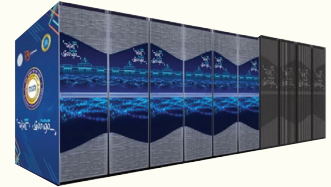


# NEWS TODAY

## PETASCALE SUPERCOMPUTER "PARAM GANGA" ESTABLISHED AT IIT ROORKEE UNDER NATIONAL SUPERCOMPUTING MISSION (NSM)

- NSM has now deployed "**PARAM Ganga**" with a **supercomputing capacity of 1.66 Petaflops**.
  - It is **designed and commissioned by Centre for Development of Advanced Computing (C-DAC)** under Phase 2 of NSM.
- NSM, launched in 2015, is being **steered jointly by Ministry of Electronics & Information Technology** and Department of Science and Technology and implemented by C-DAC and Indian Institute of Science, Bangalore.
  - Mission envisages **empowering our national academic and R&D institutions spread over the country by installing a vast supercomputing grid comprising of more than 70 high-performance computing (HPC) facilities**.
  - Till now C-DAC has deployed 11 such facilities** under NSM Phase-1 and Phase-2 with a Cumulative Computer Power (CCP) of more than 20 Petaflops.
    - Eg: PARAM Shivay [IIT (BHU)], PARAM Shakti (IIT Kharagpur), PARAM Brahma (IISER, Pune) etc.
  - These supercomputers will also be networked on the National Supercomputing Grid over **National Knowledge Network (NKN)**.
  - 4 major pillars of NSM** are Infrastructure, Applications, R&D, HRD.
- Large-scale applications being developed under NSM**
  - NSM Platform for **Genomics and Drug Discovery**.
  - Urban Modelling:** To Address Urban Environment Issues (Meteorology, Hydrology, Air Quality).
  - Flood Early Warning** and Prediction System for River Basins of India.
  - HPC Software Suite for Seismic Imaging to aid **Oil and Gas Exploration**.

### Supercomputers



- Supercomputers are **large systems that are specifically designed to solve complex scientific and industrial challenges**.
- Unlike traditional computers, **supercomputers use more than one central processing unit (CPU)**.
- Supercomputing is measured in **floating-point operations per second (FLOPS)**.
  - Petaflops** are a measure of a **computer's processing speed equal to a thousand trillion flops**.
  - Floating-point** is "a method of encoding real numbers within the limits of finite precision available on computers."
- Supercomputers can have **one million times more processing power than the fastest laptop**.

## UNION MINISTER LAUNCHES VIRTUAL SMART GRID KNOWLEDGE CENTER (SGKC) AND INNOVATION PARK

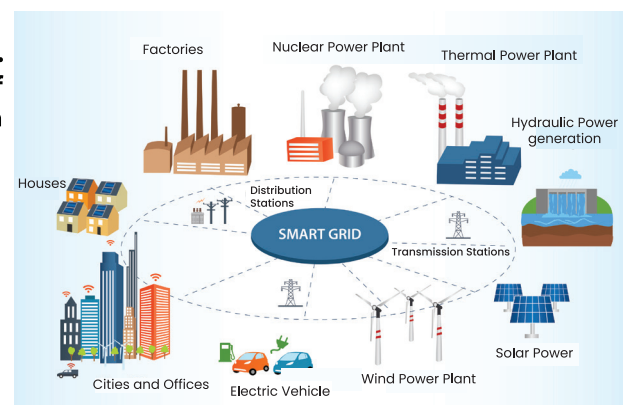
- SGKC has been established by POWERGRID **with support from the Ministry of Power and National Smart Grid Mission (NSGM)** for demonstration and advancement of frontier smart grid technologies.
  - SGKC **aims to be one of the leading Centers of Excellence globally to foster innovation, entrepreneurship and research in smart grid technologies** and create capacities in the power distribution sector.
  - Virtual SGKC **enables a digital footprint of the physical setup of SGKC**, the need for which was felt during COVID-19 pandemic.
- NSGM has been **established in 2015 to accelerate Smart Grid deployment in India**.
  - It plays role in planning and monitoring **implementation of policies and programs related to Smart Grids**.

