

June 18th to June 24th Current Affairs NASA'S ORION ALL SET TO FLY

The spacecraft is designed to take astronauts to deep space destinations such as the Moon and Mars, and it has successfully completed tests for its safety systems.

Details

- Built to take humans farther than they've ever gone before.
- An exploration vehicle with emergency abort capability and provide safe re-entry from deep space
- It will be launched on NASA's new heavy-lift rocket, the Space Launch System.

The abort system:

The launch abort system is an important part of making sure crew members stay safe on the launch pad and on their way to space.

INDIA TOPS IN INWARD REMITTANCES

Report: 'One Family at a Time' study

Agency: UN International Fund for Agricultural Development (IFAD)

<u>Details</u>

- It gives the trends about the foreign remittances and migration spread across a period of 10 years from 2007-2016
- India has become the top remittance-receiving country surpassing China in 2016.
- 80% of remittances are received by 23 countries, led by India, China, the Philippines, Mexico and Pakistan.
- The top sending countries are led by the US, Saudi Arabia and Russia.
- Asia remains the main remittance-receiving region

UN'S NEW OFFICE FOR COUNTER-TERRORISM

The UNGA approved the establishment of a new office to coordinate counter-terrorism efforts. The move was welcomed by India as it is the result of efforts for a "much awaited first step" that will align the world body with needs of the global community in the fight against the terror.



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The Counter-Terrorism Implementation Task Force Office (CTITF) and the UN Counter-Terrorism Centre (UNCCT), currently in the UN Department of Political Affairs (DPA) will be transferred to the new office. The new office gets extra-budgetary resources.

Functions:

- Provide leadership on the General Assembly counter-terrorism
- Enhance coordination and coherence across the 38 Counter-Terrorism Implementation Task Force entities to ensure the balanced implementation of the strategy.
- Strengthen the delivery of United Nations counter-terrorism capacity-building assistance to Member States.
- Ensure that due priority is given to counterterrorism across the United Nations system and that the important work on preventing violent extremism is firmly rooted in the Strategy.

INDIA MOVES UP ON GLOBAL INNOVATION INDEX

Released by: World Intellectual Property Organisation (WIPO)

What the index is all about?

It has been ranking world economies including India since 2007 based on their innovation capabilities and outcomes using various parameters. It has established itself as both a leading reference on innovation and a 'tool for action' for policy makers.

India's position

India's position in the 2017 Global Innovation Index has moved up six ranks from last year to 60. It has also taken the top spot in central and southern Asia.

- Improvements in investment, tertiary education, quality of its publications and universities, its information and communication technology (ICT) services exports and innovation clusters have contributed
- Sri Lanka, Nepal, Pakistan, Bangladesh all follow India.
- India is 2nd in innovation quality for the second consecutive year. India outperformed on innovation relative to its GDP per capita.



Top performers:

Switzerland, Sweden, the Netherlands, the US and UK retained their top spots as the most-innovative countries.

INDIA BACK INTO ECOSOC

Why in news?

India has been re-elected to the UN's principal organ on economic, social and environmental issues for another three-year term.

Details

India, Japan and Philippines are the only countries from Asia.

ECOSOC

Number of members: 54 Governments

One of the six main organs of the UN

- Deals with coordination, policy review, policy dialogue and recommendations on economic, social and environmental issues
- Implementation of the internationally agreed development goals.
- Members are Elected by the General Assembly for three-year terms.
- The members meet twice a year
- Seats on the Council are allotted based on geographical representation

Commissions under ECOSOC

- 1. Commission on Human rights
- 2. Sub-commission for promotion and protection of Human Rights
- 3. International Labor organization (ILO)
- 4. World Health Organization (WHO)



CULTURAL MAPPING OF INDIA

Program: National Mission on Cultural Mapping of India

Launched from: Mathura, UP

Ministry: Ministry of Culture

Details

The mission is a part of the 'Ek Bharat Shreshtha Bharat' umbrella.

- commemorates the birth centenary of Pandit Deen Dayal Upadhyay.
- It aims to convert the diverse cultural canvas of India into an objective map.
- Envisages to create a mechanism to cater to the needs of artist community and preserve the rich cultural heritage by forming a cultural repository of artists and art forms
- It endeavors bringing all the cultural activities under one web based umbrella for better results.
- It seeks to open a direct channel of communication of artists with the Government and peer to peer communication among artists.

Ek Bharat Shreshtha Bharat

Started in: 2015

Occasion: 140th birth anniversary of Sardar Vallabhbhai Patel.

Details:

The program entails pairing of states and UTs, and Districts in annual programs that will connect people through exchanges in the areas of culture, tourism, language, education etc

- All States and UTs will be covered under the programme.
- Through this innovative measure, the knowledge of the culture, traditions and practices of different States & UTs will lead to an enhanced understanding and bonding between the States, thereby strengthening the unity and integrity of India.



Broad objectives:

- To CELEBRATE the Unity in Diversity
- To PROMOTE the spirit of national integration
- To SHOWCASE the rich heritage and culture
- TO ESTABLISH long-term engagements and
- TO CREATE an environment which promotes learning

SARDAR SAROVAR DAM CAPACITY RAISED

Why in news?

