



Exit of Foreign Portfolio Investors

For Prelims: Capital Market, Inflation, FPI, US Federal Reserve, Reserve Bank of India, Monetary Policy

For Mains: Significance of FPI, Effect of Exit of FPI on Indian Economy, RBI's Monetary Policy, Effect of US Federal Reserve on Indian Economy

Why in News?

June 2022 witnessed the [worst Foreign Portfolio Investor \(FPI\)](#) selloff since March 2020 when India announced a [nationwide lockdown](#) at Rs. 50,000 crore.

- June was also the ninth on the trot that FPIs had sold net of their assets i.e. sold more than they had purchased.

What Do We Mean by Foreign Portfolio Investors?

- **About:**
 - Foreign portfolio investors are those that invest funds in markets outside of their home turf.
 - Examples of FPIs include stocks, [bonds](#), [mutual funds](#), [exchange traded funds](#), American Depository Receipts (ADRs), and Global Depository Receipts (GDRs).
 - FPI is part of a country's [capital account](#) and is shown on its [Balance of Payments \(BOP\)](#).
 - The BOP measures the amount of money flowing from one country to other countries over one monetary year.
 - They are generally not active shareholders and do not exert any control over the companies whose shares they hold.
 - [The Securities and Exchange Board of India \(SEBI\)](#) brought new [FPI Regulations, 2019](#), replacing the erstwhile FPI Regulations of 2014.
 - FPI is often referred to as **“hot money”** because of its tendency to flee at the first signs of trouble in an economy. FPI is more liquid, volatile and therefore riskier than FDI.
- **Significance of FPI:**
 - **Accessibility to International Credit:**
 - Investors may be **able to reach an increased amount of credit** in foreign countries, enabling the investor to utilize more leverage and generate a higher return on their equity investment.
 - **Increases the Liquidity of Domestic Capital Markets:**
 - As markets become more liquid, **they become more profound and broader**, and a more comprehensive range of investments can be financed.
 - As a result, **investors can invest with confidence** knowing that they can promptly manage their portfolios or sell their financial securities if access to their savings is required.
 - **Promotes the Development of Equity Markets:**
 - Increased competition for financing leads to rewarding superior performance, prospects, and corporate governance.
 - As the market's liquidity and functionality evolve, equity prices will become value-

relevant for investors, ultimately driving market efficiency.

How Big are FPI In India?

- FPIs are the largest non-promoter shareholders in the Indian market and their investment decisions have a huge bearing on the stock prices and overall direction of the market.
- Holding of FPIs (in value terms) in companies listed on [National Stock Exchange](#) stood at Rs. 51.99 lakh crore as on 31st March 2022, a decrease of 3.36% from Rs. 53.80 lakh crore as on 31st December 2021 due to the sustained sell-off since October 2021.
- FPIs hold sizeable stakes in private banks, tech companies and big caps like Reliance Industries.
- The US accounts for a major chunk of FPI investments at Rs. 17.57 lakh crore as of May 2022, followed by Mauritius Rs. 5.24 lakh crore, Singapore Rs. 4.25 lakh crore and Luxembourg Rs. 3.58 lakh crore, according to data available from the National Securities Depository Ltd (NSDL).

What Factors Encourage FPI Moves?

- **Economic Growth:**
 - Promise of attractive returns on the back of [economic growth](#) draws investors including FPIs into a country's markets.
 - As per data from the National Securities Depositories Ltd. (NSDL), FPIs brought in about Rs. 3,682 crore in 2002.
 - This grew to Rs. 1.79 lakh crore in 2010. This correlates with the concurrent expansion of economic output in that period, despite the 2008 global financial crisis which saw FPI selloffs in that timeframe in the country
 - Likewise, **FPIs withdrew Rs.1.18 lakh crore in March 2020 alone** — the month when India announced a nationwide lockdown, triggering concerns around economic growth.
- **US Federal Reserve:**
 - Rate hikes by the [Federal Reserve](#) affects not only the US economy, but also shapes the macroeconomic outlook and exerts a certain degree of influence on the [monetary policies](#) in other emerging economies.
 - **Correlation of Federal Reserve & Indian Markets:**
 - **Emerging economies such as India tend to have higher inflation** and higher interest rates than those in developed countries such as the US and many of the (primarily Western) European nations.
 - As a result, financial institutions, particularly [Foreign Institutional Investors \(FIIs\)](#) would want to borrow money in the US at low interest rates in dollar terms and then invest that money in [government bonds](#) of emerging countries such as India in local currency terms to earn a higher rate of interest.
 - When the US Federal raises its domestic interest rates, the difference between the interest rates of the two countries decreases.
 - This makes India less attractive for the currency carry trade, consequently, some of the money may be expected to move out of the Indian markets and flow back to the US.

