GS SCORE
ANALYST
Current Affairs Fortnightly

Issue- I (1-15) October, 2017
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TOPICAL ANALYSIS

Systemic Crisis in India's Urban Transport Infrastructure

CONTEMPORARY ISSUES

1. Economic Issue
- Critical Analysis of Draft Energy Policy
- Demonetization and its Im pact on Microfinance Sector
- Broad Based Trade and Investment Agreement (India-EU FTA Talks)
- Critical Analysis of Stand up India Scheme
- New PPP Policy

2. Social Issue
- Living Will and Euthanasia
- Why Drop-out Levels are High in India?
- Global Slavery Index Report
- Global Hunger Index, 2017

3. Governance Issue
- T.K. Visanathan Committee on Hate Speech
- Police Modernization Scheme
- Supreme Court judgments on Rape
- Firecracker Ban by Supreme Court

4. Environmental
- Stubble Burning and its Impact
- Bottom Trawling to Deep Sea Fishing: Sustainable Fishing

5. Internal Security
- Non Lethal Weapons to Control Crowd and Laws Related to it
- Poor Status of Border Infrastructure in India

6. International Issue
- Race for Resources in Central Asia
- SPAIN Hit by Constitutional Crisis

It also cover Important News for Prelims

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Test Starts
11th November 2017

Test Timings:
9:00 AM to 12:00 Noon
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12:30 PM

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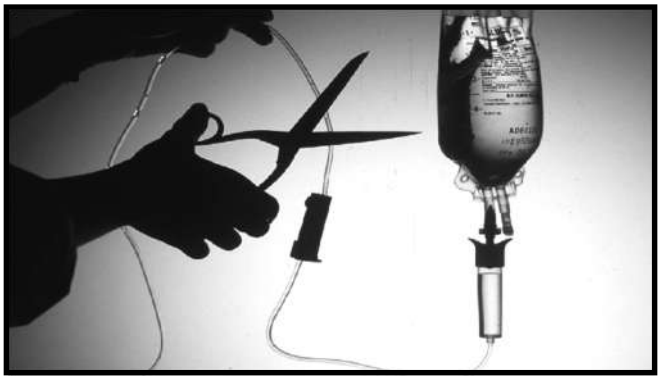

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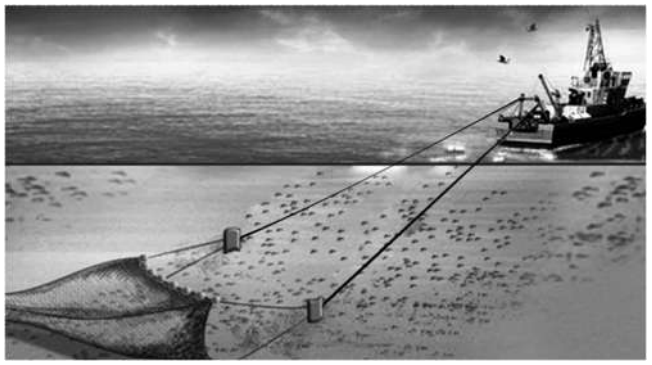

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- Total 20 Tests: 12 Sectional + 8 Mock
- Test Discussion/Value Addition Class after each Test
- Model Hint + Supplementary Notes
- One-to-one Discussion with Respective Faculty after Copy Evaluation

Batch Starts 10th Nov., 2017
4:30 to 7:30 PM

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POL. SCIENCE Test Series	PUB. AD. Test Series	HISTORY Test Series
By: Dr. PIYUSH CHOUBEY	By: ASHUTOSH PANDEY	By: PIYUSH KUMAR
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10th November 2017	9th November 2017	6th November 2017

Prelims TEST SERIES 2018

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Total: 44 Tests

23	6	8	3	4
Sub-Sectional Tests	Sectional Tests	Current Affairs Tests	CSAT Tests	Mock Tests

&

25 Revision Classes cum Test Discussion

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COVER STORY

Systemic Crisis in India's Urban Transport Infrastructure

Context

India is urbanizing and its urban population is growing at an average rate of around 3% per year. However, there is lower pace of infrastructure growth such as roads, transportation and poor planning of urbanization with respect to roads, public transport, residential and industrial area. This mismatch in urbanization & infrastructure development along with poor urban planning has created several challenges for the general public.

Public transport Solutions like Delhi Metro is a success story to ease Urban mobility problems but recurrent fare hikes and high debt of DMRC is creating a mix situation.

The present article analyzes the major problems faced by urban transport sector, the issues that influence effective policy formulation and implementation in the transport sector and the future roadmap to tackle crisis.

Introduction

India's transport sector is large and diverse as it caters to the transport needs of 1.2 billion people. Efficient and reliable urban transport systems are crucial for India. The significance of urban transport stems from the role that it plays in reduction of poverty, by improving access to labour markets and thus increasing incomes of poorer sections of the society. Services and manufacturing industries particularly concentrate around major urban areas, and require efficient and reliable urban transport systems to move workers and connect production facilities to the logistics chain.

Despite the increasing levels of urban mobility access to places, activities and services are becoming increasingly difficult in terms of convenience, cost and time. The present levels of urban mobility (movement of people or businesses in urban areas) are generating a crisis situation characterized by high levels of congestion, environmental pollution and traffic fatalities eventually leading to a situation of undesired accessibility crisis.

Factors influencing Urban Mobility in India

In 468 cities of the country there are several common factors that contribute to the severity of urban transport problems such as:

- **Unplanned Urbanization**
  - Urbanization trends and patterns present unprecedented challenges to urban mobility systems. In 1951, there were only five Indian cities with a population

greater than one million and 42 cities with a population greater than 0.1 million, much of India effectively lived in villages.

- According to 2011 census data, there are three cities with population of above 10 million and another 53 cities with an urban population greater than 1 million. This is leading to haphazard development of urban cities which lacks proper planning mechanism.

- **Rapid Motorisation**
  - Since 2001, the number of vehicles per 1,000 people in Indian metropolitan cities have grown significantly. The total registered vehicles in the country grew at 9.8 per cent between 1991 and 2009.
  - Personalised private vehicles like cars and two-wheelers grew at 9.6 per cent and 10.3 per cent per annum. The growth of registered vehicles in cities with population more than a million is significantly higher than the rest of India. Meanwhile, vehicle registrations in metro cities grew at almost double the rates than that of million-plus cities.
  - In 2011, with nearly 17 million vehicles, the four big cities—Delhi, Bengaluru, Chennai and Hyderabad—alone constituted 12.3 per cent of the total number of vehicles in the country.
- **Dwindling share of Non-Motorised Transportation**
  - Non-Motorised Transportation (NMT), also known as Active Transportation, includes walking, bicycling, other variants such as small-wheeled transport (push scooters, skates and hand carts), and wheelchair travel. In Indian cities, people who commute by walking outnumber those who use private motorised transport.
  - As cities sprawl, the share of NMT reduces drastically creating increased reliance on private modes of transport. Urban design that fosters walking and cycling is under threat as sprawl based urban design is becoming the norm in big cities. The plans for new extensions and townships are still based on low-density, segregated land use with wide roads.
- **Gaps in Laws and Regulations**
  - Presently, there is no legislation at central, state or local level that comprehensively covers urban transport requirements of Indian cities. The current systems of laws, regulations and governance for urban transport are the legacy of an era when Indian cities were sparsely populated and had not yet witnessed the kind of transport problems they are encountering today.
- **Fragmented Institutional Frameworks**
  - Urban transport systems require several functions to be performed in a well-coordinated manner for seamless and comfortable travel experience for commuters. Unfortunately, these are performed by multiple agencies under the central, state and city governments which do not necessarily work together.
  - According to the Seventh Schedule (Article 246) of the Indian Constitution, urban development, which includes urban transport, is in the State List.
  - While, in some states, the transport department undertakes urban transport planning, in others, it is the urban development or municipal administration at the urban level that does it.
- Limitation to road expansion; Resource (land & investment) constraints have come in the way of adequate investments in increasing road capacity and even in undertaking timely repair. Inefficient systems of construction coupled with poor maintenance have resulted in poor road infrastructure.

Implications of poor Urban Transport Policy

- **Road congestion**
  - As population increases, the average travel distances as well as intensity are expected to increase as there is a direct correlation between the two indicators.
  - Average trip length for metro cities including Bengaluru are over 8 km, while it is 6 km or less for all other metro cities. As more people travel over longer distances on regular basis for employment and education purposes, will inevitably lead to road congestion.
- **Parking problems**
  - The acute shortage of parking spaces both on and off the streets in Indian cities increases the time spent searching for a parking spot and induces traffic congestion.
  - High proportion of Indian streets are faced with on-street parking issue.
  - This problem is especially acute in smaller, compact Indian cities.
- **Air pollution**
  - The severity of air pollution in Indian cities based on CPCB's (Central Pollution Control Board) air quality classification there is a wide variation in the pollution concentration and severity across cities.
  - Cities are considered critically polluted if the levels of criteria pollutants (namely PM10 and NO2) are more than 1.5 times the standard.
  - Results show that half of the residential areas in cities monitored by CPCB are at critical levels of air pollution.
  - Air pollution in Indian cities is the fifth leading cause of death in India. Annually, about 620,000 premature deaths occur due to air pollution in Indian cities.
- **Road safety**
  - Expressing concern over one road accident every minute and one accident death every four minutes in urban areas and half of the victims being pedestrians, cyclists and those using two wheelers, there is a need for an affordable, comfortable, reliable and safe public transport to reduce demand for private motorized vehicles.
  - The high dependence of migrants on non-motorized transport modes such as walking and cycling causes traffic congestion on common roads where fast-moving motorised traffic shares the roads with slow-moving modes leading to an increasing number of fatalities and road accidents.
  - While progress has been made towards protecting people in cars, the needs of vulnerable groups of road users, primarily cyclists and pedestrians, are not being met. Pedestrian fatalities constitute a significant share of total fatalities and the magnitude is much higher in cities that lack adequate pedestrian facilities. In New Delhi, Bengaluru and Kolkata, the pedestrian fatality share is greater than 40 per cent.

Government Measures to make Public Transport Sustainable and Environment Friendly

The Central Government has taken many important steps to make public transportation system sustainable and environment friendly. The Central Government is working on new policy initiatives to encourage private investments in climate friendly and sustainable public transport systems like Metro rail, Non-motorised Transport and other low carbon emitting systems in urban areas.

The new initiatives under consideration include Green Urban Transport Scheme, new Metro Rail Policy, revision of Metro Acts and standardization and indigenization of Metro systems, aimed at increased private sector participation.

- ***National Urban Transport Policy 2014*** seeks to promote greater use of public transport through various measures.
- National Metro Rail Policy 2017
- New Green Urban Transport Scheme with Central assistance of Rs.25,000 cr to be rolled out.
- Private investments are encouraged to improve public transport in cities.
- Initiative for City urban transport planning which aims at moving people instead of cars.
- ***JNNURM*** - The Central Government has taken up various projects such as financing of buses and Bus Rapid Transit Systems (BRTS) under Jawaharlal Nehru National Urban Renewal Mission.
- Preparation of Urban Bus Specifications to promote use of comfortable buses equipped with ***latest Intelligent Transport System (ITS)*** technology.
- Encouraging reforms in urban transport administration and management at both city and state level by setting up of ***Urban Metropolitan Transport Authority (UMTA),*** Urban Transport Fund etc.
- Organizing annual conference and exhibition on urban transport for knowledge sharing amongst experts and stakeholders, and recognizing the exemplary achievements in the field of urban transport through awards.
- The ***Ministry of Urban Development (MoUD)*** has also provided financial assistance for various traffic/transportation studies and surveys under the Urban Transport Planning Scheme to encourage cities to better plan and manage their urban transport systems.
- MoUD has also initiated ***Sustainable Urban Transport Project (SUTP)*** with the support of Global Environment Facility (GEF) and the World Bank. The main objectives of SUTP are -
  - To strengthen and build capacity of Govt. of India and participating states and cities in planning, financing, implementing, operating and managing, environment friendly Low Carbon Transport System; and
  - To assist states and cities in preparing and implementing certain demonstration environment-friendly "Green Transport" projects towards reduction of greenhouse gases in the urban environment for achieving paradigm shift from use of personal vehicles to public transport for reducing traffic congestion.
- The existing two Metro Acts made in the context of Kolkata and Delhi Metros are being integrated envisaging more delegation of powers to State Governments besides promoting PPP and private initiatives.
- There is a need for promotion of Non-Motorized transport infrastructure for encouraging walking and cycling. NMT as a viable alternative mode of mobility would be effective if there is a close relationship between work and living place.
- New urban sector initiatives of Smart Cities Mission and Atal Mission for Rejuvenation and Urban Transformation (AMRUT) is encouraging Non-Motorised Transport on a large scale.

Few policies have been discussed below:

- **Green Urban Transport Scheme**
  - The Green Urban Transport Scheme seeks to encourage growth of urban transport along low Carbon path for substantial and measurable reduction in pollution, provide a permanent and sustainable framework for funding urban mobility projects at National, State and City level with minimum recourse to budgetary support by encouraging innovative financing of projects.
  - Under this Scheme, provision of Non-motorised Transport infrastructure, increasing access to public transport, use of clean technologies, adoption of Intelligent Transport Systems (ITS) and private sector participation in urban transport projects will be increased.
  - This scheme is being considered for implementation in cities each with a population of five lakhs and above and all capital cities. Central assistance of about Rs.25,000 cr is estimated to be required which would in turn trigger private investments to meet the resource needs, over the next five years.
- **National Urban Transport Policy 2014:** The objectives of this policy would be achieved through comprehensive approach include Urban Transport Planning, Infrastructure Design, Public Transport, Non-Motorized Transport, Traffic Management, Financing, Governance and Capacity Building.

  The vision statement of the National Urban Transport Policy (NUTP) acknowledges that people occupy centre-stage, and that cities must evolve in a manner that supports the main social and economic activities taking place there. The objectives of the NUTP also broadly focus on making life easier for city residents. The NUTP aims to bring about equitable use of road space with people and not vehicles as the focus. The policy was created to motivate the building of people-centric urban transport solutions instead of focusing on improving the conditions for private motor vehicles. However, even in this regard the NUTP ignores the transportation difficulties and challenges faced by physically disabled persons and aged people.

  The NUTP is more of a policy framework containing general guidelines rather than rules that are implemented. Further, transport is a state subject, thus making the issue of access to the Central government a tricky issue. Considering this, the Centre had to tie include some components of NUTP in JNNURM, and make the funding dependent on the implementation. This is how many cities have introduced BRTS (Bus Rapid Transit System). This has also led states to explore setting up of metros. Also, the central government has initiated the Sustainable Urban Transport Project (SUTP) in partnership with Global Environment Facility (GEF), WB (World Bank) and United Nations Development Programme (UNDP
- **New Metro Rail Policy**

  The Union Cabinet approved the new Metro Rail Policy recently, that focuses on giving clarity on development of projects, collaborations, participation, standardising norms, financing and creating a procurement mechanism so that the projects can be implemented effectively.

Key Features:

- The Metro rail projects will be approved and aided by the Central government only if their is private participation and the projects ensures last-mile connectivity for commuters.

- The policy allows respective states to formulate rules and regulations and it empowers them to establish permanent fare fixation authorities.
- The projects will now be cleared on the basis on economic internal rate of return of 14%. This is considered one of the widely followed best practices. It will alter the system that runs on the current financial internal rate of return of 8%.
- The policy provides models for states seeking to develop Metro projects with help of the Centre.
- The three models are outlined in the policy with all three models have a mandatory requirement of private participation.
  - Public-Private Partnership with Central assistance. This will be part of the Union Finance Ministry's viability gap funding scheme.
  - Grant by Centre whereby 10% of Metro project cost will be provided by the Central government as lump sum amount.
  - 50-50% Equity sharing model taken between the Centre and state.
- Since Metro projects require huge capital, they were usually financed by the Centre and states with equity and grants. Some amount is usually raised by investment bodies like in the case of Delhi Metro, Japan International Cooperation Agency pooled in massive investment.
- However, the new policy says that the states will now have to come up with innovative ways to raise funds through means like value capture finance tools. They will also have to issue corporate bonds for metro projects for enabling low-cost debt capital.
- One key aspect of the policy is the last mile connectivity that lays down a catchment area of 5 km. The feeder services will require a commitment from the government to be provided via feeders, walkways, pathways and para transport means.
- In the last four years, the Centre has sanctioned at least Rs 30,653 crore to Metro projects across the country. A large portion of it, Rs 12,345 crore, was sanctioned to overseeing companies. The current fiscal allotment for Metro rail projects till the end of quarter ended June stands at Rs 17,960.

DELHI METRO RAIL Success Story

DMRC was formed in May 1995 by the central and Delhi state governments to provide a rail-based transport system that will alleviate Delhi's ever growing transport congestion and vehicular pollution. The government of Japan has contributed more than half the cost of this project, through a soft loan disbursed by DMRC's major funding agency, the Japan Bank for International Cooperation (JBIC).

Delhi's metro rail system, to be constructed in four phases covering 245 kilometers, is scheduled to be finished in 2021. DMRC is responsible not only for construction of the system but also for its operation and maintenance.

How Sustainable and Successful is the Delhi Metro?

The Delhi Metro Rail has faced a series of obstacles, including a low rate of return and massive debt, yet it has been successful in providing quality services.

The rate of return on investment is low despite high ridership because of high costs incurred in the initial construction stage. The cost of fixed assets, such as building the stations and the trains, is high for the metro industry. Hence, the Delhi Metro's fixed capital investment turned out to be a large sum that was difficult to recover.

The acquisition of land was difficult because of the new Land Acquisition Act, which makes it difficult to get permission from the residents or landowners being relocated. Several plots of land delayed construction work due to difficulty in relocating jhuggis. These delays further increased the metro's operating and construction costs.

Recurring Fare Hikes

The recent fare hike comes five months within the last one is affecting every commuter of the mass rapid transit who travels beyond 5 km, while journeys falling in the 2-5 km distance slab will cost Rs 5 more.

The announcement was made by the top decision making body, the DMRC board, which refused to acknowledge the stiff opposition mounted by Delhi government against the hike.

The board is following the recommendations of the fare fixation committee (FCC), which had proposed the steep hike last year. Under Section 37 of the Metro Railways (Operation and Maintenance) Act, 2002, recommendations of the FFC are binding on metro rail authorities.

Despite the dismal picture painted by DMRC finances and recurrent fare hikes, the Delhi Metro still emerges as a hope in the maze of urban transport crisis.

Recommendations of Rakesh Mohan Committee for sustainable urban transport

- Urban transport policies and strategies should be formulated with an "avoid, shift and improve" framework.
- The primary responsibility for urban transport should lie with state governments. Over time, urban transport responsibilities should be devolved to metropolitan and city authorities, particularly for India's larger cities of more than 1 million.
- Metropolitan Urban Transport Authorities should be set up as holistic and integrated decision making and coordinating bodies with adequate technical staff.
- Priority in planning for modes should focus on improving mobility through non-motorised transport, public transport and para transit, and personal vehicles in that order.
- Dedicated non-lapsable and non-fungible Urban Transport Funds (UTF) should be set up at the national, state and city levels.
- The UTFs should be funded in a robust manner as under:
  - A Green Surcharge of Rs. 2 on petrol sold across the country.
  - A Green Cess on existing Personalised Vehicles should be levied at the rate of 4 per cent of the annual insured value for both car and two wheelers.
  - Urban Transport Tax on Purchase of New Cars and Two Wheelers: At 7.5 per cent of the total cost of the petrol vehicles and 20 per cent in case of personalised diesel cars.
- Consistent with the general proposition of decentralisation of responsibilities for urban transport, arrangements would need to be made so that urban transport funds thus collected devolve appropriately to state and city levels. This devolution of resources to the state and city level transport funds should be on an entitlement basis and not at the discretion of the central government. This proposal could be examined by the Finance Commission, perhaps beginning with the 14th Finance Commission.

Way Forward

India is transiting from a developing to developed country with high pace of economic development. Urbanization is too increasing at high pace as **mega cities, cities and towns are providing better economic opportunities**. Fast-growing cities have nurtured

business and industry and have provided jobs and higher incomes to many migrants from rural areas. Thus, it is important that cities function **efficiently – that their resources are used to maximize the cities' contribution to national income.** Thus proper development of urban transport to meet the needs of growing population is urgently needed in country like India.

According to the global best practices, policy interventions which can be potentially effective are :

- A comprehensive urban transport act should be enacted by each state defining the roles and responsibilities of the multiple city and state level authorities with regard to public transport, land use and public transport integration etc. For this purpose, a model law could be developed by the central government which could be adapted by state governments for their state.
- Innovative ideas and integrated policies towards sustainable transport need strong supporting institutional and governance structures.
- Political will, sound leadership, transparency, adequate resources and accountability are essential in timely implementation of effective policy interventions that eventually ensure public trust.
- Moreover, participatory mechanisms must be in place to ensure that planning and investment decisions are socially inclusive, and engage public in a shared common vision for their city and neighbourhoods. This implies providing a platform for non-state actors and city residents to negotiate when making important urban mobility decisions that directly or indirectly influence their lives.

There is no one-size-fits-all strategy or solution to the complex transport challenges facing the cities of India, therefore, the focus should be towards strengthening the existing governance mechanism in a way that it could respond decisively and effectively to the issues at hand and, at the same time, be in sync with the broader policy.

ECONOMIC ISSUE

Critical Analysis of Draft Energy Policy

Context

Energy is acknowledged as a key input towards raising the standard of living of citizens of any country, as is evident from the correlation between per capita electricity (a proxy for all energy forms) consumption and Human Development Index (HDI).

The National Energy Policy (NEP) by NITI Aayog is meant to be an integrated policy for Energy, and the draft policy is a comprehensive document that touches on most aspects of energy policy. However, a number of key issues have not made the policy deliberations. Hereby critically analyzing the policy.

Introduction

In relation to its population, India is poorly endowed with energy resources. Its share in the world population is 17% but the shares in the world gas, oil and coal reserves are only 0.6%, 0.4% and 7%, respectively. This has meant heavy dependence on imports even at a rather low level of energy consumption. It is surprising that despite this severe supply constraint, only recently have we begun to pay serious attention to demand-side interventions that would help economize on the use of energy. The National Energy Policy (NEP) aims to chart the way forward to meet the Government's bold announcements in the energy domain.