Narmada Control Authority (NCA) gave a clearance for raising the reservoir level to full capacity for Sardar Sarovar Dam (SSD) in Gujarat

Significance

- ➤ The clean (hydro-power generation) would increase.
- This additional storage would irrigate more areas and about one crore population would get assured drinking water.
- ➤ It would meet the water requirement of drought prone and desert areas of Gujarat and Rajasthan.

Narmada Control Authority

Set up by: Narmada Water Disputes Tribunal (NWDT) in 1980

Objective: To implement directions and decisions of the Tribunal.

<u>Composition</u>: It is a body corporate with representatives of the four States of Madhya Pradesh, Gujarat, Maharashtra, Rajasthan and representatives of Govt. Of India. Secretary (Water Resources), Govt. of India is the ex-officio Chairman of the Authority

Headquarters: Indore.

GST UPDATE: ANTI-PROFITEERING PANEL

The Union Finance Minister chaired GST council, comprising state finance ministers as members, approved the anti-profiteering rules. The approval envisages setting up of a five-member anti-profiteering authority as well.

Purpose and functions of the panel

To decide on levying penalty on businesses that do not pass on the benefits of price reduction to consumers under the goods and services tax regime.



- It can take suo motu action, besides acting on complaints of profiteering.
- The authority has to decide upon the complaints and levy a penalty within two years
- Where the consumer cannot be identified, the amount would be credited to the consumer welfare fund.

Working of the panel

Chairman: Retired secretary-level officer.

Besides the chairman, the four other members will be joint secretary-level officers who have been commissioners in central excise and service tax either at the Centre or states.

Firstly, the complaints of profiteering would come to the Standing Committee comprising tax officials from states and the Centre. Then the complaint will be forwarded to the Directorate of Safeguards (DGS) for investigation. Based on the investigation report, the anti-profiteering authority will decide on the penalty.

CIC WANTS BCCI UNDER THE RTI ACT

Why in news?

The Central Information Commission (CIC) sought the Committee of Administrators (CoA), which is running the Board of Control for Cricket in India (BCCI), to bring the organisation in the purview of RTI Act.

Reasons for such a proposal

BCCI, a National Sports Federation for cricket, has earned thousands of crores due to tax concessions ushered in by the government. The government had declared all the National Sports Federations (NSF)s receiving a grant of Rs. 10 lakh or more as a Public Authority under RTI, 2005. Hence it has to come under the RTI purview to make it accountable to the public.



Information commission

- Central Information Commission is constituted by the Central Government through a Gazette Notification.
- The Commission includes one Chief Information Commissioner (CIC) and not more than 10 Information Commissioners (IC) who will be appointed by the President of India.
- The Central Information Commission/State Information Commission has a duty to receive complaints from any person.

RTI Act

Right to Information Act of 2005 mandates time bound response to citizen requests for government information. It replaces the erstwhile Freedom of information Act, 2002.

- Any citizen may request information from a "public authority". The public authority in question is required to reply expeditiously or within thirty days.
- ➤ The act also mandates every public authority to computerise its records for wide dissemination, proactively in certain categories of information, so that the citizens expend minimum effort to know the information formally.
- The Act covers the whole of India except Jammu and Kashmir.
- Private bodies are not within the Act's ambit directly. However, in a decision of Sarbajit Roy versus Delhi Electricity Regulatory Commission, the Central Information Commission affirmed that privatised public utility companies continue to be within the RTI Act.

CIC:

The Central Information Commission (CIC) is set up under the RTI act

• The Chief Information Commissioner heads the Central Information Commission. CIC hears appeals from information-seekers who have not been satisfied by the public authority, and also addresses major issues concerning the RTI Act.

Composition and appointment

The Chief Information Commissioner and Information Commissioners are appointed by the President on the recommendation of a committee consisting of:

- The Prime Minister, who shall be the Chairperson of the committee.
- The Leader of Opposition in the Lok Sabha.



• A Union Cabinet Minister to be nominated by the Prime Minister.

INDIA RANKED LOW ON ENVIRONMENTAL IMPACT SURVEY

Report by: UK-based MoneySuperMarket

India's rank: 75

Details

The study highlights the individual contribution to the world's climate by highlighting areas for improvement for each country.

- The rankings were based on parameters like energy consumption, air pollution, waste production and reliance on non-renewable energy.
- Mozambique topped the list because almost all its energy use comes from green sources.
- ➤ Africa as a continent topped the charts
- Worst country for environmental impact: Trinidad and Tobago

INTERNATIONAL CONVENTION ON BIOTECH INNOVATION

The BIO (Biotechnology Innovation Organization) 2017 was held in the San Diego Convention Centre, San Diego. India also took part in the convention.

BIO International Convention

First BIO International Convention: 1993

Hosted by: The Biotechnology Innovation Organization (BIO)

It is the largest global event for the biotechnology industry, to attract the biggest names in biotech offering key networking and partnering opportunities

- ➤ It also features the world's largest biotechnology exhibition the BIO Exhibition.
- ➤ BIO represents biotechnology companies, academic institutions, state biotechnology centers and related organizations across the United States and in more than 30 other nations.
- ➤ BIO members are involved in the research and development of innovative healthcare, agricultural, industrial and environmental biotechnology products.



