

MAY 13-18

Digilocker

Digital storage with Varied acceptance



DigiLocker, introduced in **2015** is an **application** developed by the **government** to securely **store digital documents** such as Aadhaar, PAN cards driving licenses and more. It's part of the Digital India campaign. It aims to **reduce paper consumption** while making important records easily accessible and verifiable. With a user base of over 270 million people and a total of 6.7 billion documents accessed DigiLocker plays a role in administrative procedures.

USES

Users can conveniently retrieve their documents for purposes like passport applications verifying identity while traveling or checking educational transcripts. The apps collaboration with boards such as CISCE and the Tamil Nadu State Board allows students to access their exam results digitally with plans for similar integration with the CBSE board in progress. Considered as an eco-solution DigiLocker offers up to date document versions online eliminating the need to carry copies. This feature benefits both officials and users by reducing reliance on counterfeit documents. DigiLocker is not compulsory for passport applications its usage is being promoted to speed up the process.

SECURITY

Security remains a priority for Digi Locker under the Ministry of Electronics & ITs supervision, as part of the Digital India initiative. The platform employs security protocols like 2048 Bit RSA SSL encryption, multi factor authentication, consent mechanisms, timed logouts and regular security assessments.

Despite taking these precautions the platform is still a target, for cyber attackers. This was evident when a flaw in the registration process was fixed in 2020 following alerts from CERT In and an independent researcher.

Challenges

Even though DigiLocker offers convenience it comes with its set of challenges. People who are not familiar with using smartphones or those who cannot read may struggle to utilize the app. Inconsistencies in names or spellings on documents can also hinder the retrieval of records successfully. Moreover different government agencies and law enforcement bodies have varying levels of acceptance for DigiLocker documents with some insisting on copies despite the apps intended purpose.

The Impact of 50 Years Vaccination

on Children Worldwide

In the five decades, measles vaccination has had an impact on the health of children worldwide. Around 94 million children have directly benefited from this vaccination initiative. The statistics show that vaccination campaigns have notably decreased both measles cases and deaths with deaths dropping significantly from 550,000 in 2000, to 207,500 in 2016.



Key points from the visual data and analysis include:

- **Disease Reduction**: Measles vaccination has prevented about 50 million deaths since 1970. The reduction in measles deaths contributed to a larger decline in overall child mortality rates, particularly in regions with intensive vaccination drives like South Asia and Africa.
- Global Coverage: The expansion of vaccination programs worldwide has been a critical factor in improving child health. This includes regions like Africa, where the DTP3 (diphtheria, tetanus, pertussis) vaccine coverage has risen from less than 5% in the 1970s to over 80% recently, though the ideal target is 95% for effective disease control.
- Investment and Support: Major contributions by global entities like Gavi, the Vaccine Alliance, and the Bill & Melinda Gates Foundation have propelled the reach and efficacy of vaccination programs. These efforts have been particularly impactful in lower-income regions, ensuring that vaccines are accessible to all children.
- Ongoing Challenges: Despite the successes, challenges remain, such as reaching the under-immunized populations and dealing with the resurgence of diseases in regions with poor vaccine coverage or political instability.
- Healthcare Impact: Besides measles, vaccination has reduced deaths from other preventable diseases such as tetanus, whooping cough, and meningitis. Continuous efforts are needed to maintain and expand vaccine coverage to prevent these and emerging diseases like COVID-19.

This comprehensive approach to global vaccination underscores the significant strides made in public health through immunization, emphasizing the ongoing need for investment and innovation in vaccine delivery and development.



What's happening with

Private Players

in India's space sector?

The part of the space department that does business, called New Space India Limited (NSIL), wants private companies to make its biggest rocket, LVM3.

This rocket has already taken Chandrayaan-2 and Chandrayaan-3 to the moon, and it will also be used for the Gaganyaan mission, where people will go to space.

OPENING UP INDIAN SPACE SECTOR FOR PRIVATE SECTOR:

- → The Department of Space (DOS) wants private companies to join space activities.
- This aims to spread space technology and grow the space economy in India (from \$8 billion to \$100 billion by 2040).
- ▶ Start-ups began emerging in India in the early 2010s, starting with Dhruva Space Private Limited in 2012.
- More space start-ups followed: Bellatrix Aerospace (2015), Manastu Space (2017), Skyroot Aerospace (2018), and others.
- Currently, there are over 200 registered space start-ups in India, attracting investments of ₹1000 crore in 2023.
- → Many of these companies focus on making satellites, rockets, etc., and provide launch services using ISRO's PSLV/GSLV or private rockets.

