Nobel Prize in Economic Sciences 2023 awarded to Claudia Goldin
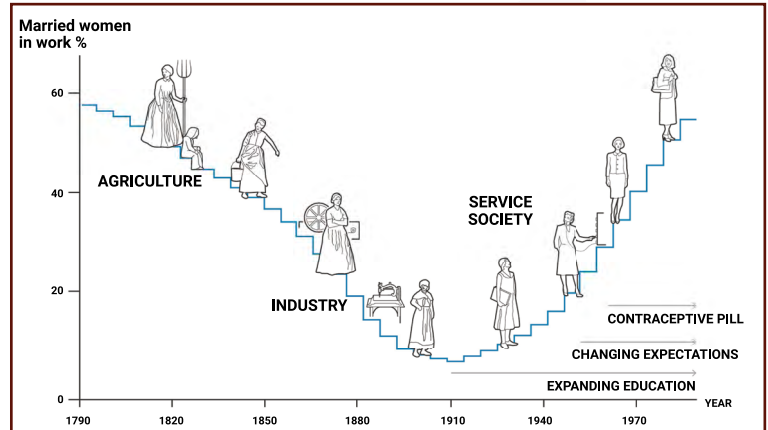
- Goldin, is only the **third woman** to win this honour.
  - She was awarded for **"having advanced our understanding of women's labour market outcomes".**
- **Key findings of her research**
  - She analysed why the **pay gap between men and women refuses to close,** even in high-income countries.
  - There is **no linear relationship between economic growth and women's labour force participation.**
    - Instead, there is a **U-shaped relationship** between women's employment and economic growth.
  - Despite rising proportions of employed women, **earnings gap continues to remain.**
- **Key reasons identified by her for this trend**
  - **Income effect,** the rise in household incomes (earnings of husband) alongside economic growth, may explain women's initial withdrawal from employment.
  - **Greedy jobs,** high paid jobs that call for increased hours of work with limited flexibility, leads to low women participation, given the disproportionately **higher care-giving burden on women.**
  - **Expectations of young women,** based on the experiences of previous generations – for instance, their mothers, who did not go back to work until the children **had grown up.**
  - **Access to the contraceptive pill** played an important role in offering new opportunities for career planning.

About Nobel Prize in Economic Sciences
- It is called the **Sveriges Riksbank Prize in Economic Sciences.**
- In 1968, **Sveriges Riksbank (Sweden's central bank) established** the Prize in Economic Sciences in Memory of Alfred Nobel.
- Prize is awarded by the **Royal Swedish Academy of Sciences, Sweden,** according to the same principles as for the Nobel Prizes that have been awarded since 1901.

National Sample Survey Office (NSSO) releases Periodic Labour Force Survey (PLFS) Annual Report 2022-2023

- **Launched in 2017,** the key **objective** of PLFS is to **estimate** the key **employment and unemployment indicators** (viz. LFPR, WPR, UR):
  - in the **short time interval of three months** for the u**rban areas only** in **'Current Weekly Status'** (**CWS**) and
  - in both **'Usual Status' and CWS** in both **rural and urban** areas **annually.**
- **Key Indicators used in PLFS:**
  - **Labour Force Participation Rate (LFPR):** Percentage of persons in the labour force (i.e. **working or seeking or available for work**) in the population.
  - **Worker Population Ratio (WPR):** Percentage of **employed persons** in the **population.**
  - **Unemployment Rate (UR):** Percentage of **persons unemployed** among the persons in the labour force.
  - **Activity Status:** It is determined on the basis of the **activities pursued** by the person **during the specified reference period** (preceding date of survey).
    - **Usual Status:** Reference period is 365 days.
    - **Current Weekly Status (CWS):** reference period is 7 days

Key findings

Indicator		2017-18	2022-23	Trend	
LFPR	Total	49.8%	57.9	Increase	↑
	Rural	50.7 %	60.8 %	Increase	↑
	Urban	47.6 %	50.4 %	Increase	↑
	Male	75.8 %	78.5 %	Increase	↑
	Female	23.3 %	37.0 %	Increase	↑
WPR	Total	46.8%	56.0%	Increase	↑
UR	Total	6%	3.2%	Decrease	↓

India and Tanzania elevate ties to Strategic Partnership to further strengthen the bilateral relations