There are four key objectives of National Energy Policy:

- ***Access at affordable prices:*** Considering poverty and deprivation in India, access to energy for all at affordable prices is of utmost importance. We are yet to provide electricity to nearly 304 million people, and clean cooking fuel to nearly 500 million people, which still depend on Biomass. The policy aims to ensure that electricity reaches every household by 2022 as promised in the Budget 2015-16 and proposes to provide clean cooking fuel to all within a reasonable time. While it is envisaged that financial support will be extended to ensure merit consumption to the vulnerable sections, competitive prices will drive affordability to meet the above aims.
- ***Improved security and Independence:*** Improved energy security, normally associated with reduced import dependence, is also an important goal of the policy. Today, India is heavily dependent on oil and gas imports while also importing coal. In so far as imports may be disrupted, they undermine energy security of the country. Energy security may be enhanced through both diversification of the sources of imports and increased domestic production and reduced requirement of energy. Given the availability of domestic reserves of oil, coal and gas and the prospects of their exploitation at competitive prices,

there is a strong case for reduced dependence on imports. In due course, we may also consider building strategic reserves as insurance against imported supplies.

- ***Greater Sustainability:*** The goal of sustainability acquires added importance and urgency in view of the threat of catastrophic effects of climate change as well as the detrimental effects of fossil fuel usage on local air quality. In India, sustainability is also closely linked with energy security. Our fossil fuel requirements, which comprise nearly 90% of our commercial primary energy supply, are increasingly being met by imports. This means that cutting fossil fuel consumption would promote the twin goals of sustainability and security. Hence the policy lays heavy emphasis on de-carbonisation through the twin interventions of energy efficiency and renewable energy.
- ***Economic Growth:*** The energy policy must also support the goal of rapid economic growth. Efficient energy supplies promote growth in two ways. First, energy is the lifeblood of the economy. It is an important enabling factor of growth and its availability at competitive prices is critical to the competitiveness of energy-intensive sectors. Second, being a vast sector in itself, its growth can directly influence the overall growth in the economy. For example, petroleum products have been an important direct contributor to our growth in recent years by attracting large investments in refining/distribution, and also fuelling economic activity.

Criticism of Draft Energy Policy

- **Lack of emphasis on public health:** An important aspect that the draft policy ignores is public health, especially in the context of the energy mix envisaged under the NITI Ambition Scenario. The Ambition Scenario is a tool to arrive at a range of possible energy futures for the energy sector till 2040.

  Vision documents like the National Energy Policy should strive to minimise the unavoidable health impacts of energy production, and their associated health costs, especially given the policy's stated objectives of sustainability and economic growth. The policy should include a health impact assessment framework to weigh the health hazards and health costs associated with the entire life cycle of existing and future energy projects and technologies. For instance, there is no method under the current policy regime, as proposed by the NITI Aayog, to evaluate the health impacts of coal's contribution to mercury and fine particulate pollution, or the risk of radiation with envisaged increase in nuclear power, or the occupational exposures to silica and cadmium during photovoltaic panel manufacturing.
- **High emphasis on thermal power:** NEP's focus on utilising coal powered thermal plants for securing the base load requirement to meet rising energy demand. The NEP's reliance on thermal power fuels scepticism about India's commitment to clean energy, and could distort investor confidence in the renewable sector.

  From both an air quality and a climate leadership perspective, it would not be ideal for India to stress on expanding its thermal power capacity to 441 GW in 2040 from 125 GW in 2012, as proposed in the NEP, without having adequate technology in place for improving the efficiency and reducing the emissions from these plants.
- **Low emphasis on electric vehicles:** The DNEP fails to highlight the gradual substitution of internal combustion engines with electric vehicles. Several European nations have announced their plans to go for 100% electric vehicles in the next two decades. This transformation in the automobile sector could be accompanied by grid and consumer-level electricity storage at homes, offices and factories.

- **Meet the energy demand:** There are at least two demand-side interventions that can help cut energy usage: behavioural change that results in reducing the demand for energy-based service and the introduction of alternatives that maintain the level of service but reduce the energy required for its provision. The former is called energy conservation and the latter greater energy efficiency.

  To meet this end four components include: clear policy objectives, regulatory and statutory mechanisms, right intervention tools and programme and a robust institutional mechanism for evaluating, monitoring and promoting energy efficiency programme.

  Lack of trust amongst citizens with respect to public service delivery is one amongst the major concerns of our democracy. Thus, measures to instill greater trust amongst citizens through a participatory and inclusive approach to policy formulation and execution is the need of the hour. The objective should be to build a greater sense of ownership amongst citizens.

- **Institutional arrangements:** The DNEP refers to making institutional arrangements on following grounds: greater involvement of State Governments and state nodal agencies; raising resource allocation for agencies; institutional capacity building; better data acquisition and monitoring; creating a dedicated research body on energy efficiency; increasing R&D support and funding and increasing state competitiveness.

  But for a holistic approach to setting up institutional mechanisms for evaluating, monitoring and promoting energy efficiency programme, there is a need for greater convergence amongst the related Ministries/Departments at the Central as well as State level respectively. Such an approach will help in creating co-benefits of energy efficiency measures across various sectors as well as allow for efficient resource mobilisation. This could be practiced through greater convergence in fund channelizing, setting policy targets, policy decision making, and human resource deployment amongst related ministries. Further, past experiences (such as inability of states to fulfil RPOs) suggest that, policy making needs to be made more inclusive, especially while setting policy targets for States. Thus, it is important to make sure that policy targets are not imposed on states but rather localized on state to state basis, taking into consideration the topography, resource availability and cultural dynamics amongst others.

- **Acquiring Technology:** The NEP makes broad recommendations on how India should work towards developing and acquiring technology needed for the energy sector. However, it does not recommend consistent and strong policy and budgetary support for technology development.

- **Direct Benefit Transfer for electricity consumers:** The DNEP proposes using the Direct Benefit Transfer (DBT) mechanism to provide subsidy on electricity tariff to needy consumers, while opening up the coal and power sectors. While this is perhaps sound in theory, it must be ensured that it also works in practice since this will effectively transfer all the risks of price variation on to consumers. Thus, if DBT does not work effectively for vulnerable consumers, through either exclusion errors or technology access challenges, the risks would be transferred from coal companies and power companies to vulnerable consumers.

Conclusion

A realistic energy policy cannot be purely top-down or "national" but must also incorporate multiple smaller policies, e.g., one meant to stimulate domestic oil and gas production, which the ambitious scenario represents. Such coordination is the need of the hour.

SOCIAL ISSUE

Living Will and Euthanasia

Context

Euthanasia is the intentional and painless taking of the life of another person, by act or omission, for compassionate motives. In contemporary practice it means that someone's life is ended for sympathetic reasons by some active or passive steps taken by another person.

The Centre has informed the Supreme Court that it is vetting a draft law to permit "passive euthanasia" - The Medical Treatment of Terminally Ill Patients (Protection of Patients and Medical Practitioners) Bill - but that it is against letting people make "Living Wills", by which they can direct that they not be put on life support in case of terminal illness.

Thus, hereby discussing the concept of Living Will, Euthanasia and issues related to it.

Introduction

Euthanasia encompasses various dimensions, from active (introducing something to cause death) to passive (withholding treatment or supportive measures); voluntary (consent) to involuntary (consent from guardian) and physician assisted (where physician's prescribe the medicine and patient or the third party administers the medication to cause death).

India has taken the stance of not allowing active euthanasia (where a life ends through the administration of lethal substances). However, it does allow "passive euthanasia" where life support is withdrawn for patients in permanently vegetative state.

Thus, centre has proposed a Draft on The Medical Treatment of Terminally Ill Patients (Protection of Patients and Medical Practitioners) Bill.

Provisions of the Bill

Under this the Bill recognises the right of terminally-ill patients to withhold and refuse medical treatment, and to express their desire to a medical practitioner to assist them in committing suicide. It does not permit active euthanasia. Once the practitioner is satisfied that the patient is competent and has taken an informed decision, the decision will be confirmed by a panel of three independent medical practitioners.

In a situation where a patient cannot make a competent decision on continuing or withdrawing treatment (such as a patient in a coma, one who is mentally challenged, or is too ill to understand the consequences of treatment options), the Bill is expected to allow a doctor, hospital or relative to approach a court to withhold treatment. The court will appoint a panel that would dispose of the matter in a month. Doctors said the legal road may delay the process. "For rare cases, such as Aruna Shanbaug's, one could afford to wait. But there are situations where survival is not possible, and it will be painful for the family and the patient to wait until a decision comes.

However, it would be a violation of patient autonomy if it were applied to instances of merely withholding or withdrawing medical treatment. Decisions on such withdrawal are made often and on a regular basis, and the procedure prescribed must not tie up the medical practitioner and family of the patient in litigation. Further, given that the MCI has been affected by corruption and institutional incompetence, and likely to be overhauled completely, it is not advisable to place complete reliance on it.

Thus, the provision of Living Will has been introduced by the Experts.

What is Living Will?

A living will is a document that sets out a patient's wishes regarding health care and how they want to be treated if they become seriously ill and unable to make or communicate their own choices. Living wills are also called *active declarations*.

Such a document may be helpful to relatives and to medical professionals in the case of a seriously ill and incapacitated patient.

Negative of Living Will

Living wills negate informed consent. Since no one knows the future, by definition their care or noncare instructions must generally be written. Thus, when an incapacitation occurs, the patient's feelings and desires about this specific circumstance may not be known. The living will puts tremendous power into the hands of doctors, who are empowered to decide whether and when the living will takes effect, when treatment should be withdrawn or withheld. Moreover, the decision regarding the type and extent of medical intervention to be withheld is the doctor's. And this power isn't restricted to 'extraordinary care' such as ventilators to assist with breathing, but to any medical intervention—from not treating a curable bacterial infection to withdrawing food and fluids so that the patient starves and dehydrates to death. Thus, with a living will, the check of informed consent is surrendered to medicalized decision making.

Advantages of living wills

- They respect the patient's human rights, and in particular their right to reject medical treatment.
- Creating them encourages full discussion about end of life decisions.
- Knowing what the patient want means that doctors are more likely to give appropriate treatment.
- They help medical professionals in taking difficult decisions.
- A patient's family and friends don't have to take the difficult decisions.

Disadvantages of living wills

- Writing them may be very depressing.
- It's difficult for a healthy person adequately to imagine what they would really want in the situations where a living will would take effect.
- It may be hard to translate the words of the living will into actual medical action.
- Patients may change their minds but not change their living wills.
- They're no use if they can't be found quickly when needed.

Australia has a system of "advance directive" to allow citizens to decide how they would like to be treated in future, if they are incompetent to make a decision at that point. The Patient Self Determination Act gives US citizens the right to make personal healthcare decisions. The Act recognises advance directives or living wills; the

Common Cause petition is on the lines of the US Act, identifying the right to dignified death. Euthanasia, in varying forms, is permitted in Belgium, Canada, and Sweden.

However, in India the government has expressed its opposition to the concept of living will. It told the Supreme Court that a living will could be misused and may not be viable as a part of public policy. Thus, Supreme Court has reserved its verdict on allowing a 'Living Will' for passive euthanasia.

GOVERNANCE ISSUE

T.K. Visanathan Committee on Hate Speech

Context

An expert committee, constituted by the Centre after the Supreme Court struck down the controversial Section 66A of the Information Technology Act in 2015, has recommended that the Indian Penal Code, Code of Criminal Procedure and the IT Act be amended to introduce stringent provisions, specifying punishment, to deal with cases of hate speech and use of cyberspace to spread hatred and incitement.

Hereby, discussing about the Section 66A of IT Act and recommendations made by the committee related to control of hate speech.

What is Section 66A of the IT Act?

According to this section any person who sends, by means of a computer resource or a communication device:

- any information that is grossly offensive or has menacing character; or
- any information which he knows to be false, but for the purpose of causing annoyance, inconvenience, danger, obstruction, insult, injury, criminal intimidation, enmity, hatred or ill will, persistently by making use of such computer resource or a communication device; or
- any electronic mail or electronic mail message for the purpose of causing annoyance or inconvenience or to deceive or to mislead the addressee or recipient about the origin of such messages,
- shall be punishable with imprisonment for a term which may extend to three years and with fine."

Section 66A provides punishment for sending offensive messages through communication services. These messages may be any information created, transmitted or received on a computer system, resource or device including attachments in the form of Text, Images, Audio, Video or Any other electronic record which may be transmitted with the message

The law targets messages that...

- Are grossly offensive or menacing.
- Proffer false information intending to cause annoyance, inconvenience, intimidation, insult, obstruction, etc.
- Are intended at deceiving the addressee about the origin of the message.

Supreme Court judgment on Section 66A

The apex court has struck down the provision in the cyber law which provides police power to arrest a person for posting "offensive" content online and provides for a three-year jail term.

In the judgment, the court said the liberty of thought and expression was a cardinal value of paramount significance under the Constitution. Three concepts, fundamental in understanding the reach of this right were discussion, advocacy and incitement. Discussion, or even advocacy, of a particular cause, no matter how unpopular it was, was at the heart of the right to free speech and it was only when such discussion or advocacy reached the level of incitement that it could be curbed on the ground of causing public disorder.

The court then went on to say that Section 66A actually had no proximate connection with public order or with incitement to commit an offence. "The information disseminated over the Internet need not be information which 'incites' anybody at all. Written words may be sent that may be purely in the realm of 'discussion' or 'advocacy' of a 'particular point of view'. Further, the mere causing of annoyance, inconvenience, danger, etc., or being grossly offensive or having a menacing character are not offences under the [Indian] Penal Code at all.

Further Section 69A allows the government to block online content that "threatens the security of the state" or fulfills other conditions. The Supreme Court order upheld the section, noting that 69A is a "narrowly drawn provision with several safeguards". However, it clarified that the blocking order must be specific and clear and should come from the government, or from a court.

About T.K. Visanathan Committee

An expert committee was constituted by the Centre after the Supreme Court struck down the controversial Section 66A of the Information Technology Act in 2015.

The Committee has accordingly proposed substantive alterations in the IPC and procedural safeguards in the Information Technology Act.

The recommendations have been discussed below:

- Amend IPC section 153 C to include in communication "spoken or written words, signs, visible representation, information, audio, video, or combination of both, transmitted, retransmitted through any telecommunication service, communication device or computer resource". Punishment should be up to two years or fine of Rs 5,000 or both.
- Punishment for c**ausing fear, alarm or provocation of violence in certain cases** by amending IPC section 505 A, punishment of any person or group of persons who intentionally, on grounds of religion, race, caste or community, gender, sexual orientation, place of birth, residence, language, disability or tribe, uses any means of communication to communicate. Punishment should be upto a year, or Rs 5000 or both.
- **Amendment to Code of Criminal Procedure, 1973** by adding sections 25 B and 25 C — creating the post of a State Cyber Crime Coordinator and District Cyber Crime Cell, respectively.
- It has been noted that law enforcement agencies face several challenges during investigation and prosecution of harmful online conduct due to the dearth of technically trained police personnel, lack of access to expert advice, procedural hurdles in conducting cross jurisdictional investigations, absence of comprehensive data on the crimes reported and the lack of a quick and streamlined

procedure for takedown of malicious online content. In an attempt to address some of these issues, the Committee proposes the insertion of two new provisions namely, sections 25B and 25C in the Code of Criminal Procedure 1973 thereby creating the post of a State Cyber Crime Coordinator and establishing a District Cyber Crime Cell, respectively.

- **Amendments to the Information Technology Act 2000** because at present Section 78 of the IT Act 2000 authorises only officer of the rank of Inspector and above to investigate offences under this Act. However, as young police officers, who are directly recruited at the level of Sub-inspectors are better equipped and trained to investigate cyber offences, there has been a demand from the State Police that this provision needs an amendment. Based on requests received from various stakeholders, an amendment to **Section 78 of *the Information Technology Act 2000*** has been suggested to authorize a police officer not below the rank of Sub- Inspector, assisted by a District Cyber Crime Cell, to investigate into any offence committed under the Information Technology Act 2000.

The Guidelines also cover the offences that are likely to be most commonly committed by the sending of communications via social media. These Guidelines equally apply to the re-sending (or re-tweeting / sharing) of communications and whenever they refer to the sending of a communication, the guidelines should also be read as applying to the re-sending of a communication.

ENVIRONMENTAL ISSUE

Stubble Burning and its Impact

Context

The Indian state of Punjab has two growing seasons: one from May to September and another from November to April. In November, farmers in Punjab typically sow crops such as wheat and vegetables. They often set fire to their fields to clear them before planting, a practice known as stubble burning. This practice is also prevalent in Haryana. Thus hereby discussing about the practice of stubble burning and its impact.

What is stubble burning?

Stubble burning is the deliberate setting fire of the straw stubble that remains after wheat and other grains have been harvested. The carbon (C) component in stubbles is lost by burning and that the process of burning stubbles even occasionally, seriously affects the organic carbon levels of the soil. Around 80 per cent of the C in standing stubble return to the atmosphere as CO_2.

Why stubble burning is done?

The green revolution also known as the new agricultural strategy was marked with the arrival of new high yielding varieties of wheat, rice, maize and bajra (millet) and package of other inputs like chemical fertilizers, insecticides, pesticides and assured irrigation facilities. Punjab and Haryana with requisite irrigation and infrastructure facilities became a major beneficiary of this national strategy and has been shown as a showpiece of India's successful green revolution strategy.

Due to this rice-wheat cropping pattern has been introduced. Under the rice-wheat cropping pattern, rice has to be harvested early in order to accommodate the wheat crop. This means, a very little time is left in the hands of the farmers to turn around for planting the wheat crop. Within this period, the farmer has to get rid of the rice stubble and prepare the land for sowing the wheat crop.

Thus, burning has emerged as the standard method of rice residue/stubble management in the combine harvested rice-wheat cropping system that is practised on a broad scale in the state of Punjab in north-west India.

Impact of stubble burning on Environment

Rice residue burning results in extensive impacts both on and off farm, e.g., losses in soil nutrients, soil organic matter, production and productivity, air quality, biodiversity, and water and energy efficiency and on human and animal health.

Some of the impacts have been discussed below:

- The on field impact of burning includes removal of a large portion of the organic material causing loss to cultivation. The burning of paddy straw leads to loss of precious nutrients as nearly 25% nitrogen and phosphorus, 50% sulphur and 75% of potassium uptake from soil are retained in the crop residues.
- Burning straw leads to increase in particulate matter (PM) in the air. The burning causes release of acids like sulfates, nitrates, metals in the air and could cause severe health problems. According to the experts, burning of straw burns out 1 lakh tonnes of nitrogen, 0.5 lakh tonnes of phosphorus and 2.5 lakh tonnes of potash in the soil over the 29-30 lakh hectares in which paddy is grown annually.
- The residue generated from the rice-wheat cropping system can be put to many uses, but this is possible if the residue is separated from the grain and carried out of the field. Burning reduces the availability of straw to livestock, which is already in short supply by more than 40%.

The options for crop residue management may include developing systems to plant residue into bailing and removal for use as animal feed or for industry. Enhanced decomposition of machine-harvested straw to improve nutrients in the soil can be useful. The use of microbial sprays that can speed decomposition of residue is also an option.

Impact of stubble burning on Human beings

- Open burning of crop stubble results in the emissions of harmful chemicals like polychlorinated dibenzo-p-dioxins, polycyclic aromatic hydrocarbons (PAH's) and polychlorinated dibenzofurans (PCDFs) referred to as dioxins. These air pollutants have toxicological properties and are potential carcinogens.
- The release of carbon dioxide in the atmosphere due to crop stubble burning results in the depletion of the oxygen layer in the natural environment causing green house effect.
- Burning of crop waste also has adverse implications on the health of milk producing animals. Air pollution can result in the death of animals, as the high levels of CO2 and CO in the blood can convert normal haemoglobin into deadly hemoglobin. There can also be a potential decrease in the yield of the milk producing animals.
- Burning of crop stubble has severe adverse impacts especially for those people suffering from respiratory disease, cardiovascular disease. Pregnant women and small children are also likely to suffer from the smoke produced due to stubble burning.
- Inhaling of fine particulate matter of less than PM2.5 μg triggers asthma and can even aggravate symptoms of bronchial attack.
- The black soot generated during burning also results in poor visibility which could lead to increased road side incidences of accident.

It is thus essential to mitigate impacts due to the burning of agricultural waste in the open fields and its consequent effects on soil, ambient air and living organisms.

Alternative uses of crop stubble

The crop stubble produced during the harvesting of rice and wheat crops can be used for various alternative uses if it is not burnt. These include use of crop stubble as fodder for animals, use of crop stubble for the generation of electricity, use as input in the paper/pulp industry, etc.

- **To use it for fodder:** The use of crop stubble as fodder for animals or for the generation of electricity requires various on-farm and off-farm operations, including collection, packing, handling, transportation, storage and pre-feeding processing. This is very expensive method, thus technical and economic feasibility mechanism should be found out to meet the issue.
- **Judicious use of rice stubble:** The incorporation of the straw in the soil has a favorable effect on the soil's physical, chemical and biological properties such as Ph, organic carbon, water holding capacity and bulk density of the soil. On a long-term basis it has been seen that it increases the availability of zinc, copper, iron and manganese content in the soil and it also prevents the leaching of nitrates. By increasing organic carbon it increases bacteria and fungi in the soil. Mulching with paddy straw has been shown to have a favorable effect on the yield of maize, soybean and sugarcane crops.

  This environment friendly technology will prove a boon to the farmer community and the state can help them in making provision of this tool for improving soil health and environment for sustainable agriculture.
- **Use of Crop Residue in Bio Thermal Power Plants:** Another use of rice residue that is being encouraged by various institutions and departments is the use of rice residue for generation of electricity. Bio-plant can utilize rice husk, waste wood chips, straw of various plants, e.g. paddy, wheat, etc. Apart from the generation of electricity for supply to state grid to meet the ever-increasing demand for energy in the state, the plant also reduces the Green House Gases (GHGs) emissions.

