitoring agency SAFAR (System of Air Quality and Weather Forecasting and Research). The highest contribution of stubble burning to PM2.5 in Delhi for a day was 58% in 2018, 43% in 2019, and 46% in 2020, said Gufran Beig, founder project director of SAFAR.

India's gross domestic product (GDP) grew by 8.4% in the July to September quarter, compared to a 7.4% contraction a year ago, with the economy's gross value added (GVA) rising 8.5%, the National Statistical Office said on Tuesday. Factoring in the first quarter GDP growth of 20.1%, the first half of this year has recorded 13.7% growth and India is likely to record double digit growth for 2021-22 as a whole, the Finance Ministry's Chief Economic Adviser (CEA) Krishnamurthy Subramanian said, seeking to emphasise that the recovery process is continuing to play out. Economists, however, were not fully convinced about the extent and durability of this recovery and reacted with caution. Though the absolute GDP in the second quarter (Q2) was 0.3% higher than pre pandemic levels, there were still many worrying areas.

Union Finance Minister Nirmala Sitharaman on Tuesday said the Government was working on a new Bill on cryptocurrency which would take into account the rapidly changing dimensions in the virtual currency space. The Bill would be presented to the Cabinet soon and brought in Parliament during the ongoing session. The Enforcement Directorate was probing eight cases of crypto currency related fraud, she said, before stressing that sharing more information might not be in the "larger public interest". The Minister was answering questions posed by several MPs during the Question Hour in the Rajya Sabha.

More than six lakh Indians renounced citizenship in the past

SUMI NAGAS

1. The wisdom of Sumi Nagas to use the ecological indicators to facilitate agricultural practices and predict seasonal variation is vanishing with time. Sümi tribe are the major ethnic group among Nagas, who are Indo-Mongoloid tribal groups, in Nagaland, India.

2. **Sümi Nagas practiced Aki Kiti (a semi-contact combat sport), and headhunting like other Nagas before their conversion to Christianity.** Sumis have two different clan heads, Swu (Sumi) and Tuku (Tukumi). Festivals - Their grandest festival, Tuluni, is marked with feasts as the occasion occurs in the bountiful season of the year.

3. Ahuna is a traditional post-harvest festival of the Sumis. Sumi Nagas is primarily agrarian and depends on forests for both food and livelihood. So several of the indicators facilitate agricultural practices and predict seasonal variation.

4. For instance, fruiting of mulberry (Morus) trees indicates spring and their harvest means summer is here. Then, to predict winter, the Sumi tribe uses a universal indicator - migrating birds. Sümi is one of the recognised scheduled tribes of India.

RHEUMATIC HEART DISEASE

1. A new study has found that penicillin can prevent latent Rheumatic Heart Disease from progressing in children and adolescents. Rheumatic Heart Disease (RHD) is the most commonly acquired heart disease in people under age 25, caused by rheumatic fever. [Rheumatic fever is an autoimmune inflammatory reaction to throat infection with group A streptococci. It arises from poorly treated, repeat infections of streptococcus bacteria.] It most commonly occurs in childhood, and can lead to death or life-long disability.

2. **Risk groups - Rheumatic fever mostly affects children and adolescents in low- and middle-income countries. People who live in overcrowded and poor conditions are at greatest risk of developing the disease.** Treatment - There is no cure for RHD and the damage to the heart valves is permanent.

3. Patients with severe RHD will often require surgery to replace or repair the damaged valve or valves. Depending on the severity of disease, medications that thin the blood to reduce the risk of blood clots may also be needed. Prevention - Since RHD results from rheumatic fever, treatment of strep throat with appropriate antibiotics will prevent rheumatic fever. Worldwide, around 40.5 million people, mostly people under the age of 25, suffer from the disease and 306,000 people die of it every year.

IMPACT OF GLOBAL WARMING ON CROP CULTIVATION

1. A new study has found that the continuation of the current trends of global warming could impact the wheat cultivation positively, but the maize cultivation negatively.