Why have FPIs been selling India holdings?

- **Post Pandemic Effects:**
 - Post Pandemic, recovery in the Indian economy has been uneven.
 - The [second wave of the Covid-19](#) pandemic in 2021 devastated lives and livelihoods.
 - The economy stuttered again when a third, albeit less severe, wave saw the spread of the [Omicron variant](#) early in 2021.
 - In addition, the return of pent-up demand in economies worldwide as the pandemic subsided created problems as the pace of recovery caught suppliers off guard, contributing to supplyside shortages.
 - **Pent-up demand describes a rapid increase in demand for a service or product**, usually following a period of subdued spending.
- **Russia Ukraine Conflict:**
 - Sunflower and wheat supplies from these [two nations](#) were impacted, leading to a rise in

global prices for these crops.

- As supplies in general tightened across the globe, commodity prices too rose and overall inflation accelerated.
- India witnessed a quickening pace in price rise that stayed above the **Reserve Bank's** upper comfort level of 6% for five months running, touching 7.8% in April, before receding to a slightly less aggressive 7.04% in the subsequent month.
- The S&P Global India Manufacturing **Purchasing Managers' Index (PMI)** slid to 53.9 in June — the lowest level in nine months — from 54.6 in the previous month. Experts attribute this to inflation pressures, which also dampened business confidence sentiment to a 27 month low in June, as per survey based findings.
- **US Federal Reserve:**
 - Recently, the US Federal Reserve announced the most aggressive interest rate increase in almost 30 years, raising the benchmark borrowing rate by 0.75% points in its battle against surging **inflation**.
 - When the differential between the interest rates in the U.S. and other markets narrows, and if such an occurrence is accompanied by the strengthening of the dollar, then the ability of investors to realize healthy returns is impacted.
 - If the Dollar strengthens against the Rupee, then an investor is able to realize fewer Dollars for a given quantum of Rupee assets liquidated.
 - Investors tend to exit assets seen as 'risky' such as in emerging markets like India, Brazil or South Africa.
 - Indeed, the Rupee has been **depreciating** against the Dollar.
 - The rupee touched its record low of 79.33 against the greenback in July 2022.

What Impact Does an FPI Selloff Have?

- **Local Currency:**
 - When FPIs sell their holdings and repatriate funds back to their home markets, the local currency takes a beating.
 - Investors sell rupees in exchange for their home market currency.
 - As supply of the rupee in the market rises, its value declines.
 - As a result, we have to shell out more funds to import the same unit of goods.
- **On Exports & Imports:**
 - India being one of the largest **crude oil** importers of the world.
 - A weaker rupee vis-à-vis a dollar results in more expensive imports of crude oil that may put cost-driven inflationary push across the whole economy and especially in those sectors that are highly sensitive to crude oil price movements.
 - India's exports on the other hand, notably IT and IT-enabled services - will benefit to some extent from a stronger dollar with respect to the rupee.
 - However, the same benefit may not fully accrue to exporters due to strong competition in the export market.
- **Reserves:**
 - India's **foreign exchange reserves** have fallen USD46 billion in the last nine months to USD596.45 billion as on 10th June 2022, mainly due to the dollar appreciation and FPI withdrawals.
- **Other Effects:**
 - Foreign investors pulling out can result in a **decline in stocks and equity mutual fund investments**.
 - A lower rupee against the dollar keeps import bills higher, pushing inflation even higher than it is now.
 - Higher inflation is detrimental to the overall market. If the rupee does not strengthen, FPI outflows will continue, which is another negative.
 - Travellers and students studying abroad will have to shell out more rupees to buy dollars from banks.

UPSC Civil Services Exam, Previous Year Questions (PYQ)

Q. Which of the following is issued by registered foreign portfolio investors to overseas investors who want to be part of the Indian stock market without registering themselves

directly?

