The Indian Express

Front Page

As global crude prices fall, Govt cuts windfall tax on fuel exports (Page no. 1) (GS Paper 3, Economy)

With crude oil prices easing on the back of fears of an impending global recession, the Centre cut recently imposed cesses and levies on diesel and aviation turbine fuel and removed the cess on exports of petrol effective.

Additional excise duty equal to Rs 6 per litre on petrol exports has been removed entirely, while that on diesel exports has been cut to Rs 11 per litre from Rs 13 per litre earlier. Also, the cess by way of special additional excise duty (or windfall tax) on domestic crude being sold to domestic refineries at international parity prices has been cut to Rs 17,000 per tonne from Rs 23,250 per tonne, while the export duty on aviation turbine fuel has been lowered by Rs 2 to Rs 4 per litre.

The government also exempted petrol, diesel and ATF from levy of duties when exported from refinery units located in the Special Economic Zones.

The Ministry of Finance did not give a timeline for continuation of the levy, but had said it will assess the situation every 15 days to review the impact of these duty changes.

Last week, Ministry officials had indicated that a review will consider lowering the tax and cesses following the slide in crude oil prices.

With an aim to address the issue of fuel shortage in the country, the government on July 1 imposed a special additional excise duty on export of petrol and diesel. Cesses equal to Rs 6 per litre on petrol and Rs 13 per litre on diesel were imposed on their exports.

The Centre also imposed a cess of Rs 23,250 per tonne (by way of special additional excise duty) or windfall tax on domestic crude being sold to domestic refineries at international parity prices.

Prior to that, from early June, fuel pumps across the country have been reporting fuel shortages, leading to their closure. The situation of fuel shortage at pumps peaked during the middle of June, resulting in the government issuing a statement on the matter.

In Parliament

Opposition, govt. trade charges as protests over price rise, GST stall House proceedings (Page no. 5) (GS Paper 3, Economy)

As the logiam in Parliament entered the third day of monsoon session, the Congress accused the government of running away from a discussion on issues of price-rise and hike in GST rates, while senior ministers hit back and asked the Opposition to follow norms, as presiding officers of both Houses have expressed readiness to hold a discussion.

Both Lok Sabha and Rajya Sabha could not transact any business. The lower House was adjourned twice, before the Chair adjourned it for the day just after 4 pm, while Rajya Sabha proceeding washed out completely.

Union ministers Piyush Goyal, Pralhad Joshi and Smriti Irani slammed the Opposition, particularly the Congress, and said the party has a "destructive" attitude towards democracy.

Goyal and Joshi also said the government is ready for a discussion and denied that it is running away from Parliament. They said the government will debate in Parliament on price-rise once Finance Minister Nirmala Sitharaman recovers from Covid-19 and is back in the House, as it is the Finance Minister who will reply to a debate on the matter.

The Congress has a destructive attitude towards democracy. It was exposed from Jairam Ramesh's tweet that Congress was successful in not allowing the House to function.

Joshi said the Congress is not interested in a constructive debate but in resorting to "destructive damage". He said both Rajya Sabha Chairperson and Lok Sabha Speaker have expressed readiness for a discussion but the Opposition should follow the norms.

Irani, on the other hand, targeted senior Congress leader Rahul Gandhi and said he "may be unproductive politically but he should not dare to continuously curb Parliament's productivity".

As the MP from Amethi between 2004 and 2019, Rahul never posed any questions in Parliament, she said. And when he "abandoned" the constituency and became the MP of Wayanad, Rahul's attendance in Lok Sabha was less than 40 per cent in the winter session in 2019.

Hitting out, Congress leader Jairam Ramesh said the Narendra Modi government has refused an urgent debate on pricerise and increase in GST rates on essential food items.

Govt to LS: Maosit violence down 77% since 2009 but security personnel deaths on the rise in recent years (Page no. 5)

(GS Paper 3, Internal Security)

While incidents of Naxal violence in the country have dropped by 77 per cent between 2009 and 2021, deaths of security force personnel due to Maoist violence have more than doubled in Chhattisgarh in the past three years.

According to the data provided by the Ministry of Home Affairs (MHA) in Lok Sabha during Question Hour, Left Wing Extremism (LWE) violence has decreased from 2,258 in 2009 to 509 in 2021.

Similarly, the resultant deaths (civilians + security forces) have reduced by 85 per cent from all-time high of 1,005 in 2010 to 147 in 2021," Union Minister of State for Home Affairs Nityanand Rai said in a written reply to a question.

