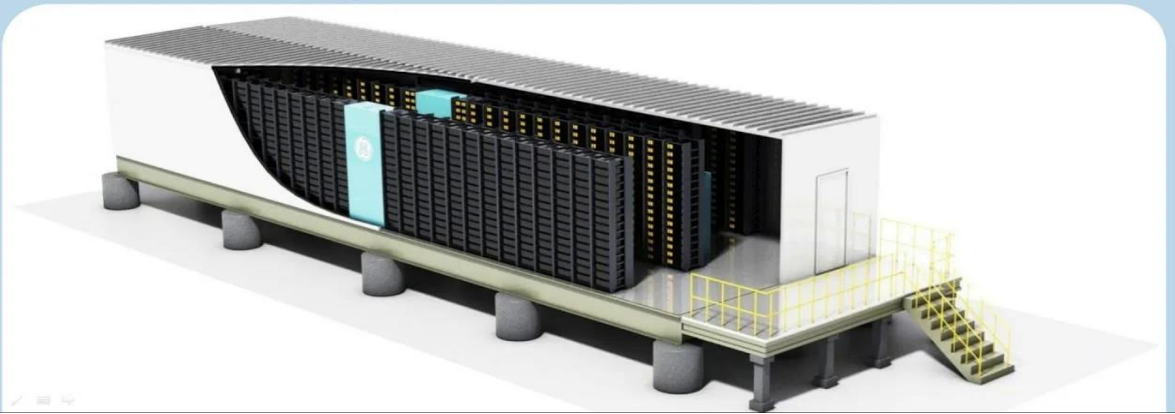


CURRENT AFFAIRS NOTES 07-09-2023

Cabinet approves the Scheme titled Viability Gap Funding for development of Battery Energy Storage Systems (BESS)

Government Unveils BESS Scheme to Energize the Nation for a Brighter Tomorrow. BESS projects of total 4,000 MWh to be developed by 2030-31 under the Scheme through competitive bidding. Scheme to reduce the cost of storage for distribution companies and consumers.

Battery Energy Storage System - BESS



The Union Cabinet, chaired by the Hon'ble Prime Minister approves the Scheme for Viability Gap Funding (VGF) for development of Battery Energy Storage Systems (BESS). The approved scheme envisages development of 4,000 MWh of BESS projects by 2030-31, with a financial support of up to 40% of the capital cost as budgetary support in the form of Viability Gap Funding (VGF). A watershed moment in the long list of pro-environment measures taken by the Government, the move is expected to bring down the cost of battery storage systems increasing their viability.

Designed to harness the potential of renewable energy sources such as solar and wind power, the scheme aims to provide clean, reliable, and affordable electricity to the citizens. The VGF for development of BESS Scheme, with an initial outlay of Rs.9,400 crore, including a budgetary support of Rs.3,760 crore, signifies the government's commitment to sustainable energy solutions. By offering VGF support, the scheme targets achieving a Levelized Cost of Storage (LCoS) ranging from Rs. 5.50-6.60 per kilowatt-hour (kWh), making stored renewable energy a viable option for managing peak power demand across the country. The VGF shall be disbursed in five tranches linked with the various stages of implementation of BESS projects.

To ensure that the benefits of the scheme reach the consumers, a minimum of 85% of the BESS project capacity will be made available to Distribution Companies (Discoms). This will not only enhance the integration of renewable energy into the electricity grid but also minimize



wastage while optimizing the utilization of transmission networks. Consequently, this will reduce the need for costly infrastructure upgrades.

The selection of BESS developers for VGF grants will be carried out through a transparent competitive bidding process, promoting a level playing field for both public and private sector entities. This approach will foster healthy competition and encourage the growth of a robust ecosystem for BESS, attracting significant investments and generating opportunities for associated industries.

The Government of India remains committed to promoting clean and green energy solutions, and the BESS Scheme is a significant step towards achieving this vision. By harnessing the power of renewable energy and encouraging the adoption of battery storage, the government aims to create a brighter and greener future for all citizen.

INDIAN AIR FORCE AND DRONE FEDERATION OF INDIA TO CO-HOST BHARAT DRONE SHAKTI 2023

Drone technology has revolutionised the civil and defence sectors by increasing efficiency, reducing exposure to risk as also by being a capability enhancer. The usage of drones in India is also seeing an increase - both, in the military, as well as in the civil domain. The IAF uses Remotely Piloted Aircraft extensively for Intelligence Surveillance & Reconnaissance operations. Its faith in the emerging Drone design and development capabilities in India are borne by its initiatives like the Meher Baba Swarm Drone competition that sought to tap this indigenous potential. Further iterations of this competition are currently underway.

To exploit its rich experience in using these unmanned platforms, the IAF is partnering with the Drone Federation of India to co-host the 'Bharat Drone Shakti 2023'. The event to be held on 25th & 26th September 2023 will be hosted at the IAF's airbase in Hindan (Ghaziabad), where the Indian drone industry shall give live aerial demonstrations.