The key benefits of attending the BIO International Convention are access to global biotech and pharma leaders via BIO One-on-One Partnering, exposure to industry

INDIA ACCEDES TO UNITED NATIONS TIR CONVENTION

India's ratification of United Nations TIR (Transports Internationaux Routiers) Convention will help boost trade through smoother movement of goods across territories. India is the 71st country to do so.

Why did India ratify it?

As India embarks on a Multi-modal transport strategy to integrate the economy with global and regional production networks, there is a need for better connectivity.



TIR convention

The Customs Convention on International Transport of Goods under the cover of TIR Carnets, 1975 (TIR Convention), is an international transit system under the auspices of the United Nations Economic Commission for Europe (UNECE).

It facilitates the seamless movement of goods within and amongst the Parties to the Convention. At present there are 70 parties to the Convention, including the European Union.

• The TIR system not only covers customs transit by road but also other modes of transport (e.g., rail, inland waterway, and even maritime transport), as long as at least one part of the total transport is made by road.



Benefits for India:

- Will save significant amount of time and money by streamlining procedures at borders, reducing administration and cutting border waiting times.
- India's initiatives to improve cross-border The TIR Convention will also facilitate India's current national and multilateral connectivity-related initiatives to improve cross border road transport, facilitating overland trade integration with both eastern and western neighbours.
- It will also help India in implementing the World Trade Organization's Trade Facilitation Agreement, which entered into force this year.
- The Convention will help Indian traders to have access to fast, easy, reliable and hassle free international system for movement of goods by road or multi- modal means across the territories of other contracting parties.
- By joining the convention, the need for inspection of goods at intermediate borders as well as physical escorts en route shall be obviated due to reciprocal recognition of Customs controls.

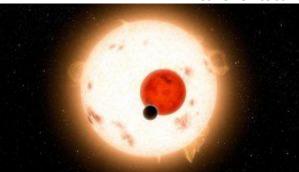
Sources: the hindu.			

<u>Paper 3 Topic</u>: Awareness in the fields of IT, Space, Computers, robotics, nano-technology, biotechnology and issues relating to intellectual property rights.

NASA finds 10 Earth-sized exoplanets

NASA's Kepler mission team has released a survey of 219 potential exoplanets — planets outside of our solar system — that had been detected by the space observatory launched in 2009 to scan the Milky Way galaxy.





Key facts:

- Ten of the new discoveries were orbiting their suns at a distance similar to the Earth's orbit around the sun, the so-called habitable zone that could potentially have liquid water and sustain life.
- Kepler has already discovered 4,034 potential exoplanets, 2,335 of which have been confirmed by other telescopes as actual planets. The 10 new Earth-size planets bring the total to 50 that exist in habitable zones around the galaxy.
- Of the 10 newly discovered Earth-size planets, one is the closest to Earth in size and the distance to its host star. But researchers don't know much more than that.

What you need to know about Exoplanets?

An exoplanet is a planet outside our solar system, usually orbiting another star. They are also sometimes called "extrasolar planets", "extra-" implying that they are outside of our solar system.

What is the habitable zone?

If a planet is too close to the star it orbits, any water on the surface quickly boils off, forming a steam atmosphere. If the planet is too far from the star, any water on the surface freezes.

- The habitable zone (or "Goldilocks zone") is the range of orbital distances from a star at which liquid water can exist on the surface of a planet.
- This range of distances changes depending on the size and temperature of the star.
- Earth is in the habitable zone of the sun one of the reasons our planet has liquid water like oceans and lakes.

Sources: the hindu.

<u>Paper 2 Topic</u>: Important International institutions, agencies and fora, their structure, mandate.

India Re-Nominates Dalveer Bhandari For Another Term As Judge At International Court of Justice

India has re-nominated Justice Dalveer Bhandari as its candidate for another term as judge at the International Court of Justice or ICJ, the principal judicial organ of the United Nations or UN.



<u>Judges at ICJ:</u>

The ICJ consists of 15 judges elected to nine-year terms by the United Nations General Assembly and the Security Council that vote simultaneously but separately.

Eligibility criteria:



In order to be elected, a candidate must receive an absolute majority of the votes in both bodies (UNSC and UNGA).

- Judges will be elected from among persons of high moral character, who possess the qualifications required in their respective countries for appointment to the highest judicial offices, or are jurisconsults of recognised competence in international law.
- Judges are chosen on the basis of their qualifications, not their nationality, but no two judges can be from the same nationality. Effort is also taken to ensure that the principal legal systems of the world are reflected in the composition of the court.

Know about ICJ:

The International Court of Justice (ICJ) is the principal judicial organ of the United Nations (UN). It was established in June 1945 by the Charter of the United Nations and began work in April 1946.

- The seat of the Court is at the Peace Palace in The Hague (Netherlands).
- Of the six principal organs of the United Nations, it is the only one not located in New York (United States of America).
- The Court's role is to settle, in accordance with international law, legal disputes submitted to it by States and to give advisory opinions on legal questions referred to it by authorized United Nations organs and specialized agencies.
- Its judgments have binding force and are without appeal for the parties concerned.

Sources: the hindu.			

<u>Paper 3 Topic:</u> Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.