- **Decisions taken**
  - Memorandum of Understanding (MoU) signed for Cooperation in the field of:
    - Sharing successful **digital solutions** for digital transformation.
    - Setting up of an **Industrial Park in Tanzania.**
    - **Maritime Industry**
    - Navies on **Sharing White Shipping Information**
    - **Cultural Exchange Programme**
  - Tanzania's decision to **join the International Big Cat Alliance (IBCA) and the Global Biofuel Alliance (GBA).**
- **India and Tanzania relationship**
  - Tanzania has an important place in India's **vision of SAGAR** (Security and Growth for all in the Region).
    - Tanzania, **with its strategic location and vast potential,** holds immense importance for India as a key partner in Africa.
    - Tanzania has a significant interest in **ensuring that shipping lines are free from piracy or interference.**
  - A **five-year Roadmap for Defence Cooperation** was signed in June 2023.
  - **India** is amongst the **top five investment sources** for Tanzania.
    - **Africa is a major investment destination for India** in sectors such as pharmaceuticals, infrastructure, etc.
  - Eastern coast of Africa is **strategically important to counter Chinese influence** in the extended Indian ocean region.
  - India's leap towards **including African countries in Multilateral institutions** like BRICS, G20 highlights affinity.

Tanzania
Political Features
East African country situated just south of the Equator.
Tanzania is bounded by:
Uganda, Lake Victoria, and Kenya to the **north,**
Indian Ocean to the east,
Mozambique, Lake Nyasa, Malawi, and Zambia to the **south and southwest,**
Lake Tanganyika, Burundi, and Rwanda to the **west.**
Geographical Features
Africa's highest mountain, Kilimanjaro
World's second deepest lake, Lake Tanganyika
Major rivers—Ruvuma, Rufiji, Wami, and Pangani—drain into the Indian Ocean.

Researchers at the World Bank published a study on rapid urban growth in flood zones since 1985

- **Key findings:**
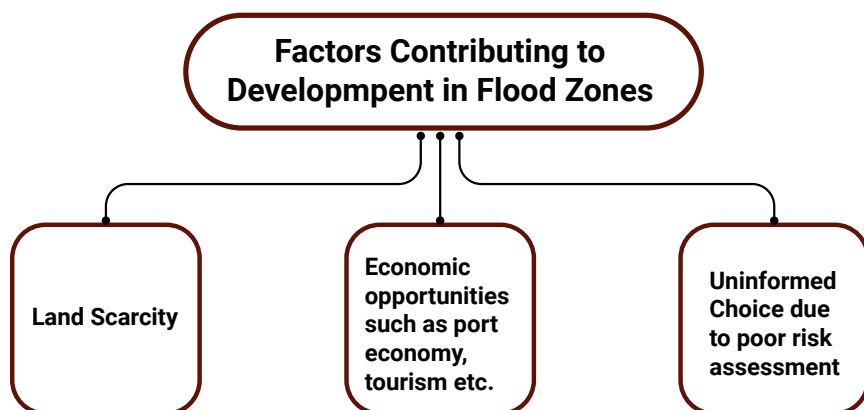 - Since 1985, the number of the world's **settlements in the riskiest flood zones has increased 122%,** compared to 80% for the safest areas.
  - Despite extreme precipitation and flood threats, especially **middle- and low-income countries** continue to **increase their exposure to such threats with unplanned urban expansion.**
  - This showcases that **locally determined patterns of urbanization and spatial development** are also **key factors to the exposure** and vulnerability of people to climatic shocks.
- **Unplanned Urbanization and increased risk of flooding:**
  - Rapid urbanization has resulted in increased **paved areas, decreased water bodies, reduced groundwater recharge** and **reduced capacity of urban drainage** channels.
  - **Huge pressure** on limited land and water resources available within city boundaries.
  - **Prioritization of funds** for visible overground infrastructure rather than addressing drainage.
- **Key Recommendations:**
  - **Continuous monitoring** of urbanization and flood exposure patterns to guide timely interventions.
  - **Investment in disaster preparedness** in areas with high flood exposure.
  - Revision of land use and urbanization plans to avoid new construction in highest risk areas.

