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Changing Geopolitics in West Asia

Implications for India and World

The Saudi-Iran deal brokered by China has a huge significance within the Arab world as well as outside the region. The major beneficiaries of the deal are the bilateral partners. The deal is significant for the regional countries and will have long-term implications for the instability in Yemen and Syria. It symbolizes China's quiet diplomacy in the region and its evolution from a preferred economic partner to an emerging political ally.

■ Chandrakant Singh

On 10th March, 2023, a Joint Trilateral Statement was issued by the Kingdom of Saudi Arabia, the Islamic Republic of Iran and the People's Republic of China announcing an agreement between Saudi Arabia and Iran to resume diplomatic relations and re-open their embassies and missions within a period not exceeding two months.

The deal has been welcomed by a number of countries, international institutions and non-state groups alike. Considered along with other recent developments in West Asia, it indicates a major shift in the region's geopolitics. It will have significant implications for the region as well as other parts of the world.

About the Diplomatic Agreement

- The two countries affirmed respect for the sovereignty of states and emphasized on adherence to the non-interference in the internal affairs.
- Saudi Arabia and Iran agreed that the Foreign Ministers of both the countries will make arrangements for the return of their ambassadors and discuss means of enhancing bilateral relations.
- The two countries also agreed to implement the bilateral Security Cooperation Agreement signed in 2001 and the General Agreement for Cooperation in the Fields of Economy, Trade, Investment, Technology, Science, Culture, Sports, and Youth, signed in 1998.

Why Agreement Now?

Saudi's Reason

- Saudi Arabia's military involvement in Yemen has not achieved the intended outcome of pushing the Houthis out of the capital Saana; rather, it has proved to be a drain on its economy. Riyadh, therefore, wants an acceptable resolution and honourable exit from the war in Yemen.
- Since 2015, Saudi Arabia has faced a large number of missile and drone attacks from the Houthis which has emerged as a critical national security challenge for the Kingdom.

- By signing an agreement with Iran to restore normalcy, Saudi Arabia hopes to protect borders and critical infrastructure from the Houthi attacks.
- Also, in order to achieve the targets under Saudi Vision 2030, long-term peace with Iran is necessary.
- Prolonged military engagement in Yemen is a hindrance to achieving such goals. Therefore, an agreement with Iran is a practical move by Saudi Arabia in terms of its national security and economic development.

Iran's Reason

- By restoring diplomatic relations with Saudi Arabia, Iran would try to end the increasing isolation it is facing in the region and beyond.
- Besides, it expects to receive support from the regional countries over its nuclear issue.
- An agreement with Saudi Arabia would help cement its ties with other members of the Gulf Cooperation Council (GCC) as well, particularly Bahrain and the UAE.
- The agreement would come as an immediate relief for the Iranian government which has been facing protests in recent months.

The Long-Standing Saudi-Iran Conflict

The Saudi-Iran conflict is a long-standing geopolitical rivalry between the Kingdom of Saudi Arabia and the Islamic Republic of Iran. The conflict is rooted in differences in religion, political ideology, and regional influence.

- Shiite Islam is the dominant religion in Iran, while Saudi Arabia is predominantly Sunni.
- The two sects have different beliefs and practices, including differences in religious law, leadership, and interpretation of certain historical events.
- Historically, the two countries have been on opposite sides of the sectarian divide, with Iran supporting Shiite communities and movements throughout the region, while Saudi Arabia has supported Sunni groups.
- Since, many countries in the West Asia have mixed Sunni and Shiite populations.

Boosting India's Semiconductor Ecosystem Harnessing Economic Gains & Moving towards Self-reliance

Semiconductors—the tiny chips powering modern electronics—have enabled breathtaking innovation in virtually all areas of society, fundamentally shifting the boundary between the possible and the impossible. They have fostered breakthrough technologies in recent years, like artificial intelligence and machine learning completely changing the way we live and work.

■ Ranjeet Shah

A recent Deloitte report estimates the Indian semiconductor market to reach US\$55 billion by 2026, with over 60 per cent of the market driven by the smartphones and wearables, automotive components, and computing and data storage industries.

Even the Ministry of Electronics & Information Technology (MeitY) has said that India's smartphone exports will touch US\$9.5 -10 billion in 2023 and soon India will announce the first semiconductor fab.

India's recent discovery of lithium reserves in the Union Territory of Jammu and Kashmir is a significant development as it has the potential to revolutionize various industries, including electric vehicles (EVs) and electronics. The growing demand for electronic devices, especially mobile phones, makes India a significant market for lithium-ion batteries and consequently making electronic devices more affordable for consumers.

The time is right to hop onto the semiconductor bandwagon in India as the semiconductor industry in India is still in its early stages and poised for huge growth compared to some of the other major players in the global semiconductor market, such as the United States, South Korea, Japan, Taiwan, and China.