  The advantages of utilizing crop residue over and above the conventional resources are that such residue is renewable, readily available and can be used successfully by burning in boilers with the efficiency of 99%.
- **Use of Rice Residue as Bedding Material for Cattle:** The farmers of the state have been advised to use paddy straw as bedding material for cross bred cows during winters. Paddy straw bedding helps the animals keep themselves warm and maintain reasonable rates of heat loss from the body. It also provides clean, hygienic, dry, comfortable and non-slippery environment, which prevents the chances of injury and lameness. Healthy legs and hooves ensure enhancement of milk production and reproductive efficiency of animals. The paddy straw used for bedding could be subsequently used in biogas plants.
- **Use of Rice Residue in Paper Production:** The paddy straw is also being used in conjunction with wheat straw in 40:60 ratios for paper production. The sludge can be subjected to bio-methanization for energy production.

In-situ methodology for handling it

The technical measures are 'straw incorporation' and 'straw mulching'. In both these measures, the residue is incorporated in the field itself and is thus used to increase the nutrient value or fertility of the soil. In the first measure, the residue is allowed to decompose in the field itself through a chemically developed process and in the second measure, incorporation is done with the help of a properly designed machine along with seeding. The second measure is more useful as there is no weeding in this process and it is less expensive.

Conclusion

The Comprehensive Action Plan for air pollution, drafted by the EPCA which has been submitted to the Supreme Court, has pitched for a strict enforcement of ban on burning of agriculture waste and crop residues in Punjab and Haryana. It has batted

for increased subsidy for purchase of equipment that eliminates the need for burning stubble and straw and recycling and reuse of this waste.

However, due to absence of any feasible alternatives farmers are moving for stubble burning even after strict order of NGT.

Thus, the government and agricultural agencies involved need to create the perfect basic needs such as logistics facilities (machinery and straw storage centres etc.), courses and training, especially for farmers and officials as well as research and development for the straw development as a whole. However, farmers would be more interested in participating in straw development projects if the incentives provided are worth the effort they do in agricultural fields. More attractive incentives will open up a wide range of farmers and community involvement in a holistic manner to the development and will become more competitive.

GOVERNANCE ISSUE

Police Modernization Scheme

Context

The Cabinet has approved police modernization scheme with an enhanced central share of resources. The scheme focuses on improving police mobility, weapons, equipment, training infrastructure, computerisation, forensic science facilities and a crime and criminal tracking network. Effectively implemented, the scheme has potential to make the police force more effective.

Hereby, discussing about the police status in India and reforms needed in that.

Introduction

Under the Constitution, police is a subject governed by states. Therefore, each of the 29 states have their own police forces. The centre is also allowed to maintain its own police forces to assist the states with ensuring law and order. Therefore, it maintains seven central police forces and some other police organisations for specialised tasks such as intelligence gathering, investigation, research and record-keeping, and training.

The primary role of police forces is to uphold and enforce laws, investigate crimes and ensure security for people in the country. In a large and populous country like India, police forces need to be well-equipped, in terms of personnel, weaponry, forensic, communication and transport support, to perform their role well.

Issues related to the Police system

- **Issue of Police accountability:** Police forces have the authority to exercise force to enforce laws and maintain law and order in a state. However, this power may be misused in several ways. For example, in India, various kinds of complaints are made against the police including complaints of unwarranted arrests, unlawful searches, torture and custodial rapes.

  The Second Administrative Reforms Commission (2007) has noted that this control has been abused in the past by the political executive to unduly influence police personnel, and have serve their personal or political interests. This interferes with professional decision-making by the police (e.g., regarding how to respond to law and order situations or how to conduct investigations), resulting in biased performance of duties.

- **Vacancies and an overburdened force:** Currently there are significant vacancies within the state police forces and some of the central armed police forces. As of January 2016, the total sanctioned strength of state police forces across India was 22,80,691, with 24% vacancies (i.e. 5,49,025 vacancies).

A high percentage of vacancies within the police forces exacerbates an existing problem of overburdened police personnel.

- **Police infrastructure:** Modern policing requires a strong communication support, state-of-art or modern weapons, and a high degree of mobility.

  The CAG has found that weaponry of several state police forces is outdated, and the acquisition process of weapons is slow, causing a shortage in arms and ammunition. Audits have noted that police vehicles are in short supply. New vehicles are often used to replace old vehicles, and there is a shortage of drivers. This affects the response time of the police, and consequently their effectiveness.

  Further, there is a need to separate the functions of investigation and maintaining law and order. An augmented police force and the separation of functions will pave the way for improving the manner in which communities and police interact with each other. Improved community-police relations can help improve safety levels, and help instil people's faith in the police force. These measures together with improved communication and forensic science facilities will help radically alter the police force.

Police modernization Scheme

To improve the availability of police hardware (i.e., vehicles, computers, communication equipments, security gadgets, etc.) in the states, the federal Ministry of Home Affairs is operating a police modernization scheme under which the financial resources are transferred to the state police departments through the respective state governments for the procurement of such equipments/gadgets. This financial assistance to the fund–starved state police departments is supposed to play a crucial role in improving police efficiency in the country.

In a recent move, Government of India (GoI) has approved a Rs 25,000-crore internal security scheme to strengthen the law and order apparatus, modernise state police forces and enhance their capacity to combat terrorism. The umbrella scheme, Modernisation of Police Forces (MPF), will be implemented between 2017 and 2020.

The scheme has special provisions for women's security, mobility of police forces, logistical support, hiring of helicopters, upgradation of police wireless, satellite communications, crime and criminal tracking network and systems (CCTNS) and e-prisons. The idea is to assist the states to upgrade their police infrastructure, especially in respect of transport, communications and forensic support, to enable them to effectively tackle the emerging challenges.

Why now?

After the 14th Finance Commission recommendations, which increased the state's share of central taxes from 32 per cent to 42 per cent, the Centre de-linked eight centrally sponsored schemes (CSS) from its support in 2015. These schemes included modernisation of police.

The majority of state governments were disinclined to make any investments in police. As a consequence, modernisation schemes received a setback. Several state police chiefs expressed concern that the battle against Maoists and terrorists of different hues was going to be affected with modernisation grants drying up.

Thus, to improve the police infrastructure, government has reinstated scheme.

Way forward

The umbrella scheme is a positive step and generous financial grants will definitely help. But these must be followed up by structural reforms in the police.

Further to allow the police greater operational freedom while ensuring accountability, various experts have recommended that the political executive's power of superintendence over police forces be limited.

The Second Administrative Reforms Commission has recommended that this power be limited to promoting professional efficiency and ensuring that police is acting in accordance with law.

The Supreme Court issued its judgment in 2006, ordering the centre and states to set up authorities to lay down guidelines for police functioning, evaluate police performance, decide postings and transfers, and receive complaints of police misconduct. The court also required that minimum tenure of service be guaranteed to key police officers to protect them from arbitrary transfers and postings.

Similarly, in order to improve the professional skills of the police personnel, a number of professional training programs should be organized at the various state police training schools/colleges/academies in India. In addition to this, several national level institutes should also impart specialized training to the police personnel in the various fields of police operations with a view to enhancing their professional competence. Then only true modernization of police force may occur.

ECONOMIC ISSUE

Demonetisation and its Impact on Microfinance Sector

Context

Microfinance is a set of financial products including micro-savings, credit, remittances, pensions, etc, crafted for the poor and serviced with affordable costs.

The impact of demonetisation on micro-finance securitisation volumes has been severe, according to a study by credit rating agency ICRA.

After two years of rapid growth, the volume of micro loan securitisation transactions witnessed a trend reversal with around 20 per cent dip observed in 2016-17.

Introduction

Microfinance Institutions (MFIs), irrespective of legal form, seek to promote financial inclusion by providing financial services to clients of financially un-served and under-served households. Over time, the microfinance sector has become an integral part of the financial infrastructure catering to the vulnerable sections of society in India. In the Indian microfinance industry NBFC-MFIs hold a significant share and are regulated by RBI. As present time, there are 71 NBFC-MFIs registered with the RBI.

In India, pioneer Micro Finance Institutions (MFI) operated as non-profit, non-governmental organisations with a strong social focus. They developed new credit techniques; instead of requiring collateral, they reduced risk through group guarantees, appraisals of household cash flow and small initial loans to test clients. In recent times, MFIs have transitioned from non-government organisations to non-banking finance companies (NBFCs). As a result, once primarily donor-led, MFIs are now increasingly funded by banks and private and shareholder equity.

Demonetisation and micro-finance sector

- In November 2016, the Indian government launched a huge demonetisation drive when they banned 500 and 1000 Rupees notes. In a country where 69% of the population lived in rural areas and 90% of the transactions are cash based, the move was paralysing.
- For the Micro Finance industry this came as a blow too. Most of the borrowers of the MFIs are based in rural areas; they borrow in cash and repay in cash. Typically, MFIs that have had a repayment rate of 99% have had a fall of upto 12% in repayment rates. For many MFIs the non-performing assets (NPA) have risen by 7-10%.
- ICRA's estimates show that MFIs (including some erstwhile ones that have now become small finance banks) raised nearly Rs.5,500 crore through the

securitisation route in the first six months of FY17. However, they raised only around Rs.1,650 crore in the second-half of the fiscal, resulting in total securitisation volumes of around Rs.7,150 crore for the full year.

- In comparison, MFI securitisation volumes had increased by 80 per cent to around Rs.9,000 crore in FY16. Securitisation involves pooling of assets such as micro loans, and creation and issuance of securities backed by cash flows from the underlying assets.
- The dip in micro loan securitisation volumes is primarily due to the impact of the demonetisation event on the portfolio of most MFIs.

Negative impacts have been discussed below:

- **Impact on collections:**
  - Microfinance entities traditionally use cash in their lending and recovery operations. The installments on microfinance loans have weekly / fortnightly / monthly collections of small denominations. On account of non-availability of cash post demonetization, the borrowers were not in a position to service their loans which led to delay and drop in collection rates.
  - For the first 2 weeks following the announcement of demonetization, the collection ratio declined to 80%.
  - Subsequent increased in supply of new currencies by RBI had led to increase in collections in the fourth week. But the collections have come down subsequently due to slowdown in business activities of the borrowers and dispensation provided by RBI (earlier by 60 days and later increased to 90 days) to financial institutions in terms of recognizing NPAs.
  - This special consideration was misrepresented to the borrowers by local influential individuals and thus resulted in fall in collection efficiency in few areas of states like Uttar Pradesh, Maharashtra and Madhya Pradesh.
- **Impact on lending:**
  - Despite the efforts to increase cashless disbursement, majority of the disbursements were still cash based. Because of the withdrawal limits imposed on current accounts, MFIs were not able to withdraw cash for further disbursement and the incremental disbursements were restricted to the collections.
  - However, the ratio of disbursements to collections fell to around 30% by the second week of December 2016. The main reason for this significant drop in disbursements was due to the focus of MFIs shifting from disbursements to collections and they also adopted a wait and watch approach in order to comprehend the position.
  - Due to sharp decline in disbursements, additional funding requirement for MFIs also reduced. This further took a toll on securitisation volumes, as around 25 per cent of incremental funding requirement of MFIs was being met through the securitisation route.
- **Impacts on farmers:**
  - Particularly farmers and SMEs that make up most of the customers are affected in a big way. The drying up of liquidity that the demonetisation drive has caused has affected cash dependent rural communities in a big way.

- Especially in the southern states of India, the drought this year has made matters worse. In Karnataka, about 800 farmers committed suicide in the past twelve months due to the drought and mounting debt, although what percentage of that is due to pressures from MFIs is unknown.
- In Tamil Nadu, farmers-suicide due to debt issues is almost a daily occurrence. There have been several cases where farmers have had to borrow from local lenders at higher rates, to pay off the MFIs, as MFIs tend to be stricter on their debt collection dates.

- **Interruption in economic activities in rural economy:**
  - Inability in the repayment of dues and hence lack of new credit will hinder the business of small farmer and entrepreneurs. This will drastically affect the blossoming rural economy.
  - Without MFIs, the poor people would not have any means to the many financial instruments offered by MFIs which would affect the financial inclusion. Devoid of any other options, poor would have to go to the loan sharks who charge very high rates.
- **Delay in loan repayment:**
  - Scrapping of 500 and 1000 denominations has created trouble in repayment of loans by bona fide clients of MFIs. This, in turn, is restricting these institutions to repay their term loan to the banks.
  - Repayment of loans to MFIs has dropped as it is unable to accept cash in older denominations from the poor people which has affected its ability to repay the banks. Banks would block the process of financial support to MFIs, which would lead to shutting down of many NBFC MFIs. This would also have an adverse impact on SMEs.
- **Threat to existence of small MFIs:**
  - Outstanding dues of these institutions will further hinder the availability of term loan from the lending institutions imposing a threat to their survival. Despite 60 days extension by RBI in due repayment, political interference is making the prospect of recovery less optimistic.
  - MFIs with high financial leverage and low collections efficiencies are expected to face deterioration in their credit profile.

Positive impacts have been discussed below:

- While these are certainly tragic incidents, there are various avenues, the government and the MFIs have explored and continue to explore. One positive outcome of it is that, the top 8 MFIs in India that hold about 40% of the market share, have now been provided the small finance bank licenses. This would mean that they can have their own cash out points and the demonetisation drive is very likely to increase usage of their accounts.
- MFIs have also been lobbying with the Reserve Bank of India (RBI) to extend deadlines for the usage of the banned currency notes and farmers have had some special exemptions to this extent.
- RBI has also provided MFIs with a further 90 days extension before classifying loans as NPAs, if payments were due in November and December 2016.
- There have been some signs of recovery in certain parts of the country where repayments had fallen immediately after demonetisation.

- Due to demonetisation and the push for a cashless economy, awareness has been created regarding use of technology like e-wallets, Paytm, USSD, AEPS, etc which would drive the people towards financial inclusion.
- Although demonetization has brought adverse impact on the rural economy, it has helped in connecting the rural people with the banking sector directly.
- More focus on opening accounts under PMJDY which would promote financial inclusion.
- This move is expected to 'break the ice' between marginalized, illiterate and ignorant rural people and banks and hence providing them to approach the main stream avenue of credit.
- MFIs are increasingly looking for cashless disbursement and collection through Jan-Dhan accounts and by leveraging technology. With 8 NBFC-MFIs converting into Small Finance Banks (SFBs) by March 2017, the competitive environment is bound to undergo a major shift within the microfinance industry as a whole. As these entities are expected to remain focused on microfinance, cashless disbursement and collection of loans is bound to increase in the future.
- Even though the collections are less, many MFIs are conducting center / group meetings to make borrowers aware of the impact on their credit profile due to default on repayment and the role credit bureaus. These meetings are also used to educate the borrowers to overcome any kind of slowdown in their business activities and to encourage banking habits in order to move towards non-cash based model.

Way forward

According to a December, 2015 Reserve Bank of India report titled "***Report of the Committee on Medium-term Path on Financial Inclusion"***, the number of branches per 1,00,000 of population in rural and semi-urban areas is less than half of that in urban and metropolitan areas.

- The presence of ATMs is also very low in rural areas. However, NBFC-MFIs have a very strong reach in rural areas and semi-urban areas where banks have a considerably lower penetration.
- Therefore, with a view to mitigate the hardship and financial crunch currently being faced by NBFC-MFIs and the rural and semi-urban community, the government / RBI may consider the following :
  - **Exchange of SBNs:**
    - The Government may take advantage of the extensive infrastructure and reach that NBFC-MFIs have in rural and semi-urban areas by allowing them to be eligible to exchange SBNs against valid compliance documents and by putting in place other checks and balances.
  - **Acceptance of SBNs:**
    - NBFC-MFIs may be allowed to act as facilitators and collect repayment of loans from their customers through SBNs.
    - This would help reduce cases of unintentional defaults in loans and also ensure that the overall asset quality of the NBFC-MFI sector does not get eroded.

- **Enhance the withdrawal limits:**
  - In order to provide necessary operational flexibility and at the same time being mindful of the growing business needs, the Government/ RBI may consider relaxing the daily / weekly withdrawal limits for companies involved in the micro-financing sector.

Conclusion

If MFIs, particularly the smaller MFIs, continue to experience worsening repayment rates and defaults, their sustainability is questionable. Bearing in mind the importance of microfinance for financial inclusion and livelihoods of a client-base of around 40 million, demonetisation has dealt a severe blow to the microfinance sector in more ways than one. It has considerably damaged the repayment behaviour and credit discipline that is central to the success of the microfinance model. Even if there is recovery in sight in the coming quarters, the report highlight the tremendous stress that the sector has borne following demonetisation.

While the decision to demonetize SBNs in order to curb anti-national activities is a welcome move, one may consider adopting the above measures in order to try and smoothen the transition and ease the plight of the informal cash-driven sectors. There is need for the RBI to come out with provisions that would allow the MFI sector to rebound before it is too late so that millions of poor Indians remain connected to formal methods of banking.

SOCIAL ISSUE

Why Drop-out Levels are High in India?

While India has made significant progress in raising enrollment rates for primary education but have failed to reduce the drop-out rate. The dropout rate peaks at the secondary level (class IX-X) at 17%, as compared to 4% in elementary school.

Hereby, analyzing the data and describing the reasons for that.

Introduction

The demand for education has clearly increased as more people are now going to schools. But the increase in supply has not been commensurate.

The dropout problem is pervasive in the Indian education system. Many children, who enter school, are unable to complete secondary education and multiple factors are responsible for children dropping out of school. Risk factors begin to add up even before students enroll in school that includes: poverty, low educational level of parents, the weak family structure, pattern of schooling of sibling, and lack of pre-school experiences.

Facts

- Around 3.5% of children between the ages of 11 and 14 years, and 13.5% between the ages of 15 and 16 years were dropouts, while over 25% of children in grades I to VIII were absent from school on the day a team visited the school. These are the findings of the 2016 Annual States of Education Report (ASER) survey, a household survey of schooling and learning levels in rural India. The survey included over 560,000 children between three and 16 years, in 589 districts of India.
- Karnataka has a dropout rate of 2.3 per cent, which is below the national average, Rajasthan's, at 8.39 per cent, is double the national rate, and Manipur's is four times, at 18 per cent.
- The problem of students dropping out, and absenteeism, is particularly acute in BIMARU (sick) states —an acronym for the less-developed states of Bihar, Rajasthan, Uttar Pradesh and Madhya Pradesh—that together have over 51 million children, or 46% of India's total child population between the ages of 11 and 16 years, according to Census data.

According to NSSO data (71st round) on reasons for dropping out (for the 5-29 age group), the key reasons for female students dropping out is due to domestic activities, lack of interest in education and marriage. On the other hand, the key reasons for male students dropping out are economic activities, lack of interest in education and financial constraints.

Reasons for drop out:

- **Family Size:**
  - Family size influences children's schooling cycle greatly.
  - In comparison to children with fewer siblings, children with more siblings tend to enroll later, repeat grades more often and drop out of school earlier.
  - Consequently, with larger family size, the financial burden/potential workload is greater; children are less likely to attend school and often dropout.
- **Educational Attainment of Parents:**
  - Besides household income, the education level of the parents is also expected to influence the continuation of children in school.
  - Parental education is the most consistent determinant of child education. Higher parental education is associated with increased access to education, higher attendance rates and lower dropout rates.
- **Financial Constraint:**
  - Educational expenditure has two sources namely, public and private. The expenditure incurred by the state in providing infrastructural arrangements for education, like creating facilities in the form of building etc.
  - Private expenditure on education refers to the expenditure incurred by the parents and households. This is mainly contributed to the payment of fees, private tuition, stationery, uniform, transport, etc.
  - A number of studies highlight the linkage between poverty and dropping out from the school.
- **Safety of Child:**
  - The secondary schools are not available to children in the neighborhood and due to this they need to travel by bicycle/bus or walk more to reach the school.
  - Insecurity, especially of the girls, becomes a major impediment for the children to continue in school.
- **Disputes within Family:**
  - Quite often family environment of households living in slums turns violent for a variety of reasons. Financial constraints, job loss and chronic unemployment, addiction to alcohol and other substances can lead to frequent disruptions in the family.
  - This can be unbearable for several children, they loose interest and attend school mechanically leading to low academic performance that may ultimately result in dropout.
- **Infrastructure:**
  - It is widely acknowledged that infrastructural facilities, school environment and teachers' attitude exert powerful influences on student's interest or disinterest in studies including dropout rates.
  - The attitude of the teachers, disinterest in teaching to the disadvantaged children and poor infrastructural facilities like unavailability of functional toilets, improper seating arrangements etc. are found to be some of the significant reasons for pushing out the children from school.

- **Attitude of the Teachers**:
  - Studies demonstrate that when teachers hold low academic expectations of particular students, they tend to treat those students (consciously or unconsciously) in a negative way.
  - Discriminatory practices of the teachers such as verbal abuse; children given cleaning tasks in school; corporal punishment meted out to them.

Solutions

In the policy context, for the present government's "Skill India" and "Make in India" programmes to see even a modicum of success, it would have to address the issues related to school education.

- Socio-economic status variables like socio economic background, family structure, etc., are unlikely to change but alterable variables such as access to schooling facilities, attendance, improvement in infrastructure, flexible curriculum and teacher motivation could be modified to improve the retention rate of these children.
- Access to schooling facilities may be improved. Efforts can be made to locate schools at those places where they are needed the most. To make a provision of secondary school within five kilometers of any habitation and higher secondary school within 7-10 kilometers of any habitation.
- In cases where the land is not available for new schools to be opened, the transport facility may be arranged for safe and convenient access to schooling facility. It should also be strictly made mandatory for all the private schools to reserve twenty five percent of seats for the poor.
- As dropout is influenced by financial constraints; children may be given stipends, scholarships, free uniform, free text books, free stationery items up to secondary level of education. For children of poor socio-economic background, these incentives will be useful in improving the retention rate. Since the symptoms of dropping out such as absenteeism, poor performance in the school examination, etc., begin to show at the elementary school level, prevention strategies need to be initiated at this stage itself.
- Schools may provide, after school and summer enhancement programmes at secondary level that eliminate information loss and invokes creativity. Such experiences are especially important for students at risk of school failure.
- An inter-sectoral approach aiming at holistic development, at both central and state levels, is necessary keeping in view the complexity of the problem. Thus, considering the original causes of dropout, an integral policy adopting preventive and restorative approach needs to be formulated.
- Teachers have to make an extra effort to counteract dropout by understanding, stimulating, supporting, and guiding the students in their studies.
- Besides the preventive dropout policy, a restorative policy is also necessary, which will ensure that dropouts are offered a second opportunity to acquire the necessary knowledge and skills, in order to increase their chances in the labor market. For this, the students may be given readmission without creating any difficulty and they may be oriented towards open school option.