### About Smart Grid

- It is an **Electrical Grid with Automation, Communication and IT systems**.
- It can **monitor power flows from points of generation to points of consumption** and control the power flow or curtail the load to match generation in real time or near real time.

### Benefits of Smart Grid:

- Reduction of Transmission and Distribution Losses (T&D Losses),
- Peak load management,
- Improved quality of Service,
- increased reliability,
- better asset management,
- renewable integration,
- Real time monitoring
- better accessibility to electricity etc.

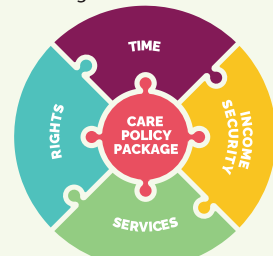


# INVESTMENT IN CARE SERVICES CAN GENERATE 234 MILLION JOBS FOR WOMEN BY 2035, SAYS ILO

- The report, titled '**Care at work: Investing in care leave and services for a more gender equal world of work**' provides a global overview of national laws and practices regarding care policies.
  - **Care policies include** maternity protection, paternity, parental and other care-related leave policies, childcare and long-term care services.
- Key observations for Care Policies**
  - **Investing in universal childcare and long-term care services** can generate up to 299 million jobs by 2035. Of these, 78% will go to women.
  - **Job creation potential by 2035 will be driven by 96 million direct jobs** in childcare, 136 million direct jobs in long-term care and 67 million indirect jobs in non-care sectors.
  - **Persistent and significant gaps in care services** and policies have left hundreds of millions of workers with family responsibilities without adequate protection and support.
  - **Long-term care services** are essential to **ensure the right to healthy ageing in dignity** and independent living.
  - **Maternity leave is a universal human and labour right**, and yet it **remains unfulfilled**. In 64 countries, the duration of maternity leave is still **below ILO mandated standards of 14 weeks**.
  - **Paternity leave is key to enabling men's care rights** and responsibilities: However, **almost 2/3rd of potential fathers** (1.26 billion men) live in countries **with no entitlements** to paternity leave.

## Suggestions by the report

- **Building knowledge, data and awareness**
- **Designing and implementing** care policies and services
- **Costing care policies** and services
- **Strengthening representation** and social dialogues.



## BANGLADESH-BHUTAN-INDIA-NEPAL (BBIN) MOTOR VEHICLES AGREEMENT (MVA) DEAL: INDIA, NEPAL AND BANGLADESH FINALISE DEAL

- India, Bangladesh and Nepal finalised an **enabling memorandum of understanding (MoU)** for implementing the BBIN MVA that is aimed at boosting regional trade and connectivity.
  - Presently, **Bhutan continues to opt-out of this MVA**.

### About BBIN MVA:

- The connectivity project was **conceived after the South Asian Association for Regional Cooperation (SAARC)** failed to agree on a regional MVA at the Kathmandu summit (2014), mainly **because of opposition from Pakistan**.
- It is a **sub-regional Motor Vehicle Agreement** for the regulation of passenger, personnel, and cargo-vehicular traffic which will further speed up the implementation of land transport facilitation arrangements.
- **Bhutan temporarily opted out of the project** after being unable to get parliamentary approval citing environmental concerns in 2017.