- (a)** Certificate of Deposit
- (b)** Commercial Paper
- (c)** Promissory Note
- (d)** Participatory Note

Ans: (d)

Exp:

- A Participatory Note or P-note is an instrument issued by a registered Foreign Institutional Investor (FII) to an overseas investor who wishes to invest in Indian stock markets without registering themselves with the market regulator, the Securities and Exchange Board of India (SEBI).
- A Certificate of Deposit is a savings certificate with a fixed maturity date and specified fixed interest rate that can be issued in any denomination aside from minimum investment requirements.
- Commercial Paper is an unsecured money market instrument issued in the form of a Promissory Note. It was introduced in India in 1990 with a view to enable highly rated corporate borrowers to diversify their sources of short-term borrowings and to provide an additional instrument to investors.
- A Promissory Note is a financial instrument that contains a written promise by one party (the note's issuer or maker) to pay another party (the note's payee) a definite sum of money, either on demand or at a specified future date.
- **Therefore, option (d) is the correct answer.**

Source: TH

Reforms in Education Sector

For Prelims: University Grants Commission, National Assessment and Accreditation Council, National Education Policy, Parliamentary Committees

For Mains: Reforms in Education Sector, Features of National Education Policy, Effects on Accreditation, Significance of Education in Economic Growth

Why in News?

The Parliamentary Standing Committee carried out a review of education standards, accreditation process, research, examination reforms and academic environment in India's higher education institutes.

What are the Findings of the Report?

- The higher education department of the Union ministry of Education informed the committee that only 30% of the universities and 20% of the colleges are in the accreditation system.
 - Less than 9,000 colleges out of a total of 50,000 colleges are accredited.
- Many deemed universities, in order to make quick money, have started Open Distance Learning courses undermining qualitative research work.

- Several state universities regularly fail to carry out assessments smoothly, often reporting instances like question paper leaks and rampant cases of copying.

What Do We Know About the Accreditation System?

- **About:**
 - Accreditation is a procedure wherein standardisation happens as to what minimum benchmarks are to be created.
 - It is a formal, independent verification that a program or institution meets established quality standards in terms of testing, inspection, or certification.
- **Significance:**
 - It is an important tool to improve the quality of product and services in the field of health, education, food as well as other areas.
 - It also promotes the adoption of quality standards relating to Quality Management Systems, Food Safety Management Systems and Product Certification.
 - It helps in realizing the objective of improving quality competitiveness of Indian products and services.
- **Grading Process:**
 - Presently, the [National Assessment and Accreditation Council \(NAAC\)](#), an autonomous body under the [University Grants Commission \(UGC\)](#), evaluates higher education institutions on a range of parameters, including teaching-learning, research and infrastructure, and gives institutions grades ranging from A++ to C.
 - If an institution is given a D, it means it is not accredited.
 - The grading remains valid for five years.
- **The International Accreditation Forum:**
 - [IAF](#) is the world association of Conformity Assessment Accreditation bodies and other bodies interested in conformity assessment in the fields of management systems, products, services, personnel and other similar programs of conformity assessment.
 - **Conformity Assessment Bodies:** These are bodies that can certify product, process or services, management systems or persons.
 - E.g. International Organization for Standardization (ISO).
 - India is also a member.

What are the Key Recommendations of the Committee?

- **Analysis of Issues:**
 - **Issues faced by NAAC and the National Board of Accreditation (NBA)**, which recognises courses offered by higher education institutions, should be analysed and worked on.
- **Frequent Accreditations:**
 - The norms for **frequency and periodicity of the accreditations** be defined so that institutions do not develop a tendency to carry the score for years without a review, which leads to complacency and undermines quality mechanisms.
- **Exam Management:**
 - The committee recommends that the parameter of the institution's exam management competency be also considered as a mandatory norm towards consideration of accreditation.
 - It also suggested strict actions, including derecognition, for higher institutions involved in malpractices in collaboration with coaching centres.
 - All universities and colleges must be scored on how foolproof their examinations are.
- **Deemed Universities:**
 - The **So-called "deemed universities"** should also **be allowed to use the term 'university'** since there is no such concept in other countries.
- **Funding of Institutions:**
 - To encourage more funding, it suggested **"donations by individuals, alumni and institutions"** should be 100% tax deductible.
- **Digital Courses Norms:**
 - It also noted that **there was an urgent need to revisit and revamp the norms** for starting online courses.