Government, RBI in talks to postpone Basel-III norms for banks



The government is in talks with the Reserve Bank of India, in a bid to postpone the implementation of the international capital norms or Basel-III norms in the Indian banking sector, which is struggling with the issue of surmounting bad debts. It has been made mandatory for the banks to abide by the Basel-III regulatory norms by March 2019.

• The extension of the last date to meet the capital needs will provide the banks an opportunity to increase their lending while they settle their bad loans tussle and also raise capital.

Background:

Basel III (or the Third Basel Accord) is a global, voluntary regulatory framework on bank capital adequacy, stress testing, and market liquidity risk. It was agreed upon by the members of the Basel Committee on Banking Supervision in 2010–11.

The third installment of the Basel Accords (see Basel I, Basel II) was developed in response to the deficiencies in financial regulation revealed by the financial crisis of 2007–08. Basel III is intended to strengthen bank capital requirements by increasing bank liquidity and decreasing bank leverage.

Sources: the hindu.			

<u>Paper 2 Topic</u>: Effect of policies and politics of developed and developing countries on India's interests, Indian diaspora.

China offers to build dam in Gilgit-Baltistan that ADB, World Bank refused to fund

China has offered to make a dam (Diamer-Bhasha Dam) project on the Indus River that India objects to, a part of the China-Pakistan Economic Corridor (CPEC).





Background:

The Diamer-Bhasha Dam is a project that both the World Bank and the Asian Development Bank (ADB) have refused to touch because India objects to its location, which is in the Gilgit-Baltistan region. India claims the region is a part of Kashmir. A little over a year ago, the US was making noises about supporting the project and India didn't shy away from showing it was peeved.

• Two years ago, the World Bank refused to come on board as a lender for the dam project, because Pakistan didn't want to seek a no-objection certificate from India for the project. And last November, the ADB too declined to fund what's said to be a \$14 billion project.

About the project:

The Diamer-Bhasha Dam was first announced in 2006 and the foundation stone for it was laid in 2011. Pakistan envisages the dam project will generate 4,500 megawatts of electricity, Reuters reported earlier this month. A vast new reservoir is also expect to regulate the flow of water to farmland that is vulnerable to increasingly erratic weather patterns.

Why is India concerned?

Gilgit-Baltistan is treated as a separate geographical entity by Pakistan. It has a regional Assembly and an elected Chief Minister. It is believed that China's concerns about its unsettled status prompted the move, which could signal a historic shift in the country's position on the future of the wider Kashmir region.



Gilgit-Baltistan shares a geographical boundary with Pakistan-occupied Kashmir, and India considers it as part of the undivided Jammu and Kashmir, while Pakistan sees it as a separate from PoK. The USD 46 billion China-Pakistan Economic Corridor (CPEC) also passes through this region.

Where is Gilgit Baltistan located?

It is located in the northern Pakistan. It borders China in the North, Afghanistan in the west, Tajikistan in the north west and Kashmir in the south east.

Gilgit-Baltistan is home to five of the "eight-thousanders" and to more than fifty peaks above 7,000 metres (23,000 ft). Three of the world's longest glaciers outside the polar regions are found in Gilgit-Baltistan.

Sources: the hindu.			

Facts for Prelims:

India's First Indigenously Built Floating Dock Goes On Stream:

- The country's first indigenously built floating dock FDN-2 for the Indian Navy was recently launched at the L&T Shipbuilding Yard at Kattupalli near Chennai.
- The floating dock will be delivered to Indian Navy, Port Blair in the coming months after undergoing a series of "harbour trials".
- The Floating Dock is an indigenously built designed and built platform with state-of-the-art machinery and control systems capable of docking ships of upto 8,000 tonne displacement. The dock covers facilitate "repair" and "refit" activities even in inclement weather conditions.
- Once operationalised, the dock would enhance the technical repair infrastructure of the Navy for ships based at the Andaman and Nicobar Islands as well as for visiting Naval ships.



Summary:

Anti-GM groups have been opposing the recent decision of GEAC which allowed for the commercial production of GM Mustard in the country. The row over the introduction of GM crops in the country for commercial production is not new. It has been here for years now.

GM crops in India:

The Indian GM crops saga is a convoluted one. Currently, it has the world's fourth largest GM crop acreage on the strength of Bt cotton, the only genetically modified crop allowed in the country. But the introduction of Bt cotton has been both highly successful and controversial. Cotton yield more than doubled in the first decade since its introduction in 2002, according to the Economic Survey 2011-12—by which point it accounted for 90% of cotton acreage. But it was also shadowed by controversy, with a tangle of pricing and intellectual property rights (IPR) issues followed by government price interventions and litigation.

GM food crops have fared worse. An agreement to develop Bt brinjal was signed in 2005 between Mahyco—American agricultural biotech giant Monsanto's Indian Bt cotton partner—and two Indian agricultural universities. Following the study of biosafety data and field trials by two expert committees, Bt brinjal was cleared for commercialization by India's top biotech regulator, the Genetic Engineering Appraisal Committee, in 2009. But nothing came of it, with moratoriums imposed by then Union environment minister Jairam Ramesh and his successor Jayanthi Natarajan following opposition from civil society groups and brinjal-growing states.

What is the science behind GM crops?