Significance	Issues in implementation
<ul style="list-style-type: none"> <li>• Help in accelerating the development of the <b>North-Eastern region of India</b>.</li> <li>• <b>Promoting investment linkages</b> with an aim to capitalize on potential bilateral and regional value chains.</li> <li>• <b>Potentially increase intra-regional trade</b> within South Asia by almost 60% and with the rest of the world by over 30%.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Bhutan is unable to join</b> it due to traffic and pollution concerns.</li> <li>• <b>Infrastructure deficits</b>, particularly in designated border posts,</li> <li>• <b>Harmonization of regulations</b> and customs procedures.</li> <li>• A <b>comprehensive vehicular insurance policy</b> for all the involved countries will be required.</li> </ul>

## GANGSTER'S CASE TRIGGERS SUPREME COURT (SC)'S CONCERN ABOUT FUTURE EXTRADITIONS

- Supreme Court asked Union Home Secretary to **explain the government's stand on gangster Abu Salem's contention** that he cannot be sentenced beyond 25 years in prison as per the **solemn sovereign assurance** given to Portugal authorities for his extradition.
  - He was **arrested in Portugal and extradited to India**. He was sentenced to life imprisonment in the 1993 Mumbai serial blasts case.
- SC advised the **government to take into account the international ramifications of being seen to divert** from past assurances.
- Extradition in India**
  - SC defined extradition as the **delivery on the part of one state to another of those whom it is desired to deal with for crimes of which they have been accused or convicted and are justifiable in the courts of the other state**.
  - **Extradition Act 1962 governs the extradition of a fugitive** from India to a foreign country, or vice versa.
    - Under the Act, **if no extradition treaty exists with a foreign country**, central government may deem any **international convention to which India and that foreign country are common parties** as an extradition treaty in respect of offences specified in that convention.

- Ministry of External Affairs is the central authority** that handles all extradition requests.

### Extradition proceedings

- **Extradition proceedings are initiated** upon receipt of a request for extradition through following modes:
  - **Directly through diplomatic channels** between India and the requesting country;
  - A **red notice** received by the **INTERPOL**; or
  - Other **settled modes of communication**.

# GREEN CHANNEL PAYMENT (GCP) SET UP FOR AYUSHMAN BHARAT PRADHAN MANTRI JAN AROGYA YOJANA (AB PM-JAY)

- **Introduced by:** National Health Authority (NHA)
- GCP aims to expedite insurance claim adjustments for empaneled hospitals treating AB PM-JAY beneficiaries.
  - Under it, Hospitals with good records will be instantly reimbursed 50% of the bill for any treatment under scheme through this channel.
  - Currently, the empaneled hospital receives payment once its claim is approved and paid by the State Health Agency (SHA) which is 15 days for non-portability claims and 30 days for portability claims.
- **Significance of GCP:**
  - Timely and judicious adjustments of claims raised by hospitals, which is key to the effective implementation of AB PM-JAY scheme.
  - Encourage greater participation of hospitals in providing treatment to AB PM-JAY beneficiaries.
- **About AB PM-JAY:**
  - It is an insurance scheme that offers cashless and paperless annual healthcare services benefits of up to ₹5 lakh per family for secondary and tertiary care hospitalization.
  - It is the world's largest Government funded health assurance scheme.
  - Beneficiary families under AB-PMJAY are identified from the Socio Economic Caste Census (SECC) 2011
  - Launched in 2018, it is implemented by NHA (attached office of Ministry of Health and Family Welfare).
  - It is implemented in all States and UTs barring West Bengal, NCT of Delhi and Odisha.

## ALSO IN NEWS



### India achieves significant reduction in coal import

- Ministry of Coal said that **imports of all grades of Non-Coking Coal has come down** by around 20% during April to December 2021 as compared to the corresponding months of 2020.
- **Non-Coking Coal** does not have any caking properties and it is mainly used as thermal coal for power generation.
  - It has a **higher ash content**.
  - It is used in industries like **cement, fertilizer, glass, ceramic, paper, chemical and brick manufacturing**.
- **Coking coal**, also known as metallurgical coal, is used to **create coke, one of the key irreplaceable inputs for the production of steel**.



### Land pooling

- Government said amendments to Delhi Development Act, 1957, have been proposed to speed up implementation of land pooling.
- **Land pooling** – also known as land readjustment or land reconstitution – is a **land acquisition strategy** where ownership rights of privately held land parcels are transferred to an appointed agency, with these land parcels being pooled as a result.
- After the development of the land, **Land Pooling agency redistributes the land after deducting some portion** as compensation towards infrastructure costs.