'Bharat Drone Shakti 2023' will present the prowess of the Indian drone industry at full capacity hosting over 50+ live aerial demonstrations showcasing survey drones, agriculture drones, fire suppression drones, tactical surveillance drones, heavy-lift logistics drones, loitering munition systems, drone swarms, and counter-drone solutions and witness participation from more than 75 drone start-ups and corporates.

The event is expected to attract around 5,000 attendees, including representatives from central government, state departments, public and private industries, armed forces, paramilitary forces, representatives from friendly countries, academicians and students and drone enthusiasts. Most importantly, 'Bharat Drone Shakti 2023' will give a fillip to India's commitment to becoming a global drone hub by 2030.

Namami Gange Signs Agreement for Development of Sewage Treatment Infrastructure in Meerut

Project Worth Rs. 369.74 Crore To Be Completed by 2025

The tripartite Concession Agreement between National Mission for Clean Ganga (NMCG), Uttar Pradesh Jal Nigam and M/s. Meerut STP Pvt. Ltd. for development of Sewage Treatment Plant (STP) and other infrastructure in Meerut was signed in the presence of Director General, NMCG in New Delhi. The project, under Hybrid Annuity PPP mode, was awarded at the total cost of Rs. 369.74 crores and is scheduled to be completed by December, 2025.

NMCG has approved the project for construction of Sewage Treatment Plant (STP) of total capacity of 220 MLD, among other works such as developing Interception & Diversion (I&D) structures, I&D network laying, Sewage Pumping Stations including Operation and Maintenance for 15 years etc. This project also aims to take care of the existing sewerage problems in the Meerut city and the resultant sewage pollution in River Kali. After the completion of this project, there will be no discharge of untreated sewage from Meerut city into River Kali (East) thereby reducing the pollution load. Kali (East) meets Ganga near Kannauj and the completion of this project will ultimately help reduce pollution in River Ganga.



The agreement was signed between Shri S.K. Barman, Superintending Engineer, UP Jal Nigam (Rural), Shri Mayank Agarwal, Authorized Signatory, M/s. Meerut STP Pvt. Ltd. (SPV formed by M/s G.A. Infra Private Limited –in JV with M/s SSG Infratech Pvt. Ltd.) and Shri Binod Kumar, Director (Projects), NMCG in the presence of Shri G. Asok Kumar, Director General, NMCG, who expressed his happiness on completing the process of award. Shri Nalin Kumar Srivastava, Deputy Director General, NMCG was also present along with other representatives of state agencies and concessionaire during the signing ceremony.

Conference on Transnational Grid Interconnections for One Sun, One World, One Grid held in New Delhi

Once we have OSOWOG, no one will ever have to go without electricity: Union Minister for Power and New & Renewable Energy R. K. Singh

In the run-up to [the 18th G20 Summit](#), a day-long conference on "Transnational Grid Interconnections for One Sun, One World, One Grid (OSOWOG)" was held in New Delhi, on 6th September, 2023. The conference was organized by Power Grid Corporation of India Limited (POWERGRID), a 'Maharatna' company under Ministry of Power, Govt. of India.

Addressing the conference virtually, Union Minister for Power and New & Renewable Energy Shri R. K. Singh said that India has already established cross border interconnections with its neighbours and that strengthening of various cross border links is under process. "OSOWOG will enable all nations to reap the benefit of energy from the sun. This is very relevant to today's context particularly when we are transitioning to renewable energy. It will make round-the-clock renewable energy much cheaper. It will also reduce the necessity for reserves. It will thus bring down the cost of electricity for the general population and will help in energy transition."



The Minister said that once the transnational grid interconnection happens, it will do away with dependence on storage, which is costlier and required for round-the-clock renewable energy. "Once we have OSOWOG, no one will ever have to go without electricity. This will unite the world and ensure energy access to the millions of people who do not have access. It is essential that all of us take this forward, I am sure this will become a reality." The Minister wished the seminar a great success.

Special Secretary & Financial Adviser, Ministry of Power, Shri Ashish Upadhyaya; Chairperson, CEA, Shri Ghanshyam Prasad; Additional Secretary, Ministry of Power, Shri Ajay Tewari; and CMD, POWERGRID, Shri K. Sreekant, addressed the inaugural session of the seminar, which was attended by think tanks, industry, academia, sector experts and media.

The panel for the conference consisted of eminent experts from India and abroad. Mr. Waleed S. Alsuraiah from The World Bank presented the Transnational Grid Interconnection-Middle East & Africa perspective. He emphasized that once the full Pan Arab Electricity Market (PAEM) is operational, it will enable interregional grids' integration between South Asia via GCC, EU & Africa, and trade with 5 regional electricity markets. The envisaged PAEM grid connects its 3 sub-regions and strengthens the potential for further integration with other regional markets.