2. **If global warming trends continue, there will be higher levels of carbon dioxide in the atmosphere. This could expand the cultivation of wheat to higher latitudes by 2030, increasing its global yield.** However, the nutritional value of such wheat would be reduced.

3. Also, the increase in global wheat yield could level off by 2050. While wheat yield would increase 17% by 2030, global maize (or corn) yield would decline 24%.

4. Maize is grown all over the world and large quantities are produced in countries near the equator (North and Central America, west Africa, central Asia, Brazil and China). So, farmers need to adapt much faster by changing the planting dates and using different crop varieties to avoid severe losses.

NEGATIVE REAL INTEREST RATE

1. As the RBI in its latest Monetary Policy Review has projected retail inflation to be at 5.3% for 2021-22, the investors may need to worry about earning negative real rates. Real rate of return on an investment is its actual rate of return minus the prevailing inflation rate.

2. **While real interest rates can be effectively negative if inflation exceeds the nominal interest rate. Unless the**

five years, the Ministry of Home Affairs (MHA) informed the Lok Sabha on Tuesday. This year, till September 30, 1,11,287 Indians gave up their citizenship. The reason for a large number of Indians surrendering their citizenship was not stated in the reply. Though, in 2018, the MHA revised Form XXII under Citizenship Rules for declaration of renunciation of citizenship, which, for the first time, included a column on "circumstances/reasons due to which applicant intends to acquire foreign citizenship and renounce Indian citizenship".

Russian President Vladimir Putin on Tuesday sternly warned NATO against deploying its troops and weapons to Ukraine, saying it represents a red line for Russia and would trigger a strong response. Commenting on Western concerns about Russia's alleged intention to invade Ukraine, he said that Moscow is equally worried about NATO drills near its borders. Speaking to participants of an online investment forum, the Russian President said that NATO's eastward expansion has threatened Moscow's core security interests. He expressed concern that NATO could eventually use the Ukrainian territory to deploy missiles capable of reaching Russia's command centres in just five minutes.

The U.S. military will reinforce deployments and bases directed at China and Russia, while maintaining forces in the West Asia adequate to deter Iran and jihadist groups, the Pentagon said, referencing results of a review. The U.S. Defense Department will be upgrading and expanding military facilities in Guam and Australia, underscoring its focus on China as the country's leading defence rival, officials said.

Twitter on Tuesday updated its private information policy that will allow the microblogging platform to take action on media that is shared without any explicit abusive content, but was posted without the consent of the person depicted. "There are growing concerns about the misuse of media and information. Sharing personal media, such as images or videos, can potentially violate a person's privacy, and may lead to emotional or physical harm," the company said in a blog. "When we are notified by individuals depicted, or by an authorised representative, that they did not consent to having their private image or video shared, we will remove it," it said.

Nonfood credit growth of banks accelerated to 6.9% in October as against 5.2% in the same month of last year, RBI data showed. Loans to agriculture and allied activities continued to perform well,

return on investments beat inflation, it isn't logical to postpone your consumption or to save for the future. The real rate would be even worse, if taxes on interest income are considered.

3. By understanding the concept of negative real interest, one may make their purchase decision. Even safe investments can erode your capital if they offer negative real returns. Government intervention - The central banks around the world increase interest rates when inflation begins to exceed their desired threshold. But as economic growth needs a lower interest rate regime to kick-off investments, central banks may decide to keep the rates lower or hike at lower pace going ahead.

4. This may lead to continuation of lower real interest rate scenario in the short to medium term. As interest rates in India are now at a record low, this makes negative real returns a significant risk to your investments.