- With regard to Open Distance Learning courses, the **committee strongly recommended adequate measures** to curb such tendencies after carefully examining the options.

What Initiatives have India Taken for the Education Sector?

- **National Education Policy:**
 - [NEP 2020](#) aims at making “**India a global knowledge superpower**”.
 - The Cabinet has also approved the renaming of the Ministry of Human Resource Development to the Ministry of Education.
 - The NEP cleared by the Cabinet is only the third major revamp of the framework of education in India since independence.
 - The two earlier education policies were brought in 1968 and 1986.
- **Margadarshan:**
 - Institutions having good accreditation records or the top-performing institutions are selected to mentor relatively newer 10 to 12 potential institutions.
 - Best teaching and learning practices followed in the mentor institute will be simulated in the identified mentee institutions.
 - The mentee institutions will also be provided with funding up to Rs. 50 lakhs (per institution) over a period of three years (in installments), for carrying out various activities like training, workshops, conferences, etc.
- **Academic Bank of Credit:**
 - It is envisaged as a digital bank that holds the credit earned by a student in any course.
 - It is a major instrument for facilitating multidisciplinary and holistic education.
 - It will provide multiple entry and exit options for students in Higher education.
 - It will make the youth future-oriented and open the way for an [Artificial Intelligence \(AI\)](#) - driven economy.

[Source: HT](#)

Hadron Collider Run 3

For Prelims: Hadron Collider, Particle Physics, God Particle, Big Bang Theory, CERN

For Mains: Evolution of Matter, Significance of LHC, Significance of Particle Physics, Concept of Standard Model of Physics

Why in News?

[The European Organisation for Nuclear Research \(CERN\)](#) has reignited the [Large Hadron Collider](#) for the third time in July 2022 — 10 years after it enabled scientists to find the ‘God particle’ or Higgs Boson.

What Do We Need to Know About LHC?

- **About:**
 - The Large Hadron Collider is a giant, complex machine built to study particles that are the smallest known building blocks of all things.
 - In its operational state, it fires two beams of protons almost at the speed of light in opposite directions inside a ring of superconducting electromagnets.
 - The magnetic field created by the superconducting electromagnets keeps the protons in a

tight beam and guides them along the way as they travel through beam pipes and finally collide.

- LHC's powerful electromagnets carry almost as much current as a bolt of lightning; they must be kept chilled.
 - The LHC uses a distribution system of liquid helium to keep its critical components ultracold at minus 271.3 degrees Celsius, which is colder than interstellar space.

▪ **Latest Upgrade:**

- This is the LHC's third run, it will operate round-the-clock for four years at unprecedented energy levels of 13 tera electron volts. (An electron volt is the energy given to an electron by accelerating it through 1 volt of electric potential difference).
- Scientists are aiming to be delivering 1.6 billion proton-proton collisions per second" for the ATLAS and CMS experiments.
 - ATLAS: Largest general purpose particle detector experiment at the LHC.
 - CMS: one of the largest international scientific collaborations in history, with the same goals as ATLAS, but which uses a different magnet-system design.

▪ **Significance:**

- Physicists want to use the collisions **to learn more about the Universe at the smallest scales, and to solve mysteries such as the nature of dark matter.**
- The LHC's goal is to allow physicists **to test the predictions of different theories of particle physics.**
 - Technology found in particle accelerators **is already used for certain types of cancer surgery etc.**

How has LHC Performed in Previous Runs?

▪ **First Run:**

- A decade ago, CERN had announced to the world the discovery of the [Higgs boson or the 'God Particle'](#) during the LHC's first run.
 - The discovery concluded the decades-long quest for the 'force-carrying' subatomic particle, and proved the existence of the Higgs mechanism, a theory put forth in the mid-sixties.
 - This led to Peter Higgs and his collaborator François Englert being awarded the Nobel Prize for physics in 2013.
 - The Higgs boson and its related energy field are believed to have played a vital role in the creation of the universe.

▪ **Second Run:**

- It began in 2015 and lasted till 2018. The second season of data taking produced five times more data than Run 1.

What Do We Know About God Particle?