“Complementarities of SAARC, BIMSTEC and ASEAN countries can be utilized through transnational interconnections”

Senior Advisor, IRADe, Mr. Pankaj Batra provided the ASEAN perspective stating that the complementarities of energy resources of SAARC, BIMSTEC and ASEAN countries can be utilized through transnational interconnections. Dy. COO, CTUIL, Mr. Ashok Pal discussed technical considerations and business models of existing Indian cross border interconnections. The System Operation Aspects for Regional Grid Interconnection were shared by CMD, Grid Controller of India, Mr. S. R. Narasimhan.

During the seminar, Chief, CERC, Dr. S. K. Chatterjee gave insights into the Regulatory and Legal aspects for Regional Grid Interconnection while Chief Manager, Siemens Energy, Mr. Niket Jain discussed various technologies for transnational interconnections. The session on OSOWOG was moderated by Mr. Shubhranshu Patnaik, Deloitte India. The seminar ended with vote of thanks by Mr. Abhay Chaudhary, Director (Projects), POWERGRID.

Globally, energy transition and energy security, driven by renewable capacity addition are the thrust areas towards sustainability. Considering that the sun never sets and that every hour, half the planet is bathed in sunshine, harnessing energy from sun, wind and water would facilitate generation of clean energy, enough to meet the needs of everyone on the earth. However, this requires transnational exchange of electricity through grid interconnections. These efforts need to be synergized and supplemented by establishing an inter-connected global electricity grid through transnational interconnections. This is the vision for One Sun, One World, One Grid; through development of transnational grid connections towards ensuring energy security for a sustainable future.

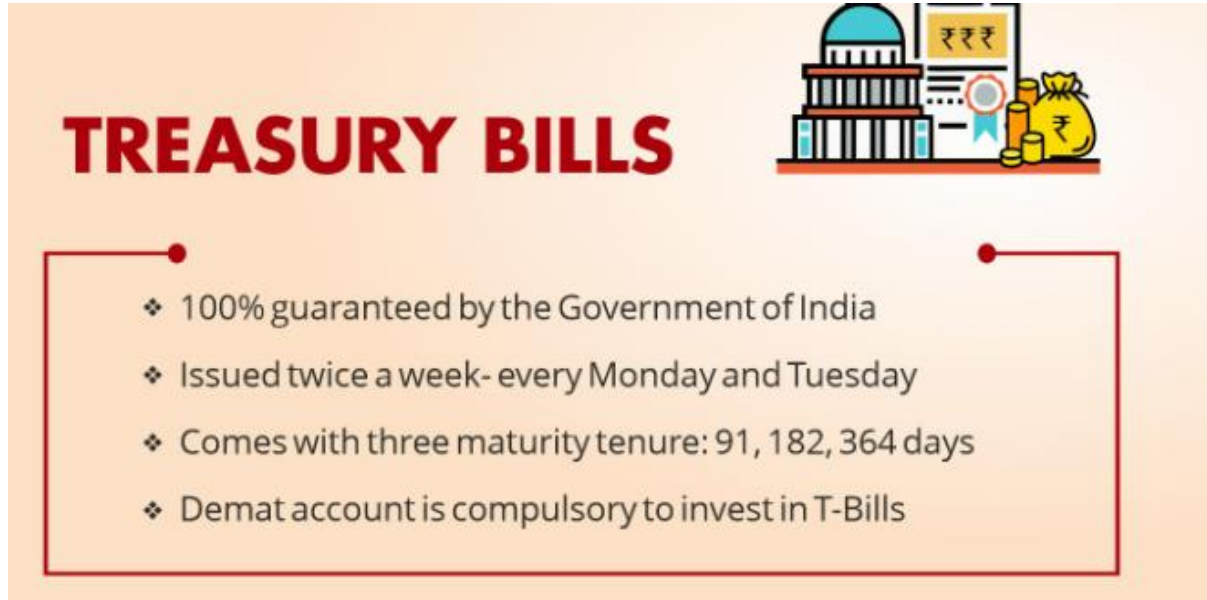
Following the theme of G20 “Vasudhaiva Kutumbakam” i.e. One-Earth, One-Family and One-Future, India under its G20 presidency highlighted the importance of transnational grid Interconnections in enhancing energy security, fostering economic growth, and facilitating universal energy access for all, in affordable, reliable and sustainable manner which will accelerate integration of Renewable Energy towards energy transition, with enhanced resiliency.

In the recently concluded Energy Transitions Ministerial in Goa, all G-20 countries came together on the same page and declared the following in Para No. 5 of the [ETWG Outcome Document and Chair Summary](#).