However, state-wise and year-wise data provided by Rai on deaths of security personnel between 2019 and June 2022 shows that the LWE problem continues to rage in Chhattisgarh even as it appears to be petering out in other states.

According to the data, 22 security force personnel were killed in Naxal violence in Chhattisgarh in 2019, 36 in 2020 and 45 in 2021. In the first six months of 2022, six security force personnel were killed in the state. The countrywide figures for 2019, 2020, 2021 are 52, 43 and 50 respectively.

In 2021, Chhattisgarh accounted for 90 per cent (45 out of 50) of all security personnel deaths in the country. Jharkhand is the only state that recorded security personnel deaths (5) besides Chhattisgarh in 2021. In 2019, when 52 security force personnel deaths were recorded in the country, Chhattisgarh accounted for just 42 per cent (22) of those with Maharashtra accounting for 16 deaths and Jharkhand for 12 deaths.

Other states for which data has been provided by the government are Bihar, Odisha and Telangana. All recorded zero deaths in 2021. In 2022, Odisha recorded three deaths while Jharkhand recorded two.

Rai said the geographical spread of the violence has reduced as only 46 districts reported LWE-related violence in 2021 as compared to 96 districts in 2010.

Gaganyaan abort mission this year; solar, lunar missions in 2023 (Page no. 5) (GS Paper 3, Science and Technology)

The Indian Space Research Organisation (ISRO) has set new deadlines for major missions, with its first solar mission and third lunar mission set to take place in the first quarter of next year.

The space agency's third scientific mission scheduled for next year is the space observatory, XpoSat, designed to study cosmic x-rays. The first abort demonstration for ISRO's Gaganyaan mission, however, is scheduled for later this year. Minister of State in the Space Department, Dr Jitendra Singh, wrote in an answer to Parliament on Wednesday that ISRO would also carry out a 'space docking experiment' in the third quarter of 2024. Space docking is a process of joining two separately launched spacecraft, and is mainly used for setting up modular space stations.

The Indian space agency had in 2019 announced its plans to set up its own space station in "five to seven years" after successfully launching its first human spaceflight mission.

Then ISRO chairperson K Sivan had said it would be an extension of the spaceflight programme, with the space station weighing about 20 tonnes and having the capacity to house astronauts for about 15-20 days in the low earth orbit.

In his answer in Parliament, the minister also said that the first milestone for the Gaganyaan mission will be undertaken in the last quarter of 2022 — it will be the first abort demonstration mission.

The abort missions are meant to test the systems that can help the crew escape from the spacecraft mid-flight in case of a failure. ISRO already conducted a pad abort test — where the crew can escape from the spacecraft in case of an emergency at the launch pad — in 2018.

For the abort missions, the space agency has developed test vehicles that can send the systems up to a certain height, simulate failure, and then check the escape system.

Gaganyaan's escape system was designed with five "quick-acting" solid fuel motors with a high burn rate propulsion system, and fins to maintain stability. The crew escape system will separate from the crew module by firing explosive nuts.

Explained Page

Law on abortion and what means for unmarried women (Page no. 9) (GS Paper 2, Polity and Governance)

A 25-year-old pregnant woman moved the Supreme Court on Tuesday (July 19) seeking an abortion after the Delhi High Court declined her plea last week. The woman has also challenged Rule 3B of the Medical Termination of Pregnancy Rules, 2003, which allows only some categories of women to seek termination of pregnancy between 20 and 24 weeks.

The case has raised very important questions about the framework of reproductive rights, and recognising female autonomy and agency in India.

Last week, a 25-year-old woman sought the Delhi High Court's permission for termination of a pregnancy of 23 weeks and 5 days.

The woman, a permanent resident of Manipur who currently resides in Delhi, told the court that the pregnancy was a result of a consensual relationship, and that she wanted to terminate the pregnancy because her partner had refused to marry her. She also told the court that she feared stigmatisation as a single, unmarried woman.

A two-judge Bench of the Delhi High Court comprising Chief Justice Satish Chandra Sharma and Justice Subramonium Prasad refused to allow the termination of the pregnancy.

In oral observations, the judges coaxed the woman to carry her pregnancy to term, and to give up the newborn for adoption — even offering to personally pay for the process.

Section 312 of the Indian Penal Code, 1860, criminalises voluntarily "causing miscarriage" even when the miscarriage is with the pregnant woman's consent, except when the miscarriage is caused to save the woman's life.