EMPLOYEE STOCK OPTION PLAN

1. With the Zomato IPO paving the way for other Indian ventures to consider listing, it's been raining Employee Stock Option Plans in the start-up world. Employee Stock Option Plan (ESOP) gives employees the right to buy shares of their company at a future date at a pre-decided price. Companies grant ESOPs to their employees as part of their compensation package. As ESOPs are part of a person's compensation, these are taxed, when they exercise the option to buy and when they make capital gains on selling them.

2. While ESOPs have traditionally been granted to senior employees, many firms, mainly start-ups, are extending them beyond the top echelons. ESOPs come with an exercise price and a vesting and exercise period. Vesting period is the waiting period for a person before they get the right to buy shares. Exercise period is the period during which one can buy the ESOPs at any time at the exercise price. Some companies also grant ESOPs where the vesting period is staggered. An ESOP may be staggered over three years. That is, you can exercise 20, 35 and 45% of your ESOPs at the end of each year from the date of their grant. Once you have exercised the option, you can sell your shares any time or after the lock-in period specified by the company is over.

3. **Importance - ESOPs give employees a sense of ownership in a company and to work keeping in mind the interests of the company's shareholders. ESOPs help businesses, particularly cash-strapped start-ups, attract and retain talented people.** A significant proportion of the salary at many start-ups may come in the form of ESOPs. While this may imply lower cash in hand for the employees, the potential for windfall gains on sale of these shares at some point in the future makes employees value them.

4. ESOPs can bring windfall gains not only for employees but also for the taxman, as the option buyer pays tax on it. Flip side - If the financial performance of the company you're working with turns out to be subpar, your salary and wealth will be put at risk.

HAZARAS OF AFGHANISTAN

1. Hazara is an ethnic group from Afghanistan.

2. They are believed to be descendants of the founder of the Mongol empire, Genghis Khan, and his army that overran the entire region during the 13th century.

3. **Their distinct Asiatic features and use of a Persian dialect called Hazaragi also sets them apart from the rest of the country.**

TIWA TRIBE AND WANCHUWA FESTIVAL

1. This festival is celebrated by Tiwa tribesmen to mark their good harvest. It comes with songs, dances, a bunch of rituals and people clad in their native attires.

2. **The people of Tiwa tribe associate the bountiful harvest with the higher power from nature. This takes the form of pigs' skulls and bones which act as deities and are preserved through many generations.**

3. Tiwa also known as Lalung is indigenous community inhabiting the states of Assam and Meghalaya and are also found in some parts of Arunachal Pradesh and Manipur.

INTERNET THROUGH LEO SATELLITES

1. OneWeb is considering options to remove one of its broadband satellites from low Earth orbit after it failed following a software issue last year. So far, OneWeb has deployed 358 satellites at

registering an accelerated growth of 10.2% in October 2021 as compared with 7.2% in October 2020, according to the RBI's Sectoral Deployment of Bank Credit – October 2021 data, released. The growth in credit to industry picked up to 4.1% in October 2021 from a contraction of 0.7% in October 2020. Size wise, credit to medium industries registered a robust growth of 48.6% in October 2021 as compared with 20.8% last year.

1,200 kilometers through 11 launches. Background: OneWeb has a partnership formed earlier this year with debris-removal startup Astroscale under ESA's Sunrise program.

2.About OneWeb's LEO internet programme: OneWeb is a Low Earth Orbit (LEO) satellite communications operator. Using LEO satellites OneWeb seeks to offer connectivity across the UK, Alaska, Northern Europe, Greenland, the Arctic Seas and Canada. The company expects the service to be switched on before the end of the year. It calls this programme the 'Five to 50' service of offering internet connectivity to all regions north of 50 degrees latitude.

3.What are the benefits of LEO satellites based internet? LEO satellites are positioned around 500km-2000km from earth, compared to stationary orbit satellites which are approximately 36,000km away. As LEO satellites orbit closer to the earth, they are able to provide stronger signals and faster speeds than traditional fixed-satellite systems. Because signals travel faster through space than through fibre-optic cables, they also have the potential to rival if not exceed existing ground-based networks.