The industry has been growing rapidly in recent years and is expected to play an increasingly important role in the global semiconductor ecosystem in the coming years.

What are Semiconductors?

Semiconductors possess specific electrical properties. A substance that conducts electricity, like silver and copper is called a conductor, and a substance that does not conduct electricity, like rubber or plastic is called an insulator. Semiconductors are substances with properties somewhere between them.

A semiconductor is a physical substance designed to manage and control the flow of current in electronic devices and equipment. It either doesn't allow a freely flowing electric current or repels the current completely. Addition of small amounts of other substance can change the properties entirely. It's generally created using silicon, germanium, or other pure elements.

Semiconductor Value Chain

Semiconductors can broadly be divided into four categories -

- i) *integrated circuits* (e.g. a Qualcomm Snapdragon chip),
- ii) *Optoelectronics* (e.g. light-emitting diodes),
- iii) *discrete components* (e.g. rectifiers), and
- iv) *sensors* (e.g. CMOS image sensors for cameras).

Of the four, integrated circuits (ICs) account for 83 per cent of the total economic value.

There are two models of manufacturing semiconductors:

1. **Integrated Device Model:** Under this model, design and manufacturing both are carried out by the same company. Leading examples are Intel, Samsung, and Texas Instruments.
2. **Fab Foundry Model:** An integrated semiconductor supply chain involves thousands of companies, millions of people, and billions of dollars. The semiconductor value chain can be broken up into stages which happen across the globe, better known as the foundry model.

Research: Pre-production efforts to increase processing capability and speed needed so as to reduce cost. The focus is on surpassing the physical limits of semiconductor materials.

Design: Semiconductor chip designs are created for specific or general device usage. Highly skill intensive, access to expensive design software's and IP blocks. R&D costs are high in this stage as well.

Manufacturing (Front End): Silicon wafers are processed through an extensive series of manufacturing steps then diced into multiple chips (also called dies or devices).

Manufacturing (Back End): Chips are layered and assembled into packages that can be mounted onto circuit boards. Packaged chips are then tested under different electrical and temperature conditions. Highly capital intensive, access to manufacturing equipment, chemicals & wafer facilities, need to constantly upgrade facilities as per technological advancement.

Assembly and Testing: Chips are integrated by electronics and equipment manufacturers to create end products for consumers. Highly labour-intensive, less reliant on tech, high volume low margins, could be proved redundant by fabs creating wafer-level packaging.

India's Performance in SDGs

Challenges & the Road Ahead

The sustainable development goals (SDGs) are a framework for a better and more sustainable future for everyone. The SDGs tend to make the world a better place to live by fulfilling its targets within the stipulated time of 15 years and remove poverty, improve health, provide employment, empower women, reduce inequalities and follow all the seventeen targets that have been set by the UN.

■ **Sharmila Senthil Kumar**

According to the Lancet report (February 2023), India is not on-target for 19 of the 33 SDGs (Sustainable Development Goals) of the United Nations, which is more than 50% of the indicators related to health and social determinants of health seven years before the 2030 deadline.

Over 75 per cent Indian districts are off-target for crucial SDG indicators like access to basic services, poverty, stunting and wasting of children, anaemia, child marriage, partner violence, tobacco use, and modern contraceptive use. These districts are concentrated in Madhya Pradesh, Chhattisgarh, Jharkhand, Bihar, and Odisha.

According to the study, worsening trend observed between 2016 and 2021, and assuming no course correction occurs, many districts will never meet the targets on the SDGs even well after 2030.

UN SDGs: An Overview

The SDGs, officially known as 'Transforming our world: the 2030 Agenda for Sustainable Development' is a set of 17 Global Goals with 169 targets between them. The SDGs were adopted by the United Nations in 2015 with a vision to achieve a better and more sustainable future for all.

The SDGs follow, and expand on, the Millennium Development Goals (MDGs), which were agreed by governments in 2000, and ended on 2015. India is one of the signatory countries that has committed to achieving these goals by 2030.

The 17 SDGs are integrated—they recognize that action in one area will affect outcomes in others, and that development must balance social, economic and environmental sustainability.

Countries have committed to prioritize progress for those who're furthest behind. The SDGs are designed to end poverty, hunger, AIDS, and discrimination against women and girls.

The 17 SDGs call for a global partnership for sustainable development. The goal highlights the importance of global macroeconomic stability and the need to mobilise financial resources for developing countries from international sources, as well as through strengthened domestic capacities for revenue collection.

It also highlights the importance of trade for developing countries and equitable rules for governing international

trade. Furthermore, SDG 17 emphasises the importance of access to science, technology and innovation, in particular internet-based information and communications technology.