This means that the woman herself, or anyone else including a medical practitioner, could be prosecuted for an abortion.

MSP and govt panel's task (Page no. 9)

(GS Paper 3, Economy)

Earlier this week, the government notified a committee to "promote zero budget based farming", to "change" crop pattern keeping in mind the changing needs of the country, and to make MSP (minimum support price) more "effective and transparent".

The government has named 26 members including the chairman of the committee, and kept three places for representatives of the Samyukta Kisan Morcha (SKM), which had led a sustained farmers' agitation against three agriculture laws, now repealed. The SKM has, however, rejected the committee and announced that it will not nominate any representatives.

It has been constituted by the Ministry of Agriculture and Farmers' Welfare, as a follow-up to an announcement by Prime Minister Narendra Modi on November 19, 2021 when he had declared the government's intention to withdraw the three farm laws.

The protesting farm unions led by the SKM had demanded a legal guarantee on MSP, based on Swaminathan Commission's 'C2+50% formula' (C2 is a type of cost incurred by farmers; see box).

This was in addition to their demand for repeal of the three farm laws — Farmers Produce Trade and Commerce (Promotion and Facilitation) Act, 2020; Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act, 2020; and the Essential Commodities (Amendment) Act, 2020.

Its terms and references do not mention legal guarantee of MSP. What they do mention is making MSP "more effective and transparent".

As per announcement of Hon'ble Prime Minister that 'A committee will be constituted to promote Zero budget based farming, to change crop pattern keeping in mind the changing needs of the country, and to make MSP more effective and transparent.

Aneurysm (Page no. 9)

(GS Paper 3, Science and Technology)

Actor Emilia Clarke, who played the role Daenerys Targaryen in the series Game of Thrones, recently told BBC One in an interview that she had suffered two brain aneurysms while filming for the series, in 2011 and 2013.

Aneurysm is a swelling of the arteries and veins in any part of the body, and is caused by weakening of the walls. It occurs most commonly in the aorta, back of the knees, brain or intestines. If the aneurysm gets ruptured, it can even cause internal bleeding and stroke.

Blood vessels of the brain and the heart are the most common locations to get seriously affected. The swelling can be of two types. Either the complete blood vessel is swollen or a specific side of the blood vessel can bulge out from the sides. Potential risk factors for aneurysm include smoking, age, high cholesterol, obesity, hypertension or tissue disorders. Pregnancy can also increase risk of aneurysm of the spleen.

Usually, an aneurysm remains undetected and screening may be required for patients needing monitoring or treatment. Women being at lower risk of developing aneurysm, men must undergo ultrasound screening for sure around the age of 55 years and above.

More so if they are regular smokers. MRI scans are useful for identifying aneurysms that do not rupture but the symptoms are prevalent. In case the aneurysm gets ruptured and leads to the risk of bleeding in the brain, CT scans are preferred.

An angiogram may be performed in extreme cases with severe rupture and bleeding in the brain to identify the exact area for treatment.

A device called flow diversion stent is a new innovative intervention for treatment of aneurysm for the initial stages, when it has not ruptured.

A cylindrical, metallic mesh stent is placed inside the sac of the parent blood vessel to divert the blood flow from the aneurysm. The diversion is aimed at preventing rupture. Flow diversion can be used to treat large or giant wide-necked brain aneurysms.

Most cases being congenital, it is not always possible to prevent aneurysm, but certain lifestyle changes can help reduce risk. These include quitting smoking; maintaining a healthy blood pressure by sticking to a balanced diet; maintaining a healthy body weight; and avoiding a high cholesterol diet.

Europe heatwave: a number of reasons, climate change most worrying (Page no. 9) (GS Paper 3, Environment)

An extraordinarily hot summer in Europe crossed another peak on Tuesday with some places in Britain recording temperatures above 40°C, the first time any place in the United Kingdom had breached this mark. Last month, a few places in France had recorded temperatures in excess of 45°C — this too an all-time high for that country.

Other countries in Europe are also facing extreme heat, made all the more unbearable because domestic air-conditioning is not very common in that part of the world.

Temperatures have dropped a bit in some countries in the last two days, but are still higher than the normal that is expected during this time of the year.

As is true of most such situations, the unusually high temperatures are a result of the combination of global and local factors. On the global scale, climate change has been driving the temperatures upwards, which, in general, is evident across the world.

Considering the average annual temperature, the last eight years have been the hottest ever recorded through direct measurements since the 1880s, a NASA analysis showed.