Ever since the discovery of the DNA double-helix model by Watson and Crick, scientists realised it was possible to manipulate the DNA features of an organism to create new traits in them by borrowing genes from other organisms and mixing it with theirs. In the case of GM food, scientists insert into a plant's genome one or several gene from another species of plant or even from a bacterium, virus or animal. This is to inject desired traits such as pest-resistance or Vitamin A (as in the case of golden rice).

GM food crops are mainly being opposed for the following reasons:

- Opponents believe GM crops have the potential for serious, irreversible damage to human health and the environment. This is especially relevant in the context of crops such as Bt brinjal which involve direct consumption by humans, unlike Bt cotton. The widespread havoc that chemical pesticides and fertilizers have caused since the Green Revolution only adds credence to these concerns.
- Lack of proper assessment has further reduced the trust. GM opponents cite the need for longer term assessment of adverse impacts and more concrete evidence of no adverse effects.
 Implicitly, GM opponents are invoking the precautionary principle, which is a widely incorporated one in several international agreements and treaties on the environment.
- The lack of transparency in the regulatory process further amplifies apprehensions stemming from a precautionary approach. All the safety tests for regulatory approvals are typically conducted by the same party that applies for commercialisation of GM crops. This conflict of



interest was made worse by the refusal of GEAC to publicly release the safety testing data submitted for regulatory approval until GM opponents filed a Right to Information petition.

 There are also concerns regarding loss of food biodiversity if corporate food varieties begin to flood the markets.

Way ahead:

There is a need to start cultivating an environment of openness and transparency to allay genuine fears instead of dismissing GM opponents as being "irrational". On its part, the government should adopt a participatory approach to bring together all stakeholders to develop regulatory protocols that restore trust in the process. The burden of proof lies with the promoters of GM technology to persuade consumers, farmers and activists that among various alternatives available for sustainable food production — e.g., organic farming, use of biopesticides — GM technology is at least a serious option that we should embrace.

Conclusion:

There is the need for the GEAC "to draw up a fresh protocol for the specific tests that will have to be conducted in order to generate public confidence". Given agricultural distress and the need for broad reforms in the sector—and the potential of GM crops to supplement those reforms with increased drought resistance and reduced pesticide dependence, among other benefits—opposition must be managed, not allowed to hold sway.

Second edition of Slum Daud

The second edition of the Slum Daud was recently inaugurated.



What is Slum Daud?

The Slum Yuva Daud is part of the Adopt Slum Campaign initiated by the Ministry of Youth Affairs & Sports and Nehru Yuva Kendra Sangathan. The Slum Yuva Daud & Adopt Slum campaigns aim at highlighting the government's pro-people schemes among masses.

Participation: the campaign will involve groups like NSS, public schools, RWAs, NGOs, rotary clubs etc.

NYKS:



Nehru Yuva Kendras were established in the year 1972 with the objective of providing rural youth avenues to take part in the process of nation building as well providing opportunities for the development of their personality and skills.

In the year 1987-88, Nehru Yuva Kendra Sangathan(NYKS) was set up as an autonomous organization under the Government of India, Ministry of Youth Affairs and Sports, to oversee working of these Kendras.

- NYKS is the largest grassroots level youth organization; one of its kind in the world. It channelizes the power of youth on the principles of voluntarism, self-help and community participation.
- The basic objective for creation of youth clubs is to render community support through developmental initiatives involving activities with particular focus on youth empowerment.

Sources: pib.			

<u>Paper 3 Topic</u>: Science and Technology- developments and their applications and effects in everyday life Achievements of Indians in science & technology; indigenization of technology and developing new technology.

First train that runs on virtual tracks

China has unveiled the world's first train that runs on virtual tracks. The new train is part of China's attempts to develop "intelligent rail express system".



Key facts:

• Instead of railway tracks, the train runs on rubber tyres. The train can move at a maximum speed of 70 km/hour.



- The Autonomous Rail Transit (ART) system is fitted with sensors that detect the dimensions of the road. This enables the vehicle to follow routes without the need for metal rails.
- The 30-metre train has three carriages as of now and can carry 300 passengers. More carriages can be added taking the total capacity up to 500 passengers.
- The new train is equipped with sensors that allow it to "read the dimensions of roads" and plan its own route.
- The train is powered by electricity as well, making it environment-friendly. On a full charge, the train can travel for distances up to 40 km.

Sources: et.			

NASA Tests Roll-Out Solar Array

What is ROSA?

Solar panels are an efficient way to power satellites, but they are delicate and large, and must be unfolded when a satellite arrives in orbit. The Roll-Out Solar Array (ROSA) is a new type of solar panel that rolls open in space like a party favor and is more compact than current rigid panel designs. The ROSA investigation tests deployment and retraction, shape changes when the Earth blocks the sun, and other physical challenges to determine the array's strength and durability.

Applications

Space Applications

ROSA has the potential to replace solar arrays on future satellites, making them more compact and lighter weight. Satellite radio and television, weather forecasting, GPS and other services used on Earth would all benefit from high-performance solar arrays.

Earth Applications

The International Space Station, telecommunications and research satellites, and satellites for military use are all powered by solar arrays, which convert sunlight into energy. ROSA is a new design that uses a one-piece, flexible composite material that snaps open in space. It has higher power density than existing technology and can be easily adapted to different sizes, making it a promising material for use on all future NASA, military and commercial solar-powered spacecraft.