- In 2012, the Nobel-winning discovery of the Higgs boson (also known as 'God particle') validated the [Standard Model of physics](#), which also predicts that about 60% of the time a Higgs boson will decay to a pair of bottom quarks.
- In 1960s Peter Higgs was the first person to suggest that this particle might exist.
 - The Higgs field was proposed in 1964 as a new kind of field that fills the entire Universe and gives mass to all elementary particles. The Higgs boson is a wave in that field. Its discovery confirms the existence of the Higgs field.
- **The Standard Model of Physics:**
 - The Standard Model of particle physics is the theory which **describes three of the four known fundamental forces** (the electromagnetic, weak, and strong interactions, and not including the gravitational force) in the universe, as well as classifies all known elementary particles.
 - It explains how particles called **quarks** (which make up protons and neutrons) and **leptons** (which include electrons) make up all known matter.
 - It also explains how force carrying particles, which belong to a broader group of bosons, influence the quarks and leptons.
 - Scientists do not yet know how to combine gravity with the Standard Model.
- The Higgs particle is a boson.

- Bosons are thought to be particles which are responsible for all physical forces.
 - Other known bosons are the photon, the W and Z bosons, and the gluon.

India and CERN

- India in 2016 became an associate member of the European Organisation for Nuclear Research (CERN).
- India's association with CERN goes back decades with an active involvement in the construction of the Large Hadron Collider (LHC), in the areas of design, development and supply of hardware accelerator components/systems and its commissioning and software development and deployment in the machine.
- India was inducted as an 'Observer' at CERN in 2004. Its upgrade as associate member allows Indian companies to bid for lucrative engineering contracts and Indians can apply for staff positions at the organisation.
- The associate membership would cost India approximately Rs. 78 crore annually though it still wouldn't have voting rights on decisions of the Council.
- Indian scientists have played a significant role in the A Large Ion Collider Experiment (ALICE) and Compact Muon Solenoid (CMS) experiments that led to the discovery of the Higgs Boson.

UPSC Civil Services Examination, Previous Year Question (PYQ)

Q. The efforts to detect the existence of Higgs boson particle have become frequent news in the recent past. What is/are the importance of discovering this particle?

1. It will enable us to understand as to why elementary particles have mass.
2. It will enable us in the near future to develop the technology of transferring matter from one point to another without traversing the physical space between them.
3. It will enable us to create better fuels for nuclear fission.

Select the correct answer using the codes given below:

- (a) 1 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

Ans: (a)

Exp:

- Basic equations of the Unified Theory described the electro-weak force and its associated force-carrying particles, namely the photon, and the W and Z bosons. All of these particles emerged without a mass. Protons are with negligible mass, but W and Z have mass nearly 100 times that of a proton.
- Theorists Robert Brout, Francois Englert and Peter Higgs made a proposal known as Brout-Englert-Higgs mechanism that gives a mass to the W and Z when they interact with an invisible field, now called the "Higgs field", which pervades the universe.
- The Higgs boson is the visible manifestation of the Higgs field.
- Just after the Big Bang, the Higgs field was zero, but as the universe cooled and the temperature fell below a critical value, the field grew spontaneously so that any particle interacting with it acquired a mass.
- The more a particle interacts with this field, the heavier it is. Particles, like the photon that do not interact with it are left with negligible mass.
- Like all fundamental fields, the Higgs field has an associated particle – the Higgs boson. **Hence, statement 1 is correct and there is no relation of the Higgs boson particle with**

statements 2 and 3.

- Therefore, option (a) is the correct answer.

[Source: IE](#)

Extension to OBC Sub-Categorisation Commission

For Prelims: Reservation of Other Backward Classes, National Commission for Backward Classes

For Mains: Sub-Categorisation Commission and its objectives

Why in News?

Recently, the Union Cabinet gave the 13th **extension to the Justice Rohini Commission**, to examine [sub-categorisation of Other Backward Classes](#) (OBCs) and submit its report by 31st January 2023.

- The initial deadline to submit the commission's report was 12 weeks — by 2nd January, 2018.

What are the Key Highlights?