SUSTAINABLE DEVELOPMENT GOALS (SDGs) TO TRANSFORM OUR WORLD

- GOAL 1: No Poverty
- GOAL 2: Zero Hunger
- GOAL 3: Good Health and Well-being
- GOAL 4: Quality Education
- GOAL 5: Gender Equality
- GOAL 6: Clean Water and Sanitation
- GOAL 7: Affordable and Clean Energy
- GOAL 8: Decent Work and Economic Growth
- GOAL 9: Industry, Innovation and Infrastructure
- GOAL 10: Reduced Inequality
- GOAL 11: Sustainable Cities and Communities
- GOAL 12: Responsible Consumption and Production
- GOAL 13: Climate Action
- GOAL 14: Life Below Water
- GOAL 15: Life on Land
- GOAL 16: Peace and Justice Strong Institutions
- GOAL 17: Partnerships to achieve the Goal

India's Performance in SDGs

- ◆ India has slipped from last year's 117 to rank 121 on the 17 Sustainable Development Goals adopted as a part of the 2030 agenda by 192 United Nations member states.
- ◆ India's recent overall Sustainable Development Goals (SDG) score was 66 out of 100.
- ◆ While comparing with South Asian nations, with the latest rankings, India is now behind all South Asian nations except Pakistan.
- ◆ The South Asian countries ahead of India are Bhutan ranked 75, Sri Lanka at 87, Nepal at 96 and Bangladesh at 109.
- ◆ India's rank dropped primarily because of major challenges in 11 SDGs including zero hunger, good health and wellbeing, gender equality and sustainable cities and communities.

Internationalization of Indian Rupee

A Step towards Enhancing India's Global Stature

Internationalization of the Indian Rupee refers to the increasing use of the local currency in cross-border transactions. It involves promoting the Rupee for import and export trade and numerous other current account and capital account transactions. In the present times, internationalization of the Rupee is essential due to growing confidence in the Indian economy internationally. With the Rupee becoming more significant internationally, the bargaining power of Indian businesses will improve. This will add weight to the Indian economy and enhance India's global stature and respect.

■ Deepika Singla

The 17th Foreign Exchange Dealers Association of India (FEDAI) conference was held at Cairo, Egypt from 4th -7th March 2023. During the conference, it was highlighted that for the internationalization of Indian currency, it is necessary that India takes required measures to manage the exchange rate volatility and risks associated with internationalization of Indian Rupee.

What is meant by internationalization of currency?

- Internationalization of currency means that a currency is widely accepted across the world as a medium of exchange.
- It is an indicator of the confidence that the external economy has in the domestic economy of the issuing country, as it integrates with the global economy.
- It is characterized by the following:
 - ◆ Payments for international transactions can be made in that currency;
 - ◆ Both residents and non-residents can hold financial assets and liabilities denominated in that currency; and
 - ◆ Freedom for non-residents to hold tradable currency balances, even beyond the territory of the issuing country.

What are the pre-conditions for internationalization of currency?

Internationalization of currency is governed by following economic factors:

- **Stability of currency:** Stability of domestic economy, which makes the currency attractive as a store of value
- **Economic Weight:** A well-developed financial system with deep and liquid markets that offer the participants a wide range of services and products in terms of borrowing, investing and hedging. This increases the chances of using a country's own currency in international transactions.
- **Size of Domestic Economy:** The size of domestic economy shall be comparable to the world output which leads the outside world to increase the demand for internationalized currency for transaction purposes, and consider the



- use of such currency when making portfolio decisions.
- **Openness and Depth of Financial Markets:** It is determined by how easily non-residents can access the currency, make an investment, liquidate it, and hedge the risk.
- **Credibility of Economic and Legal Systems:** There should be an independent monetary policy-making mechanism, a sound legal system that protects property rights and enforces bankruptcy law, and a political system that is more transparent and well represented.
- **Investor Confidence:** Investor confidence in the currency by supporting currency, financial, economic, and even political stability.

The process of internationalization of a currency includes the following necessary pre-conditions:

- The government must remove all restrictions on the freedom of any entity, domestic or foreign, to buy or sell its country's currency, whether in the spot or forward market.
- Domestic firms are able to invoice some, if not all, of their exports in their country's currency, and foreign firms are likewise able to invoice their exports in that country's currency, whether to the country itself or to third countries.
- Foreign firms, financial institutions, official institutions and individuals are able to hold the country's currency

- [Compassionate Appointments](#)
- [Women, Business and the Law 2023](#)
- [Foreign Trade Policy 2023](#)
- [United Nations World Water Development Report 2023](#)

Compassionate Appointments

On 3rd March, 2023, the Supreme Court (SC) rejected some applications for ‘compassionate appointment’ that were filed by the dependents of deceased government employees in West Bengal.