“We also recognize the role of grid interconnections, resilient energy infrastructure and regional/cross-border power systems integration, where applicable, in enhancing energy security, fostering economic growth, and facilitating universal energy access for all, in affordable, reliable and sustainable manner. In particular, we recognize that expanded and modernized electricity networks will be essential to scale up the deployment of zero and low emission technologies including renewables. This entails enhanced voluntary international cooperation in coordinated planning, mutually agreed information sharing, joint research and development, technical assistance, technology development and harmonization of regulatory frameworks for design, planning and system operations. In this regard, we take note of Presidency’s initiative to connect different regional grids through interconnections to transfer renewable energy power. We call for increased public and private investments, noting the important role of International Finance Institutions including Multilateral Development Banks

(MDBs) in supporting developing countries to exploit the full benefits of regional/crossborder interconnections, where deemed appropriate."

Treasury Bills



TREASURY BILLS

- ❖ 100% guaranteed by the Government of India
- ❖ Issued twice a week- every Monday and Tuesday
- ❖ Comes with three maturity tenure: 91, 182, 364 days
- ❖ Demat account is compulsory to invest in T-Bills

Recently, the yields on Treasury Bills (T-Bills) eased by up to seven basis points (bps) following an improvement in liquidity in the banking system.

T-Bills are money market instruments. These are short-term debt instruments issued by the Government of India.

Tenure: These are presently issued in three tenors, namely, 91 days, 182 days and 364 days.

These are zero coupon securities and pay no interest. Instead, they are issued at a discount and redeemed at the face value at maturity.

When were treasury bills introduced?

Treasury bills were first issued in India in 1917. They are issued via auctions conducted by the Reserve Bank of India (RBI) at regular intervals.

Who can buy it?

Individuals, trusts, institutions and banks can purchase T-Bills. But they are usually held by financial institutions.

They have a very important role in the financial market beyond investment instruments.

Banks give treasury bills to the RBI to get money under repo.

Similarly, they can also keep it to fulfil their Statutory Liquid Ratio (SLR) requirements.

T-bills work

Treasury bills are issued at a discount to the original value, and the buyer gets the original value upon maturity.

For example, a Rs 100 treasury bill can be availed of at Rs 95, but the buyer is paid Rs 100 on the maturity date. The return on treasury bills depends on the liquidity position of the economy. When there is a liquidity crisis, the returns are higher, and vice versa.

COMET NISHIMURA



Comet Nishimura could become visible this week

Comet Nishimura, officially known as C/2023 P1 Nishimura, was discovered in mid-August by amateur astronomer Hideo Nishimura.

It has been increasing in brightness as it travels along its path in the inner solar system.

Discovery and Characteristics

Orbital Characteristics

NASA's Jet Propulsion Laboratory (JPL) has calculated that this comet completes an orbit around the Sun approximately once every 435 years.

On September 12, the comet is expected to make a close approach to Earth, possibly coming as close as 125 million kilometers away.



Visibility and Location

Currently, the comet is situated in the constellation Leo.

Given its angular proximity to the Sun, it will likely only be visible shortly before sunrise or after sunset.

EarthSky suggests that September 8 may be a good date for observers to attempt to spot the comet with the unaided eye, particularly before dawn.

On September 8, the comet could be located near the crescent moon in the eastern sky, with Venus nearby, and it may be found near the star Adhafera in Leo's Sickle.

Comets

Definition of Comets

Comets are celestial objects primarily composed of ice, dust, and rocky material.

They are often described as "dirty snowballs" or "icy dirtballs" due to their mixture of volatile and non-volatile components.

typically have highly elliptical orbits that take them from the distant regions of the solar system into the inner solar system, where they become visible to observers on Earth.

Structure and Composition

Nucleus: The core of a comet is called the nucleus. It is the solid, central part of the comet and can range in size from a few meters to several kilometers in diameter. The nucleus is composed of water ice, frozen gases (such as carbon dioxide and methane), dust, and rocky material.

Coma: As a comet approaches the Sun, solar radiation causes the nucleus to heat up and release gas and dust into space. This forms a glowing, cloud-like envelope around the nucleus called the coma.

Tail: The interaction of solar wind and radiation pressure pushes the released gas and dust away from the Sun, forming a visible tail. Comets can have two types of tails: a dust tail, which is bright and curved, and an ion tail, which is fainter and points directly away from the Sun.

Orbital Characteristics

Comets have highly eccentric (elongated) orbits, which can take them from the outer reaches of the solar system (Kuiper Belt or Oort Cloud) to close approaches to the Sun.

When comets approach the Sun, they become more active, developing a coma and tails, making them visible from Earth.

The period of a comet's return to the inner solar system can vary widely, from a few years to thousands of years.

Role in the Solar System

Comets play several important roles in our solar system:



Remnants from the Early Solar System: Comets are thought to be remnants from the early solar system, preserving material from its formation. They offer valuable clues about the conditions and composition of the early solar nebula.

Delivery of Volatiles: Comets contain volatile ices, which can include water, carbon dioxide, and more. When comets impact planets or release their volatiles into space, they can influence planetary atmospheres and provide a source of water for Earth and other celestial bodies.

