

1. Greenland and Antarctica is Melting Faster

Why in News?

- Recently, the climate change in Greenland and Antarctica to melt 6 times faster than in 1990s.

Key Points:

- The comprehensive data obtained from 11 satellite missions monitoring the regions suggest that if the current melting trends continues, it will result in the raising of sea level by 6.7 inches by 2100.
- The ocean water is responsible for the majority of Antarctic ice loss and half of Greenland's Ice Loss.
- The rest of the melting is caused by rising Air Temperature.
- To calculate changes in the mass of the Greenland and Antarctic ice sheets between 1992 and 2018, the Ice Sheet Mass Balance Intercomparison Exercise team combined 26 surveys, which used measurements from satellites including NASA's Ice, Cloud, and land Elevation Satellite and the joint NASA-German Aerospace Center Gravity Recovery and Climate Experiment.
- It is calculated that Greenland and Antarctica lost 81 billion tons per year in the 1990s, compared with 475 billion tons of ice per year in the 2010s – a sixfold increase.
- Together, the melting polar ice sheets are responsible for a third of all sea-level rise. Of this total sea-level rise, 60 per cent resulted from Greenland's ice loss and 40 per cent resulted from Antarctica's, Every centimetre of sea-level rise leads to coastal flooding and coastal erosion, disrupting people's lives around the planet.



2. Pradhan Mantri Ujjwala Yojana (PMUY)

Context:

- Recently, over 1.51 Crore free LPG cylinders distributed so far to the PMUY beneficiaries under the Pradhan Mantri Garib Kalyan Yojana (PMGKY) in this Month.

About:

- Several relief measures have been announced for the welfare of poor, to provide 3 LPG cylinders (14.2 kg) free to over 8 crore beneficiaries of the Pradhan Mantri Ujjawala Yojana (PMUY) over the period of April to June 2020, under PMGKY.

- The Oil Marketing Companies (OMCs) are distributing 50 to 60 lakh cylinders per day, which includes about 18 lakh free cylinders to PMUY beneficiaries.

About Pradhan Mantri Ujjwala Yojana:

- It aims to provide LPG (liquefied petroleum gas) connections to poor households.
- Its Goal is to deposit-free LPG connection is given to eligible with financial assistance of Rs 1,600 per connection by the Centre.

About the Eligibility Criteria under PMUY:

- The applicant must a woman above the age of 18 and a citizen of India.
- The applicant should belong to a BPL (Below Poverty Line) household.
- No one in the applicant's household should own an LPG connection.
- The household income of the family, per month, must not exceed a certain limit as defined by the government of the Union Territories and State Government.
- The name of the applicant must be in the list of SECC-2011 data and should match with the information available in the BPL database that Oil Marketing Companies have.
- The Applicant must not be a recipient of other similar schemes provided by the Government.

About objectives of the PMUY:

- To Empower women and protecting their health.
- To Reducing the serious health hazards associated with cooking based on fossil fuel.
- To Reducing the number of deaths in India due to unclean cooking fuel.
- To Preventing young children from significant number of acute respiratory illnesses caused due to indoor air pollution by burning the Fossil Fuel.

3. Effect of Pandemic on Gold Prices

Why in News?

- Much before Covid-19's impact reverberated across economies and led to a crash in global stock markets, gold prices had started their upward move to culminate into a nearly 40 per cent jump in less than a year.

Highlights:

- The present gold prices in India are even higher, as they jumped from around Rs 32,000 per 10 grams to nearly Rs 46,800 per 10 gram during the same period, a nearly 45 per cent return.

- Since gold is mostly imported commodity into India, the depreciation of the rupee vis-avis the US dollar of around 7 per cent since last September pushed the gold prices in India even higher.
- There have been intermittent reports based on economic indicators suggesting that the US economy could enter into recession after a record 11 years of economic surge since the global financial crisis of 2008.
- This expectation of recession sowed the seeds of the gold rally, and the Covid-19 impact, which has virtually led to a shutdown of major economies across the world, added momentum to the rising gold prices as a major global recession now looks certain.
- Apart from this, major gold buying leading central banks of China and Russia over the last two years supported higher gold prices. While gold by itself does not produce any economic value, it is an efficient tool to hedge against inflation and economic uncertainties. It is also more liquid when compared with real estate and many debt instruments which come with a lock-in period.
- The empirical findings suggest that gold prices fall with a rise in equity prices. Gold prices also move in tandem with heightened economic policy uncertainty, thereby indicating the safe haven feature of the asset. Given the economic uncertainty, gold is expected to touch a new all-time high, which will be over \$1900 an ounce. In India, the prices will also be supported by any further weakness in the Indian rupee. As an when economic recovery picks up pace, which is now expected in late 2021 only, investors will start allocating more funds to risk assets like stocks, real estate and bonds and pull out money from safe havens such as gold, US dollar, government debt and Japanese yen.
- As per historical trends, when equity and risk assets start an upward trend, gold typically falls significantly as was the case from 2011 till 2015.