The temperature in 2021 was the sixth highest ever recorded. Most regions of the world have been reporting higher-than-usual temperatures year after year.

In the United Kingdom, each month of this year has recorded substantially higher average temperatures compared to normal, or the average of the 30-year period between 1991 and 2020 (see chart). The current heatwave in UK and the rest of Europe, which began in the second week of July, is in keeping with this trend, and was forecast well in advance. But climate change alone does not fully explain the record-breaking temperatures being seen in Europe. These kinds of unprecedented high temperatures are usually a result of some unusual combinations of local, short-term, warming phenomena which accentuate the already high baselines induced by climate change.

In the present case, a low pressure system over the European region has been found to be attracting hot air from northern Africa. An unusual warming in the Arctic Ocean is also said to be playing a role.

A slow-moving high-pressure area has been, and is still, transporting hot air from North Africa over western and parts of central Europe. The hot air is moving northwards, first affecting Portugal, Spain, France, now the UK, and imminently reaching the Benelux countries (Belgium, the Netherlands and Luxembourg), and western Germany, Switzerland, and northern Italy.

The Idea Page

Lessons from Gregor Mendel (Page no. 11) (GS Paper 3, Science and Technology)

July 20, 2022, marks the 200th birthday of Gregor Johann Mendel, a revolutionary scientist. He propounded that information on "traits" gets passed on from one generation to another as particulate "elements" and that traits in the present generation can be traced back to past generations.

The notion was revolutionary because there was no theory about the mechanism of inheritance before Mendel. Mendel's theory, together with the evolutionary theory propounded by Charles Darwin, laid the foundations of biology.

Mendel completed his schooling from the Gymnasium in Troppau. His physics teacher in the gymnasium, Friedrich Franz, who was impressed with his talents in physics and natural sciences, made a life-changing suggestion to him. Franz, a priest, informed Mendel that the Augustinian Order of the Catholic Church valued intellectual pursuits. He suggested that priesthood could offer Johann a path to learning and teaching.

Johann grabbed the suggestion and joined St. Thomas monastery in Brünn (now Brno) in 1843 and changed his christened name Johann to Gregor. Cyril Napp (1792-1867) was the Abbot of St. Thomas, and was also interested in

science, particularly plant cultivation and animal breeding. He built a glasshouse (greenhouse) for Gregor to pursue plant breeding.

Abbot Napp had said that the questions to investigate are "what is inherited and how?" These questions motivated Mendel in his experiments.

Between 1857 and 1864, Mendel undertook a series of plant breeding experiments in the monastery's garden, which were breathtaking for their brilliance in planning, observation and analysis, and also in the interpretation of the results. His experiments were designed with great thought to answer questions on offspring characteristics in relation to those

of parents. He collected data on tens of thousands of pea plants over multiple generations and kept counts of characteristics and calculated ratios.

He was searching for generalisch

He was searching for generalisable laws from the numerical data. And, he was immensely successful. Mendel represented a member of the nineteenth-century intellectual community who derived laws ("Mendel's Laws") from counts and ratios.

Economy

RBI prepared to spend \$100 billion more defending rupee (Page no. 13) (GS Paper 3, Economy)

THE CENTRAL bank is prepared to sell a sixth of its foreign exchange reserves to defend the rupee against a rapid depreciation after it plumbed record lows in recent weeks.

The rupee has lost over 7percent of its value in 2022 and weakened past the psychological level of 80 per US dollar, but The source said the fall would have been far bigger if the Reserve Bank of India (RBI) had not stepped in to stem the decline.

The RBI's currency reserves have fallen by more than \$60billionfromitspeakof\$642.450billion in early September, in part due to valuation changes, but largely on the back of dollar selling intervention.

Despite the drawdown, the RBI's reserves of \$580 billion remain the fifth largest in the world, giving the central bank confidence in its ability to prevent any sharp, jerky depreciation of the currency.

They have shown that they will use reserves at will to prevent volatility in the rupee. They have the wherewithal and have demonstrated the willingness to use it. The RBI can afford to spend even \$100 billion more if required to defend the rupee.

The source said the RBI, as perits stated stance, does not try to protect the rupee or hold it at a certain level but will act to avoid any run away depreciation in the currency.

The RBI did not immediately respond to a query seeking comment. The rupee's fall is in line with what is happening globally—a broad and persistent US dollar rally driven by the Federal Reserve's aggressive monetary tightening and the resultant scramble by investors to dump riskier assets in favour of dollars.