Study of Celestial Mechanics: The study of comets and their orbits contributes to our understanding of celestial mechanics and the gravitational interactions within the solar system.

Famous Comets

Halley's Comet: Perhaps the most famous comet, Halley's Comet is visible from Earth approximately once every 76 years. Its last appearance was in 1986, and it is expected to return in 2061.

Comet Hale-Bopp: This comet, which made a bright appearance in 1997, was one of the most widely observed comets in history. It had a strikingly long and well-defined tail.

Comet NEOWISE (C/2020 F3): Discovered in 2020 by NASA's NEOWISE spacecraft, this comet became visible to the naked eye and delighted skywatchers around the world.

Missions to Study Comets

Several spacecraft have been sent to study comets up close, including NASA's Stardust, Deep Impact, and ESA's Rosetta mission, which successfully landed a probe, Philae, on the comet 67P/Churyumov-Gerasimenko.

Asteroids

Definition

Asteroids are rocky or metallic objects that orbit the Sun, primarily found in the asteroid belt, a region located between the orbits of Mars and Jupiter.

Characteristics

Asteroids vary in size, from a few meters to hundreds of kilometers in diameter.

They are primarily composed of rock and metal, with some containing water ice and organic materials.

Asteroids have a wide range of shapes and compositions.

Significance

Asteroids are considered remnants from the early solar system and can provide information about its formation and evolution.

Some asteroids are of interest for potential resource extraction in the future.

Meteors

Definition



are the streaks of light produced when small objects from space, called meteoroids, enter Earth's atmosphere and vaporize due to friction with the air. They are often colloquially referred to as "shooting stars."

Characteristics

Meteors can vary in brightness, from faint streaks to bright fireballs.

They typically travel at high speeds, with velocities ranging from 11 to 72 kilometers per second.

Significance

provide a visual spectacle when they produce bright trails across the night sky.

Meteor showers occur when the Earth passes through the debris left by a comet, resulting in an increased number of meteors.

Meteorites

Definition

Meteorites are fragments of meteoroids that survive their journey through Earth's atmosphere and land on the surface. They are solid remnants of space objects.

Characteristics

Meteorites come in three main types: stony meteorites (silicate-rich), iron meteorites (mostly metallic iron-nickel), and stony-iron meteorites (a combination of both).

They can vary in size from tiny pebbles to large masses weighing several tons.

Significance

Meteorites provide valuable information about the composition of asteroids and the early solar system.

They can help scientists understand the geological and chemical processes occurring on other celestial bodies.

Meteoroids

Definition

Meteoroids are small, solid objects in space that range in size from a grain of sand to a few meters in diameter. They are the precursors to meteors when they enter Earth's atmosphere.

Characteristics

Meteoroids can be composed of rock, metal, or a combination of materials.

They can travel at high speeds through space.

Significance

Meteoroids are a component of the broader population of small objects in the solar system and play a role in the formation and evolution of celestial bodies.

JUSTICE AMITAVA ROY COMMITTEE REPORT

The Justice Amitava Roy Committee report highlighted the need for reforms in the correctional justice system to make it more inclusive of women. The Supreme Court asked the Centre and the states to respond to the report and its recommendations.



Gender Disparities: Female prisoners in India face significant disparities compared to male prisoners. They lack access to basic facilities such as medical care, legal aid, paid labour, and recreational facilities. Female inmates are often housed in enclosures within larger male-dominated prison facilities rather than having exclusive women's prisons. This situation can lead to a lack of privacy, safety concerns, and limited access to essential services.

Sanitary Napkin Provision: The report highlights that less than 40% of Indian prisons provide sanitary napkins for female inmates. This deficiency points to a failure to address the basic hygiene needs of women in custody, which can have adverse health implications and compromise their dignity.

Facilities for Children: Only a few states and union territories (Goa, Delhi, and Puducherry) allow female prisoners to meet their children without barriers like bars or glass separation. In many cases, these barriers hinder family connections, which are crucial for the well-being of both mothers and their children.

Shared Facilities: A significant concern is that 75% of female wards in Indian prisons share kitchens and common facilities with male wards. This shared arrangement can potentially lead to safety and privacy issues for female inmates, especially given the gender dynamics within prison environments.



Undertrial and Convict Housing: Regardless of their legal status (undertrial or convict), female prisoners are often housed in the same wards and barracks. This lack of differentiation based on legal status can impact the rehabilitation and reintegration prospects of female inmates.

Gender-Specific Training: The report highlights a lack of gender-specific training for prison staff, including matrons responsible for handling female inmates. This training gap includes issues like conducting searches, which need to be carried out with sensitivity and respect for the dignity of female prisoners.

Complaint Mechanisms: Women inmates in India are allowed to file complaints against jail staff for abuse or harassment in only 10 states and 1 Union Territory. This limited access to justice within the prison system can leave female inmates vulnerable to abuse and without proper recourse.