- The apex court set aside the judgment delivered by a Division Bench of the Calcutta High Court on September 30, 2019, restoring an earlier order passed by a single judge of the Calcutta High Court on July 5, 2018. While the Division Bench had directed consideration of the applications for the compassionate appointment in light of circulars issued by the state government, the single-judge had rejected the applications due to delay and absence of state policy.

What SC said?

- Compassionate appointment is not a vested right which can be exercised at any time in future.
- Compassionate employment cannot be claimed or offered after a lapse of time and after the crisis is over.
- Appointment on compassionate grounds is not a source of recruitment. The reason for making such a benevolent scheme by the State or the public sector undertaking is to see that the dependents of the deceased are not deprived of the means of livelihood. It only enables the family of the deceased to get over the sudden financial crisis.
- Compassionate employment cannot be claimed or offered after a lapse of time and after the crisis is over.
- That compassionate appointment should be provided immediately to redeem the family in distress. It is improper to keep such a case pending for years.

In determining as to whether the family is in financial crisis, all relevant aspects must be borne in mind including the income of the family, its liabilities, the terminal benefits if any, received by the family, the age, dependency and marital status of its members, together with the income from any other source.

About Compassionate Appointment

- The concept of compassionate appointment can be traced to the Indian Constitution’s Article 39, which is under the

Directive Principles of State Policy and talks about the right to livelihood.

- It aims to provide employment on compassionate grounds to the dependent family members of a government servant who dies in harness or retires on medical grounds, leaving the family without any source of sustenance.
- According to the Department of Personnel and Training (DoPT’s) office memorandum dated January 16, 2023, these appointments can only be made for “Group ‘C’ posts against the direct recruitment quota.”

Factors for Assessing Compassionate Appointments

- Multiple factors are looked at while assessing a request for compassionate appointments, such as the financial condition of the family, the presence of earning members, family size, children’s ages, and the essential needs of the family.

Eligibility

- Compassionate Appointments can extend to dependent family members of a government servant who:
 1. Dies while in service (including death by suicide),
 2. Retired on medical grounds under Rule 2 of the CCS (Medical Examination) Rules 1957 or the corresponding provision in the Central Civil Service Regulations before 55 years of age (57 years for erstwhile Group ‘D’ Government servants);
 3. Retired on medical grounds under Rule 38 of the CCS (Pension) Rules, 1972 or the corresponding provision in the Central Civil Service Regulations before attaining the age of 55 years (57 years for erstwhile Group ‘D’ Government servants).
- The measure can also extend to the family members of an Armed Forces employee who:
 1. Dies during service;
 2. Is killed in action; or
 3. Is medically boarded out and is unfit for civil employment.
- Moreover, the deceased’s dependents can only be first-degree relations such as their spouse, son or daughter (including adopted ones), brother or sister in the case of an



Polity & Governance

- Disqualification of Members of Parliament
- Pre-arrest Bail
- Guillotine in Parliament
- NCLAT upholds CCI's Penalty on Google

Polity & Governance

Disqualification of Members of Parliament

On 23rd March, 2023, a politician was sentenced to two years jail by Gujarat's Surat Court which led to his disqualification as a Member of Parliament (MP).

Provisions for Disqualification of MP

Articles 102(1) and 191(1)

- It deals with disqualification of a MP and a member of the Legislative Assembly (MLA) respectively.
- The grounds here include holding an office of profit, being of unsound mind or insolvent or not having valid citizenship.

Tenth Schedule

- Commonly known as the 'anti-defection law', it was meant to arrest the practice of legislators from changing political affiliations during their term in office.

The Representation of the People Act (RPA), 1951

- **Section 8** of the RPA deals with disqualification for conviction of offences.
- The provision is aimed at "preventing criminalisation of politics" and keeping 'tainted' lawmakers from contesting elections.
- **Section 9** deals with disqualification for dismissal for corruption or disloyalty, and for entering into government contracts while being a lawmaker.
- **Section 10** deals with disqualification for failure to lodge an account of election expenses.
- **Section 11** deals with disqualification for corrupt practices.

Legal Protection against Disqualification

- **Section 8(3)** of the RPA mandates that an MP can be disqualified if convicted and sentenced to at least 2 years of imprisonment.

- Rule 357 of Rules and Procedure and Conduct of Business in Lok Sabha
- Constitutional Validity of Section 354(5) of CrPC, 1973
- Lok Sabha Passes Competition (Amendment) Bill 2022
- Pennaiyar River Dispute

Judiciary

- Sealed Cover Jurisprudence
- Principle of Audi Alteram Partem

National Security

- National Security Act
- Centre Reduces "Disturbed Areas" under AFSPA

Plans/Policies

- NITI Aayog launches ATL Sarthi

- The disqualification can be reversed if a higher court grants a stay on the conviction or decides the appeal in favour of the convicted lawmaker.
- Under **Section 389 of the CrPC**, an Appellate Court can suspend the sentence of a convict while the appeal is pending. This is akin to releasing the appellant on bail.
- The MP can also approach the President as a different alternative.
- Under **Article 103**, the President has to declare whether a sitting member of either House of Parliament is subject to disqualification. As per the Constitutional provision, a decision on disqualification will be taken by the President.