Factors Contributing to Developmpent in Flood Zones

- Land Scarcity
- Economic opportunities such as port economy, tourism etc.
- Uninformed Choice due to poor risk assessment

Natural rubber-producing nations urged Association of Natural Rubber Producing Countries (ANRPC) to address common issues

- Rubber tree is **native to the Amazon River basin** and was introduced to **tropical Asia and Africa** by British during 19th century.
    - Natural rubber is a major raw material for the **automobile industry**, medical devices, airplanes, clothing, toys, footwear, adhesives, etc.
    - **Synthetic rubbers** are **produced artificially** by creating polymers, sourced from raw materials mostly from the petroleum industry.
- **Cultivation in India**
    - **Rainfall: Tropical climate** with annual rainfall of **2000 - 4500 mm.**
    - **Temperature,** from 25 to 34°C with 80 % relative humidity is ideal.
    - **Rubber growing regions in India:** Tamil Nadu, Kerala, Karnataka, Goa, Maharashtra, Andhra Pradesh, Orissa, A&N Islands, West Bengal Tripura, Assam, Meghalaya, Nagaland, Manipur.
- **Key challenges**
    - Low **productivity** of smallholders.
    - Low and **volatile rubber prices.**
    - **Increased labour costs,** labour shortages, and **diseases.**
    - **Environmental challenges**
        - **Climate change** has resulted in **erratic weather patterns.**
        - **Deforestation** has led to the **loss of biodiversity and soil degradation.**
- **Recommendation**
    - **Mechanisation** in the rubber plantation
    - Promotion of **sustainable agricultural** practices,
    - **strengthening of the supply chain,**
    - **value addition** for rubber wood

NCDC should set a target of achieving Rs.1 lakh crore yearly disbursement in next 3 years: Minister of Cooperation

- National Cooperative Development Corporation (NCDC) is a **statutory organization** established through **NCDC Act of 1962 under the Ministry of Cooperation.**
- It works to **promote cooperative movement and economic development** through **cooperative societies.**
    - **Cooperatives** are **collectives owned by participating members** who share profits and losses, such as rural businesses or banks.
- **Key Functions**
    - **Financing:** Provides **loans and subsidies** to cooperative societies.
    - **Promotion and development:** For production, processing, marketing, storage, and export of agricultural produce, foodstuffs, etc.
    - **Implementing agency of Central schemes:** For example, Pradhan Mantri Matsya Sampada Yojana, Yuva Sahakar, Formation and Promotion of 10,000 Farmers Producer Organizations (FPOs), etc.
- **Significance**
    - **Crucial role in the vision of Sahakar se Samridhi: Rs.41,000 crore** was disbursed **in FY 2022-23** and it is expected to achieve the target of **Rs. 50,000 crore for FY 2023-2024.**
        - Since inception, the disbursement is **Rs.2.78 Lakh crore.**
    - **Strong balance sheet: Net NPA** is maintained at '**Zero**' with a **loan recovery rate** being over **99%.**
- **Weaknesses of NCDC:** Weak credit risk **profile of the borrowers,** regional and sectoral **client concentration** in advances, limited **regulatory oversight,** etc.

Also in News

Automatic 'Status Holder' certificates

- Ministry of Commerce & Industry unveils system-based **automatic 'Status Holder' certificates** under **Foreign Trade Policy 2023.**
- **Now** certificate **will be provided by the IT system** based on **available** Directorate General of Commercial Intelligence and Statistics merchandise **export electronic data and other risk parameters.**
    - Status Holders are **business leaders who have excelled in international trade** and have successfully **contributed to the country's foreign trade.**
- **Privileges of certificate**
    - Provides **credibility to the Indian exporters** in the international markets.
    - **Priority custom clearances** and **certain exemptions** (like exemption from compulsory negotiation of documents through banks).

District Mineral Foundation Funds

- Rs. **82370.79 Crore** collected under DMF till August 2023.
- DMF is a **trust,** setup as a non-profit body established under **Mining and Minerals Development and Regulation (MMDR) Act,** 2015 in **all mining affected districts.**
- It implements **Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY)** from DMF fund.
    - Mining companies **are required to contribute to DMFs between 10% and 30% of the royalty,** in addition to the royalty paid to state governments.
- **About PMKKKY**
    - **Objective: developmental and welfare programs** in mining affected areas
    - **Utilisation of fund:** 60% of or high priority works such as drinking water health, education etc.

Kudumbashree

- **"Back to school"** campaign was launched under Kudumbashree by **Kerala** govt.
  - Under this, **46 lakh women** will attend classes on adapting to the digital age, and training in financial transactions and entrepreneurship.
  - This will enable moving **from poverty alleviation to enhancing the income of households.**
- Kudumbashree is the poverty eradication and women empowerment programme of Kerala.
  - It is essentially a **community network** that covers the entire State of Kerala.