Medical and Psychiatric Care: Many Indian prisons lack separate medical and psychiatric wards specifically designed for female inmates. This deficiency poses significant challenges in addressing the specific health needs of female prisoners, including those related to pregnancy and mental health.

Telemedicine and Vocational Training: To address these issues, the report recommends introducing telemedicine facilities for remote diagnosis and virtual consultation, strengthening vocational training and education programs, and reducing the reliance on imprisonment for petty offences. Instead, it suggests implementing community service and providing proper counselling for inmates with psychological disorders.

Overcrowding: The issue of overcrowding is a long-standing concern in Indian prisons. Overcrowding can lead to a host of problems, including inadequate living conditions, increased tension among inmates, and difficulty in providing essential services and rehabilitation programs.

Prison reform

Prison reform is a process that involves reviewing and restructuring the policies, procedures, and conditions within the prison system to ensure the fair treatment, rehabilitation, and reintegration of inmates. It seeks to address issues such as overcrowding, human rights violations, and the inadequacy of rehabilitation programs in correctional facilities. Prison reform is an essential component of criminal justice reform efforts worldwide.

Human Rights

Dignity: Prison reform ensures that even individuals convicted of crimes maintain their basic human dignity. It prevents cruel, inhumane, or degrading treatment or punishment within correctional facilities.

Access to Necessities: It guarantees that inmates have access to necessities such as food, clean water, proper healthcare, and sanitary conditions.

Protection from Torture: Reform efforts work to prevent torture or any form of physical or psychological abuse within prisons, safeguarding inmates' physical and mental well-being.



Rehabilitation

Skill Development: Prison reform focuses on equipping inmates with the skills and knowledge they need to become productive members of society after release. This includes education, vocational training, and mental health support.

Reduced Recidivism: Successful rehabilitation reduces the likelihood of inmates returning to a life of crime, which enhances public safety and reduces the burden on the criminal justice system.

Fairness and Justice

Equality: Prison reform ensures that all individuals, regardless of their background or socioeconomic status, are treated fairly and equally within the criminal justice system.

Due Process: It upholds the principles of due process, including the right to a fair trial, access to legal representation, and the presumption of innocence until proven guilty.

Overcrowding

Living Conditions: Overcrowded prisons often lead to overcrowded cells and inadequate living conditions. The reform aims to alleviate overcrowding to ensure healthier and safer environments for inmates.

Alternative Sentencing: Efforts are made to promote alternatives to incarceration for non-violent offenders, reducing the strain on prison resources and facilities.

Cost-Effectiveness

Long-Term Savings: While there may be upfront costs associated with implementing rehabilitation and reintegration programs, these initiatives are often cost-effective in the long run. By reducing recidivism and promoting successful reintegration into society, they can lower the financial burden on the criminal justice system and social services.

Objectives of the reforms

Human Dignity

Respect for All: Prison reform promotes the idea that every person, regardless of their criminal history, is entitled to be treated with respect and human dignity. This includes humane treatment, protection from abuse, and the preservation of an individual's inherent worth.

Prevention of Cruelty: It works to prevent any form of cruel, inhumane, or degrading treatment within correctional facilities, ensuring that inmates are not subjected to torture or inhumane conditions.

Reduced Recidivism

Holistic Rehabilitation: Prison reform emphasizes rehabilitation through education, vocational training, and psychological support. By addressing the root causes of criminal behaviour and providing inmates with the skills and resources for reintegration, it seeks to reduce the likelihood of reoffending.

Enhanced Public Safety: Successful rehabilitation programs contribute to public safety by reducing the number of individuals who return to a life of crime upon release. This not only



protects the community but also eases the burden on law enforcement and the criminal justice system.

Skills and Opportunities: Reform efforts aim to equip inmates with the tools, education, and job skills necessary to reintegrate into society as productive and law-abiding citizens. This helps them secure employment and lead a stable life post-release.

Breaking the Cycle: By facilitating successful reintegration, prison reform breaks the cycle of recidivism and prevents individuals from becoming trapped in a cycle of criminal behaviour, incarceration, and re-incarceration.

Fairness and Justice

Equity and Transparency: Prison reform ensures that the criminal justice system operates equitably and transparently. It upholds the principles of due process, equal protection under the law, and access to legal representation.

Public Trust: By creating a fair and accountable system, reform efforts contribute to building public trust in the criminal justice system. This trust is vital for social cohesion and ensuring that the system is perceived as just and reliable.

India has taken several important steps toward prison reform

National Crime Records Bureau (NCRB)

Data Collection: The NCRB plays a vital role in collecting and maintaining data related to prisons and inmates in India. This data provides valuable insights into the conditions, demographics, and trends within the prison system.

Informed Decision-Making: By compiling and analyzing this data, policymakers and authorities can make more informed decisions about prison management, resource allocation, and reform initiatives.

Justice Amitava Roy Committee

Supreme Court Oversight: The appointment of the Justice Amitava Roy Committee by the Supreme Court underscores the judiciary's commitment to addressing prison reform issues in India.