Government measures

- Provision of universal elementary education has been a salient feature of the national policy since Independence, in accordance with the Constitutional

commitment to ensure free and compulsory education for all children upto the age of 14 years. This resolve has been spelt out emphatically in the National Policy on Education (NPE), 1986 and the Programme of Action (POA), 1992. A number of schemes and programmes were launched in pursuance of the emphasis embodied in NPE and POA.

- After the enactment of the **RTE Act**, Out-of-school children are now identified by a school-mapping exercise in the community and the identified children are directly enrolled in formal government schools in age-appropriate grades. These children are provided Special Training which can last from 3 months to 2 years, depending on their need, so that they can attend regular classes at the earliest possible.
- The MHRD has already initiated a new system of tracking drop-out rates by students' Aadhar IDs, so that early intervention can be made to bring the child back to school. The data will be maintained by the National University for Education Planning and Administration (NUEPA).
- To ensure quality outcomes in government schools, the Central Government through Sarva Shiksha Abhiyan has supported State / UTs on:
  - Early grade reading, writing & comprehension and early mathematics programmes through a sub-programme namely "Padhe Bharat Badhe Bharat".
  - Sharing an exemplar on continuous comprehensive evaluation in elementary education developed by the NCERT.
  - Notifying learning outcomes by class and stage of education brought out by the NCERT.
  - Conducting the 3rd round of National Achievement Surveys for Class III, V and VIII to track student learning outcomes.
  - Providing funds and technical guidance to states for annual refresher training of teachers.
  - Providing academic support to teachers and schools through Block and Cluster Resource Centres.
- The identification of Special Focus Districts (SFDs) is an important step in the direction of providing universal and quality education to SCs & STs student at elementary level. These districts are identified based on indicators like concentration of out of school children, high gender gap, low retention rate and infrastructure gap as well as concentration of SC/ST/Minority population.

Conclusion

It is important to carefully design preventive measures and intervention strategies that could be adopted in order to help all adolescent dropouts. Certain preventive measures can be implemented throughout the target population, while others must take into account the diversity of dropout profiles.

ECONOMIC ISSUE

Broad Based Trade and Investment Agreement (India-EU FTA Talks)

Context

The negotiations on the FTA, known officially as the Broad-based Trade and Investment Agreement (BTIA) between India and European Union, was launched in 2007 to boost trade flows in goods and services, bilateral investments and access to public procurement.

However, India and the European Union (EU) failed to fix a date to re-launch negotiations on the proposed bilateral Free Trade Agreement (FTA), or a timeline to successfully conclude the talks that "were temporarily put on hold in summer 2013." Recently the Prime Minister's office is nudging the commerce department to take forward stagnant trade discussion.

Hereby, discussing about Broad based trade and investment agreement and hurdles in finalization of that.

Introduction

India and the European Commission (with a negotiating mandate from the European Council) initiated negotiations on a Free Trade Agreement (FTA) called the Broad-based Trade and Investment Agreement (BTIA) in 2007.

Seven rounds of negotiations have been completed without reaching a Free Trade Agreement.

Since 2013, when the FTA talks were delayed, India has unilaterally undertaken several reforms such as allowing 49 per cent foreign investment in insurance and pension, easing of foreign investments norms in the banking, defence and railways sectors.

The FTA negotiations were expected to restart in August 2015, but India deferred them saying it was disappointed and concerned over the EU imposing a ban on sale of around 700 pharmaceutical products clinically tested by GVK Biosciences.

The 14th India-EU Summit was held in New Delhi on October 6, during which the two sides had held extensive deliberations on bilateral, regional and international issues, including the Rohingya crisis and the volatile situation in the Korean peninsula.

However, India and EU failed to fix a date to re-launch negotiations on the proposed bilateral Free Trade Agreement (FTA), or a timeline to successfully conclude the talks that "were temporarily put on hold in summer 2013."

Hurdles in the negotiations

India's Demands:

- Data secure status (important for India's IT sector to do more business with EU firms) to permit Indian ITeS and BPM companies to gain greater traction in the EU, besides seeking greater access to the EU markets in various categories.
- Ease norms on temporary movement of skilled workers across the EU, make business visas easier.

EU's Demands:

- Elimination of India's duties on goods such as automobiles and wines and spirits, open its financial services sector as well as public procurement.
- The EU is keen on finalisation of an India-EU Bilateral Investment Treaty (BIT) before the re-launch of the FTA talks; India wants to make 'investment protection' a part of the negotiations on the proposed comprehensive FTA.
- Over time, with the boom in the Indian economy and the changing food habits and the retail distribution in India, the EU has also added easing FDI in retail and a greater access to the Indian food and agricultural markets.

Mode IV:

It refers to the delivery of a service within the territory of a member, with the service provider present as a natural person. In its essence, this enables the free movement of individual professionals by committing to measures such as a relaxation of immigration norms.

Analysis:

- Neither the European Union nor India has been able to satisfy the demands of the other side for the deal to progress ahead.
- **Duties on goods:**
  - India did slash tariffs on automobile imports and eased import and distribution of alcohol and spirits, but the EU wants it to go much further in both, something that India is not willing or able to, mainly to protect its own automobile and beverages industries.
- **Data Secure Status:**
  - The EU has refused to cede to Indian demands on data secure status or to ease mobility of Indian professionals in the EU region, citing that visas were national subjects and not something that Brussels could decide.
  - Indian ITeS firms are also outraged that the EU continues to refuse a data secure status to India, casting doubts over the security of private individuals' data to be shared with Indian ITeS companies, thus severely limiting their business prospects in Europe.
  - **Mode IV:** It refers to the delivery of a service within the territory of a member, with the service provider present as a natural person. In its essence, this enables the free movement of individual professionals by committing to measures such as a relaxation of immigration norms.

The EU law mandates that European countries doing outsourcing business with countries that are not certified as data secure have to follow stringent contractual obligations which increases operating costs and affects competitiveness.

- **Free movement of people:**
  - India has been keen to ensure that the final BTIA agreement includes provisions for free movement of people. India is particularly interested in the liberalisation of services under Modes I and IV of GATS.
  - As India's skilled services labour force is growing very fast, India emphasises better market access for services through Mode IV liberalisation over market access for goods in trade negotiations.
  - India says that improved market access in Mode IV will allow skilled professionals such as software engineers to temporarily reside and work in EU countries. The barriers include work permits, wage parity conditions, visa formalities and non-recognition of professional qualifications.
  - The Europeans, however, have been unable to reach a consolidated position on the issue, which is subject to the individual immigration policies of member states rather than of the EU as a whole.
- **Intellectual Property Rights:**
  - India's Intellectual Property Rights regime is another impediment as the EU wants India to go further than what it has signed on at the WTO.
  - India fears that any commitment over and above WTO's intellectual property right rules will undermine India's capacity to produce generic formulations.
  - Data exclusivity protection measures (that allows pharmaceutical companies to exclusively retain rights to their test results for a certain time period) would delay the supply of generic medicines. That explains India's opposition to the proposal.
  - European pharmaceutical companies are wary of India's patents law which prevents ever greening, which allows companies to renew patents on old drugs by making incremental changes.
- **FDI:**
  - The EU has been insisting that India further liberalise its Mode III services, including FDI in multi-brand retail and insurance and presently closed sectors such as accountancy and legal services.
  - European banks have been eyeing India's relatively under tapped banking space.
- **Non-tariff barriers:**
  - India is also keen that the EU abolishes non-tariff barriers such as standards and mutual recognition of licensing requirements.
  - Indian businesses have accused the EU of using terms like sustainable development, human rights, child labour and working conditions as import barriers and that these are being used increasingly in a rampant fashion.
- **Agriculture:**
  - Less than 2% of EU's population depends on farming as means of livelihood, compared to over 60% of Indian population that lives off the land.
  - The EU has a highly protected agricultural sector and India has strong defensive interests in the negotiations not just with the EU but even at the World Trade Organisation talks where India has blocked a deal on trade facilitation agreement unless the WTO members recognise India's right to provide food and farm subsidies for as long as it deems fit.

- **Procurement Issues:**
  - This is a priority issue for the EU and a bone of contention between the parties. The EU has complained that the Indian public procurement practices are often not transparent, discriminate against foreign companies while giving preferences to the locals. India is reluctant to agree to bring public procurement on board as it accounts for nearly 13 per cent of India's GDP.

  Hence, several rounds of negotiations and even high level meetings have failed to get around these hurdles and the deal seems more or less to be at the same place where it first encountered hurdles.

Benefits:

- When concluded, this (FTA) would be one of the world's largest trade agreements, touching the lives of 1.7 billion people.
- The European Union is India's biggest trade and investment partner. In principle, the trade agreement can be a great boost to the Indian economy.
- The proposed agreement ensures greater access to trade in information technology (IT) services for Indian IT professionals in the EU. An exchange for a reduction of tariffs from the most favoured nation (MFN) rates by India would facilitate this.
- However, a reduction in tariffs for India would mean more imports than exports, with a greater opening in the Indian market for European goods than in the European market for Indian goods. Therefore, the real issue for India is tackling with the non-tariff barriers such as sanitary and phytosanitary measures, and technical barriers to trade.
- Development of India as a manufacturing hub and expansion of infrastructure of India would also be beneficial for trade. Our imports would also grow. And, it is natural that German companies would benefit a lot from it.

Conclusion

The BTIA would encompass markets of more than 1.7 billion people. It has been described as "the mother of all trade agreements" by the Indian media. Therefore, it has been opined that India should adopt a flexible approach. This would be necessary in order to tap the potential gains of the FTA. However, it needs to be understood that issues of contentions between the parties are results of different economic structures and policies. These reflect opposing interests of economies at different levels of development.

Hence, the Indian Government needs to take a holistic overview of the potential gains and losses from the proposed FTA with the EU and initiate consultations with all stakeholders. The FTA requires political will from both sides. This should ensure a middle ground which enables both the countries to reap benefits out of the agreement, while at the same time, safeguarding domestic concerns and the public interest at large.

ECONOMIC ISSUE

Critical Analysis of Stand up India Scheme

Context

Prime Minister launched the "Stand up India scheme" and a Web portal for the scheme on 5th April, 2016. The "Stand up India Scheme" is being launched to promote entrepreneurship among Scheduled Caste/Schedule Tribe and Women with loans in the range of Rs. 10 Lakhs to Rs. 100 Lakhs.

The Scheme is expected to benefit large number of such entrepreneurs, as it is intended to facilitate at least two such projects per bank branch (Scheduled Commercial Bank) on an average one for each category of entrepreneur. The expected date of reaching the target of at least 2.5 lakh approvals is 36 months from the launch of the Scheme.

But the recent data shows that Stand Up India plan is slowing down; only 6% of bank branches gave loans to SC/STs.

Hereby, critically analyzing the Stand up India scheme.

Introduction

The "Stand up India Scheme" launched to promote entrepreneurship among Scheduled Caste/Schedule Tribe and Women for loans in the range of Rs. 10 lakhs to Rs. 100 lakhs.

The key features of the scheme:

- Composite loan between Rs. 10 lakh and upto Rs.100 lakh, inclusive of working capital component for setting up any new enterprise.
- Debit Card (RuPay) for drawal of working capital.
- Credit history of borrower to be developed.
- Refinance window through Small Industries Development Bank of India (SIDBI) with an initial amount of Rs.10,000 crore.
- Creation of a corpus of Rs. 5,000 crore for credit guarantee through NCGTC.
- Handholding support for borrowers with comprehensive support for pre loan training needs, facilitating loan, factoring, marketing etc.
- Web Portal for online registration and support services.
- The overall intent of the proposal is to leverage the institutional credit structure to reach out to these underserved sectors of the population by facilitating bank loans in the non-farm sector set up by such SC, ST and Women borrowers. The initiative will also develop synergies with ongoing schemes of other Departments.

- The process would be led by SIDBI with involvement of Dalit Indian Chamber of Commerce and Industry (DICCI) and various sector-specific institutions all over the country. The offices of SIDBI and National Bank for Agriculture and Rural Development (NABARD) shall be designated Stand Up Connect Centres (SUCC).

Every bank has been told that it will be responsibility to ensure that wherever one have a branch, have to give loans to two persons in the area — a youth who is a Dalit or an Adivasi, and a woman — to help them start a new enterprise, new business.

Benefits of Stand Up India Scheme

- Capital Access to Female entrepreneurs made easier.
- The government has initiated refinancing options under the scheme through SIDBI with an amount of Rs 10,000 crore. A corpus of Rs 5,000 crore will also be created for ensuring credit guarantee through ***NCGTC (National Credit Guarantee Trustee Company Ltd)***. The borrowers will also be given debit cards.
- Under the scheme, there are provisions for providing support to women as well as SC/ST borrowers through all stages, right from the loan application stage to business operations. They will be trained to familiarise them with guidelines and terminologies of banks, how to register online and use e-markets, and other relevant entrepreneurial practices. All the scheme related information will be brought together on the web portal of Stand Up India.
- The participation of women in entrepreneurship still remains low in numbers. There could be many reasons for it including access to capital, lack of training and knowledge, lack of confidence, etc. Through this scheme, every bank branch will start minimum two entrepreneurial projects. This initiative will significantly increase the number of women entrepreneurs in the country. As it is expected that the Stand Up India scheme will benefit more than 250,000 potential borrowers, the participation of female entrepreneurs is also expected to rise.

Challenges

- **Losses incurred for banks**:
  - The scheme provides much lower interest rates than the market rate. This low rate of interest is for the poor people. It definitely incurs huge losses for the PSU banks. On the other, it will be like investing more and more in non-performing assets.
  - According to the scheme there will be creation of jobs, encouraging new talents but also there will be a flood of loans that must be fulfilled by the PSU banks which is definitely not very good news for any of the banks.
- **Delays:**
  - The criterion for this scheme says that the company needs to be innovative. Judging whether a product is innovative or not is left to the discretion of the DIPP. This may lead to delays and also potentially good entrepreneurial ventures may be lost in the process.
- **Lack of awareness:**
  - The education of the people about the socio-economic dimensions of Dalit entrepreneurship and women entrepreneurship has not been paid much attention. If this is not done, the Stand up India scheme may not be very effective.

- The SC/ST's and women have not been fully and meaningfully empowered in terms of technological knowhow, access to skilled labour, knowledge about the sectors and so on.

- **Weak infrastructure:**
  - Instead of financing business or self-employed programs, government should have invested in basic amenities like electricity, road developments, basic education and such things.
  - A major part of the nation is still not receiving these basic amenities due to weak infrastructure. GOI must work on these areas first before financing small start-ups which are still a wild dream for mass Indians.

- The self help group's which have indeed provided some impetus to women entrepreneurs; especially in rural areas have been subject to elite capture and have been overwhelmed by locally dominant interests. The stand up India scheme does not make a mention of any institutional measures to address these challenges.

- **Lack of institutional bank linkages:**
  - The banking sector has not yet penetrated to the hinterlands in a meaningful manner. Therefore, the challenges of lack of institutional bank linkages, awareness among the people, digital divide and many other technological challenges can be obstacles to bank account linkages despite the success of Pradhan Mantri Jan Dhan Yojana.

- **Technological dependency:**
  - In India, there are several places where latest technologies haven't reached yet. At the same time, poor people, backward classes, dalits and other applicants, who fall under such scheme, are also not aware of technology evolution till today. It looks little difficult for lot of people to compete in long run.

- **Inadequate fund:**
  - The funding support of about 10 lakhs to 1 crore is inadequate for manufacturing sector.

Data on Stand-UP India Scheme

- Records show that 17 months after this assurance, barely six per cent of the 1.3 lakh bank branches have provided Stand Up India loans to Scheduled Caste/Scheduled Tribe individuals. And less than 25 per cent of the branches have provided loans to women in the general category.
- 21 public sector commercial banks, 42 regional rural banks and nine private sector banks have provided Stand Up India loans to 5,852 SC applicants, 1,761 ST individuals, and 33,321 general category women.
- The total loan amount sanctioned across banks is Rs 8,803 crore — so far, only Rs 4,852 crore has been disbursed.
- Data shows that the 21 public sector commercial banks have together sanctioned Stand Up India loans to 38,111 individuals – 5,559 of them are SC, 1,653 ST and 30,899 general category women. The average amount disbursed to SC/ST applicants is Rs 10 lakh while the average for women is Rs 12.27 lakh.
- Six of these public sector banks have together provided loans to less than 100 SC individuals. And 16 banks have not sanctioned a single loan under the ST category.
- Of the nine private banks, IndusInd Bank has sanctioned 184 Stand Up India loans to SC individuals while only 12 loans have been provided by the rest.

Way Forward

India has a high percentage of people who are unable to start their own business because of the capital shortage. This leads to death of several innovations and hence in the end economy suffers. By implementing such schemes, the government is providing an opportunity to the people to grow and innovate. The scheme would also help in reducing the unemployment rate which in turn also helps in increasing the GDP and the national income.

The need of the hour is to create awareness about this, and various other schemes for women entrepreneurs in India. The SC/ST population needs to be educated and socio-politically empowered further to reap the benefits of this scheme meaningfully. If implemented with the adequate ecosystem support, this scheme can indeed transform the socio-economic architecture of rural and urban India.

INTERNAL SECURITY

Non Lethal Weapons to Control Crowd and Laws Related to it

Context

Non-lethal weapons are used in policing and combat situations to limit the escalation of conflict where employment of lethal force is prohibited or undesirable, where rules of engagement require minimum casualties, or where policy restricts the use of conventional force.

The use of pellet guns by security forces in Jammu and Kashmir was in the news recently. Police and security forces have been using less-than-lethal or non-lethal weapons (NLW) such as pellet guns, oleoresin or chilli grenades, tear gas, pepper balls, stun grenades, electron shells and plastic pellets for crowd control.

Hereby, discussing the meaning of non lethal weapons and laws related to that.

Introduction

Non-lethal weapons are weapons intended to be less likely to kill a living target than conventional weapons such as knives and firearms. It is often understood that unintended or incidental casualties are risked wherever force is applied, but non-lethal weapons try to minimise the risk as much as possible.

Non-lethal weapons may be used by conventional military in a range of missions across the force continuum. They may also be used by military police, by United Nations forces, and by occupation forces for peacekeeping and stability operations. Non-lethal weapons may also be used to channelize a battlefield, control the movement of civilian populations, or to limit civilian access to restricted areas.

When used by police forces domestically, similar weapons, tactics, techniques and procedures are often called "less lethal" or "less than lethal" and are employed in riot control, prisoner control, crowd control, refugee control, and self-defense.

NLW are characterised by their ability to disable or incapacitate people or things while minimising physical harm to them, either because their effects are highly discriminate or relatively reversible.

Different Non lethal weapons

- ***PAVA:*** The name PAVA expands to ***Pelargonic Acid Vanillyl Amide***, also called Nonivamide, and is an organic compound found characteristically in natural chilli pepper. PAVA once fired, the shells burst out temporarily stun, immobilise

and paralyse the target (protesters) in a more effective way than a tear gas shell or pepper sprays.

- ***Water cannons*** are commonly used in crowd and riot control, for dispersal or to prevent movement on a particular position. These water cannons are like pressure washers, but not quite as strong. Water-filled rounds for small arms are in experimental stages.
- ***Scent-based weapons:*** Malodorants produce smells so horrible that they cause people to leave the affected area. In 2008, the Israeli Defence Forces began using Skunk for crowd control. It is a form of mist sprayed from a water cannon, which leaves a terrible odor of rot or sewage on whatever it touches, and does not wash off easily.
- ***Pepper spray:*** The active ingredient in pepper spray is oleoresin capsicum (OC), an acrid irritant chemical derived from cayenne pepper plants.
- ***Tear gas*** is a chemical weapon that causes severe eye, respiratory, and skin irritation, pain, bleeding, and even blindness. In the eye, it stimulates the nerves of the lacrimal gland to produce tears.
- ***Rubber bullets***, which are used as a non-lethal alternative to standard bullets, are known to cause significant pain and result in haematomas (where clotted blood swells within the tissues) and bruises.
- ***Bean-bag rounds*** are also deemed "less-lethal" but are capable of knocking someone to the ground.
- ***Taser (Thomas Appleton Swift's Electrical Rifle),*** produce a high voltage that stuns and temporarily disables people by causing involuntary muscle contractions. These contractions can cause people to fall and experience serious fractures or head injuries.
- ***The X-net***, developed by British QinetiQ Co., is a non-lethal vehicle-arresting device that can bring a vehicle to a complete standstill. The system is man-portable, can be deployed in a matter of seconds, and causes minimal damage to target vehicles.

Guidelines for use of force

- Governments and law enforcement agencies should develop a range of means as broad as possible and equip law enforcement officials with various types of weapons and ammunition that would allow for a differentiated use of force and firearms. These should include the development of non-lethal incapacitating weapons for use in appropriate situations.
- The development and deployment of non-lethal incapacitating weapons should be carefully evaluated in order to minimize the risk of endangering uninvolved persons, and the use of such weapons should be carefully controlled.
- Law enforcement officials, in carrying out their duty, shall, as far as possible, apply non-violent means before resorting to the use of force and firearms. They may use force and firearms only if other means remain ineffective or without any promise of achieving the intended result.
- Whenever the lawful use of force and firearms is unavoidable, law enforcement officials shall:
  - Exercise restraint in such use and act in proportion to the seriousness of the offence and the legitimate object to be achieved;
  - Minimize damage and injury, and respect and preserve human life;

- Ensure that assistance and medical aid are rendered to any injured or affected persons at the earliest possible moment.

- Governments shall ensure that arbitrary or abusive use of force and firearms by law enforcement officials is punished as a criminal offence under their law.
- Exceptional circumstances such as internal political instability or any other public emergency may not be invoked to justify any departure from these basic principles.
- Law enforcement officials shall not use firearms against persons except in self-defence or defence of others against the imminent threat of death or serious injury, to prevent the perpetration of a particularly serious crime involving grave threat to life, to arrest a person presenting such a danger and resisting their authority, or to prevent his or her escape, and only when less extreme means are insufficient to achieve these objectives. In any event, intentional lethal use of firearms may only be made in strictly unavoidable conditions in order to protect life.

Hence by use of pellet guns in such lethal way the government is violating the UN Basic Principles on the Use of Force and Firearms by Law Enforcement Officials and the UN Code of Conduct for Law Enforcement Officials.