### Employees' Provident Fund Organisation (EPFO)

- EPFO has **moved a proposal to transfer ₹100 crore from its unclaimed funds to the Senior Citizens's Welfare Fund**, in line with a 2015 Finance Ministry directive.
- EPFO is a **retirement fund body which on a mandatory basis provides Universal Social Security Coverage to all salaried employees in India**.
- It **operates three schemes** — Employees' Provident Fund Scheme 1952, Pension Scheme 1995 and Insurance Scheme 1976.
- It is a **statutory body under the Ministry of Labour & Employment**.



### Unified Payments Interface (UPI) payments without Internet, Smartphone: UPI123pay

- **Launched by:** RBI and National Payments Corporation of India (NPCI).
- UPI123pay is a **three-step method to initiate and execute services for users which will work on Feature phones**.
  - It can be used to **make digital payments without the need for an internet connection**.
  - Users can perform a **few offline steps and easily make UPI payments**.
- This helps in **digital innovations which will further deepen the digital ecosystem** and financial inclusion in the country.
- Additionally, **RBI launched DigiSaathi** - a 24x7 Helpline to address the queries of digital payment users across products.



### Ukraine International Legion

- As per reports, Over 500 Indians from across the country, have volunteered to **join the International Legion created to fight Russian forces in Ukraine**.
- Indian domestic law clearly states **such an act is punishable under Chapter VI, Section 121-130 of the Indian Penal Code (offences against the state)**.
- The sections provides for **punishment with imprisonment** and shall also be liable to fine and to forfeiture of any property.
- The law is **invoked when the foreign Army in which India nationals joining is doing inimical things** or is an adversary of India.





### Temporary Protection Directive of 2001

- Over 1.5 million people fled Ukraine in the first 10 days of fighting.
- Responding to the crisis, **European Union (EU) Member States made the decision to activate European Union's Council Directive, Temporary Protection Directive (TPD).**
- European Commission describes "temporary protection" under TPD as an **"exceptional measure to provide immediate and temporary protection to displaced persons from non-EU countries and those unable to return to their country of origin".**
- The war in Ukraine is the **first time that the EU has invoked the TPD.**



### Trellis systems

- Trellis systems are **used in agriculture for cane support with trailing and semi-erect cultivars** to keep the fruit off the ground.
  - > A trellis structure is **prepared using four pillars, bamboo poles, and rope.**
  - > In this, the plants climb **vertically with the support of bamboo and ropes.**
- **Benefits:**
  - > **Prevent crop damage** due to waterlogging.
  - > **Enhances the utilization of nutrients,** water, carbon dioxide, etc.
  - > **Proper ventilation** helps in the control of pests and diseases as well.
  - > **Reduces the cost of cultivation** by way of ease of weeding, hoeing, staking/propping, spraying, and harvesting.



### Biomass Burning

- Recently, Centre **clarified that the act of biomass burning would never be criminalised.**
- Biomass burning is the **burning of living and dead vegetation.**
  - > It includes the **human-initiated burning** of vegetation for land clearing and land-use change as well as **natural, lightning-induced fires.**
  - > It releases **large amounts of solid carbon particulates, greenhouse gases** etc.
- Instead of biomass burning by farmers, **alternate methods can be used like co-firing in thermal power plants, feedstock for ethanol and biogas plants, brick kilns, packaging materials** etc.



8468022022, 9019066066



www.visionias.in



/c/VisionIASdelhi



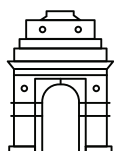
/Vision\_IAS



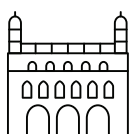
/visionias\_upsc



/VisionIAS\_UPSC



DELHI



LUCKNOW



JAIPUR



HYDERABAD



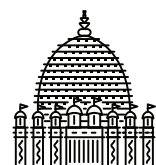
PUNE



AHMEDABAD



CHANDIGARH



GUWAHATI