Pre-arrest Bail

On 14th March, 2023, the Supreme Court agreed to hear a petition filed by the Karnataka Lokayukta, challenging a Karnataka High Court order granting pre-arrest bail to a Member of Legislative Assembly (MLA).

About Bail

- Bail is described as the release of a person from legal custody, by undertaking that he shall appear at the time and place designated and submit himself to the jurisdiction and judgment of the court.
- Bail has not been expressly defined in Indian statutes.
- The Code of Criminal Procedure (CrPC) differentiates between "bailable" and "non-bailable" offenses.

Pre-arrest Bail

- It was introduced under Section 438 of the CrPC.
- The 41st Law Commission Report in 1969 recommended the need for a measure that protects against arbitrary violation of one's liberty.

Granting of Pre-arrest Bail

- It can be granted under Section 438, when "any person has reason to believe that he may be arrested on an accusation of having committed a non-bailable offense".
- It can be granted by the High Court or the Court of Session.



Indian Society

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- Guidelines for Blood Donor Selection & Blood Donor Referral 2017

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Classes' for Reservation

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- Silver Jubilee of Kudumbashree

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Indian Society

Affinity Test & Caste Claims

On 24th March, 2023, the Supreme Court (SC) held in a judgment that an affinity test cannot be the litmus test to decide a caste claim.

- The judgment came pursuant to a reference pertaining to the question of whether the affinity test is integral for determining the SC or ST status of an applicant by a 'scrutiny committee'.

What SC Held?

- A three-judge Bench was settling conflicting views on the value of affinity tests to prove caste/tribe claims.
- One view held that if a candidate failed the affinity test at any stage, a caste validity certificate cannot be granted to him.
- The second view was that the affinity test was not the only criterion for deciding a caste claim based on a caste certificate issued by a competent authority.
- It was held that the affinity test could be used only as a means to corroborate the documentary evidence.
- It stated that an affinity test is not an essential part of the process of the determination of the correctness of a caste or tribe claim in every case.
- The bench observed that when an application is moved with the scrutiny committee, the case can be referred to the vigilance cell.
- It noted that by referring the case to the vigilance cell, the scrutiny committee must record its basis for coming to the conclusion that it is not satisfied by the materials produced by the applicant.
- Only after the case is referred to the vigilance cell for making an inquiry, an occasion for the conduct of an affinity test will arise.

ANAND VS. COMMITTEE FOR SCRUTINY AND VERIFICATION OF TRIBE CLAIMS & ORS. (2011)

- In this case, the Supreme Court had observed that the affinity test cannot be the sole criterion for establishing the link of an applicant with an SC or ST, and may be used to corroborate documentary evidence.
- According to the bench, with migrations, modernisation and contact with other communities, the present traits of an applicant may not match their tribe's peculiar anthropological and ethnological traits, and they should not be denied the benefits extended to their tribe.

Important Facts

Caste Claim

- Any person who claims to belong to a Scheduled Caste or a Scheduled Tribe or Other Backward Class has to produce a certificate to the Appointing Authority/Selection Committee/Board, etc. in support of his claim so as to make him eligible for reservation and various relaxations and concessions.
- The Caste/Tribe/Community certificate issued by the appointing authorities in the prescribed form for SCs/STs and for OBCs is only accepted as proof in support of a candidate's claim as belonging to the Scheduled Caste or the Scheduled Tribe or the Other Backward Class.

Scrutiny Committee

- A scrutiny committee is a statutory body for verification of SC or ST certificates. After obtaining the ST or SC certificate from a competent authority, any person who wants to avail its benefits or concessions can apply to the relevant scrutiny committee for the verification of such certificate and the issue of a validity certificate.

Heritage Art & Culture

Art & Culture

- Bumchu Festival of Sikkim
- Sharada Peeth Corridor

Art & Culture

Bumchu Festival of Sikkim

Bumchu festival is celebrated at Tashiding Monastery, West Sikkim on the 15th day of the first month of the Lunar calendar corresponding to the month of February/March.