Need for National Level Policy on use of Non Lethal Weapons:

- Non lethal weapons are designed and used to achieve military objectives, while simultaneously minimizing human casualties and collateral damage to property and equipment.
- These weapons can help to clarify the intent of an adversary, especially in CI ops and allow a commander to elevate/decrease his response to a suspected target as a situation evolves. Non lethal weapons can thus be used to help fill the gap between 'warning and shooting.'
- Non lethal weapons however cannot be used without an overarching national policy guiding its development and use in the Indian context.
- When formulating policy for the use and development of non lethal weapons, the following aspects need to be kept in mind:
  - Non lethal weapons augment, rather than replace, lethal weapons.
  - Use of non lethal weapons should not limit a commander's right to self-defense.
  - Can be used in conjunction with lethal force.
  - Does not obligate their use prior to employment of force provided for by applicable law.
  - Effects must be relatively reversible on personnel or material in order to decrease the post-conflict costs of reconstruction.
  - Non lethal weapons are capable of causing fatalities.

Way Forward

The intent behind the use of non-lethal weapons is to put more humane alternatives in the hands of the commanders rather than leaving them perplexed when facing horrific moral dilemmas where their own self-defense is warranted. Non-lethal weapons, by their very nature, must use new technologies or existing technologies in an innovative way, in order to provide the desired effects.

Innovative use of non lethal weapons will provide an option to lethal force, in an environment in which military engagements continue to be characterized by conditions where combatants and civilians closely intermingle. They also save lives of own personnel, as well as, of innocent civilians, caught in the midst of irregular warfare. Incorporating these and additional forms of non-lethal capabilities more broadly into the equipment, training, and doctrine of the Indian Army could substantially improve its effectiveness in achieving the goals in operations.

SOCIAL ISSUE

Global Slavery Index Report

Context

Slavery is everywhere in India. It's at brick kilns, rice mills, embroidery factories, quarries and farms. It's in roadside brothels and private homes.

According to the recent report, more than 18 million people, or 1.4% of India's population, live in slavery.

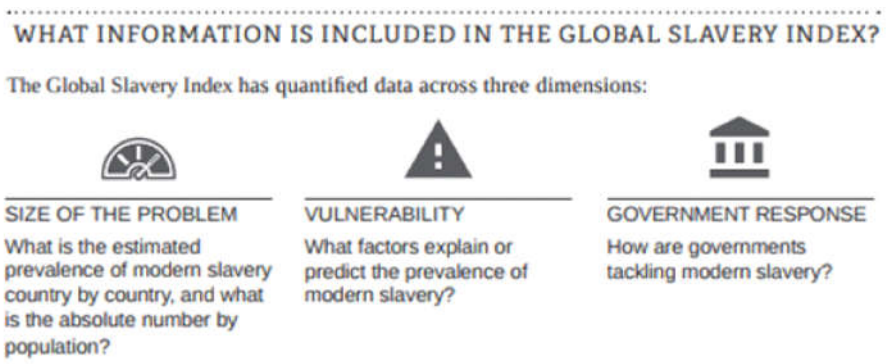
Hereby, discussing the prevalence of modern slavery, data related to that with special reference to India.

Introduction

Modern slavery is a hidden crime that affects every country in the world. In 2015–2016, modern slavery was found in many industries including the Thai fishing, Uzbek and Turkmen cotton, and the Qatari construction industries. It was identified in the domestic households of diplomats, in Islamic State (IS) controlled areas, and in areas that have experienced natural disasters, such as Nepal, and environmental destruction, such as the Democratic Republic of the Congo. It impacts on all of us, from the food we consume and the goods we purchase. It is our responsibility to tackle this crime.

About Global Slavery Index

The Global Slavery Index is a tool for citizens, non-government organisations (NGOs), businesses, and governments to understand the size of the problem, existing responses, and contributing factors so that they can advocate for and build sound policies that will eradicate modern slavery.



Data on Slavery

Slavery and its components, forced labour and trafficking, are the ultimate economic negative multipliers.

The 2016 Global Slavery Index estimates that 45.8 million people are subject to some form of modern slavery in the world today. The Index presents a ranking of 167 countries based on the proportion of the population that is estimated to be in modern slavery.

The countries with the highest estimated prevalence of modern slavery by the proportion of their population are North Korea, Uzbekistan, Cambodia, India, and Qatar. In North Korea, there is pervasive evidence that government-sanctioned forced labour occurs in an extensive system of prison labour camps while North Korean women are subjected to forced marriage and commercial sexual exploitation in China and other neighbouring states. In Uzbekistan, the government continues to subject its citizens to forced labour in the annual cotton harvest.

Those countries with the highest absolute numbers of people in modern slavery are India, China, Pakistan, Bangladesh, and Uzbekistan. Several of these countries provide the low-cost labour that produces consumer goods for markets in Western Europe, Japan, North America and Australia.

The countries with the lowest estimated prevalence of modern slavery by the proportion of their population are Luxembourg, Ireland, Norway, Denmark, Switzerland, Austria, Sweden and Belgium, the United States, Canada, Australia and New Zealand. These countries generally have more economic wealth, score higher on government response, have low levels of conflict, and are politically stable with a willingness to combat modern slavery.

Slavery in India

According to the Report, all forms of modern slavery continue to exist in India, including intergenerational bonded labour, forced child labour, commercial sexual exploitation, forced begging, forced recruitment into non-state armed groups and forced marriage.

Different forms of slavery have been discussed below:

- **Bonded labour:** While bonded labour has been outlawed for decades, survey data and pre-existing research confirms that this practice still persists. In debt bondage, slaves are chained to an illegal financial obligation that they are forced to repay through endless labor. An entire family—men, women, and children—is forced to work for the person who holds the debt. If a slave gets sick and misses work, the debt grows.

  It also has serious negative health impacts for those affected, who typically work in unsanitary and dangerous working conditions with no access to health care.

- **Domestic service:** Domestic workers are a particularly vulnerable group as work takes place in private homes and largely out of the reach of regulation. Official figures in India suggest that there are more than 4.2 million men, women and children working as cooks, cleaners, drivers, gardeners and care-givers across the country. Domestic workers in some states are excluded from labour laws and can experience excessive overtime, withholding of wages or receive insufficient remuneration. It is reported that girls as young as ten continue to be hired in private homes. Domestic workers can be subject to threats of and actual physical violence and in, some cases, sexual abuse.

- **Forced begging:** Street begging by adults and children is a prominent feature of many Indian cities. Though many beggars do so out of economic desperation, criminals also force people to beg.

- **Commercial sexual exploitation:** Existing research and the 2016 survey data confirm the existence of forced prostitution.

  Existing National Crime Records Bureau data indicate there were almost 5,500 cases across India under existing human trafficking laws in 2014. As the law does not differentiate between human trafficking and sex work, and there are no formal guidelines on who is identified in rescue and raid situations, it is impossible

to know if every one of these cases involved force or whether some are simply cases of economic survival.

- **Forced marriage:** More than 50 percent of women are married in India before the legal age of 18. Despite the illegality of sex-selective termination of female foetuses, the introduction of sex determination by ultrasound has seen some areas of India experience significant gender disparity and a dearth of available brides. The subsequent demand for brides, particularly in rural communities where many girls of marriageable age have migrated to cities for employment, has fuelled the trafficking of women for forced marriage. It is reported that in some instances, girls are forced into marriage and then used as unpaid labourers. The northern state of Haryana has India's most distorted sex ratio—114 males for every 100 females.
- **Forced recruitment for armed services:** A number of regions in India continue to experience armed violence and conflict between state-armed forces and armed opposition groups (AOGs). There is ongoing evidence to suggest that children are forcibly recruited into AOGs in Jammu & Kashmir, Punjab, Rajasthan, Bihar, Orissa, Jharkhand, West Bengal, Assam, Manipur, Tripura, Uttar Pradesh, Chhattisgarh, Madhya Pradesh, Maharashtra, Kerala, Tamil Nadu, Andhra Pradesh and Karnataka. Some children as young as six are used by Naxalites as informers and trained to fight with crude weapons, such as sticks. Once children reach 12 years, they receive training in weapon handling and the use of improvised explosive devices. Some women and girls have reported experiencing sexual violence in militant camps.

Factors leading to slavery mentioned in the Report

Vulnerability to modern slavery is affected by a complex interaction of factors related to the presence or absence of protection and respect for rights, physical safety and security, access to the necessities of life such as food, water and health care, and patterns of migration, displacement and conflict.

Dimension 1: Civil and Political Protections	Dimension 2: Social health and economic rights	Dimension 3: Personal security	Dimension 4: Refugee populations and conflict
Confidence in judical system	Financial inclusion: borrowed any money	Financial inclusion: availability of emergency funds	Impact of terrorism
Political instability	Financial inclusion: received wages	Violent crime	Internal conflict
Weapons access	Cell phone subscriptions	Women's physical security	Refugees resident
Discrimination: sexuality	Social safety net	GINI coefficient	
Displaced persons	Undernourishment	Discrimination: intellectual disability	
The Index 2016 Government Response	Tuberculosis	Discrimination: immigrants	
Political rights measure	Water improved access	Discrimination: minorities	

Vulnerability to slavery in India has some common elements, with poverty and the lack of capacity to absorb shocks, and deep structural inequalities reflecting gender, caste and tribe all being highly relevant. However, vulnerability is also distinct state by state. For example, in Bihar, agricultural shocks, high prevalence within the

population of members of the Scheduled Castes, combined with borders to Nepal, result in forced labour connected to migration for work both within and from India.

Across India, but particularly in some southern states, Indian migrant workers actively seek jobs in construction and care industries, primarily in the Gulf, Europe and North America. There are reported 14 million Indian men and women working overseas, primarily in the Gulf, many of whom will have sought work through their networks rather than formal channels. Official migration processes are complex and often tainted by corruption, which further encourages irregular migration. These channels leave migrants with little recourse against practices such as unilateral contracts, dangerous working and living conditions, limited movement and access to communications, withholding of passports and wages, and physical and sexual abuse.

Recommendations

- With many of the necessary laws in place and under development, the focus must be on implementation and tracking improvements in implementation. For example, given the high levels of internal migration, there is a clear need to ensure that State police are encouraged and enabled to continue investigations across borders. This needs to be in addition to any central investigations bureau which will likely focus on only the most complex cases.
- Ratify and implement the Convention on the Worst Forms of Child Labour.
- Ratify and implement the Domestic Workers Convention.
- Proactively require all states to follow up on the Supreme Court Judgment of October 15, 2012, to identify and release those in bonded labour, and report on progress. Require States who report zero cases of bonded labour to show what steps have been taken to actually find and assist bonded labourers.
- Update regulations and processes for the implementation of the Bonded Labour Act, and report on its implementation.
- Focus on practical ways to regulate and monitor practices of placement agencies.
- Implement a new National Action Plan that targets the full spectrum of modern slavery, while recognising the differences between highly organised crime (which is likely to be cross-border) and more localised practices of bonded labour.
- Ensure that victims are not criminalised or detained both by law enforcement and in the shelter system. Victims must be protected (including protecting their identities) throughout the duration of their court cases. Repeal laws which permit detention of victims.
- Increase the proportion of female police officers in enforcement.
- Create and monitor implementation of standard operating procedures for shelter homes to support quality and rights based post-rescue rehabilitation of survivors.
- Prevent the recruitment of children into armed opposition groups and provide targeted rehabilitative services to rescued children.

ENVIRONMENTAL ISSUE

Bottom Trawling to Deep Sea Fishing: Sustainable Fishing

Context

The issue of fishermen straying in each other's territorial waters has come as a potential irritant in the bilateral relations between the neighbouring states specially India and Sri Lanka. Indian fishermen are usually arrested on charges of trespassing. Thus to cater this issue, the Tamil Nadu Fisheries University (TNFU) has organised a one-day workshop in Chennai on deep sea fishing, the aim being to promote deep sea fishing as an alternative to trawling in the Palk Bay.

Hereby discussing the drawbacks of bottom trawling and how deep sea fishing can be a solution to it.

Fishing issue between India and Sri Lanka

The arrests and seizures of fishermen and sea crews have become a continuous problem and cause a rise of tensions between India and Sri Lanka. The reasons are:

- There is no well defined boundary line between the two nations.
- **Territorial waters overlap in some areas:** Maritime border between the two countries is about 400 kilometres spreading along three different areas: the Bay of Bengal in the north, the Palk Bay and the Gulf of Mannar in the centre and the Indian Ocean in the south. In the Palk Bay region, distances between the coasts of the two countries varies between 16 and 45 kms. This means territorial waters of each country in some areas strays into the other's if 12 nautical mile criteria is strictly applied.
- **LTTE issue has raised vigilance:** The issue of fishermen came to existence with the emergence of violent ethnic conflict between the Tamil militants and the Sri Lankan government in the mid 1980s. Increased vigilance by the Sri Lankan Navy to check intermittent flow of Tamil refugees into India and flow of arms and supplies to Tamil militant groups made fishing difficult and risky. Due to these fishermen from both nations suffered.
- **Security concerns:** The monitoring is still on which aimed at preventing possible return of LTTE cadres, who fled from the island during the height of the conflict in 2009, to revive the insurgency all over again.

Thus the Indian fishermen, who thus far enjoyed monopoly of resource-rich waters, have now got competitors in massive numbers. At times, this leads to confrontations between the two fishing communities and in turn drawing intervention of either of naval forces.

The main complaint of Sri Lankan fishermen has been against Indian mechanised trawlers that indulge in pair, mid-water, pelagic, and bottom trawling severely damaging marine resources and the sea bed.

What is bottom trawling?

Bottom trawling is an industrial fishing method where a large net with heavy weights is dragged across the seafloor. When the weighted nets and trawl doors are dragged along the seafloor, everything in their path is disturbed or destroyed, including seagrasses, coral reefs or rock gardens where fish hide from predators.

Bottom trawls are used in catching marine life that live on the seafloor, such as shrimp, cod, sole and flounder.

Impact of Bottom Trawling

- The damage from bottom trawling is not limited to habitat destruction. As the net drags along the seafloor, all creatures in its path—fish, animals, marine mammals, plants, and turtles—are scooped up along the way.
- The fishing vessel keeps the targeted commercial species and discards the remaining, unwanted fish and animals—virtually all of it dead or dying.
- Once coral and sponge communities are destroyed, commercial fish and other species dependent on them for spawning, shelter, nurseries, protection, and food, may also disappear. In addition, overfished species such as rockfish and crab may need corals and other seafloor structures to provide appropriate habitat for recovery.
- By re-suspending bottom sediment, nutrient levels in the ambient water, and the entire chemistry of the water is changed.
- Re-suspended sediment can lower light levels in the water, and reduce photosynthesis in ocean-dwelling plants, the bottom of the food web.
- The re-suspended sediment is carried elsewhere by currents, and often lost from the local ecosystem. It may be deposited elsewhere along the continental shelf, or in many cases, permanently lost from the shelf to deeper waters. Changing parts of the seafloor from soft mud to bare rock can eliminate those creatures that live in the sediment. Species diversity and habitat complexity are directly affected by changing of the physical environment of sand, mud or rock that result from trawling.

Thus, the Sri Lankan Parliament unanimously passed an Amendment to the Fisheries and Aquatic Resources Act on July 6 that declared the method of fishing by bottom trawling as an offence. It is aimed at curbing local trawlers as well as deterring trawlers from Tamil Nadu.

As a solution, Tamil Nadu government is transiting it's strategy from trawling to deep-sea fishing.

The present plan in the Palk Bay is to extract 2,000 trawlers from the bay and replace them with deep sea vessels that fish in the Bay of Bengal and Gulf of Mannar. The time period for this transition is three years (2017-2020), with 500 boats to be replaced in the first year alone. The Central and Tamil Nadu governments have committed Rs.800 crore and Rs.320 crore, respectively, to the plan. Each vessel will be fitted for tuna long-lining and/or gillnetting, and have a unit cost of Rs.80 lakh. Of this unit cost, trawl owners have to only pay Rs.8 lakh upfront and Rs.16 lakh through a loan from the Pandyan Grama Bank. The balance Rs.56 lakh will be a subsidy shared by the State and Central governments.

What is Deep sea fishing?

The activity of catching fish that live in the deep parts of the sea/ocean is called deep-sea fishing. The boats are designed in such a way that fishermen get access to the deeper parts of the ocean and fish species. It is practiced worldwide, especially in the coastal areas with no ecological damage.

The goal with deep sea fishing is to travel far enough away from land so that fishermen reach deeper parts of the ocean, giving them access to fish species which only live in the open ocean. Big fish like the open ocean because it provides them with lots of room and lots of prey, and some fishing grounds may be teeming with such fish, especially if they have been well-managed. Often, a deep sea fishing expedition will travel beyond the sight of land to reach prime fishing grounds.

Challenges in Deep Sea Fishing

Prospective beneficiaries of the deep see fishing project should possess a registered, seaworthy trawl vessel of over 12m in length that must be scrapped or disposed of outside the Palk Bay. However, new replacement tuna long liner boats cannot trawl or operate in the Palk Bay. The government is now creating a new deep sea fishing harbour at Mookaiyur, located just south of the Palk Bay in the Gulf of Mannar, where many of these vessels are likely to be berthed. Priority is to be given to owners who have had their boats apprehended or damaged in Sri Lanka. Beneficiaries are not allowed to sell their boats within five years of obtaining them though it is unclear how that will be enforced.

The Indian government report of the Working Group for Revalidating the Potential of Fishery Resources in the Indian EEZ suggests that oceanic regions have a maximum potential yield of 208,000 tonnes. Importantly, however, while the report highlights that oceanic stocks are not fully exploited, it does not state where the remaining oceanic stocks in the Indian Ocean exist nor whether this might be in the Bay of Bengal or the Gulf of Mannar. Moreover, the report warns that oceanic resources are transboundary and hence are targeted by a number of other countries too.

Whether deep sea fishing will reduce the Palk Bay fishing conflict depends entirely on the downsizing of the existing trawl fleet. On paper, the necessary safeguards are in place: participant trawl owners have to surrender their boats while deep sea fishing vessels will not be allowed into the Palk Bay. But rules are not always followed. The government will have to ensure that remaining vessels are not upgraded in size or engine horse-power, as many trawl owners in the Palk Bay have been increasing their engine capacities surreptitiously, well beyond legal limits.

Also the Palk Bay trawl fishers, who are used to one-day fishing, do not have sufficient skills and an interest for deep sea fishing.

Thus, proper steps need to be taken for their training and creating awareness related to the benefits of deep sea fishing.

INTERNAL SECURITY

Poor Status of Border Infrastructure in India

Context

The Ministry of Defence has decided to significantly enhance infrastructure along the Sino-Indian border including near Doklam, where the militaries of both sides were engaged in a two-month standoff.

Hereby, analyzing the present status of the border infrastructure mainly in context of India and China and steps needed.

Introduction

India shares an undemarcated 3,488-km border with China, which witnesses frequent incursions. China's preparedness on its side of the border is far superior to India's in terms of roads, highways, rail lines, air strips, and logistic depots, according to security analysts in India.

Concerns about poor Indian infrastructure were raised during the Doklam standoff when it was pointed out that it would be difficult for India to quickly increase its deployment in the region if tensions escalate.

In sharp contrast to the metal-topped roads, rail links, air strips, radar systems, depots and other state-of-the-art infrastructure on the Chinese side, the Indian Army convoys that most of the places is vastly hampered by the poor infrastructure on the Indian side.

According to several military and intelligence sources, India is at least a decade away from matching the infrastructure on the Chinese side, where most posts have direct road access.

Across Tibet, massive infrastructure projects have come up providing easy access to the border for the Chinese military.

Need of the border infrastructure:

- The $46 billion China-Pakistan Economic Corridor, which transgresses Pakistan-occupied Kashmir, allows China easy access to the Arabian Sea.
- It is not just Pakistan but China is also spreading the tangles in Bangladesh and Myanmar, the latter is a key nation in India's Look East Policy.
- China has invested $10 billion in developing a Special Economic Zone in Kyaukphyu, giving China access to the Bay of Bengal. Since 2012, China is also keen on building a road link between Kunming and Chittagong, a port city in Bangladesh.
- China may begin the work of linking Nepal's capital Kathmandu through a rail link by 2020.

- China's Tibet Autonomous Region shares its border with India. China has been on a development spree in the region, building about five airports, besides linking the territory with road and rail links. In contrast to India, which has still not linked all of North East through rail link, China linked Lhasa to its railway system in 2006.
- Developmental projects being undertaken in Tibet has sparked concerns in India as it would provide considerable leverage to the 2.3 million-strong People's Liberation Army (PLA) to move men and material up to the borders with relative ease.
- China's military power is also bolstered by several airstrips in Tibet as well as a 58,000 kilometre-long roadways in the region.
- What must worry India is the fact that a rail link between Lhasa and Xigaze is close to Sikkim, Bhutan and Nepal.
- In addition to providing China with easy military manouevering, the railway links have led to the influx of migrants from the populated regions of China.
- While China has been proactive in building infrastructure along the border, India has woken up from its slumber only in the last few years.

Implications:

- With the improved infrastructure, China is in a position to deploy and sustain 30 to 32 divisions, including five or six rapid reaction divisions, compared with the 20 to 22 divisions it could have sent earlier.
- All-weather roads have changed the scenario completely as such mobilization will be possible year round. Moreover, while mobilization would have taken more than six months in the past, it can now be done in six weeks with the improved infrastructure. Apart from extensive road and rail networks, China has also built oil depots.
- These suggest that China will not only be able to amass troops and supplies to the LAC rapidly in the event of war but will also be able to sustain operations over a longer period of time. "Multiple air bases and forward airstrips near the border areas are additional advantages to China".
- In contrast, India's lack of road and rails on its side will undermine Delhi's capacity to rush reinforcements to the LAC. This could prove costly especially in the initial stages of a possible war.