Examination of Overcrowding: The committee's specific focus on overcrowding in prisons is significant, as overcrowding is a pervasive issue that affects living conditions and access to services for inmates.

Legal Aid

Access to Justice: Legal aid programs in India ensure that inmates have access to legal representation, which is essential for a fair trial and the protection of their legal rights.

Fair Proceedings: These programs help ensure that inmates are aware of their rights and have the opportunity to present their cases effectively, contributing to the overall fairness of the criminal justice system.

Vocational Training



Skill Development: Vocational training programs offered in some Indian prisons are crucial for equipping inmates with practical skills that can improve their employability upon release.

Rehabilitation: These programs align with the rehabilitation aspect of prison reform, helping inmates build a better future and reduce the likelihood of recidivism.

While these steps are important, there is still work to be done to comprehensively address prison reform challenges in India. Challenges such as overcrowding, inadequate infrastructure, and resource constraints continue to pose significant obstacles to achieving the desired outcomes of prison reform. Therefore, a continued and sustained effort, along with policy reforms and resource allocation, is essential to bring about meaningful change in India's prison system.

Key obstacles that India faces in its efforts to reform its prison system

Overcrowding

Living Conditions: Overcrowded prisons lead to inadequate living conditions, including cramped cells, poor ventilation, and limited access to basic amenities such as sanitation and healthcare. This can compromise the physical and mental well-being of inmates.

Security Concerns: Overcrowding can strain security measures within prisons, leading to increased tension among inmates, a higher risk of violence, and difficulties in maintaining order.

Access to Services: Overcrowding makes it challenging to provide essential services, including healthcare, vocational training, and educational programs, to all inmates.

Resource Constraints

Staffing Shortages: Many prisons in India lack sufficient staff, including correctional officers and healthcare professionals, to adequately manage and supervise inmates. This can impact security and the delivery of services.

Infrastructure: Inadequate infrastructure, such as outdated or overcrowded facilities, can hinder rehabilitation efforts and contribute to poor living conditions for inmates.

Funding: Limited financial resources allocated to prisons can restrict the implementation of rehabilitation and reintegration programs, as well as efforts to improve facilities.

Socioeconomic Disparities

Marginalized Communities: The criminal justice system often disproportionately affects marginalized and economically disadvantaged communities. This can result in a cycle of poverty and incarceration, where individuals from these backgrounds are more likely to be caught up in the criminal justice system.

Access to Legal Representation: Socioeconomic disparities can impact an individual's ability to access legal representation and mount a proper defence, potentially leading to unfair outcomes in the criminal justice process.

Inefficiency and Delay



Lengthy Legal Procedures: Delays in legal proceedings, including investigations, trials, and appeals, can lead to prolonged incarceration for individuals, even if they are eventually found not guilty or are eligible for parole.

Overcrowding: Inefficient legal processes contribute to overcrowding, as individuals may spend extended periods in pre-trial detention while their cases are pending.

Access to Justice: Inefficiency in the legal system can hinder access to justice, as individuals may face barriers to timely trials and appeals.

Way forward for addressing prison reform challenges in India and building a more just and effective criminal justice system.

Legislative Reforms

International Standards: Aligning prison legislation with international standards and human rights principles ensures that the legal framework supports the protection of inmates' rights and dignity.

Clear Guidelines: Comprehensive legislation can provide clear guidelines for prison management, including standards for living conditions, access to healthcare, and inmate rights.

Infrastructure Upgrade

Overcrowding Mitigation: Investment in infrastructure upgrades is crucial for mitigating overcrowding by expanding capacity and improving the living conditions of inmates.

Modern Facilities: Building modern and secure facilities enhances both security and the provision of essential services to inmates.

Alternative Sentencing

Community Service: Promoting alternatives to incarceration, such as community service, probation, and parole for non-violent offenders, reduces prison populations and offers a more balanced approach to justice.

Rehabilitation Focus: These alternatives should also include rehabilitation and reintegration components to address the underlying causes of criminal behaviour.

Rehabilitation Programs

Vocational Training: Expanding vocational training and education programs equips inmates with employable skills, improving their chances of successful reintegration into society.

Mental Health Services: Comprehensive mental health services within prisons are essential to address the psychological needs of inmates and reduce the risk of recidivism.

Gender Sensitivity

Exclusive Facilities: Developing exclusive facilities for female inmates and implementing gender-sensitive policies ensures the safety, privacy, and dignity of women in custody.

Training: Providing gender-specific training for staff, including matrons, helps create a more respectful and secure environment for female inmates.

Legal Reforms



Efficient Processes: Simplifying legal procedures and expediting trials reduces pre-trial detention and overcrowding while ensuring timely access to justice.

Digital Solutions: Adoption of digital technologies for case management and hearings can improve the efficiency of the legal system.