- **Commission:**
 - The commission was **set up on 2nd October, 2017 under Article 340 of the Constitution.**
 - It was tasked with sub-categorisation of the Other Backward Classes (OBCs) and equitable distribution of benefits reserved for them.
 - In 2015, the [National Commission for Backward Classes \(NCBC\)](#) had recommended that OBCs should be categorised into **extremely backward classes, more backward classes and backward classes.**
 - NCBC has the **authority to examine complaints and welfare measures** regarding socially and educationally backward classes.
- **Commission's Terms of References:**
 - To **examine the uneven distribution of reservation benefits** among different castes in the central OBC list.
 - To **work out the mechanism, criteria, norms and parameters in a scientific approach** for sub-categorisation within such OBCs.
 - To **take up the exercise of identifying the respective castes/communities/sub-castes/synonyms** for comprehensive data coverage.
 - To **study and recommend correction of any repetitions, ambiguities, inconsistencies and errors** of spelling or transcription.
- **Work Done So Far:**
 - It has met representatives of state governments, state backward classes commissions, community associations etc. apart from [obtaining caste-wise data of OBCs](#) in higher educational institutions and recruits in central departments, public sector banks and financial institutions.
 - In 2021, the commission proposed to divide OBCs into four subcategories numbered 1, 2, 3 and 4 and split the 27% into 2, 6, 9 and 10%, respectively.
 - It also recommended complete digitisation of all OBC records and a standardised system of issuing OBC certificates.

How has the status of OBC reservation evolved over time?

- The **Kalelkar Commission, set up in 1953**, was the **first to identify backward classes other than the [Scheduled Castes \(SCs\)](#)** and Scheduled Tribes (STs) at the national level.
- The **Mandal Commission Report, 1980** estimated the **OBC population at 52% and classified 1,257 communities** as backward.
 - It recommended increasing the existing quotas, which were only for SC/ST, from 22.5% to 49.5% to include the OBCs.
- **The central government reserved 27%** of seats in union civil posts and services for OBCs [Article 16(4)]. The quotas were subsequently enforced in central government educational institutions [Article 15 (4)].
 - In 2008, the **Supreme Court** directed the central government to **exclude the creamy layer (advanced sections) among the OBCs**.
- The **102nd Constitution Amendment Act, 2018** provided constitutional status to the National Commission for Backward Classes (NCBC), which was previously a statutory body under the Ministry of Social Justice and Empowerment.

[Source: IE](#)

The Global Findex Database 2021

For Prelims: Financial Inclusion, Digital Banking, Formal Banking

For Mains: Global Findex Database 2021, World Bank

Why in News?

Recently, the [World Bank](#) has released '**The Global Findex Report 2021**'.

- The Global Findex surveys over 125,000 adults in 123 economies during Covid-19 to better understand **how people use formal and informal financial services and digital payment**.

What are the Findings?

- **Account Ownership:**
 - The account ownership worldwide increased by 50 % to reach 76 % of the global adult population.
 - Recent growth in [account ownership](#) has been widespread across dozens of developing economies and **most of the newly account opened in India and China**.
- **Access of Formal Banking:**
 - Large shares of the **global population without formal banking (130 million and 230 million, respectively) lives in India and China** because of their size.
 - Women are **often excluded from formal banking services because they lack official forms of identification, do not own a mobile phone** or other forms of technology and

have lower financial capability.

- 74 % of men had an account in developing countries whereas women are six points behind, accounts for 68 %.

▪ **Unbanking:**

- 24 % of adults are unbanked globally. Lack of money is one of the multiple reasons. Distance is a barrier for 31 % of unbanked adults.
 - People without an account at a financial institution or a mobile money service provider have been classified as unbanked.
- Globally, 64 % of unbanked adults have primary education or less.
- Worldwide, 36 % of unbanked adults said that financial services are too expensive.

▪ **Covid-19 and Digital Payments:**

- [Covid-19 pandemic](#) catalyzed growth in the use of digital payments.
- In developing countries in 2021, 18 % of adults paid utility bills directly from an account. About one third of these paid bills online for the first time.

▪ **Mobile Money:**

- [Mobile money](#) has become enabler of financial inclusion in [Sub-Saharan Africa](#), especially for women.
- Sub-Saharan Africa is home to all **11 economies in which a larger share of adults-only had mobile money account** rather than a normal bank account.

▪ **Financial providers helped expand financial Access:**

- Government, private employers and financial providers helped expand financial access and usage among the unbanked by lowering barriers and improving infrastructure.
- Financial inclusion has become a cornerstone for both short-term relief and sustainable recovery efforts since the Covid-19 pandemic.