Border infra development strategy so far

- Since its humiliating defeat in the 1962 war with China, India perceived the building of roads near the LAC as facilitating the advance of China's troops into India in the event of another invasion.
- It was only in 2006 that the country's Cabinet Committee on Security, its topmost policy making body on national security, ordered among other things, the construction of 73 strategic roads and airstrips near the LAC.
- The inordinate delay in improving connectivity to the LAC signals that even if India has shed its old defensive mindset, it still lacks the political will and the energy to match China.
- In 2013, the Cabinet Committee on Security headed by then Prime Minister Manmohan Singh had approved a Rs. 64,000-crore plan to raise the corps. It is to be completed by 2020.
- The Strike Corps was to be armed with, among others, the M-777 ultra-light howitzers, manufactured in the U.S. by BAE Systems, which can be easily airlifted. These are to be inducted from March 2019.

Government measures:

- Government has inaugurated the country's longest road bridge. The 9.15 km-long Dhola-Sadiya bridge across the river Lohit in Assam will vastly improve road connectivity to the border state of Arunachal Pradesh. Built at a cost of Rs 2,056 crore, the bridge is designed to allow the passage of the Indian Army' s 60-tonne Arjun and T -72 main battle tanks.
- As areas like Tawang and Bame near the LAC are likely to be connected by rail, work is in progress on a two-lane trans-Arunachal highway too. Scheduled for completion by 2021, it is planned as a trunk route of 1811 km, linking Tawang at Arunachal Pradesh' s north-western tip to Kanubari at its south-eastern end, and finally joining NH-52 near Akajan beside Bogibeel bridge near Dibrugarh in Assam.
- The 4.9 km-long Bogibeel bridge, under construction for the past 15 years, is poised to become the longest rail-cum-road bridge in the country. Likely to be commissioned by March 2018, the bridge across the Brahmaputra will be of prime strategic importance as it will enable the army to take men and supplies from its Dibrugarh base to the Sino-Indian border.
- Up north, the NHAI's all-weather road project to connect Jammu and Srinagar with Leh through Zojila pass.
- Indian Army is set to deploy fleet of armed helicopters near the North East border. The army will also raise a new corps, 17 Corps, for the North East by 2025. A new air force station near Ladakh will be built just 25 kilometres from the Line of Actual Control.

Things are changing, given the government's focused commitment and the realisation that developing infrastructure is crucial for ensuring effective defence and territorial integrity. "Logistics infrastructure—advance landing ground, helipads, ammunition dumps, staging areas and so on—to support combat operations are being given priority.

However, government should increase funds for the Border Area Development Programme (BADP) and encourage the forces to win the trust of residents.

GOVERNANCE ISSUE

Supreme Court Judgments on Rape

Context

In the recent judgment of the Delhi High Court in Mahmood Farooqui vs. State the court has sought to determine the issue of consent in the context of a pre-existing non-platonic relationship. This judgment is significant because it has laid down a new test that can enable the determination of whether a sexual act between previously consenting partners was on a given date non-consenting.

Whereas in the other judgment the Supreme Court has criminalised sex with a minor wife aged between 15 and 18 years, saying the exception in the rape law was arbitrary and violative of the constitution.

Hereby, discussing the two judgments and its implications.

Mahmood Farooqui vs. State

In June 2015, a case of rape was registered against Farooqui based on the complaint filed by a US scholar. She claimed that in a drunken state, Farooqui had forcible oral sex with her. In 2016, a trial court judge Sanjiv Jain had accepted the testimony of the woman, convicted Farooqui.

The 2013 criminal law amendments were made to the rape law provisions in the Indian Penal Code, 1860 (IPC) including the introduction of the definition of consent in rape cases and made a seven-year sentence mandatory for rape. Farooqui's sentencing triggered a debate on whether the minimum sentence was too harsh and must be awarded for forcible oral sex or not.

The Delhi high court acquitted filmmaker Mahmood Farooqui of rape charges and set aside his sentence. A trial court in 2015 had sentenced him to seven years of rigorous imprisonment for raping a 30-year-old research scholar from Columbia University, New York. While acquitting Farooqui, Justice Ashutosh Kumar held that in rape cases where the victim and accused know each other, consent cannot be deciphered by a "feeble no".

Questions before the high court:

Farooqui had moved the Delhi High Court in appeal. The court was to check the correctness of the trial court verdict. While deciding that the victim's testimony is unreliable, the High Court discussed consent.

- On consent when victim and accused know each other and the victim is educated and may, have in the past had physical contacts with the accused, the High Court said that a "feeble no" may not suffice.

- The court also held that "absence of any real resistance of any kind re-affirms the willingness," on the victim's part.
- On the victim's conduct after the rape, the High Court said that she could not have so understood as to confront the accused.
- Lastly, the court also acknowledges Farooqui's history of bipolar disorder and said that there is doubt as to whether he could discern/understand the victim's denial of consent, giving him the benefit of doubt.

Implications

- Between strangers, lack of consent on the part of the woman is much easier to establish. But when the parties have had consensual encounters, the judgment in Mahmood Farooqui suggests that the communication of unwillingness by the woman has to be more emphatic.
- The court rightly does not arrive at a conclusion that there was consent on her part nor does it presume consent based on past consensual encounters.
- However, the court arrived at a conclusion that there was a failure of adequate and unequivocal communication of unwillingness on the part of the prosecutrix and therefore gives Farooqui the benefit of doubt.
- What made matters worse was her acute awareness of his fragile emotional state, his alcoholism and his inebriated condition at the time (she even mixed a drink for him shortly before the incident).
- Not that any of these factors could justify a man foisting himself on an unwilling woman. It is the failure to communicate her resistance, and instead her call to "go along" with it, according to her, to avoid more harm, even "faking an orgasm" so she could be done with it sooner, that contributed to his acquittal.
- The judgment does not seek to draw sweeping generalisations, nor should it be stretched to be authority for the proposition that "no" means "yes". That would do great harm to women. Giving Farooqui the benefit of doubt in the circumstances was correct.

The ruling's regressive discourse on consent is a setback for women's rights. It shifts the onus on proving consent on the woman, contrary to apex court rulings and the 2013 amendments to rape laws.

Judgment of rape with Minor

The Supreme Court held that sexual intercourse by a man with his wife, who is below 18 years of age, is rape. The Supreme Court has ruled that Exception 2 to Section 375 (which defines rape) of the IPC, as it stands, is arbitrary and violative of articles 14, 15 and 21 and not in consonance with the POCSO Act.

The IPC was amended in 2013 and the age of consent was raised to 18 years [from the earlier age of 16, which was the age of consent since 1940] and the rationale behind that was a girl below the age of 18 years is considered incapable of realising the consequences of her consent; she is treated as a minor under law and, therefore, mentally and physically not mature enough to give a valid consent.

Section 375 of the IPC reads as here under:

"375 Rape—A man is said to commit "rape" if he — a) penetrates his penis, to any extent, into the vagina, mouth, urethra or anus of a woman or makes her to do so with him or any other person; or b) inserts, to any extent, any object or a part of the body, not being the penis, into the vagina, the urethra or anus of a woman or makes her to do so with him or any other person; or c) manipulates any part of the body of a woman so as to cause penetration into the vagina, urethra, anus or any part of body of such woman or

makes her to do so with him or any other person; or d) applies his mouth to the vagina, anus, urethra of a woman or makes her to do so with him or any other person, under the circumstances falling under any of the following seven descriptions:

- Against her will.
- Without her consent.
- With her consent, when her consent has been obtained by putting her orany person in whom she is interested, in fear of death or of hurt.
- With her consent, when the man knows that he is not her husband and that her consent is given because she believes that he is another man to whom she is or believes herself to be lawfully married.
- With her consent when, at the time of giving such consent, by reason of unsoundness of mind or intoxication or the administration by him personally or through another of any stupefying or unwholesome substance, she is unable to understand the nature and consequences of that to which she gives consent.
- With or without her consent, when she is under eighteen years of age.
- When she is unable to communicate consent.

Consent means an unequivocal voluntary agreement when the woman by words, gestures or any form of verbal or non-verbal communication, communicates willingness to participate in the specific sexual act: Provided that a woman who does not physically resist to the act of penetration shall not by the reason only of that fact, be regarded as consenting to the sexual activity.

The Section 375 of IPC states that Sexual intercourse by a man with his own wife, the wife not being under fifteen years of age, is not rape.

The exception had remained an anomaly because Section 375 itself mandated that sex with a girl below 18 years of age, with or without her consent, was statutory rape. An unmarried girl child can prosecute her rapist, but a married girl child aged between 15 and 18 could not even do that.

Raising the age of consent to 18 years was indicative of the fact that Parliament considers girls below the age of 18 years as incapable of giving consent for sex. But Parliament fixed the age of consent for married girls as 15 years while for all other acts like Protection of Children from Sexual Offences Act, 2012 (POCSO), Prohibition of Child Marriage Act, 2006, Juvenile Justice (Care and Protection of Children) Act, 2000, a girl less than 18 years is regarded as a child.

With this judgment, considered by experts as trigger to declaring child **marriage** void ab initio, the court ended the decades-old disparity between Exception 2 to Section 375 IPC and other child protection laws.

The Court has asked the Centre and states to take proactive steps to prohibit child marriage across the country, and voiced concern over thousands of minor girls being married in mass wedding ceremonies on the occasion of Akshaya Tritiya.

Law is never the only solution – it needs to be supported by comprehensive training to individuals and increased sensitisation. Justice Verma panel recommended that there is a need for attitudinal change where the legal prohibition on marital rape is accompanied by changes in the attitudes of prosecutors, police officers and those in society more generally.

INTERNATIONAL ISSUE

Race for Resources in Central Asia

Context

A great game is unfolding in resource-rich, but landlocked, Central Asia, where China through its one-belt-one-road (OBOR) initiative is attempting to harness maximum mineral and hydrocarbon wealth as well as grow the market for its goods. India, not to be left behind, has also embarked on a Connect Central Asia Policy, trying to overcome a disadvantage it has: lack of direct connectivity to the region.

Hereby analyzing the race of utilizing resources going on in Central Asia by India and China.

Introduction

- The five republics of Central Asia (Tajikistan, Uzbekistan, Turkmenistan, Kyrgyzstan, and Kazakhstan) are endowed with an immense amount of natural resources and are located in the center of Eurasia. The collapse of the Soviet Union made it possible for these Central Asian states to develop independent relations with the rest of the world.
- The location of Central Asia has made it a "strategic pivot." The interconnectedness and high degree of economic interaction among great powers makes it unlikely that a strategic player (China or Russia) could use Central Asia as a staging ground for an invasion. Thus the race in going on to improve economic relations with these nations.

India and Central Asia

- India views itself as a stabiliser and security provider in the region and, with its growing economic clout, is an attractive economic power for the countries in the region.
- Uzbekistan, which has historical links with India, is emerging as the next big partner for New Delhi in the region. It has offered to provide special incentives and zones for Indian businesses, expand defence and counter-terror partnership with India and extend an opportunity to expand presence in the region and Afghanistan through mega connectivity initiatives. Oil and uranium rich Kazakhstan is an old partner of India.
- India's interest in securing reliable energy supplies and trade through Central Asia remains substantial. Besides oil and gas, energy-hungry India is eyeing imports of uranium from both Kazakhstan and Uzbekistan.
- India is considering exploration and production of hydrocarbons in Kazakhstan and participation of its companies in the oil and gas sector. Kazakhstan has expressed interest in supplying gas to India.

- India is exploring with Uzbekistan the possibility of extending the Friendship Railway Bridge to Herat in Western Afghanistan amid a push to the government's Afghan strategy.
- With Uzbekistan being the region's biggest military power, Tashkent is also keen to expand its defence partnership with India.
- India is also eyeing effective counter-terror partnership through the Shanghai Cooperation Organisation (SCO) Counter-terror centre based in Tashkent, after it became a member of the bloc.

India's lack of direct overland access to the region due to Pakistan's reluctance in allowing Indian goods to pass through its territory has hurt New Delhi's trade interests in the region. However, countries in Central Asia are keen to have India as one of their major partners to unleash their potential.

Significance for India

- **Strategic Location:**
  - Geographically, the strategic location of these countries makes them a bridge between different regions of Asia and between Europe and Asia.
- **Trade and Investment potential:**
  - The economic development of Central Asia, especially in Kazakhstan, Turkmenistan and Uzbekistan, has sparked a construction boom and development of sectors like IT, pharmaceuticals and tourism.
  - India has expertise in these sectors and deeper cooperation will give a fresh impetus to trade relations with these countries.
  - There is a great demand for Indian pharmaceutical products in the region.
- **Stabilization of Afghanistan:**
  - Central Asian nations and India can play effectively role in bringing normalcy in Afghanistan.
- **Energy security:**
  - The countries of Central Asia are endowed with significant hydrocarbon and mineral resources and are close to India geographically.
  - Tajikistan has vast hydropower potential besides oil deposits, and Turkmenistan has the fourth largest gas reserves of the world.
  - Uzbekistan is also rich is gas, and is an important regional producer of gold along with Kyrgyzstan.
  - Kazakhstan is the largest producer of uranium and has huge gas and oil reserves as well.
- **Security:**
  - Central Asia can help in tackling the challenge of terrorism, narcotics trafficking and arms smuggling and keeping a check on the rise of radical Islamist groups that may pose a threat to India's security.
  - Religious extremism, fundamentalism and terrorism continue to pose challenges to Central Asian societies as well as regional stability thus healthy relation in must.

China and Central Asia

- China has made significant headway in the region, with $10 billion in grants and aid to SCO members in Central Asia and developing regional linkages between Central Asia and its western regions.
- Central Asia is central to China's OBOR policy.
- Top military commanders from China, Pakistan, Afghanistan and Tajikistan met in Urumqi, Xinjiang province to form "Quadrilateral Cooperation and Coordination Mechanism in Counter Terrorism."
- Central Asian countries are rich in oil, natural gas, and other resources, and therefore, it makes sense for the Chinese to extend their economic muscle to that part of the world. Kazakhstan is a country that is rich in natural resources and can help Beijing with the prospect of creating jobs for its citizens. China has been working on many infrastructure projects in Kazakhstan: roads, railroads, bridges, airports, and pipelines. These efforts further demonstrate the importance of Central Asia to the Chinese government.

Significance for China

- **Strategic Location:**
  - Geographically, Kazakhstan shares a border with China's western province, Xinjiang. Politically, Kazakhstan is still a dictatorship.
  - China, unlike the United States and European powers, registers no objections to the Kazakh government's human rights abuses. This makes China's political and economic transactions with the Kazakh government much easier.
- **Energy Security:**
  - As China's thirst for oil and natural gas has stimulated the Chinese to invest heavily in the markets of Central Asia, Kazakhstan will continue to be a particular target for that investment.
- **Security:**
  - The western province of China—Xinjiang or the "New Territories"—was annexed to the Chinese empire in 1884. However, ever since its addition to the empire, the [Muslim] Uyghurs, the natives of the province, have been trying to separate and create their own independent state.
  - Uyghurs remaining in China have fomented unrest and been found responsible for "several bombings" in Xinjiang and other parts of China.
  - China has been working with the Central Asian states to avoid political problems and to extinguish the remnant of Uyghurs' aspirations for an independent Xinjiang by preventing the Uyghurs' partnering with the Diaspora scattered throughout the region.

India's Concern

India's interests in Eurasia are fundamentally strategic. The Central Asian Region's (CARs) are superficially stable but inherently fragile states, with incomplete nation building, underdeveloped political institutions and traditions, and no accepted mechanism for periodic transfer of political power. Instability could make them a haven for terrorists, separatists and fundamentalists.

Since developments in Xinjiang, geographically contiguous to both India and the CARs have direct and far-reaching implications for India's security.

Way Forward

- India can become relevant to the CARs only if it remains integral to Eurasian energy politics through a big project that creates long-term mutually beneficial linkages between India and the CARs and, equally important, is in conformity with the strategic interest of the concerned parties. In this context, Iran's strategic relevance to India has gone up. The recently signed Memorandum of Understanding on the development of Chabahar port as a strategic, not merely economic, project, and the reactivation of the North-South Corridor are long overdue steps. These need to be followed up urgently with high-level exchanges, including at the Prime Minister's level.
- India needs to use its soft power while dealing with the region. The "people-to-people" contact has been a defining feature of India's Connect Central Asia Policy.
- Many students from Central Asia come to India for higher studies because India provides higher education at marginal cost when compared to European and American universities.
- India can increase its attractiveness to the region's countries more effectively.

India's 'Connect Central Asia' Policy:

- India will continue to build on our strong political relations through the exchange of high level visits. Its leaders will continue to interact closely both in bilateral and multilateral fora.
- India will strengthen its strategic and security cooperation. India already has strategic partnerships in place with some Central Asian countries. In focus will be military training, joint research, counter-terrorism coordination and close consultations on Afghanistan.
- India will step up multilateral engagement with Central Asian partners using the synergy of joint efforts through existing fora like the Shanghai Cooperation Organisation, Eurasian Economic Community (EEC) and the Custom Union. India has already proposed a Comprehensive Economic Cooperation Agreement to integrate its markets with the unifying Eurasian space.
- India looks to Central Asia as a long term partner in energy, and natural resources. Central Asia possesses large cultivable tracts of land and it sees potential for India to cooperate in production of profitable crops with value addition.
- The medical field is another area that offers huge potential for cooperation. India is ready to extend cooperation by setting up civil hospitals/clinics in Central Asia.
- India's higher education system delivers at a fraction of the fees charged by Western universities. Keeping this in mind, India would like to assist in the setting up of a Central Asian University in Bishkek that could come up as a centre of excellence to impart world class education in areas like Information Technology, management, philosophy and languages.
- India is working on setting up a Central Asian e-network with its hub in India, to deliver, tele-education and tele-medicine connectivity, linking all the five Central Asian States.
- Indian companies can showcase its capability in the construction sector and build world class structures at competitive rates. Central Asian countries, especially Kazakhstan, have almost limitless reserves of iron ore and coal, as well as abundant cheap electricity. India can help set up several medium size steel rolling mills, producing its requirement of specific products.
- As for land connectivity, India has reactivated the International North-South Transport Corridor (INSTC). India & Central Asian nations need to join our efforts to discuss ways to bridge the missing links in the Corridor at the earliest and also work on other connecting spurs along the route.
- Absence of a viable banking infrastructure in the region is a major barrier to trade and investment. Indian banks can expand their presence if they see a favourable policy environment.

Conclusion

While New Delhi enters the Eurasian integration path, it also needs to factor in the changing political dynamics within Central Asia. Following the recent change of leadership in Tashkent, the nature of the regional outlook is changing in favour of intra-regional cooperation. If this trend gathers force, it would not be always easy for China to overcome the broader set of issues that could come in the way of realising its BRI vision. In any event, to counter such a strategic move, the Indian policy response should cater for the interplay of trade, investment, connectivity and culture.

INTERNATIONAL ISSUE

SPAIN Hit by Constitutional Crisis

Context

Referendum on independence for Catalonia was recently held. Catalan officials have claimed that preliminary results of its referendum have shown 90% in favour of independence in the vote vehemently opposed by Spain.

The referendum, declared illegal by Spain's central government, has thrown the country into its worst constitutional crisis in decades and deepened a centuries-old rift between Madrid and Barcelona. The ballot will have no legal status as it has been blocked by Spain's Constitutional Court and Madrid for being at odds with the 1978 constitution.

Hereby analyzing the issue, its historical background and implication of it.

Introduction

Catalonia, an area in north-eastern Spain of 7.5 million people, accounts for 15% of Spain's population and 20% of its economic output. About 1.6 million people live in Barcelona, Catalonia's capital, which is a major tourist destination.

The latest referendum was the region's second referendum on independence in three years. The previous ballot, a non-binding vote in November 2014, returned an 80% result in favour of an independent Catalan state. However, less than half of the 5.4 million eligible voters participated.

Dispute over Catalonia in Spain began when the Catalan parliament voted by 72 to 52 with 11 abstentions to call a binding referendum on Oct. 1 to decide whether Catalonia should become "an independent state in the form of a republic."

Supporting the motion were the 62 representatives of Together for Yes (Junts pel Sí) that includes most of the center-right, pro-independence Convergence and Union and the Republican Left, and the 10 representatives of the far-left Catalan Popular Unity party. Opposing the motion were the 25 representatives of the Citizens Party (Ciudadanos), the 16 representatives of the Socialists and the 11 representatives of Rajoy's People's Party.

Historical background

- Catalonia was historically an autonomous region of the Iberian peninsula, which encompasses Spain and Portugal. However, it was never a disparate part of the region despite having its own language, laws, and customs. The marriage of Petronilia, the Queen of Aragon, and Ramon Berebguer IV, Count of Barcelona in 1150, led to the formation of a dynasty. All regions of the peninsula spanning

Aragon and Catalonia were brought under unified rule which lasted until the reign of King Philip V.

- The war of Spanish Succession created modern Spain with the defeat of Valencia in 1707 and of Catalonia in 1714. Subsequent sovereigns tried to impose the Spanish language and laws in order to culturally unify the kingdom, but their attempts were abandoned in 1931 when the Generalitat (the national Catalan government) was restored.
- Catalan separatism was crushed under the dictatorship of General Francisco Franco who took control of the region, killing 3,500 people and forcing many more into exile. Franco was ousted in 1977 and democracy was restored.
- Calls for complete independence continued to grow. In July 2010, the Constitutional Court in Madrid overruled part of the 2006 autonomy statute, stating that there is no legal basis for recognizing Catalonia as a separate country in the framework of the Spanish nation state.
- The economic crisis which has embattled the Spanish economy with rising unemployment and spiraling inflation, only served to amplify separatist sentiments as the wealthy Barcelona region is seen as propping up the poorer provinces.
- In that moment, people in Catalonia demanded more self-government and control over what is done with their money.
- Pro-independence supporters claim Catalonia, which is one of Spain's wealthiest regions, offers more financial support to Spain than it receives from the central government in Madrid.
- Many view the region's strong economy as an indicator that it would be viable as a sovereign state.

Catalonia's grievances with Madrid

- Barcelona has become one of the EU's best-loved cities, famed for its 1992 Summer Olympics, trade fairs, football and tourism. But Spain's 2008 economic crisis hit Catalonia hard, leaving it with 19% unemployment (compared with 21% nationally).
- It is one of Spain's wealthiest regions, making up 16% of the national population and accounting for almost 19% of Spanish GDP. But there is a widespread feeling that the central government takes much more than it gives back.

Concern

Catalonia is emerging as a scary example, where too much of decentralization and giving far too much power to self-rule can prove damaging to the issue of national unity, which the nation-states of Europe want to cultivate.