About the Festival

- Bumchu, the Tashiding holy water vase ritual, is a unique and important occasion that draws travellers from all over the world.
- Bumchu means “pot of sacred water” in Tibetan.
- Annual performances of this ancient ceremony are held at the Tashiding Monastery, located in the western part of Sikkim. The fascinating history behind Bumchu’s roots can be traced back several centuries ago.
- The Tashiding Monastery is one of the most sacred Buddhist pilgrimage sites, located on a hilltop overlooking the Rangeet River in Sikkim.
- Legend has it that during his journey to Sikkim in the eighth century, Guru Padmasambhava, better known as Guru Rinpoche, the great Buddhist guru who brought Buddhism to Tibet, blessed the location of the monastery.
- A Nyingma teacher named Ngadak Sempa Chempo Phunshok Rigzing later founded the monastery in the 17th century.
- The Bumchu festival commemorates a supernatural occurrence that took place in the 18th century under Chogyal Chakdor Namgyal.
- A legend says that a Lama was told by a deity to visit a nearby spring and gather water in a vase. The Lama followed the instructions and found that no matter how much water was used, the water level in the vase never dropped.
- The Lama understood that the vase was scary and that its water had healing properties. The vase was delivered to the Tashiding Monastery, where it was revered as a

- Attukal Pongala
- Matua Maha Mela
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News Snippets

holy object and served as the centrepiece of the Bumchu festival.

- The vase is opened during the event, and the water inside is shared among the worshippers. The water is thought to have healing qualities and to grant luck and riches to those who drink it.
- In Sikkim, the Bumchu festival is a time of intense delight and celebration. At the event, pilgrims travel to Tashiding from all around India as well as from close by nations like Bhutan, Nepal, and Sri Lanka.
- Sacred rituals are carried out by monks and nuns, who also recite prayers and offer gifts to the gods.
- The Bumchu festival is a significant cultural celebration that showcases Sikkim’s distinctive cultural heritage in addition to being a religious occasion.

Sharada Peeth Corridor

On 22nd March, 2023 the Union Home Minister said that the government will move forward to open Sharda Peeth on the lines of the Kartarpur corridor.

About Sharda Peeth

- Sharda Peeth is located in Neelum Valley in Pakistan Occupied Kashmir (PoK) across Teetwal village (in the Neelum Valley) in Kupwara district of Jammu and Kashmir, along the Line of Control (LoC).



ECONOMY WATCH

Agriculture

- National Mission on Natural Farming
- India's First Cloned Gir Calf 'Ganga'

Plans/Policies

- Captive Employment Initiative under DDU-GKY

Banking & Finance

- IREDA gets 'Infrastructure Finance Company' Status
- MCA proposes Changes to IBC, 2016

Industry

- MSME Competitive (LEAN) Scheme
- Centre Approves Setting of Seven PM-MITRA Parks
- Hallmark Unique Identification (HUID) Number

Infrastructure

- PNRGB amends norms to allow Unified Tariff on Natural Gas Pipelines
- Sagar Manthan Dashboard

Reports

- Falling Long-Term Growth Prospects: Trends, Expectations, and Policies
- ED releases Data on Money Laundering

Agriculture

National Mission on Natural Farming

On 28th March, 2023, the Government launched the National Mission on Natural Farming (NMNF) as a separate and independent scheme to promote chemical-free and climate-smart agriculture.

About NMNF

- The NMNF has been formulated by upscaling the Bharatiya Prakritik Krishi Paddhati (BPKP) to promote natural farming across the country.
- Bharatiya Prakritik Krishi Paddhati (BPKP) is a sub-mission under the Paramparagat Krishi Vikas Yojana (PKVY), which falls within the umbrella of the National Mission on Sustainable Agriculture (NMSA).

Coverage

- It will cover a 7.5 lakh hectare area by developing 15,000 clusters.
- The farmers willing to implement natural farming on their field will be registered as cluster members; each cluster shall comprise 50 farmers or more with 50-hectare land.
- Also, each cluster can fall into one village or spread across 2-3 nearby villages under the same gram panchayat.

Financial Assistance

- Farmers will receive a financial assistance of Rs.15, 000 per hectare per year for three years for the creation of on-farm input production infrastructure.

Web Portal for Implementation Progress

- A Web portal has also been launched for the promotion of natural farming with information on the implementation framework, resources, implementation progress, and farmers' registration.

Training Farmers

- Farmers will be given training in the techniques of natural farming through the National Institute of Agricultural Extension Management (MANAGE) and National Centre of Organic and Natural Farming (NCONF).

Bio-inputs Resources Centres (BRCs)

- The Centre intends to set up 15,000 Bhartiya Prakritik Kheti Bio-inputs Resources Centres (BRCs) to provide easy access to bio-resources wherein cow dung and urine, neem and bioculture play an important role.

Important Facts

Paramparagat Krishi Vikas Yojana

- Launched in 2015, it is an extended component of Soil Health Management (SHM) under the Centrally Sponsored Scheme (CSS), National Mission on Sustainable Agriculture (NMSA).
- It aims at supporting and promoting organic farming, in turn resulting in improvement of soil health.

National Centre for Organic and Natural Farming (NCONF)

- Founded in 2004, it is a nodal organization for promotion of organic farming under integrated nutrient management (INM) Division, Department of Agriculture & Farmers Welfare, under Soil Health Management component of National Mission on Sustainable Agriculture (NMSA).