▪ **Financial Worries:**

- Adults in developing countries are more likely to worry about finances than adults in high-income countries.
- Concerns around medical expenses **are highest in Sub-Saharan Africa and South Asia**, where 64 % of adults are very worried and the lowest in East Asia and the Pacific, where 38 % of adults are very worried.

What are the Recommendations?

- As to move out of the pandemic and as governments seek to consolidate the momentum and expand access to digital banking services, **policies must factor in protections for the most vulnerable**, including women, the poor and those with limited educational attainment or financial literacy.
- The gender gap in mobile access must be addressed to ensure equitable progress on financial inclusion.

[Source: DTE](#)

Direct-seeded Rice

For Prelims: Direct Seeded Rice (DSR), water stress, groundwater

For Mains: Benefits and issues of Direct Seeded Rice method of rice implantation

Why in News?

Recently, the state of Punjab was unable to achieve its target in the water-saving method (direct-seeded

rice).

What is Direct Seeded Rice (DSR)?

- **Direct Seeded Rice(DSR)**, also known as the 'broadcasting seed technique,' is a **water-saving method of sowing paddy**.
- In this method, **seeds are directly drilled into the fields. In contrast to the traditional water-intensive method of transplanting rice seedlings from a nursery to waterlogged fields**, this method saves groundwater.
- There is no nursery preparation or transplantation involved in this method.
- Farmers have to only level their land and give one pre-sowing irrigation.

What are the Advantages of DSR?

- **Require Less Number of Labours:**
 - DSR can **solve labour shortage problems** because like the traditional method it does not require a paddy nursery and transplantation of 30 days old paddy nursery into the main puddled field.
- **Avenues for Groundwater:**
 - It offers **avenues for ground water recharge as it prevents the development of hard crust** just beneath the plough layer due to puddled transplanting.
 - It matures 7-10 days earlier than the puddle transplanted crop, therefore giving more time for management of paddy straw.
- **Increase in Yield:**
 - According to the results from research trials and farmers' field survey, after this technique the yield is one to two quintals per acre higher than puddled transplanted rice.

What are the Major Issues Related to DSR?

- **Extreme climate:**
 - **High temperatures and deficient rainfall** are mainly to blame.
 - The temperature was in the range of 47-48 degrees Celsius on some days, whereas the ideal temperature is 42-43°C during the period.
 - **Farmers were hesitant** to choose DSR because their wheat crops had already suffered as a result of the heat wave.
- **Reluctance by Farmers:**
 - **Due to a lack of support from the government** in the form of providing a good variety of weeds, and unable to supply uninterrupted electricity during the sowing season of DSR that's why farmers found it very difficult to irrigate the field using an electric motor.
- **Governance issues:**
 - Punjab Government's **uninterrupted electricity supply for puddling season which begins in mid-June** is not beneficial for DSR as its sowing season is between **early May to mid-June** and that's why it is beneficial for the traditional method.
- **Other challenges:**
 - It includes **closed canals, erratic electricity supply for operating tube wells for irrigation, and issues of weeds and rats**.
 - **Water availability was a challenge** due to **deficient to no rainfall** in many parts of the state of Punjab during May.

Way Forward

- The need of the hour is to get proper **feedback and a grievance redressal** programme by the government.
- Need **Weed management to enhance harvesting crops** in DSR, as poor quality of weedicides distributed by the government.
- **Leverage technology and work on innovative solutions** to promote the DSR method, as it requires less water than the traditional method, which could also help in **tackling water stress and groundwater in the region**.

UPSC Civil Services Examination Previous Year Question (PYQ)

Q. What is/are the advantage/advantages of zero tillage in agriculture? (2020)

1. Sowing of wheat is possible without burning the residue of the previous crops.
2. Without the need for a nursery of rice saplings, direct planting of paddy seeds in the wet soil is possible.
3. Carbon sequestration in the soil is possible.