EU does not need another crisis while already finding it hard to land a deal on Brexit. Catalans enjoy freedom of expression, and creating a new country within EU creates a situation where other regions within EU could start demanding a new country.

Should Catalonia be granted independence?

- Catalonia should not be granted independence. The rich regions of Europe should shoulder some responsibility for the poor regions. Though this is an internal issue of Spain, its outcome could have far-reaching impact on countries in Asia and Africa as well.

Is there room for compromise?

- For any region it is very hard to achieve independence under international law. Even though it had a strong case on human rights grounds.
- The government in Madrid has indicated it could open the door to possible constitutional reforms. They may be ready to offer more money and greater financial autonomy.
- But that may not be enough for Carles Puigdemont and a Catalan leadership that has spent months preparing a path for independence.

Options for Spain

- The Spanish government could still make a gesture to appease the Catalan separatists who dominate the Catalan parliament.
- The independence movement was galvanised by a 2010 Spanish Constitutional Court ruling which many Catalans saw as a humiliation.
- That ruling struck down some key parts of Catalonia's 2006 autonomy statute. The court refused to recognise Catalonia as a nation within Spain; the Catalan language should not take precedence over Spanish in the region; and measures giving Catalonia more financial autonomy were overruled.
- The court acted after Mr Rajoy's party asked it to. Now, to defuse this crisis, Madrid could agree to negotiate and reinstate the elements of autonomy that were taken from Catalonia.
- Madrid could also change Section 92 of the constitution, to allow a legally binding referendum to take place. But that appears unlikely, as such an initiative would have to come from the Spanish government and be supported by the King.
- Holding a new Catalan referendum would also be risky for Madrid, as its intransigence in the current crisis may have boosted the Catalan independence cause.

Way forward

- Spain and Catalonia both need to take a timeout before they both go over the cliff-edge into a full-blown constitutional crisis. And after stepping away from the cliff-edge, they need to undertake a comprehensive negotiation – one that fully addresses the grievances that gave rise to the 2006 statute granting Catalonia greater autonomy.
- As part of that negotiation, they should consider whether Spain and its historic regions should move beyond the ambiguous halfway house of "autonomous communities" within a unitary state to a full-fledged federal system of government in which the regional governments have substantially more autonomy.
- That negotiation should elaborate a procedure that provides a constitutional path through which a region which expresses, through its democratic institutions, a clear and unambiguous desire to become independent can undertake a negotiation with the national government that might, if both governments agree and the constitution is amended, allow it to become independent.

A better strategy might have been constructive engagement, or simply allowing the vote to take place and encouraging "no" voters to participate. Allowing lop-sided development, concentrating development in a few states and regions creates a national crisis. A warning all other countries should heed in future.

SOCIAL ISSUE

Global Hunger Index, 2017

Context

The 2017 Global Hunger Index (GHI) shows long-term progress in reducing hunger in the world. The advances have been uneven, however, with millions of people still experiencing chronic hunger and many places suffering acute food crises and even famine.

Hereby discussing the important outcomes of the index and recommendations for improving the Global Hunger Index.

Introduction

Hunger is usually understood to refer to the distress associated with lack of sufficient calories. The Food and Agriculture Organization of the United Nations (FAO) defines food deprivation, or undernourishment, as the consumption of too few calories to provide the minimum amount of dietary energy that each individual requires to live a healthy and productive life, given his or her sex, age, stature, and physical activity level.

About Global Hunger Index

The Global Hunger Index (GHI) is a tool designed to comprehensively measure and track hunger at the global, regional, and national levels.

The GHI is designed to raise awareness and understanding of the struggle against hunger, provide a means to compare the levels of hunger between countries and regions, and call attention to the areas of the world in greatest need of additional resources to eliminate hunger.

To capture the multidimensional nature of hunger, GHI scores are based on four indicators:

- **UNDERNOURISHMENT:** the share of the population that is undernourished (that is, whose caloric intake is insufficient);
- **CHILD WASTING:** the share of children under the age of five who are wasted (that is, who have low weight for their height, reflecting acute undernutrition);
- **CHILD STUNTING:** the share of children under the age of five who are stunted (that is, who have low height for their age, reflecting chronic undernutrition); and
- **CHILD MORTALITY:** the mortality rate of children under the age of five (in part, a reflection of the fatal mix of inadequate nutrition and unhealthy environments).

The indicators included in the GHI formula reflect caloric deficiencies as well as poor nutrition. By including indicators specific to children, the index captures the nutrition situation not only of the population as a whole, but also of children—a particularly vulnerable subset of the population for whom a lack of dietary energy, protein, or micronutrients (essential vitamins and minerals) leads to a high risk of

illness, poor physical and cognitive development, and death. The inclusion of both child wasting and child stunting allows the GHI to capture both acute and chronic undernutrition.

GHI Calculation

GHI scores are calculated using a three-step process.

- First, values for each of the four component indicators are determined from the available data for each country. The four indicators are undernourishment, child wasting, child stunting, and child mortality.
- Second, each of the four component indicators is given a standardized score on a 100-point scale, based on the highest observed level for the indicator globally.
- Third, standardized scores are aggregated to calculate the GHI score for each country, with each of the three dimensions (inadequate food supply, child mortality, and child undernutrition, which is composed equally of child stunting and child wasting) given equal weight.

This calculation results in GHI scores on a 100-point scale, where 0 is the best score (no hunger) and 100 is the worst. In practice, neither of these extremes is reached. A value of 0 would mean that a country had no undernourished people in the population, no children younger than five who were wasted or stunted, and no children who died before their fifth birthday. A value of 100 would signify that a country's undernourishment, child wasting, child stunting, and child mortality levels were each at approximately the highest levels observed worldwide in recent decades.

Global Data on Hunger

The 2017 Global Hunger Index (GHI) indicates that worldwide levels of hunger and undernutrition have declined over the long term: At 21.8 on a scale of 100, the average GHI score for 2017 is 27 percent lower than the 2000 score (29.9).

This improvement reflects the reductions since 2000 in each of the four GHI indicators—the prevalence of undernourishment, child stunting (low height-for-age), child wasting (low weight-for-height), and child mortality.

Despite these improvements, a number of factors, including deep and persistent inequalities, undermine efforts to end hunger and undernutrition worldwide. As a result, even as the average global hunger level has declined, certain regions of the world still struggle with hunger more than others, disadvantaged populations experience hunger more acutely than their better-off neighbors, and isolated and war-torn areas are ravaged by famine.

At the regional level, South Asia and Africa south of the Sahara have the highest 2017 GHI scores—30.9 and 29.4, respectively, indicating serious levels of hunger.

In South Asia, child undernutrition, as measured by child stunting and child wasting, is higher than in Africa south of the Sahara. Meanwhile, Africa south of the Sahara has a higher child mortality rate and struggles more with undernourishment, reflecting overall calorie deficiency for the population.

Data of India

India's 2017 GHI score is at the high end of the serious category. According to 2015–2016 survey data, more than a fifth (21 percent) of children in India suffer from wasting.

India has implemented a "massive scale-up" of two national programs that address nutrition—the Integrated Child Development Services and the National Health Mission—but these have yet to achieve adequate coverage. Areas of concern include

(1) the timely introduction of complementary foods for young children (that is, the transition away from exclusive breastfeeding), which declined from 52.7 percent to 42.7 percent between 2006 and 2016; (2) the share of children between 6 and 23 months old who receive an adequate diet—a mere 9.6 percent for the country; and (3) household access to improved sanitation facilities—a likely factor in child health and nutrition—which stood at 48.4 percent as of 2016.

Recommendations

Although enough food is produced globally to feed the world, hunger persists—largely the product of various and severe inequalities. Yet neither hunger nor inequality is inevitable; both are rooted in uneven power relations that often are perpetuated and exacerbated by laws, policies, attitudes, and practices.

The following recommendations aim at redressing such power imbalances in order to alleviate hunger among the most vulnerable:

- **Foster Democratic Governance of National Food Systems:** To foster genuinely democratic governance of our food system, governments must actively include in the policy-making process underrepresented groups, such as small-scale farmers, that are involved in producing food and feeding people but often excluded from contributing to the policies and laws that affect their livelihoods.
- **Broaden Participation in International Food-Policy Debates:** International bodies aiming to increase food and nutrition security must ensure the meaningful participation of people's movements and civil society organizations from all parts of the world to generate more productive debates around paradigms of food systems.
- **Guarantee Rights and Space for Civil Society:** Governments must ensure space for civil society to play its role in holding decision makers to account on their obligation to protect and ensure the Right to Food. Integral to this are freedom of assembly and association, including peaceful protest, and the right to information.
- **Protect Citizens and Ensure Standards in Business and Trade:** Governments should create and enforce regulatory frameworks to safeguard citizens—especially the most vulnerable—from the negative impacts of international trade and agriculture agreements and the actions of private firms that could endanger citizens' food sovereignty and food and nutrition security. Private companies should act in compliance with internationally agreed human rights and environmental standards in their business activities, as described in the UN Guiding Principles on Business and Human Rights.
- **Analyze Power to Make Better Policies:** National policies should take into account how hunger and malnutrition are distributed across the population, and how power inequalities affect different groups in society—for example, how discriminatory gender norms and practices can harm the nutritional status of women and girls. Focusing on trade, land, agricultural, and other policies that have both visible and hidden impacts on food and nutrition security will help to align efforts in the fight against global hunger.
- **Increase Support for Small-Scale Food Producers:** Governments should build the capacity of small-scale producers, particularly women, by ensuring access to public services such as infrastructure, financial services, information, and training.
- **Advance Equality through Education and Social Safety Nets:** To reduce gross inequality and hunger, national governments must provide access to education and create social safety nets to ensure that all members of society—including the most vulnerable and marginalized—have income security and can access essential health care.

- **Hold Governments Accountable with Timely Data:** To monitor progress toward Zero Hunger and hold governments accountable to their commitments, critical data gaps in relation to both hunger and inequality must be addressed, and national governments and international organizations must support the collection of disaggregated, independent, open, reliable, and timely data.
- **Invest in the SDGs and Those Left Behind:** Donors should adequately fund efforts to achieve the SDGs. This is particularly crucial for low-income countries, where official development assistance (ODA) is disproportionately necessary. Donors should meet internationally agreed targets by contributing 0.7 percent of gross national income (GNI) to ODA as well as 0.15–0.2 percent of GNI to the Least-Developed Countries.

GOVERNANCE ISSUE

Firecracker Ban by Supreme Court

Context

Due to the burning of crackers during Diwali the air quality deteriorates abysmally and alarmingly and the city chokes thereby. It leads to closing the schools and the authorities are compelled to take various measures on emergent basis, when faced with "health emergency" situation.

Hence a bench headed by Justice A K Sikri put on hold sale of fire crackers with immediate effect.

Hereby discussing the impact of the firecrackers and Supreme Court judgment on that.

Background of the judgment

A PIL was placed in the Supreme Court related to ban on firecrackers.

Based on the data on different pollution levels, Supreme Court has directed the Union of India on 11th November, 2016 to:

- Suspend all such licences as permit sale of fireworks, wholesale and retail within the territory of the National Capital Region (NCR).
- The suspension shall remain in force till further orders of this Court.
- No such licences shall be granted or renewed till further orders.

It was further directed that the Central Pollution Control Board (CPCB) to study and prepare a report on the harmful effects of the materials currently used in the manufacture of fireworks.

Later, on September 12, 2017, however, the apex court had temporarily overturned its earlier order and permitted the sale of firecrackers, saying a blanket ban would be an "extreme step" and a graded approach was needed to curb pollution.

This order has been upheld by the court in its entirety but would be effective post Diwali.

Under the order, the court had asked traders to utilize their existing stocks and not sell fresh stock. It had also cut temporary licences of the states of Delhi, Haryana and Uttar Pradesh by 50%. Temporary licences in Delhi were capped at 500.

But the **Supreme Court** has suspended the sale of firecrackers in Delhi and NCR till November 1, 2017 in a bid to test whether a Deepavali without firecrackers this year will have a "positive effect" on the health of citizens and a steadily deteriorating air quality.

The ban would remain in effect until 31 October and any further orders would be passed based on assessment of the situation that would emerge after Diwali.

The court passed this order reimposing its earlier order of 11 November 2016 suspending sale of firecrackers so as to test the suspension order and ascertain its positive effect on the air quality of the NCR region, particularly during the Diwali period.

Guidelines of the Supreme Court

Judgement of the Supreme Court of India in the matter of Arjun Gopal vs Union Of India regarding use of fireworks, sparklers and minor explosives in any form, during festivals or otherwise.

Some of the directions passed by the Apex Court are the following:

- Concerned police authorities and the District Magistrates will ensure that fireworks are not burst in silence zones that is, an area at least 100 meters away from hospitals, nursing homes, primary and district health-care centres, educational institutions, courts, religious places or any other area that may be declared as a silence zone by the concerned authorities.
- The Delhi Police is directed to reduce the grant of temporary licences to sell fireworks by about 50% of the number of licences granted in 2016. The number of temporary licences should be capped at 500. Similarly, the States in the NCR are restrained from granting more than 50% of the number of temporary licences granted in 2016.
- Educate school children on the health hazards and ill-effects of breathing polluted air, including air that is polluted due to fireworks.
- The interim direction issued by this Court on 31st July, 2017 prohibiting the use of compounds of antimony, lithium, mercury, arsenic and lead in the manufacture of fireworks is made absolute.
- A Committee is appointed for a research study to be conducted on the impact of bursting fireworks during Dussehra and Diwali on the health of the people. Report should be submitted before 31st December, 2017.

What are firecrackers?

Fireworks are small explosive device, typically containing a small amount of gunpowder in a tightly-wound roll of paper, primarily designed to produce a large bang.

Firework performance depends on four primary ingredients — oxidiser, fuel, colouring agents, and binder.

Oxidiser: the oxidisers in fireworks are chemicals that release oxygen to allow the explosion to take place. Nitrates, chlorates and perchlorates are used most commonly.

Fuel: Charcoal, commonly known as black powder is the most common fuel used in fireworks. The combination of fuel and oxidiser — or gunpowder — causes the explosion.

Reducing Agents: The second part to a firework is the reducing agent. These burn the oxygen provided by the oxidising agents to produce hot gasses. Common reducing agents are Sulphur and Charcoal.

Colouring Agents: Different chemicals are used to produce different coloured fireworks are:

Metal	Colour
Strontium	Red
Copper	Blue
Barium	Green
Sodium	Yellow/Orange
Calcium	Orange
Gold	Iron

Binders: Binders are used to hold what is essentially the mixture of the firework together in a paste like mixture. The most commonly used binder is known as dextrin, a type of starch which holds the composition together.

Impact of fireworks

Results of studies have shown that the levels of suspended particulate matters (SPM), CO, NOx, hydrocarbons, SO2, increase to an unprecedented levels in air during fireworks displays. Pregnant women, children and those having a chronic asthma are most vulnerable to these exposures.

The SPM levels can cause throat, nose, eye related problems. It can lead to headaches and reduced mental acuity. It has much more severe effects in people with heart, respiratory or nervous system disorders. It can aggravate problem for people suffering from cold allergies or coughs and can also cause congestion of throat and chest.

Unwanted second noise has harmful effects as well. Standard noise level set by the Department of Environment and Natural Resources (DENR) for the ambient environment is 60 dB during daytime and 50 decibels during night time. Fireworks can be loud and can exceed 140 decibels. Noise at 85 decibels above can damage hearing. Increase in the sound levels can lead to restlessness, temporary or permanent hearing loss, high blood pressure, and sleep disturbance.

Fireworks can also cause respiratory problems such as: chronic or allergic bronchitis, bronchial asthma, sinusitis, rhinitis, pneumonia and laryngitis.

These ingredients, according to the scientists at CPCB, are a major constituent of the smog that forms on bursting of firecrackers and hangs over the city like an impenetrable cloak for days after Diwali. This smog has high levels of sulphur oxides and nitrogen oxides, and particulate matter containing heavy metals such as lead, mercury, strontium, lithium, and aluminium.

Ban on crackers failed to bring result

Post-Diwali morning air pollution level was 6.6 times higher than prescribed standards and more than twice as high as pre-Diwali day levels.

According to Centre for Science & Environment (CSE), "Despite the cracker ban the 24-hour average level of PM2.5 during Diwali and the morning after (12 pm-12 am, October 19-20) has been 397 microgramme per cubic metre (mg/cu m). This is 6.6 times higher than prescribed standards and more than two times higher than the levels of pre-Diwali day when the 24-hour average was 184 microgramme per cu m."

Data by the Central Pollution Control Board's (CPCB) data exhibited a significant drop in volume of particulates PM2.5, PM10 and gaseous pollutant SO2 (sulphur

dioxide) across Delhi on the Diwali night, as compared to 2016. However, the volume of pollutants were almost identical and at many places even higher, when compared with figures of 2014 or 2015, making it difficult to attribute the marginal dip to any particular factor, such as the ban on the sale of firecrackers.

Despite the good intent of the Supreme Court, the ban on sale of firecracker failed to give the desired results as it could never do. Thus proper and graded steps should be taken to meet the challenge and awareness drive should be placed to increase people participation.

ECONOMIC ISSUE

New PPP Policy

Context

National development needs active participation of many stakeholders - the government, corporate players, civil society and industry associations. The spirit of symbiotic partnerships between private and public sector is the best way to fulfill the development. Thus government has launched new PPP policy.

Hereby discussing the concept of PPP, challenges and changes proposed in the policy.

Introduction

Public Private Partnership is a long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility, and remuneration is linked to performance.

PPP Characteristics

- The private sector is responsible for carrying out or operating the project and takes on a substantial portion of the associated project risks.
- During the operational life of the project the public sector's role is to monitor the performance of the private partner and enforce the terms of the contract.
- The private sector's costs may be recovered in whole or in part from charges related to the use of the services provided by the project, and may be recovered through payments from the public sector.
- Public sector payments are based on performance standards set out in the contract.
- Often the private sector will contribute the majority of the project's capital costs, although this is not always the case.

PPP advantages

- Access to private sector finance.
- Efficiency advantages from using private sector skills and from transferring risk to the private sector.
- Potentially increased transparency.
- Enlargement of focus from only creating an asset to delivery of a service, including maintenance of the infrastructure asset during its operating lifetime.
- This broadened focus creates incentives to reduce the full life-cycle costs (ie, construction costs and operating costs).

PPP modes

- **Build Operate and Transfer (BOT):** This is the simple and conventional PPP model where the private partner is responsible to design, build, operate (during the contracted period) and transfer back the facility to the public sector.

- **Build-Own-Operate (BOO):** This is a variant of the BOT and the difference is that the ownership of the newly built facility will rest with the private party here.
- **Build-Own-Operate-Transfer (BOOT):** This is also on the lines of BOT. After the negotiated period of time, the infrastructure asset is transferred to the government or to the private operator.
- **Build-Operate-Lease-Transfer (BOLT):** In this approach, the government gives a concession to a private entity to build a facility (and possibly design it as well), own the facility, lease the facility to the public sector and then at the end of the lease period transfer the ownership of the facility to the government.
- **Hybrid Annuity Model:** HAM is a Combination of EPC model and BOT- (Build Operate Transfer) Annuity model. Under this model. The government will provide 40% of the project cost to the developer to start work while the remaining investment has to be made by the developer.
- **Management contract:** Here, the private promoter has the responsibility for a full range of investment, operation and maintenance functions. He has the authority to make daily management decisions under a profit-sharing or fixed-fee arrangement.
- **Service contract:** This approach is less focused than the management contract. In this approach, the private promoter performs a particular operational or maintenance function for a fee over a specified period of time.

Government initiatives

The Government has facilitated the PPP sector by offering:

- **Foreign Direct Investment (FDI) -** upto 100% FDI in equity of SPVs in the PPP sector is allowed on the automatic route for most sectors.
- **Viability Gap Funding (VGF) subsidy**
  - Viability Gap Funding of upto 40% of the cost of the project can be accessed in the form of a capital grant.
  - This scheme aims at supporting infrastructure projects that are economically justified but fall marginally short of financial viability.
  - Support under this scheme is available only for infrastructure projects where private sector sponsors are selected through a process of competitive bidding.
  - VGF under this Scheme is normally in the form of a capital grant at the stage of project construction.
- **India Infrastructure Project Development Fund (IIPDF)**
  - Scheme supports the Central and the State Governments and local bodies through financial support for project development activities,(feasibility reports, project structuring etc) for PPP projects.
  - The IIPDF would assist ordinarily up to 75% of the project development expenses.
  - The IIPDF will be available to the Sponsoring Authorities for PPP projects for the purpose of meeting the project development costs which may include the expenses incurred by the Sponsoring Authority for achieving Technical Close of such projects.
  - On successful completion of the bidding process, the project development expenditure would be recovered from the successful bidder.

- From the Government of India's perspective, the IIPDF must increase the quality and quantity of bankable projects that are processed through the Central or States' project pipeline.

- **India Infrastructure Finance Company Limited (IIFCL)**
  - IIFC was set-up to bridge the gap between long-term debt and Sufficient tenure for cost recovery.
  - There is urgent need for providing long-term debt for financing infrastructure projects that typically involve long gestation periods.
  - Debt finance for such projects should be of a sufficient tenure which enables cost recovery across the project life, as the Indian capital markets were found deficient in long-term debt instruments;

Issues and Challenges

The idea that PPP investments can spur infrastructure development and growth without much fiscal pain is not practical as the actual experience of many countries, including India is bitter. In the current scenario Private investments in India is failing to pick up speed, and with government's own finances under strain the government is emphasizing on public-private partnership (PPP) projects to make up for a shortfall in investment spending in the Union budget.

The reason for the lack luster performance by PPPs projects are:

- Disputes in existing contracts
- Non-availability of capital and
- Regulatory hurdles related to the acquisition of land.
  - Though India is one of the largest recipients of private investment in infrastructure, yet due to regulatory and policy issues, there are few hurdles in this area as well.
  - A few private companies have walked out of big projects and some others have been demanding renegotiation or are under arbitration. GMR and GVK that walked out of mega highway projects and Delhi Airport Metro Express are some of the cases.
- Unstable Macroeconomic Indicators
  - The government and its agencies cannot predict the macro-economic indicators accurately but they expect from the private sector to forecast all the issues that may crop up in the future and take risks.
- Political Indecisiveness & Renegotiation
  - Political indecisiveness leads to policy paralysis.
  - The contracts once negotiated are opened for renegotiation
  - Moreover, articulation of any changes required attracts the charge of crony-capitalism.
  - Therefore renegotiation is easier said than done.

