

NORD STREAM



- While 40% of Europe’s pipeline gas came from Russia before the war, the number now stands at just 9%.
- The construction of the \$11 billion-worth Nord Stream 2 was completed in 2021 but never began commercial operations.
- The pipelines were unlikely to provide any gas to Europe in the forthcoming winter months, even if the political will to resume supply was found.
- European gas prices spiked after reports of the leaks emerged;
- European Benchmark prices rose 12% on Tuesday, while Dutch and British Prices continued to rise on Wednesday.
- Additionally, while analysts have not yet quantified the environmental impact of the leaks, Reuters quoted the commercial methane-measuring satellite firm GHGSat as saying that a “conservative estimate” based on available data suggested that the leaks together were releasing more than 500 metric tonnes of methane per hour when first breached,
- The European Union said they suspected “sabotage” behind the leaks while the Russian Foreign Ministry said that the ruptures to the pipelines took place in territory that was “fully under the control” of U.S. intelligence agencies.

What are the Nord Stream pipelines?

- The \$7.1 (€7.4) billion Nord Stream 1 subsea pipeline has been operational since 2011, and is the largest single supply route for Russian gas to Europe.
- The Russian state-owned gas company Gazprom has a majority ownership in the pipeline.

What’s the big deal about methane?

- Methane is the primary contributor to the formation of ground-level ozone, a hazardous air pollutant and greenhouse gas, exposure to which

causes 1 million premature deaths every year. Methane is also a powerful greenhouse gas.

- Over a 20-year period, it is 80 times more potent at warming than carbon dioxide.
- Methane has accounted for roughly 30 per cent of global warming since pre-industrial times and is proliferating faster than at any other time since record keeping began in the 1980s.

THE HINDU

Interest rate hike

- Raising rates is the first tool for monetary intervention as it is the quickest way to drain excess liquidity in the market.
- When interest rates go up, real rates also rise, leading to the burden on the borrower increasing in real terms
- The main reason why stock prices drop when rates rise is due to lower consumption and, therefore, a nominal decline in profit.
- Fixed income securities offer better returns in times of deflation as the real value of the fixed payments rises due to the real value of the currency swelling.
- The Federal Reserve and other central banks around the world have raised interest rates to curb inflation.
- The rationale behind raising interest rates is that the cost of borrowing rises whenever they are raised, and the incentive to save and invest rather than consume increases due to better yields.
- It becomes more expensive to consume rather than save for the future as interest rates are higher.
- Therefore, the demand for goods reduces, leading to a drop in their prices.
- This leads to a reduction in wages being paid and a sustained drop in price levels which theoretically forestalls an inflationary spiral.
- The topic of gold, however, is trickier to tackle when rates rise.
- Gold moves in comparison with the dollar.
- The recent appreciation in the dollar aided depreciation in gold prices.
- The opportunity cost of holding gold can be measured in terms of the interest rate received on U.S. T-bills, which is on the rise.
- Therefore, we see a decline in gold prices as rates rise. The dollar has also appreciated in terms of other currencies.
- Gold prices in India move according to the U.S. dollar and rupee exchange rates.
- If the rupee depreciates more than gold against the dollar, an increase in

the price of gold can be observed (and vice versa).

- The rupee has appreciated against the pound and the euro, making their domestic producers more competitive and ours weaker.
- Further, competing nations such as Bangladesh, Vietnam, and China, which let their currencies depreciate, enjoy the benefits of being more competitive with their exports.
- The IT and pharma industries have suffered price corrections due to the defence of the rupee.
- An artificially strong rupee means lower sales revenue and profit, which further widens the trade deficit leading to a greater need for intervention to maintain the current exchange rate.
- Furthermore, India has elastic exports, whose demand decreases during recessions and inelastic imports, whose demand stays constant during a downturn.

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Swachh Survekshan Gramin

- Telangana was ranked first for the cleanliness of its villages in the Swachh Survekshan Gramin (SSG), 2022, which looked into the sanitation status of rural areas.

- After Telangana, Haryana was placed second followed by Tamil Nadu in the Large States category.
- The Swachh Survekshan Gramin, 2022 award ranks States and districts on the basis of their performance attained on Swachh Bharat Mission Gramin (SBM-G) parameters and engagement of the rural community in improvement of their sanitation status.
- Among smaller States and Union Territories, Andaman and Nicobar secured the first position, followed by Dadra and Nagar Haveli, Daman and Diu, and Sikkim.
- “Swachh Bharat Mission-Gramin is a movement to bring in behavioural change in our populace.

THE HINDU

Tap water

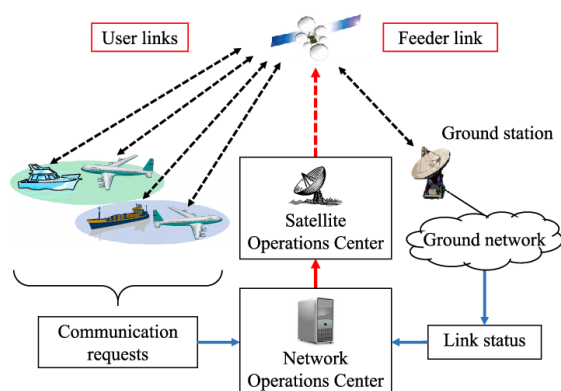
- A fully functional tap water connection is defined as a household getting at least 55 litres per capita per day of potable water all through the year.
- Close to three-fourths of households received water all seven days a week and 8% just once a week.
- On an average, households got water for three hours every day, and 80% reported that their daily

requirements of water were being met by the tap connections.

- The water quality in some households was tested. It revealed 95% of households to have within acceptable limits of pH values.
- Over 90% of village-level institutions were getting potable water. Over half (57%) of the sampled households reported purifying water before drinking.
- However, the report mentions a concerning problem of chlorine contamination.
- Though 93% of the samples were reportedly free of bacteriological contamination, “most of the anganwadi centres and schools, had higher than the permissible range of residual chlorine and indicated inappropriate local dosing.

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SATCOM AND INTERNET



- The two biggest developments in the global satellite communication

space are the emergence of LEO (low-earth orbit constellations) that promises to provide truly global coverage and lower latency service, and HTS (High Throughput Satellites Service) which offers unprecedented capacity and flexibility.

- India is quickly catching up with global trends and we are optimistic about India’s prospects in the global satellite communication market.
- **One Web has also partnered with News pace India Limited (NSIL), the commercial arm of Indian Space Research Organization (ISRO) and Elon Musk’s SpaceX to resume its satellite launches**
- **Satellite service provider Hughes Communications India, (HCI) and Bharti Airtel announced a joint venture in January to provide satellite broadband services in India**

- Tata-owned Satcom Company Nelco, and Canada’s Telesat have also successfully conducted the first in-orbit demonstration of high-speed broadband connectivity in India.
- Changing the Internet landscape Satcom companies reckon that satellite broadband services can connect the most remote parts of the country which are otherwise difficult to connect through fibres.

- Satellite broadband services can, therefore, help in addressing the need of the market for fibre-like connectivity in the remotest parts of the country with high reliability and flexibility.
- If the user is located under trees with light or medium foliage it might take over a minute to send a message, while the same message takes 15 seconds to be sent in ideal conditions with a direct view of the sky and the horizon.
- Users might not be able to connect to a satellite at all if they are located under heavy foliage or surrounded by other obstructions.
- Satellite Internet latency can be a significant problem.
- This can be a matter of only a second or two, but a delay on that scale can seriously affect real-time applications like video chats.
- Unlike terrestrial communications, minor changes in weather can have a massive impact on both the speed and latency of satellite data.

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