4. Software Technology Parks of India (STPI)

Why in News?

- Government of India gives 4 months' rental waiver to the IT companies operating from Software Technology Parks of India (STPI) centres.
- In light of the current coronavirus pandemic, the Ministry of Electronics and Information Technology (MeitY) has decided to provide rental waiver to IT companies housed in STPI premises in the country from March to June, i.e., for 4 months period as of now.

Software Technology Parks of India (STPI):

- Software Technology Parks of India (STPI) is an autonomous society under the Ministry of Electronics & Information Technology, Government of India.
- It was established in 1991 with the objective of encouraging, promoting and boosting the export of software from India.
- STPI maintains internal engineering resources to provide consulting, training and implementation services. Services cover Network Design, System Integration, Installation, Operations and maintenance of application networks and facilities in varied areas.
- The STPI's major functions are to establish software technology parks in various locations in India, and to perform various financial management functions related to it.
- It has 60 centres across India.
- The STPI's Governing Council's Chairperson is the Union Minister for Electronics & Information Technology.

STPI Objectives:

- To promote the development and export of software and software services including Information Technology Enabled Services/Bio-IT.
- To provide statutory and other promotional services to the exporters by implementing Software Technology Park/Electronics and Hardware Technology Park Schemes and other such schemes which may be formulated and entrusted by the Government from time to time. To provide data communication services including value added services to IT/IT Enabled Services related industries.
- To promote micro, small and medium entrepreneurs by creating conducive environment for entrepreneurship in the field of IT/IT Enabled Services.

5. Chitra GeneLAMP-N

Why in News?

- Chitra GeneLAMP-N makes confirmatory tests results of COVID-19 possible in 2 hours.

Highlights:

- Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum, an Institute of National Importance, of the Department of Science and Technology (DST), has developed a diagnostic test kit that can confirm COVID-19 in 2 hours at a low cost.

- The confirmatory diagnostic test, which detects the N Gene of SARS- COV2 using reverse transcriptase loop-mediated amplification of viral nucleic acid (RT-LAMP), will be one of the world's first few if not the first of its kind in the world.
- The test kit, funded by the DST called Chitra GeneLAMP-N, is highly specific for SARSCoV-2 N-gene and can detect two regions of the gene, which will ensure that the test does not fail even if one region of the viral gene undergoes mutation during its current spread.
- The tests performed at National Institute of Virology (NIV) Alappuzha (authorized by ICMR) show that Chitra GeneLAMP- N has 100% accuracy and match with test results using RT-PCR. This has been intimated to ICMR, the authority to approve COVID-19 testing in India, following which license needs to be obtained from the Central Drugs Standard Control Organisation (CDSCO) for manufacture.

Significance:

- Current PCR kits in India enable detection of E gene for screening and RdRp gene for confirmation. Chitra GeneLAMP-N gene testing will allow confirmation in one test without the need for a screening test and at much lower costs.
- The detection time is 10 minutes, and the sample to result time (from RNA extraction in swab to RT-LAMP detection time) will be less than 2 hours.
- A total of 30 samples can be tested in a single batch in a single machine allowing a large number of samples to be tested each day. The testing facility can be easily set up even in the laboratories of district hospitals with limited facilities and trained laboratory technicians. The results can be read from the machine from the change in fluorescence.
- The cost of testing with the new device for LAMP testing and the test kit for 2 regions of N gene (including RNA extraction) will be less than Rs 1000/test for the laboratory.

6. Special Drawing Rights of IMF

Why in News?

- Recently, India has opposed the new general allocation of SDR to the member countries by IMF.

Key Points:

- The new SDR allocation of IMF will provide all 189 members with new foreign exchange reserves with no conditions.

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- The Finance Minister of India opposed this general allocation of new Special Drawing Rights (SDR) by the International Monetary Fund (IMF) because it might not be effective in easing Covid-19 driven financial pressures.
 - The Finance Minister was concerned that such a major liquidity injection could produce potentially costly side-effects if countries used the funds for irrelevant purposes.

What is SDR?

- The SDR basket of currencies includes the U.S. dollar, Euro, Japanese yen, pound sterling and the Chinese renminbi (included in 2016).
- The SDR is neither a currency nor a claim on the IMF. Rather, it is a potential claim on the freely usable currencies of IMF members. SDRs can be exchanged for the above currencies.
- The SDR serves as the unit of account of the IMF and some other international organizations. The currency value of the SDR is determined by summing the values in U.S. dollars, based on market exchange rates, of a SDR basket of currencies.
- Quota (the amount contributed to the IMF) of a country is denominated (expressed) in SDRs.
- Members' voting power is related directly to their Quotas.