National Institute of Agricultural Extension Management (MANAGE)

- It was established in 1987 as the 'National Centre for Management of Agricultural Extension at Hyderabad.
- The aim of the institute is to instill managerial and technical skills to Extension Officers, managers, scientists and administrators in the agricultural economy, to enable them to provide support and services to farmers and fishermen for practicing sustainable agriculture.

SCIENCE & TECHNOLOGY

Space Science

- LVM3-M3/OneWeb India-2 Mission
- Evidence of Active Volcano on Venus

Space Science

LVM3-M3/OneWeb India-2 Mission

On 26th March, 2023, the Indian Space Research Organisation (ISRO) launched 36 OneWeb satellites on its second commercial launch of the Launch Vehicle Mark-3 (LVM-3) rocket. This marked the second launch that ISRO performed for OneWeb, a UK-based company.

- The launch completed the OneWeb Constellation wherein OneWeb will use 588 active satellites for global connectivity.
- The launch earned ISRO over Rs. 1,000 crore and increased its share of the global commercial space market.

Background

- ISRO's commercial arm NewSpace India Limited (NSIL) had signed a contract with OneWeb to launch 72 satellites in two phases.
- The first set of 36 satellites was launched in LVM3-M2/OneWeb India-1 Mission on October 23, 2022.

Significance

- OneWeb's high-speed, low-latency solutions will help connect communities, enterprises, and governments around the world, demonstrating the unparalleled potential of LEO connectivity.
- OneWeb's network can be used for disaster relief and emergency communications, providing a reliable means of communication when traditional infrastructure is damaged or unavailable.

LVM3: Technical Highlights

- The key features of LVM3 include:
- Handling of multiple satellite separation events
- Increased nominal mission duration
- Ensuring safe separation distance through C25 stage re-orientation and velocity addition
- Ensuring data availability for entire mission duration

- Controlled Re-entry Experiment of Megha-Tropiques-1

New Technology & Innovations

- Potential of Organoid Intelligence to Create Biocomputers
- Laccase
- Starberry-Sense

Government Policies/Initiatives

- ICMR's Ethical Guidelines for Use of AI in Healthcare
- Bharat 6G Project

News Snippets

- Realization of new payload adaptor and interface ring for the satellites dispenser

OneWeb Constellation: Salient Points

- OneWeb Constellation operates in a LEO Polar Orbit
- Satellites are arranged in 12 rings (Orbital planes) with 49 satellites in each plane.
- The orbital planes are inclined to be near polar.
- Each satellite completes a full trip around the earth every 109 minutes.
- The earth is rotating underneath satellites, so they will always be flying over new locations on the ground.
- Each plane has 49 satellites, totalling 588 Satellites.

Important Facts

NewSpace India Limited (NSIL)

- It has been incorporated in 2019 as a wholly-owned Government of India Company, under the administrative control of Department of Space (DOS).
- It is the commercial arm of ISRO.
- It aims to excel in providing space-related products and services emanating from Indian Space Programme to global customers and to further spur the growth of Indian industry in undertaking technologically challenging space-related activities.

Indian National Space Promotion and Authorization Centre (IN-SPACe)

- Formally inaugurated on 10th June, 2022, IN-SPACe is an independent nodal agency under Department of Space.
- Its vision is to enable non-government entities' (NGEs) participation in space activities, boost the space economy within the country and develop space force frontiers for a resurgent, AtmaNirbhar Bharat.

Evidence of Active Volcano on Venus

Recently, a new study found direct geological evidence of recent volcanic activity on Venus (also known as Earth's twin) for the first time.



ECOLOGY & ENVIRONMENT

Climate Change

- Himalayan Glacial Retreat

Biodiversity

Climate Change

Himalayan Glacial Retreat

Recently, a team of scientists from Wadia Institute of Himalayan Geology (WIHG), Dehradun, quantitatively evaluated the influence of the debris cover on the loss of ice mass in summer (summer ablation) and on terminus recession of glaciers.

What is Glacial Retreat?

- Glacial retreat refers to the process of a glacier shrinking or receding in size over time due to a decrease in ice accumulation or an increase in ice melt.

Context

- Despite the importance of the Himalayan glaciation, the knowledge of the glacial dynamics and the factors that influence these dynamics is scanty.
- Recent studies of Himalayan glaciers indicate wide variability in retreat rate and mass balance in different sectors of the mountain range, primarily linked to the topography and climate of the region.
- However, variable retreat rates of glaciers and inadequate supporting field data (e.g., mass balance, ice thickness, velocity, etc.) of the Himalayan glaciers make it challenging to develop a coherent picture of climate change impact.