June 18th to June 24th Current Affairs SEBI eases norms for buying stressed assets of listed companies

Why in news?

The Securities and Exchange Board of India eased rules on the restructuring of distressed companies, making it easier for banks to sell them off.

What is SEBI?

Securities Exchange Board of India (SEBI) was set up in 1988 to regulate the functions of securities market.

Purpose and Role of SEBI:

SEBI was set up with the main purpose of keeping a check on malpractices and protect the interest of investors. It was set up to meet the needs of three groups.

1. Issuers:

For issuers it provides a market place in which they can raise finance fairly and easily.

2. Investors:

For investors it provides protection and supply of accurate and correct information.

3. Intermediaries:

For intermediaries it provides a competitive professional market.

Objectives of SEBI:

The overall objectives of SEBI are to protect the interest of investors and to promote the development of stock exchange and to regulate the activities of stock market. The objectives of SEBI are:

- 1. To regulate the activities of stock exchange.
- 2. To protect the rights of investors and ensuring safety to their investment.
- 3. To prevent fraudulent and malpractices by having balance between self regulation of business and its statutory regulations.
- 4. To regulate and develop a code of conduct for intermediaries such as brokers, underwriters, etc.

What are stressed assets?

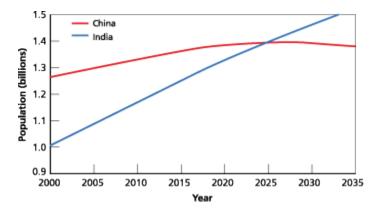
Stressed assets = NPAs + Restructured loans + Written off assets



June 18th to June 24th Current Affairs

India's population will exceed China's by 2024, says UN report Why in news?

By 2024, India's population is expected to surpass that of China's and is projected to reach 1.5 billion in 2030, according to a report published by the United Nations Department of Economic and Social Affairs. It was earlier said that India could exceed China's population by 2022.



Facts of the report:

Population growth:

Even assuming that fertility levels will continue to decline, the global population is expected to reach 8.6 billion in 2030, 9.8 billion in 2050 and 11.2 billion in 2100.

The report, titled 'The World Population Prospects: The 2017 Revision', said fertility has been declining in nearly all regions in recent years.

The concentration of global population growth in the poorest countries presents a considerable challenge to governments in implementing the 2030 Agenda for Sustainable Development," the report said. The 2030 Agenda for Sustainable Development aims to put an end to poverty, hunger and gender equality, and promote women's empowerment and quality education systems.

Life expectancy and under-five mortality rate:

The life expectancy at birth will be 71 years in India in 2025-2030, the report said. The under-five mortality rate, currently at 44.5, per 1,000 live births, will reduce to 32.3 between 2025 and 2030, and further drop to 18.6 between 2045-2050.



Quality of life in major cities to be assessed; City Liveability Index launched

Why in news?

The Index, a Common Minimum Reference Framework to enable the cities know where they stand in terms of quality of life and the interventions required to improve the same was launched by the Minister of Urban Development

How will cities be assessed?

Cities will be assessed on a comprehensive set of 79 parameters to capture the extent and quality of infrastructure including availability of roads, education and health care, mobility, employment opportunities, emergency response, grievance redressal, pollution, availability of open and green spaces, cultural and entertainment opportunities etc.

Progress in respect of reforms like e-governar audit of accounts, tax revision policies and ext of tax revenue collection, energy and water au establishing state level financial intermediarie resource mobilisation and credit rating was ta into account.

Andhra Pradesh topped the list scoring 96.06 per cent marks. Others who received the incentive fund in order of merit were Odisha (95.38 per cent), Jharkhand (91.98 per cent),

Govt launches weather and lowest cost power Portals

Why in news?

Govt has launched a new 'Weather Portal' for the power sector aiming to help distribution companies (Discoms) to manage power supply and plan infrastructure availability in response to extreme weather.

Govt has also launched a second portal named 'MERIT' (Merit Order Despatch of Electricity for Rejuvenation of Income and Transparency). This will facilitate must-run status for hydro power and renewables as well as transparency in the clean energy market. Goyal has previoulsy condemned Discoms for failing to implement the priority status for renewable energy plants.

Benefits of "Merit" Portal are as follows:

• Empowerment of the Consumer and participative governance.



- Transparent information dissemination pertaining to marginal variable cost and source wise purchase of electricity.
- Promotes economy and efficiency in operations.
- Demystifies the utility portfolio and its complexity.
- Optimization of the power procurement costs.
- Facilitates renewable integration and handling of the variability and uncertainty of renewables.
- Indication of supply side reliability, adequacy, and cost of power procurement.

VAJRA scheme launched by Govt

Why in news?

Department of Science and Technology has launched VAJRA (Visiting Advanced Joint Research) Faculty scheme that enables NRIs and overseas scientific community to participate and contribute to research and development in India.

Salient Highlights

The Science and Engineering Research Board (SERB), a Statutory body of the Department of Science and Technology will implement the Scheme.

Under this scheme, foreign researchers abroad of Indian origin or otherwise can collaborate with faculties in public funded Indian institutions.

The researchers would receive endowments at par with those in their own countries. They would be given USD 15,000 in the first month of residency and USD 10,000, for the remaining months.