INDIAN REGULATORY FRAMEWORK FOR PRIVATE SPACE COMPANIES:

NewSpace India Limited (NSIL):

- ▶ NSIL is a government-owned company created in 2019 to boost private sector involvement in India's space programs.
- ▶ It's responsible for making, putting together, and integrating launch vehicles with help from industry groups.
- ▶ In 2022, NSIL asked for private companies to fully build its Polar Satellite Launch Vehicle (PSLV).
- A partnership of HAL and L&T has been chosen to make five PSLVs, with the first one likely launching this year.

Indian National Space Promotion and Authorization Center (IN-SPACe):

- ▶ Established in 2020, IN-SPACe is a single-window agency for authorizing and supervising private space activities.
- → It has signed 45 agreements with private companies to support their space endeavors.

National Geospatial Policy:

The policy, introduced in 2022, allows private firms to access government geospatial data without licenses.

It encourages private sector involvement in collecting geospatial data.

Indian Space Policy:

Rolled out in 2023, the policy shifts ISRO's focus from making space systems to advancing technology.

Amended FDI policy:

In 2024, the government updated its foreign investment rules, allowing higher FDI in satellite manufacturing and related areas.

$NSIL\ Calling\ Private\ Players\ to\ Manufacture\ LVM3:$

LVM3 is ISRO's heavy-lift launch vehicle, capable of carrying heavy satellites to orbit.

NSIL wants private firms to help meet the growing demand for launching larger satellites.

They'll select manufacturers through a two-stage bidding process based on technical and financial factors.

Sericulture

in India

Why in News?

Silk making in Karnataka is increasing to keep up with the rising need for local silk.

- There was a decrease in production because of a disease affecting the mulberry trees.
- Corona virus has significantly reduced silk imports from China.

Key Points

Sericulture:

- It's farming to produce raw silk.
- Involves raising silkworms and harvesting their cocoons.
- Requires growing food plants for silkworms.

Silk Types in India:

- Mulberry, Oak Tasar, Tropical Tasar, Muga, Eri.
- Mulberry is most common, others are wild silks.

Production and Distribution:

- South India is a major silk producer.
- India is the world's second-largest silk producer.

Government Support:

- India supports sericulture through schemes like 'Silk Samagra'.
- Significant funds allocated for its development.

Increasing Demand:

 Demand rising for high-quality silk domestically and internationally.



NIDHI COMPANIES

Why in News?

Amendments to Nidhi Companies:

- Central Government recently amended provisions in Companies Act, 2013 and Rules.
- Nidhi companies must now apply to the central government for status updates or declaration as "Nidhi Company".

Purpose of Amendments:

- Amendments aim to enhance the effectiveness of regulatory control over Nidhi Companies.
- Intended to promote transparency and investor-friendly practices in the corporate sector of India.

Key Points

Nidhi Company Definition:

- A Nidhi company, as per Nidhi Rules, 2014, is incorporated with the aim of promoting thrift and savings among its members.
- It accepts deposits from and lends to its members exclusively, for their mutual benefit.

Legal Status:

- Registered under the Companies Act, 2013.
- Regulation falls under the Ministry of Corporate Affairs.

Principle of Operation:

• Operates on the principle of mutual benefits among its members.

Regulatory Oversight:

- Classified as a type of Non-Banking Financial Company (NBFC).
- The Reserve Bank of India (RBI) can issue directives concerning their deposit activities.
- However, since they solely deal with their shareholder-members,
 Nidhis are exempt from certain core provisions of the RBI Act and other NBFC regulations.



Why in News?

"India made only three supercomputers since 2015, as shown in a recent Right to Information (RTI) reply. Supercomputers are powerful computers used for tasks like cryptography, chemistry, drug discovery, and artificial intelligence."

National Supercomputing Mission

- Mission approved in 2016.
- Implementation by Department of Science and Technology and Ministry of Electronics and Information Technology.
- Aims to link 70+ high-performance computing facilities across India's academic and research institutions.
- Budgeted at ₹4,500 crores over seven years.
- Aims to increase India's supercomputer count.
- Supercomputers will be connected via National Supercomputing Grid and National Knowledge Network.
- Goal to train 20,000 skilled individuals in High Performance Computing over five years.
- Supports 'Digital India' and 'Make in India' initiatives.