Transparency and Accountability

Oversight Mechanisms: Establishing oversight mechanisms and independent bodies to monitor prison conditions and handle inmate complaints ensures transparency and accountability within the prison system.

Reporting Mechanisms: Providing clear avenues for inmates to report abuse or misconduct by prison staff helps protect their rights and well-being.

Measuring unemployment in India

According to the Periodic Labour Force Survey (PLFS), India's unemployment rate was 6.1% in 2017 (the highest ever recorded) and the PLFS of 2021-22 showed unemployment reducing to 4.1%.

The article highlights the **difficulties of measuring unemployment in India**, which reduced between 2017-2022, but still higher than some developed economies (US - ~3.5%).

What's in Today's Article?

- Meaning of Unemployment
- How the Unemployment Rate is Measured?
- Classifying the Working Status of Individuals in India
- Rural vs Urban Unemployment Rates in India
- The Difficulties of Measuring Unemployment in India
- Way Ahead

Meaning of Unemployment:

According to the International Labour Organisation (ILO), unemployment means being out of a job; being available to take a job; and actively engaged in searching for work.

Therefore, an individual who has lost work but does not look for another job is not unemployed. Thus, unemployment is not synonymous with joblessness.

How is the Unemployment Rate Measured?

The unemployment rate is measured as the **ratio of the unemployed to the labour force**. The **labour force** is defined as the sum of the employed and the unemployed.

Those neither employed nor unemployed such as students and those engaged in unpaid domestic work are considered out of the labour force.

The unemployment rate could also fall if an economy is not generating enough jobs, or if people decide not to search for work.



Classifying the Working Status of Individuals in India:

The National Sample Survey Organisation (NSSO) adopts **two major measures** for this - the Usual Principal and Subsidiary Status (UPSS) and the Current Weekly Status (CWS).

An individual's principal status, whether employed, unemployed or out of the labour force, is based on the activity in which they spent relatively long time in the previous year.

For example, a person who is not a worker (as per the principal status), would still be counted as employed according to the UPSS if they were engaged in some economic activity in a subsidiary role for a period (not less than 30 days).

The CWS adopts a shorter reference period of a week. An individual is counted as being employed if they have worked for at least one hour on at least one day during the seven days preceding the date of survey.

UPSS unemployment rates will always be lower than CWS rates because there is a greater probability that an individual would find work over a year as compared to a week.

Rural vs Urban Unemployment Rates in India:

- The low bar for classifying an individual as employed explains why unemployment rates are lower in rural areas than urban.
- **In agrarian economies**, where individuals have access to family farms or some form of casual agrarian work, there is greater probability of finding some kind of work when compared to urban areas.
- These definitions may 'underestimate' unemployment, but they were largely **designed to capture the extent of the informal economy.**

The Difficulties of Measuring Unemployment in India:

Decisions to search for work are constrained by social norms in a developing economy like India.

A definition of unemployment that focuses on actively searching for a job may underestimate the true picture. For example,

According to a NSSO survey, 33.3% of rural women and 27.2% of urban women aged 15 and above who were engaged in domestic work reported willingness to work if it were made available within the premises of the household.

These women would not be counted among the unemployed because they are not actively looking for work.

Informal nature of jobs: Unlike developed economies, individuals do not hold one job year-round.

An individual may be unemployed this week, but may have worked as a casual labourer last month, and as a farmer for most of the year.

Different methodologies: For example, the Centre for Monitoring Indian Economy classifies individuals based on their activity in the day preceding the interview.

They, therefore, estimate a higher unemployment rate, but lower labour force participation rates.

This is because in an informal economy, there is a lower chance of an individual having work on any given day as compared to longer periods of a week or a year.

Methodologies do not accurately reflect data: For example,

The lockdown announced in March 2020 was a profound disruption to the Indian economy.

But this wasn't reflected in the PLFS unemployment rates, which covers a period between July of one year to June of the next.

As a result, unemployment rates measured both by the UPSS and CWS standards fell in 2019-20 and 2020-21.

	UPSS			CWS		
	Rural	Urban	Aggregate	Rural	Urban	Aggregate
2017-18	5.3%	7.8%	6.1%	8.5%	9.6%	8.9%
2018-19	5%	7.7%	5.8%	8.4%	9.5%	8.8%
2019-20	4%	7%	4.8%	7.9%	11%	8.8%
2020-21	3.3%	6.7%	4.2%	6.5%	10%	7.5%
2021-22	3.3%	6.3%	4.1%	6%	8.3%	6.6%

Unavoidable trade-off in a developing economy. For example, adopting too short a reference period, and one gets higher rates of the unemployed and lower of the employed, and vice versa.

This dilemma does not arise in developed nations because they are more industrialised and work is largely regular over the year.

Way Ahead:

Unemployment is shaping up to be an important factor in the upcoming election.

In order to successfully tackle it, it is important to understand how it is defined and measured in a developing economy like India.