The scheme would promote broad areas of research like energy, health, advance material among others.

Public funded academic institutions and national laboratories will be eligible for hosting the VAJRA Faculty.

The VAJRA faculty can reside in India for a minimum of 1 month and a maximum of 3 months a year.

The applications received from the interested foreign researchers would be evaluated by a Selection Committee of eminent scientists. The Committee will meet twice a year in January and July and make recommendations.



June 18th to June 24th Current Affairs

Mobile banking complaints possible now under Ombudsman scheme

Why in news?

Reserve Bank of India has widened the scope of its banking ombudsman platform for addressing mis-sell of third party products, and customer grievances on and mobile banking and electronic banking issues, recognising customers' plight in dealing with much translate.

1. What is the Banking Ombudsman Scheme?

The Banking Ombudsman Scheme enables an expeditious and inexpensive forum to bank customers for resolution of complaints relating to certain services rendered by banks.

Mobile banking is the act of doing financial transactions on a mobile device (cell phone, tablet, etc.).

Advantages to mobile banking include the ability to bank anywhere and at any time. Disadvantages include security concerns and a limited range of capabilities when compared to banking in person or on a computer.

2. Who is a Banking Ombudsman?

The Banking Ombudsman is a senior official appointed by the Reserve Bank of India to redress customer complaints against deficiency in certain banking services.

3. Which are the banks covered under the Banking Ombudsman Scheme, 2006?

All Scheduled Commercial Banks, Regional Rural Banks and Scheduled Primary Co-operative Banks are covered under the Scheme.

4. Is there any cost involved in filing complaints with Banking Ombudsman?

No. The Banking Ombudsman does not charge any fee for filing and resolving customers' complaints.

5. Is there any further recourse available if one rejects the Banking Ombudsman's decision?

If one is not satisfied with the decision passed by the Banking Ombudsman, one can approach the appellate authority against the Banking Ombudsmen's decision. Appellate Authority is vested with a Deputy Governor of the RBI.

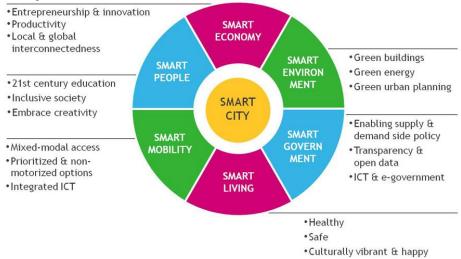


30 more smart cities added by Indian govt

Why in news?

Thirty more cities from across the country have been added to the Centre's Smart Cities Mission, with a proposed investment of Rs.57,393 crore in various projects under the scheme, taking the total number of cities to 90.

What is smart city?



WHY DO WE NEED SMART CITIES?

According to demographers, India will become the most-populous country in the world by 2030. Unlike the previous phases of demographic change, the latest one is witnessing a fast shift towards urban areas, particularly the big cities.

As per government estimates, every minute 25-30 people are migrating to major Indian cities from rural areas in search of better livelihood and better lifestyles. If the pace of migration from rural



areas to urban centres continues, Indian cities would be home to nearly 85 crore people by 2050. This would make 70 per cent of the total population of the country.

But such a huge population would also require accommodation, jobs, civic amenities, efficient governance, fast communication means, speedy and hassle-free transport system, uninterrupted and clean power, water supply and good quality of life.

The Smart City Mission aims to provide the same to Indians.

Smart Cities mission:

Smart Cities Mission is an urban renewal and retrofitting program by the Government of India with a mission to develop 100 cities (the target has been revised to 109 cities) all over the country making them citizen friendly and sustainable.

The Union Ministry of Urban Development is responsible for implementing the mission in collaboration with the state governments of the respective cities.

GOVT HAS ALSO INVITED FOREIGN PARTNERSHIP

The government has also invited foreign partnership in developing smart cities. Deals have been signed to develop three smart cities in association with Germany, three with the United States, and one each with Spain and Singapore. Japan has also agreed to invest USD 4.5 billion in the Smart City Mission.

The Industrial Corridors, being developed to connect some of the mega cities, are further contributing to the Smart City Mission. The Delhi-Mumbai Industrial Corridor, the Chennai-Bangalore Industrial Corridor and the Bangalore-Mumbai Economic Corridor are expected to create smart cities in their sphere of influence.

NATGRID to get PAN, taxpaver data access

According to an order issued by the Central Board of Direct Taxes, the department will share 'bulk information', starting from the Permanent Account Number (PAN) to the taxpayer's name and all the individual data that it captures like father's name, gender, date of birth, photograph and signature or thumb impression.

The MoU with the NATGRID that functions under the Union home ministry will also include confidentially clause so that transfer of personal data is safe.



About National Intelligence grid (NATGRID)

NATGRID is a central agency that aims to have an integrated intelligence grid that will link and store sensitive personal information on citizens from different government agencies for counterterror investigations.

It was established to bolster India's counter-terrorism capabilities by combining 21 sensitive databases of personal information related to various domains. The domains are banks, credit cards, cellphone usage, immigration records, motor vehicle registrations, Income Tax records and National Crime Records Bureau.

The single database will be accessed by authorised officers from 10 central agencies like IB, IB, R&AW, CBI, ED and DRI.