Progress of NSM:

- First supercomputer, ParamShivay, installed in IITBHU, Varanasi in 2019, with 837 TeraFlop capacity.
- Second supercomputer installed at IIT-Kharagpur, with 1.66 PetaFlop capacity.
- Teraflops: A unit of computing speed equal to one million million (10^12) floating-point operations per second (FLOPS).
- Third system, Param Brahma, installed at IISER-Pune, with 797 TeraFlop capacity.
- Petaflops: A unit of computing speed equal to one thousand million million (10^15) floating-point operations per second (FLOPS).
- The National Supercomputing Mission aimed to set up a network of 70 high-performance computing facilities in India, but limited funding slowed progress.
- Only 16.67% of the total budget of Rs 4,500 crore has been used in the last four-and-a-half years for the mission.

Global Scenario:

- China holds the most supercomputers globally, maintaining the top position.
- The United States, Japan, France, Germany, Netherlands, Ireland,







Why in News?

"Recently, a report from the Global Trade Research Initiative suggested a plan to help India's toy industry grow and sell more toys abroad. The goal is to make India a top place for making and selling toys worldwide. They want to do this by improving the quality of toys, encouraging new ideas, and finding more places to sell them."

What is the Status and Potential of India's Toy Industry?

- India's toy industry holds a marginal position in the global market, with only a 0.3% share in exports and 0.1% share in imports.
- Ranked 27th in global toy exports and 61st in toy imports, India's current standing underscores its potential for growth.
- Despite its small market share, India boasts diverse manufacturing capabilities, particularly in electronic toys, plastic dolls, and metal toys.
- The industry is projected to reach USD 3 billion by 2028, with a compound annual growth rate (CAGR) of 12% between 2022-2028.
- India is expanding its global presence, focusing on high-value exports to regions like the Middle East and Africa.

What are the Challenges Faced by India's Toys Industry?

Lack of Technology: Outdated technology and machinery prevalent among domestic manufacturers hinder quality and design innovation in Indian toys.

High GST rates: Differential tax rates, with mechanical toys taxed at 12% and electronic toys at 18%, create complexities in classification and taxation, affecting cost structures.

Lack of Infrastructure: Challenges stemming from inadequate infrastructure, including the absence of end-to-end manufacturing facilities, testing labs, toy parks, clusters, and logistics support, impede industry growth.

Unorganized and Fragmented: The Indian toy market remains largely unorganized, with 90% of it fragmented, posing difficulties in maximizing industry benefits and coordination.

Other Challenges: Various factors such as cost-effectiveness, product diversity, adherence to quality standards, and implications of trade agreements significantly influence the global toy trade landscape.

Market Dynamics: Shifts in consumer preferences, technological advancements, and regulatory changes continually reshape the dynamics of the toy industry, necessitating adaptability and innovation from market participants.

Way Forward

Government Initiatives: Support the toy industry through schemes like SFURTI by the Ministry of MSME, aiming to regenerate traditional industries and promote exports, thus enhancing India's global presence in the toy market.

Encourage Global Toy Brands: Invite international toy manufacturers, such as Hasbro, Mattel, Lego, Spin Master, and MGA Entertainment, to establish production facilities in India, leveraging the country's growing market potential

Collaboration for Technology Transfer: Foster partnerships with international counterparts for technology transfer and skill development, bolstering India's competitiveness in the global toy trade.

Learn from China's Success: Analyse China's trajectory in the toy industry, understanding how it transformed from a modest market to a dominant global exporter. Emulate strategies for penetrating demanding markets like the USA, EU, Japan, and others, despite initial challenges with product quality and safety.

Localize Production of Key Inputs: Promote local manufacturing of crucial toy-making materials such as glass eyes, beads, imitation stones, plastics, electric motors, and remote-control devices. This initiative aims to enhance self-sufficiency, reduce costs, and minimize dependency on imports, thereby strengthening the industry's resilience.

What Influences the Price of Gold on a Global Scale?

Why in News?

A recent study in economics discovered that crude oil prices and gold prices go up or down together, while the value of the U.S. dollar and gold prices move in opposite directions.

What are the Major Findings of the Study?

Major Findings:

- Crude oil prices and gold prices are directly related.
- The value of the U.S. dollar and gold prices have an inverse relationship.

Implications:

- When crude oil prices go up, gold prices go up.
- When the U.S. dollar strengthens, gold prices decrease.