Select the correct answer using the code given below:

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 3 only
- (d) 1, 2 and 3

Ans: D

Exp:

- Zero Tillage, also called no-till farming, is a cultivation technique in which the soil is disturbed only along the slit or in the hole into which the seeds are planted, the reserved detritus from previous crops covers and protects the seedbed. As per a study, it has been found that farmers in north India can not only help reduce air pollution but also improve the productivity of their soil and earn more profits if they stop burning their crop residue and instead adopt the concept of no-till farming. Under zero tillage, the direct seeding of wheat into unploughed soil and with rice residues left behind has proved very beneficial. It saved on water, labour and use of agrochemicals, reduced greenhouse gas emissions, and improved soil health and crop yield and thus benefitted both farmers and the society at large. Hence, statement 1 is correct.
- **Direct Seeded Rice (DSR)** is a viable option to reduce the unproductive water flows. DSR refers to the process of establishing a rice crop from seeds sown in the field rather than by transplanting seedlings from the nursery. Conventional rice establishment system requires a substantial amount of water. It has been reported that water up to 5000 litres is used to produce 1 kg of rough rice. However, with increasing shortage of water, dry DSR with minimum or zero tillage further enhances the benefits of this technology by saving labour. Hence, statement 2 is correct.
- No tilled soils tend to be cooler than others, partly because a surface layer of plant residues is present. Carbon is sequestered in the soil enhancing its quality, reducing the threat of global warming. Hence, statement 3 is correct. Therefore, option (d) is the correct answer.

[Source: DTE](#)

Pasmanda Community

Why in News?

Recently, Pasmanda Community has gained attention of many political parties for inclusive growth and eradication of intra caste discrimination.

Who are Pasmanda Muslims?

- **‘Pasmanda’**, a Persian term meaning **“those who have fallen behind”** refers to Muslims belonging to the **shudra (backward) and ati-shudra (Dalit) castes**.
 - It was adopted as an oppositional identity to that of the dominant ashraf Muslims (forward castes) in 1998 by the Pasmanda Muslim Mahaz, a group which mainly worked in Bihar.
- Pasmandas encompass those who are socially, educationally and economically backward and make up the majority of the Muslim community in the country.
- The term **“Pasmanda” is majorly used by Muslim associations** in Uttar Pradesh, Bihar, and other parts of India to define themselves as Muslim communities historically and socially oppressed by caste.
- Backward, Dalit and tribal Muslim communities are now organising under the identity of Pasmanda. These communities includes:
 - Kunjre (Raen), Julahe (Ansari), Dhunia (Mansuri), Kasai (Qureishi), Fakir (Alvi), Hajjam (Salmani), Mehtar (Halalkhor), Gwala (Ghosi), Dhobi (Hawari), Lohar-Badhai (Saifi), Manihar (Siddiqui), Darzi (Idrisi), Vangujjar, etc.

What are the Provisions Available for Minorities?

- **Constitutional:**
 - **Article 29:**
 - It provides that any section of the citizens residing in any part of India having a distinct language, script or culture of its own, shall have the right to conserve the same.
 - It grants protection to both religious minorities as well as linguistic minorities.
 - However, the SC held that the scope of this article is not necessarily restricted to minorities only, as use of the word ‘section of citizens’ in the Article includes minorities as well as the majority.
 - **Article 30:**
 - All minorities shall have the right to establish and administer educational institutions of their choice.
 - The protection under Article 30 is confined only to minorities (religious or linguistic) and does not extend to any section of citizens (as under Article 29).
 - **Article 350-B:**
 - **The 7th Constitutional (Amendment) Act 1956** inserted this article which provides for a Special Officer for Linguistic Minorities appointed by the President of India.
 - It would be the duty of the Special Officer to investigate all matters relating to the safeguards provided for linguistic minorities under the Constitution.
- **Legal:**
 - **National Commission for Minority Education Institution (NCMEI) Act, 2004:**
 - It gives minority status to the educational institutions on the basis of six religious communities notified by the government under the NCMEI Act, 2004-- Muslims, Christians, Sikhs, Buddhists, Zoroastrians (Parsis) and Jains.

Who are the minorities notified by the Government of India?

- Currently, only those communities notified under section 2(c) of the **NCM Act, 1992**, by the central government are regarded as minority.
- In 1992, with the enactment of the NCM Act, 1992, the MC became a statutory body and was renamed as the NCM.
- In 1993, the first Statutory National Commission was set up and five religious communities viz. The Muslims, Christians, Sikhs, Buddhists and Zoroastrians (Parsis) were notified as minority communities.
- In 2014, Jains were also notified as a minority community.

Source: TH

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