Thus it is essentially a data transfer tool that seeks to give investigators a 360 degree profile of a suspect.

India is creating its own 'Antarctica Law'

Antarctica might be an almost uninhabitable, ice-covered landmass now but with the rise in world's population, soon there will come a day when it'll see more human presence, over-exploitation of fisheries and perhaps criminal activities.

Keeping that in mind, India is currently drafting an Antarctica policy and also a law which will be presented at the winter session of Parliament.

Treaty: Why is it needed?

Since India is among the countries that have agreed to abide by the Antarctica Treaty, it is necessary for India to have a clear directive on how it will tackle activities in the region.

Under this treaty, India is bound to ensure that Antarctica will always be used for peaceful purposes and should never become the scene or object of international discord.



Protection: What's in the treaty?

The Treaty prohibits any military activity on Antarctica's soil sans those which are done for scientific purposes and also ensures that the land is not used for nuclear explosions or the disposal of nuclear waste.

The Treaty also suspends any territorial claims by countries, and promotes scientific research and exchange of data gathered in the region.



FACTS

- Antarctica is Earth's southernmost continent, containing the geographic South Pole.
- It is situated in the Antarctic region of the Southern Hemisphere, almost entirely south of the Antarctic Circle, and is surrounded by the Southern Ocean.
- At 14.0 million square kilometres, it is the fifth-largest continent in area after Asia, Africa, North America, and South America.
- For comparison, Antarctica is nearly twice the size of Australia.
- About 98% of Antarctica is covered by ice that averages 1.9 kilometres in thickness.

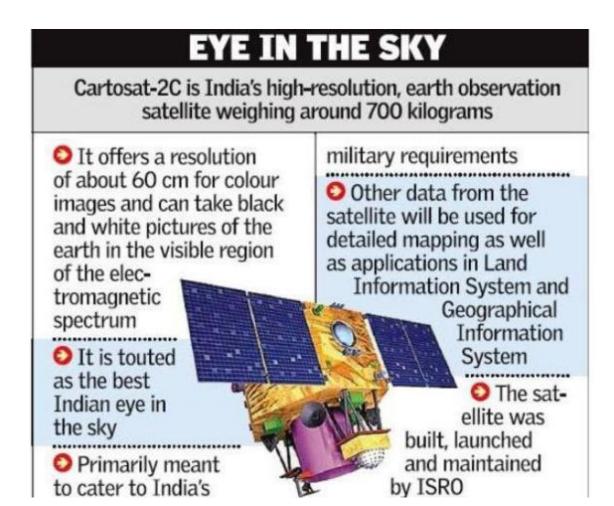
Research stations by India at Antartica:

- 1) Dakshin Gangotri
- 2) Bharti
- 3) Maitri

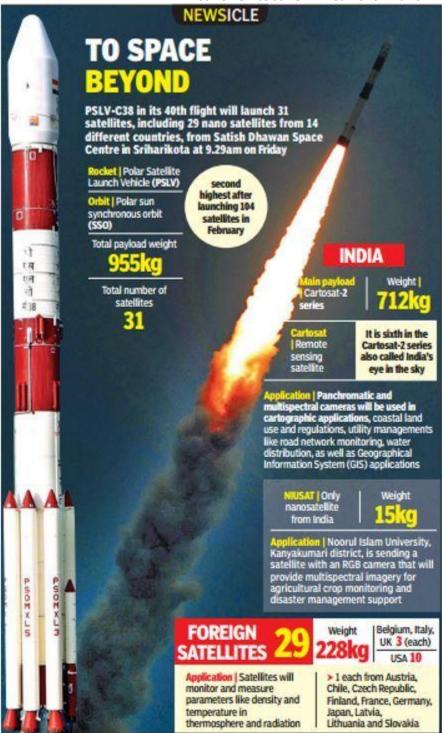
The Indian Antarctic program is bound by the rules of the Antarctic Treaty System, which India signed in 1983.



Cartosat-2 launched by ISRO:









Biggest municipal bonds programme launched in Maharashtra:

Why in news?

Pune Municipal Corporation (PMC) has become the first local body in the country to issue municipal bonds in nearly one and a half decade, raising Rs 200 crore for the smart city project, the central government's pet scheme.

What are Municipal Bonds?

Municipal bonds are debt instruments through which a corporation or municipality raises money from individuals or institutions. The civic body floating the bonds returns the principal amount on a maturity date with a specific amount of interest.

There are usually two kinds of bonds – general bonds, where money is raised without mentioning the cause in particular, and revenue bonds, where funds are raised for income-generating projects and revenue from the projects is used to repay the buyers.

An effort to preserve endangered Manipuri Deer

Why in news?

Recently a workshop has been conducted to show that how humans can co-exist with brown-antlered i.e. Manipuri Sangai deer.

About Sangai:

- The sangai is an endemic, rare and endangered subspecies of brow-antlered deer. It is also state animal of Manipur.
- The Sangai is now restricted to the Keibul Lamjao National Park (KLNP) in the Southeastern fringe of Loktak Lake in Manipur. Phumdis, floating vegetation occupy about two-third of the surface area of the lake.
- These Sangai walks over floating vegetation so they look like dancing. That is why they are also called as dancing deer.
- It is classified as "Endangered" by the IUCN.