Reasons:

- Higher global crude oil prices lead to inflation.
- Gold is sought after as a hedge against inflation because it retains its value.
- A strong U.S. dollar keeps gold prices stable.
- A weaker U.S. dollar increases demand for gold as people seek a safer investment.

What are the Factors that Affect Gold Prices Worldwide?

Gold Production:

- Gold prices depend on production and mining costs.
- New production is expensive as it requires digging deeper into the earth.
- Rising crude oil and natural gas prices lead to higher gold prices.
- Top 5 gold producing countries: China, Australia, Russia, Canada, and the US.

Demand by Central Banks:

- Central banks buy gold to strengthen reserve assets.
- Rising crude oil prices and geopolitical tensions prompt central banks to increase gold reserves.
- Reserve Bank of India held 822 metric tonnes of gold as of March 2024, with 408 metric tonnes held domestically.

Investor Demand:

- Investors turn to gold during market downturns.
- Gold is seen as a haven due to its liquidity and lack of default risk.
- Individual and institutional investors diversify their portfolios with physical gold, financial derivatives, and ETFs.

Consumer Demand:

- Consumers and jewellers drive demand, especially in China and India.
- Gold is bought as a traditional store of wealth and for special occasions.
- Consumer demand is mostly seasonal.

Industrial Demand:

- Gold is valued in industries for its properties like malleability and conductivity.
- Used in electronics, dentistry, aerospace, and medical devices.
- Common applications include electronics components, dental prosthetics, spacecraft coating, and medical implants.

What is the Status of the Gold Industry in India?

Gold Reserves in India: Total reserves/resources of gold ore in India estimated at 501.83 million tonnes as of 2015.

Largest gold ore resources located in Bihar (44%), followed by Rajasthan (25%), Karnataka (21%), West Bengal (3%), Andhra Pradesh (3%), Jharkhand (2%).

Karnataka contributes around 80% of India's total gold output, with the Kolar Gold Fields (KGF) being one of the oldest and deepest gold mines in the world.

India Gold Import:

India ranks as the world's secondlargest gold consumer.

Gold imports rose by 30% in 2023-24, reaching USD 45.54 billion.

However, there was a significant 53.56% decline in gold imports observed in March 2024.

Sovereign Gold Bond Scheme: Introduced by the Government in November 2015 as part of the Gold Monetisation Scheme.

Aims to reduce demand for physical gold and encourage investment of domestic savings in financial instruments instead.

Employment Trends in India

Why in News?

"In the past few years, India has seen a big increase in jobs. Over 80 million new jobs were created between 2017-18 and 2022-23. This fast growth has started discussions about why it happened and if it will keep going."

What are the Key Trends in Employment Growth?

Historical Growth:

- → Analysis of NSSO data from 1983 to 2023 shows consistent growth in principal employment.
- Principal employment refers to main jobs worked for the bulk of the year.

Consistent Growth:

- → Principal employment has consistently grown since 1983.
- Subsidiary employment is part-time, shorter duration, and additional to the main job.

Significant Increase (2017-2023):

- → Fastest increase in employment occurred from 2017-18 to 2022-23.
- → Around 80 million additional jobs were created, with an annual growth rate of 3.3%.

Labour Market Indicators:

- ▶ Key indicators like labour force participation rate and unemployment rate have improved in recent years.
- → These improvements happened during economic distress, including the Covid-19 pandemic.

Broad-Based Growth:

- ▶ Employment growth distributed across rural and urban sectors, and various industries.
- → Highest employment growth seen among women and older people.

Women and Older People:

- **▶** Employment growth highest for women, over 8% annually.
- ▶ Employment among those aged 60 and above grew at around 4.5% annually.

Employment Condition Index:

- **▶** Based on seven labour market outcome indicators.
- ▶ Index improved between 2004-05 and 2021-22, but some states consistently ranked lower or higher.

How has Employment Quality Evolved?

Rise in Informal Employment:

- About 50% of jobs in the formal sector are informal
- Around 82% of the workforce is engaged in informal work
- Nearly 90% of workers are informally employed.

Dominance of Self-Employment:

- A large part of employment growth, about 44 million jobs, is in own-account work and unpaid family work.
- Government schemes like Pradhan Mantri MUDRA Yojana
 (PMMY) have provided significant funding to this segment.
- Self-employment is the main source of jobs, making up 55.8% of employment in 2022.
- Casual employment (hiring as needed) accounts for 22.7%, and regular employment for 21.5%.