Wet Bulb Temperature

- Recent research has found that we may already be nearing the **threshold values for human survivability of temperature and humidity** for short periods in some places of the world – a measure known as the **"wet-bulb" temperature.**
- Wet Bulb Temperature combines dry air temperature with humidity and is a **measure of heat-stress conditions on humans.**
  - It is the **lowest temperature to which air can be cooled by evaporation of water into the air** at a constant pressure.
  - It is therefore measured by **wrapping a wet wick around the bulb of a thermometer.**

Iron Dome System and Operation Iron Swords

- Iron Dome is **Israel's most advanced short-range, ground-to-air, air defence system.**
  - It includes a **detection and tracking radar, a Battle Management and Weapon Control System, and Tamir interceptor missiles.**
  - It can **track and neutralise** any incoming rockets, missiles or Unmanned Aerial Vehicles (UAVs).
  - Its success rate is believed to be in between **80-90%.**
- **Operation Iron Swords** has been launched by **Israel Defence Forces** in response to an attack on Israel by the Hamas militant group.

SHRESHTA Scheme

- Till now in FY 2023-24 the **expenditure** under **SHRESHTA** (Residential Education for Students in High Schools in Targeted Areas) is **Rs. 14.94 cr.**
- **Ministry:** Ministry for Social Justice and Empowerment
- **Type:** Central Sector Scheme
- **Objective:** To **fill the gap in service-deprived SCs** (Scheduled Castes) **dominant areas,** provide an environment for **socio-economic upliftment of SCs, etc.**
- **Benefits: High quality free residential education** to **poor** and **meritorious scheduled caste** (SC) students from **class 9th to class 12th.**
- **Implementing agency**
  - **Mode 1:** District Administration
  - **Mode 2:** Voluntary organisation (VO)/ Non-Government Organisation (NGO)/ Other organisation

Multimodal Artificial Intelligence (AI)

- Multimodal AI **combines multiple data sources** from different modalities, such as **text, images, audio, and video.**
  - By combining **information from multiple modalities,** a multimodal AI model offers **more dynamic predictions and better performance** compared to unimodal AI systems.
  - Unimodal AI systems are designed to **process a single data type, such as images, text, or audio.**
- **Applications:** automatic image caption generation, automatically detect hateful memes, text-to-speech, speech-to-text translations etc.

Udangudi 'Panangkarupatti' (palm jaggery/ gur)

- **Tamil Nadu's** Thoothukudi district's **Udangudi 'Panangkarupatti'** has been given a Geographical Indication (GI) tag.
- Panangkarupatti is made from the **palm sap** collected from the inflorescence of **palmyra trees that grow on the red sand dunes in the region.**
  - It is made using traditional methods and **without any chemical additives.**
  - **Dry climatic conditions** and low groundwater holding characteristic of red sand dune soil **lead to high sucrose content** in Panangkarupatti and support its longer storage.

Places in News   📰 Spain (Capital Madrid)

- Mass protests were organised in **Barcelona** against possible amnesty for **Catalan separatists.**
  - **Catalonia** is an autonomous region in the **northeastern Spain.**
- **Political boundaries of Spain**
  - **Bordered Portugal (West); France (North east), Andorra.**
  - **Bounded by Mediterranean Sea** (east) **Atlantic Ocean** (northwest), and **Bay of Biscay** (north).
  - **Canary Islands** (in the Atlantic Ocean), and **Balearic Islands** (in the Mediterranean), and **two enclaves in North Africa** also are parts of Spain.
- **Geographical features**
  - Occupies about **85% of the Iberian Peninsula.**
  - **Major mountain ranges:** Central Sierra, Cantabrian Mountains, Sierra Morena, Pyrenees.
  - **Major river:** Ebro River

Map of Spain showing Bay of Biscay, France, Andorra, Catalonia, Portugal, Spain, Atlantic Ocean, Mediterranean Sea, Algeria, Morocco, Africa.

AHMEDABAD   BHOPAL   CHANDIGARH   DELHI   JAIPUR   JODHPUR   GUWAHATI   HYDERABAD   LUCKNOW   PRAYAGRAJ   PUNE   RANCHI   SIKAR