The Study

- The team studied two glaciers with different characteristics - the Pensilungpa Glacier (PG) in Suru River and the Durung-Drung Glacier (DDG) in Doda River basins of Zaskar in the Leh district of Ladakh for a comparative study of glacier fluctuations between 1971 and 2019.
- While a thick debris cover characterizes the PG, the DDG has a thin debris cover, and their comparative analysis helped them trace the influence of various factors on the mass balance process.

Key Findings

- Change in debris cover plays a critical role in the glacier surface lowering, shrinkage, retreat, and mass balance.

- Loss of Mountain Forests
- DNA Profiling of Captive Elephants

Disaster Management

- Landslide Atlas of India

Sustainable Development

- Green Tug Transition Programme
- Adverse Effects of Antibiotics Administered on Livestock

Report

- IQAir's World Air Quality Report 2022

News Snippets

- Glacier retreat rate is controlled by climate change and the topographic setting and morphology of the glacier.
- The study also confirms the possible influence of factors such as snout geometry, glacier size, elevation range, slope, aspect, debris cover, as well as the presence of supra and proglacial lakes other than the climate in the heterogeneous glacial dynamics.

Significance

- The study assumes significance because its findings need to be accounted for in future studies for a complete understanding of the observed glacier changes and responses.

Important Facts

Wadia Institute of Himalayan Geology

- It is an autonomous research institute of the Department of Science & Technology, Ministry of Science and Technology, Government of India.
- Established in June 1968 as a small nucleus in the Geology Department, Delhi University, the Institute was shifted to Dehradun during April, 1976.

Biodiversity

Loss of Mountain Forests

According to a recently published report, mountain forests, habitat to 85% of the world's birds, mammals and amphibians, are disappearing at an alarming rate.

The report highlights the need for better forest management including stricter enforcement of laws and regulations, adding that protecting areas can help reduce the loss.

Key Findings

- **Magnitude of Loss:** Mountain forests covered 1.1 billion hectares of the planet in 2000. But at least 78.1 million hectares of forests have been lost between 2000 and 2018.
- The recent losses are 2.7-fold greater than at the beginning of the century.



WORLD WATCH

International Relations

- India-US Commercial Dialogue
- India-Australia Critical Minerals Investment Partnership

International Relations

India-US Commercial Dialogue

On 10th March, 2023, India and the United States of America held the 5th Ministerial level meeting of the bilateral Commercial Dialogue in New Delhi.

- The dialogue aimed to enhance economic and commercial ties between the two countries and deepen their strategic partnership.
- A joint statement was issued at the end of the meeting.

Key Highlights

Building Supply Chain Resilience

- One of the key areas of cooperation discussed was building supply chain resilience. Both countries agreed to collaborate on diversifying supply chains and reducing their dependence on any single source or region.
- They also recognized the importance of ensuring secure and reliable supply chains that support critical infrastructure and industries.

Facilitating Climate and Clean Technology Cooperation

- The two nations expressed their shared commitment to addressing climate change and promoting clean energy technologies.
- They agreed to strengthen cooperation on research and development, deployment, and scaling of clean energy solutions.
- Additionally, both countries pledged to work together to address air and water pollution, enhance biodiversity conservation, and mitigate the impact of climate change.

Inclusive Digital Growth

- India and the United States recognized the importance of digital transformation in driving economic growth and job creation.
- Both countries committed to expanding cooperation on digital infrastructure, including 6G and broadband, and promoting the responsible use of digital technologies.

- India-Bangladesh Friendship Pipeline
- Vienna Convention on Diplomatic Relations

World Issues

- AUKUS: Australia to Get Nuclear Submarines
- Doha Political Declaration

Reports/Indices

- UNCTAD's Technology and Innovation Report 2023
- Global Terrorism Index 2023

News Snippets

- They also discussed the need to bridge the digital divide and ensure that all citizens have access to digital tools and services.

Post-Pandemic Economic Recovery

- The two countries emphasized the importance of a strong and sustained economic recovery from the COVID-19 pandemic.
- They discussed ways to support small and medium-sized enterprises (SMEs), including through access to finance and digital platforms.
- Both countries also agreed to promote trade and investment in sectors that have been particularly hard hit by the pandemic, such as tourism and hospitality.

Standards and Conformance Cooperation

- India and the United States recognized the importance of standards and conformance in promoting trade and investment.
- They agreed to enhance cooperation on standards development, conformity assessment, and mutual recognition of standards.
- They also pledged to work together to address non-tariff barriers to trade.

US-India CEO Forum

- The two nations discussed the importance of private sector engagement in promoting economic growth and job creation.
- They committed to strengthening the US-India CEO Forum, a platform for business leaders to engage with government officials on issues related to economic and commercial cooperation.

India-Australia Critical Minerals Investment Partnership

Recently, India and Australia have taken significant steps towards developing critical minerals supply chains between the two countries under the India-Australia Critical Minerals Investment Partnership.