What is the Trend in Wages and Salaries?

- Wages and salaries haven't been growing much lately.
- → They grew by 6.6% each year before inflation from 2017-18 to 2022-23, but only 1.2% after.
- ➡ Living conditions haven't gotten much better despite wages not dropping. This could be because lots of new workers came in, and productivity at work might not be improving much.

What are the Trends in Youth Employment?

- Youth had more jobs or part-time work from 2000 to 2019 but less during the pandemic.
- But, young people, especially those who finished high school or went to college, had a harder time finding jobs.
- In 2022, about 83% of all people without jobs were young, and 66% of them had some education, up from 54% in 2000.
- Young people with higher education had much higher unemployment rates than those who didn't finish school, especially women.
- In 2022, about 18% of young people who finished high school couldn't find jobs, while 29% of graduates couldn't. For those who couldn't read or write, it was only about 3%. Among women, it was even higher, especially for those who graduated.



What are the Concerns Regarding Employment in India?

Growth of Informal Sector:

- Despite economic growth, many new jobs lack security, benefits, or minimum wage.
- These informal jobs are on the rise.

Quality of Jobs for Youth:

- Youth employment might not show high unemployment rates, but many jobs are of lower quality.
- Young people might be overqualified for available jobs or stuck in insecure situations like gig work.

Gender Gap:

- Women's participation in the workforce hasn't increased as expected.
- Many ends up in unpaid family work or low-paying self-employment instead of formal jobs.

Skill Mismatch:

Education might not match current job market needs.

Formalisation Challenges: Much of India's workforce remains

informal, leading to lower tax revenue and limited social security benefits

Job Automation:

Automation threatens certain sectors, potentially displacing jobs, particularly in manufacturing and outsourcing industries.

Vulnerability to Economic Shocks:

Informal workers are highly vulnerable to economic downturns, as seen during the Covid-19 pandemic.

High Demand for Government Jobs:

• Due to limited job creation in the private sector, there's high demand for stable government employment.

Way Forward

- Encourage informal workers to join the formal job sector by making it appealing. Learn from Peru's plan and
 involve different groups like the government, businesses, schools, workers, and community organizations. Make it
 easier for small informal businesses to register officially, so they follow work laws and get benefits like social
 security.
- Help marginalized groups by giving them special training programs, like the SMILE initiative, so they can get better jobs too. Teach people about AI, robots, and data so they can adapt to new kinds of work.
- Make a social security system that moves with gig workers and people who switch between informal and formal jobs. Help new businesses start by creating special places for them to grow and giving them money early on.
- Encourage more remote work so people who live far away from cities can have jobs too. This also helps people balance work and life better.

Coffee Boom

Driven by a global shortage in crop production, the soaring prices of coffee beans have provided a ray of hope for coffee farmers in Karnataka. These increased prices have significantly improved the farmers' income, allowing them to enhance their living standards and invest in various assets.



Coffee Production in Karnataka:

Karnataka is India's **largest coffee-producing state**, with major coffee-producing districts including Chikamagaluru, Kodagu, and Hassan. The state predominantly produces two varieties of coffee: **Arabica** and **Robusta**, accounting for **70%** of India's coffee production.

Types of Coffee:

→ Arabica:

Arabica coffee is known for its higher quality, milder flavor, and aromatic profile. It is grown at higher altitudes (600-2000 meters) but is sensitive to pests and requires more care.

→ Robusta:

Robusta coffee has a stronger, more **bitter flavor** and is grown at lower altitudes (**sea level** to **800 meters**). It is more resistant to pests and diseases and yields higher quantities.

Suitable Factors for Cultivation:

- Climate: Coffee cultivation requires moderate temperatures (15-30°C) and well-distributed rainfall (1500-3000 mm annually). Arabica prefers cooler climates, while Robusta can tolerate warmer temperatures.
- ▶ Soil: Ideal soil for coffee is well-drained, rich in organic matter, and slightly acidic (pH 6-6.5).

▶ Shade and Altitude:

Shade-grown coffee is preferred for better quality. Higher altitudes affect the flavor and quality, with superior coffee typically grown at greater heights.

Challenges:

Despite the positive outlook, coffee farmers face challenges such as high input costs and labor shortages. Climate change impacts rainfall patterns and temperatures, affecting coffee cultivation. Market volatility and fluctuating prices also pose significant risks. Improved irrigation systems and infrastructure are needed to mitigate these challenges.