PPP in Health Care

Niti Aayog and Union Health Ministry have proposed a public private partnership (PPP) model to augment the state run healthcare institutions' capacity to treat non-communicable diseases like cancer and heart ailments. The suggestion is to provide land or building within an existing public health facility or its premises to allow private healthcare provider set up specialised treatment units for specified illnesses.

Over the last two decades or so, several state governments have tried to rope in private healthcare players to offer affordable treatment to masses. One of the earliest models was to provide land at concessional rates, after getting the private partner to commit to offer free treatment to the poor. Governments have tried to lease out entire facility to the private player, given them the operational rights for mutually agreed time frame and allowed them to provide specific services like diagnostic labs or pharmacies within the government hospital premises.

The results have always been mixed. There were some good examples, some failures. But none of these partnerships were seen as something that can be scalable pan-India, and hence become a template for universal healthcare coverage

Kelkar Report on PPP

Key recommendations of Kelkar Committee are:

- **Periodic reviews:** Reviews should ideally be done frequently, perhaps once every three years.
- **Change in attitude and in the mind-set:** All parties concerned to foster trust between private and public sector partners when they implement PPPs.
- **Amend the Prevention of Corruption Act, 1988:** The Government may take early action to **amend the Prevention of Corruption Act, 1988** which does not distinguish between genuine errors in decision-making and acts of corruption.
- **Capacity building programmes** for different stakeholders including implementing agencies and customized programmes for banks and financial institutions and private sector need to be evolved. The need for a national level institution to support institutional capacity building activities must be explored.
- **Optimal allocation of risks across PPP stakeholders:** Project specific risks are rarely addressed by project implementation authorities in this "One-size-fits-all" approach**.**
- **Dispute Resolution Mechanism:** The Committee recognizes the need for a quick, equitable, efficient and enforceable **dispute resolution mechanism for PPP projects**.
- **Unsolicited Proposals ("Swiss Challenge") may be actively discouraged** as they bring information asymmetries into the procurement process and result in lack of transparency and fair and equal treatment of potential bidders in the procurement process.
- The Committee is of the view that since state owned entities SoEs/PSUs are essentially government entities and work within the government framework, they should not be allowed to bid for PPP projects.
- PPP should not be used as the first delivery mechanism without checking its suitability for a particular project.
- **Equity in completed, successful infrastructure projects may be divested by offering to long-term investors**, including overseas institutional investors as domestic and foreign institutional investors with long-term liabilities are best suited for providing such long-term financing, but have a limited appetite for risk.
- Encouraging the banks and financial institution to issue **Deep Discount Bonds or Zero Coupon Bonds (ZCB)**. These will not only lower debt servicing costs in an initial phase of project but also enable the authorities to charge lower user charges in initial years.

New PPP Policy

Government has announced a new PPP Policy for Affordable Housing that allows extending central assistance of up to Rs.2.50 lakh per house to be built by private builders even on private lands besides opening up immense potential for private investments in affordable housing projects on government lands in urban areas.

This policy seeks to assign risks among the government, developers and financial institutions, to those who can manage them the best besides leveraging under utilized and un-utilized private and public lands towards meeting the Housing for All target by 2022.

New policy gives eight PPP (Public Private Partnership) options for private sector to invest in affordable housing segment.

The two PPP models for private investments in affordable housing on private lands include:

- Extending central assistance of about Rs.2.50 lakh per each house as interest subsidy on bank loans as upfront payment under the Credit Linked Subsidy Component (CLSS) component of Pradhan Mantri Awas yojana (Urban).
- Under the second option, central assistance of Rs.1.50 lakh per each house to be built on private lands would be provided, in case the beneficiaries do not intend to take bank loans.

The six models using government lands are:

- **DBT Model:** Under this option, private builders can design, build and transfer houses built on government lands to public authorities. Government land is to be allocated based on the least cost of construction. Payments to builders will be made by the public authority based on progress of project as per agreed upon milestones and buyers will pay to the Government.
- **Mixed Development Cross:** Subsidized Housing : Government land to be allotted based on number of affordable houses to be built on the plot offered to private builders, cross subsidizing this segment from revenues from high end house building or commercial development.
- **Annuity Based Subsidized Housing:** Builders will invest against deferred annuity payments by the Government. Land allocation to builders is based on unit cost of construction.
- **Annuity-cum-Capital Grant Based Affordable Housing:** Besides annuity payments, builders could be paid a share of project cost as upfront payment.
- **Direct Relationship Ownership Housing:** As against government mediated payments to builders and transfer of houses to beneficiaries in the above four models, under this option, promoters will directly deal with buyers and recover costs. Allocation of public land is based on unit cost of construction.
- **Direct Relationship Rental Housing:** Recovery of the costs by builders is through rental incomes from the houses built on government lands.

Under these six Government land based PPP models, beneficiaries can avail central assistance of Rs.1.00 to Rs.2.50 lakh per house as provisioned under different components of PMAY(Urban).

Also Beneficiaries will be identified as per the norms of PMAY(Urban).

The private sector has not entered affordable housing segment so far despite huge scope for the same under Pradhan Mantri Awas Yojana(Urban) and an enabling eco-system put in place through several concessions and incentives offered including the grant of infrastructure status for this segment.

Conclusion

The ultimate success of the PPP model depends upon the government's willingness to accept the basic premise within which private sector operates. Whatever be the arrangement, it should make commercial sense. The private sector should also be careful not to utilize this opportunity for maximizing their profits. It's going to be a volume game, and they should be contented with the thinnest margins possible. Once there is a convergence in these motives, resource convergence will take no time.

Prelims News

Context

Hereby, compiling the important short notes of October (1 to 15), 2017.

Indian Culture

GADIYA LOHARS

- Gadia Lohars are a nomadic community of Rajasthan, India. They are also found in the Malwa region of Madhya Pradesh.
- They are ironsmith by profession who move on from one place to another place on bullock carts.
- These Lohars are different from the Lohar clan of Iran, Pakistan and India. They usually make and repair agricultural and household implements.
- The members of this tribe claim that their ancestors made weapons for the army of Rajput king Maharana Pratap. Legend says that when Maharana Pratap lost to Akbar, Gadiya Lohars vowed that they would neither live in pucca houses nor go back to their homeland.
- Times have changed, but the Gadiya Lohars continue to honour the vow taken by their ancestors around 300 years ago. But this has made them lag behind. They cannot manage to get identity or voter cards made, which keeps them out of the purview of all government and development schemes.

'MERA HOU CHONGBA' FESTIVAL

- The festival of 'Mera Hou Chongba' was celebrated at Manipur Royal Palace (Sana Konung) in Imphal at a large scale.
- The festival, organised by the Mera Hou Chongba Thoushil Lup, is an age-old festival that marks oneness to the growth of nationalism in the state.
- This festival has been celebrated since time immemorial to renew the feeling of brotherhood and unity between the people of the hills and valley. To mark the celebration, traditional fabrics, vegetables and fruits from both hill and valley have brought here together and exchange each other as a symbol of oneness."
- Dressed in colourful and unique traditional attires, the festival brings people of the hills and valleys together.

Science and Environment

TROPICS EMIT MORE CARBON THAN THEY CAPTURE NOW

- According to a study, the world's tropical forests are so degraded that they now emit more carbon into the atmosphere than they capture, countering their role as a carbon sink.
- A new, cutting-edge approach to measuring changes in above-ground forest carbon density helped scientists determine that tropical forests have undergone widespread deforestation, degradation and disturbance. Previous measurements of forest carbon loss focused largely on areas subject to complete forest removal (deforestation). This is the first time, however, that scientists have been able to account for changes from subtle natural and human-caused losses (degradation and disturbance) such as small-scale tree removal and mortality while also measuring gains from forest growth.
- Researchers at the Woods Hole Research Center (WHRC) and Boston University in the US found that tropical regions are a net source of about 425 teragrams of carbon annually, which is more than the emissions from all cars and trucks in the US.

- Gross annual losses were about 862 teragrams of carbon and while gains were approximately 437 teragrams of carbon. Losses and gains of carbon are not evenly distributed cross the tropical belt, the report finds. On a continental scale, the majority of the loss (nearly 60 per cent) occurred in Latin America, home to the Amazon – the world's largest remaining intact rainforest.
- Nearly 24 per cent of the loss is attributable to Africa while the forests of Asia experienced the least losses – a little more than 16 per cent of the tropical total.
- The study quantifies changes in above ground forest carbon across tropical America, Africa and Asia – the most threatened forests in the world – and those with the greatest ability to act as significant carbon stores as well as globally recognised hotspots of biodiversity and essential ecosystem services including food, fibre, and fuel.

SECURE HIMALAYA

- The Centre has launched a six-year project to ensure conservation of locally and globally significant biodiversity, land and forest resources in the high Himalayan ecosystem spread over four states in India.
- Protection of snow leopard and other endangered species and their habitats is one of the key components of the project which will also focus on securing livelihoods of the people in the region and enhancing enforcement to reduce wildlife crime.
- The project has been launched in association with the United Nations Development Programme (UNDP) on the inaugural day of the Global Wildlife Programme.
- The SECURE: securing livelihoods, conservation, sustainable use and restoration of high range Himalayan ecosystems - is meant for specific landscapes. It include Changthang (Jammu and Kasmir), Lahaul - Pangi and Kinnaur (Himachal Pradesh), Gangotri - Govind and Darma - Byans Valley in Pithoragarh (Uttarakhand) and Kanchenjunga - Upper Teesta Valley (Sikkim).
- Enhanced enforcement efforts and monitoring under the project will also curb illegal trade in some medicinal and aromatic plants which are among the most threatened species in these landscapes.

TURTLE SANCTUARY TO BE SET UP IN ALLAHABAD

- In order to protect the rich aquatic biodiversity of river Ganga from escalating anthropogenic pressures, development of a Turtle sanctuary in Allahabad along with a River Biodiversity Park at Sangam have been approved under Namami Gange programme.
- The project at an estimated cost of Rs 1.34 crore would include development of River Biodiversity Park at Sangam (confluence of Ganga, Yamuna and mythical Sarasvati), establishment of a Turtle Rearing Centre (Permanent nursery at Triveni Pushp and makeshift annual hatcheries) and awareness about the importance of river Ganga and imperativeness of its conservation has been approved.
- This project will provide much needed platform to make the visitors aware of their place in the ecosystem, their roles and responsibilities, improve their understanding of the complexity of co-existence with the environment and help generate awareness for reducing the impact of human activities on critical natural resources. The task of dissipating knowledge about river Ganga will be taken up ardently in this project, which is 100% centrally funded.

INTENSIFIED MISSION INDRADHANUSH (IMI)

- Through ***Intensified Mission Indradhanush***, Government of India aims to reach each and every child under two years of age and all those pregnant women who have been left uncovered under the routine immunisation programme.
- The special drive will focus on improving immunization coverage in select districts and cities to ensure full immunization to more than 90% by December 2018. The achievement of full immunisation under Mission Indradhanush to at least 90% coverage was to be achieved by 2020 earlier.
- Intensified Mission Indradhanush will cover low performing areas in the selected districts and urban areas. These areas have been selected through triangulation of data available under national surveys, Health Management Information System data and World Health Organization concurrent monitoring data. Special attention will be given to unserved/low coverage pockets in sub-centre and urban

slums with migratory population. The focus is also on the urban settlements and cities identified under National Urban Health Mission (NUHM).

- Intensified Mission Indradhanush will have inter-ministerial and inter-departmental coordination, action-based review mechanism and intensified monitoring and accountability framework for effective implementation of targeted rapid interventions to improve the routine immunization coverage.

ALGAE BASED FOOTWEAR

- Three billion petroleum-based flip-flops are produced worldwide each year, eventually ending up as non-biodegradable trash in landfills, rivers and oceans around the globe.
- Hence scientists have developed algae-based, renewable flip-flops that could be an environment friendly alternative to petroleum-based slippers - the go-to footwear in countries like India and China.
- The flip-flops, shoe soles and other polyurethane products scientists make from living algae oil are "sustainable" because the carbon to construct them was pulled from the atmosphere, rather than underground oil reserves.
- Scientists are seeking to also make them "biodegradable," by chemically converting the algae oil into polyurethane in manner that will allow the carbon bonds to be degraded by microorganisms.

NATIONAL CENTRE FOR COMBUSTION RESEARCH AND DEVELOPMENT

- The National Centre for Combustion Research and Development (NCCRD) was opened at the Indian Institute of Technology-Madras (IIT-M).
- The NCCRD will develop state-of-the-art capabilities in combustion research involving experts in the country. The research interests are in three major application sectors — automotive, thermal power and aerospace propulsion, besides fire research and microgravity combustion to a minor extent.
- The establishment of the centre will give a major boost to the Indian scientific community and will provide an impetus to research in alternative energy and environmental protection by focusing on effective utilisation of combustion as a means of thermo-chemical energy conversion.
- The centre is supported by the Science and Engineering Research Board, Department of Science and Technology (DST), Government of India, the IITM statement said.

Polity and Governance

UCC DRAFT HANDED OVER TO LAW PANEL CHIEF

- Government tasked Chairman of the Law Commission retd. Justice Chauhan to formulate a draft on Uniform Civil Code.
- Article 44 of the Constitution (Directive Principle of State Policy) states that 'The State shall endeavour to secure for citizens a uniform civil code throughout the territory of India.
- *Salient features in the draft*
  - Providing for homosexual marriages and live-in, the draft UCC rules out any kind of gender-based discrimination for marriage, adoption, custody of child/children and inheritance.
  - It defines marriage as "the legal union as prescribed under this Act of a man with a woman, a man with another man, a woman with another woman a transgender with another transgender or a transgender with a man or a woman".
  - Partnership has been defined as living together of a man with a woman, a man with another man, a woman with another woman a transgender with another transgender or a transgender with a man or a woman.
  - It also provides that any two person who have been in partnership for more than two years shall have same rights and obligations towards each other as a married couple. The draft also bars more than one such partnership at a time.
  - According to the draft UCC, 20 years is the legal age for marriage and it prohibits marriage to a sibling, real uncle or aunt, or direct lineal ascendant descendant.
  - It also recommends compulsory registration of all marriages, something which the panel itself had recommended to the government earlier in the year.
  - On the issue of adoption, the draft provides for all couples, whether married or in a partnership, to adopt a child, irrespective of their sexual orientation.

- As per the draft, only a civil court shall have the power to decide on divorce and non-judicial decree of divorce will not have any legal effect.
- The draft also proposes to do away with any discrimination in the law of inheritance such as those in Muslim laws where the share of women at the time of inheritance is half of the share of their male counterparts.
- It provides for repeal of laws like the Hindu Marriage Act, Hindu Succession Act, Muslim Personal Law Application Act, Dissolution of Marriage Act, Indian Christian Marriage Act and the Parsi Marriage Act.

DIBANG VALLEY TOPS BETI BACHAO PLAN

- According to officials of the Ministry of Women and Child Development, the Dibang Valley district in Arunachal Pradesh has seen the highest improvement under the Beti Bachao Beti Padhao programme, followed by Lakshadweep, Hamirpur (Himachal Pradesh), Kadapa (Karnataka) and Pulwama (Jammu and Kashmir).
- Officials revealed that of the 161 districts with the worst sex ratio at birth (SRB), where the flagship programme of the government was implemented, a total of 104 districts showed an increase in the SRB.
- In 119 districts, the first trimester registration showed improvements, while 12 districts remained stable. In 146 districts, there were improvements in institutional delivery.
- In 2015-16, the SRB of Dibang Valley was 761 points, and it rose to 1,176 points in 2016-17 with an increase of 416 points
- In Lakshadweep, there was a 122-point increase, from 832 to 955 points, while Hamirpur recorded an increase of 94 points, from 849 to 943 points.

The Beti Bachao, Beti Padhao (BBBP) Scheme has been introduced in October, 2014 to address the issue of declining Child Sex Ratio (CSR). The Scheme was launched on 22ndJanuary, 2015 at Panipat in Haryana. It is a tri-ministerial effort of Ministries of Women and Child Development, Health & Family Welfare and Human Resource Development. Overall Goal of the Programme is "Celebrate the Girl Child & Enable her Education"

EXCELLENCE IN GOVERNANCE AWARDS

- On Gandhi Jayanti 2017, in the 70th year of India's Independence, The Express Group launched The Indian Express Excellence in Governance Awards to acknowledge *Excellence in Governance* at the level where it matters and counts the most — *the district* through pioneering work done by the District Magistrate.
- These awards will celebrate District Magistrates from across India, who have best scripted and/ or implemented change that has touched men, women and children, change that has improved life literally on the ground, brought about by officers, the genuine ambassadors of good Governance in their districts/
- This biennial awards will highlight their work and will also aim to spread best practices across state governments, share innovation, ensure transparency, leadership and learning. The award will honor individuals by celebrating their systems and processes that fundamentally alter the interface between citizens, their representatives and public servants.

MANDAL 2.0 TO REDISTRIBUTE OBC QUOTA BENEFITS

- Government has set up a commission to revisit the quota norms for other backward classes (OBCs) to ensure a more equitable sharing of the benefits.
- The commission is to be chaired by retired Delhi high court chief justice G. Rohini. The terms of references of the new commission include examining the extent of inequitable distribution of benefits of reservation among the central list of OBCs, working out the modalities for sub-categorization within OBCs and identifying and classifying them into their respective sub-categories.
- At present, most of the benefits tend to be cornered by dominant OBC communities like the Yadavs. The weaker backward classes have often complained that they have been denied quota benefits because of their weaker socio-economic status.

Mandal Commission

The Mandal Commission was established in India on 1 January 1979 by the Janata Party government under Prime Minister Morarji Desai

with a mandate to "identify the socially or educationally backward." It was headed by Indian parliamentarian B.P. Mandal to consider the question of seat reservations and quotas for people to redress caste discrimination, and used eleven social, economic, and educational indicators to determine backwardness. In 1990, the then government headed by Prime Minister V.P. Singh had implemented the recommendations of the Mandal Commission, which guaranteed 27% reservation for OBCs.

LINGAYATS DEMAND FOR MINORITY STATUS

- Lingayat community rallied in the streets of Kalaburgi, about 650km from Bengaluru, demanding they be recognized as a separate minority religion and have a separate identity. However, they do not want to include Veerashaivas, a sub-sect within the community, in this separate identity. The latest round of agitations and renewed demands for minority religious status are led by Karnataka water resources minister M.B. Patil.

Lingayatism

- Lingayatism is a distinct Shaivite religious tradition in India. Its worship is centered on Hindu god Shiva as the universal god in the iconographic form of Ishtalinga. The adherents of this faith are known as Lingayats. Lingayats are the followers of the 12th century social reformer-philosopher-poet Basaveshwara who defied the caste system and Vedic rituals. Though Lingayats worship Shiva, they say the concept of 'Ishta Linga' (personal god) and rules of conduct prescribed by Basaveshwara is very different from the Hindu way of life.

MAATRU POORNA SCHEME IN KARNATAKA

- The Karnataka State government launched Mathru Poorna scheme meant to meet the nutritional needs of pregnant and lactating women in rural areas.
- Under the programme, pregnant and lactating poor women in rural areas will get one nutritious meal daily for 25 days in a month. A full meal, consisting of rice, dal with vegetables/sambar, one boiled egg and 200ml of milk, will be given to pregnant women. Those who don't eat eggs would be given two varieties of sprouts.
- This meal will meet 40-45% of the daily calorie, protein and calcium requirement per day of the pregnant and lactating mothers. Along with the meal, Iron Folic Acid (IFA) tablets will be administered and gestational weight monitoring will be ensured for pregnant women.
- The scheme has been scaled up in all the districts of the State from Monday, benefiting around 12 lakh pregnant women and lactating mother, and anganwadi assistants and helpers.
- The scheme will be implemented through anganwadis in the State. Each meal is estimated to cost around Rs. 20. The food will be provided for 15 months, from the start of pregnancy up to six months after delivery.

COMMON SCHEME TO MAKE EDUCATION AFFORDABLE

- Central Government is planning to merge the two of its major school education schemes — Sarva Shiksha Abhiyan (SSA) and Rashtriya Madhyamik Shiksha Abhiyan (RMSA). This move will provide infrastructure to the government schools same as that of the private institutes.
- Further, the Ministry of HRD is working on a plan to merge SSA and RMSA to create a single more effective policy for school education. While SSA caters to Classes 1 to 8, RMSA caters to only classes 9 and 10, due to their slightly different mandates.
- The merger is also being done because of a large number of primary (1 to 8) schools in the country as compared to upper primary (1 to 10), which skews up the attention given to upper primary classes. Stand-alone primary and upper primary schools constitute respectively around 55 percent and 10 percent of the total schools in the country.
- With this plan, the government wants to make quality education accessible for all by the year 2030. Pooling together all resources including that of SSA and RMSA at national and state level and clear commitment to school education during the next seven years will make the goal achievable. Benefits will also reflect in the strengthening of existing school in terms of civil works, hardware support, major repairs and residential quarters for teachers. Also need-based composite residential schools may be established, this will be economic, efficient and effective.

Sarva Sikhsha Abhiyan has been operational since 2000-2001 to provide for a variety of interventions for universal access and retention, bridging of gender and social category gaps in elementary education and improving the quality of learning. SSA interventions include inter alia, opening of new schools and alternate schooling facilities, construction of schools and additional classrooms, toilets and drinking water, provisioning for teachers, regular teacher in service training and academic resource support, free textbooks& uniforms and support for improving learning achievement levels / outcome. With the passage of the RTE Act, changes have been incorporated into the SSA approach, strategies and norms. The changes encompass the vision and approach to elementary education.

Rashtriya Madhyamik Shiksha Abhiyan (RMSA) (National Mission for Secondary Education) is a centrally sponsored scheme of the Ministry of Human Resource Development, Government of India, for the development of secondary education in public schools throughout India. It was launched in March 2009. The implementation of the scheme has started from 2009-2010 to provide conditions for an efficient growth, development and equity for all.

INDIA'S FIRST APMC YARD ESTABLISHED

- Agricultlure Produce Market committee Amreli Town has developed its new market yard to Fatehpur Village in the outskirts.
- The new yard, costing Rs 125 crore, has 10 auction sheds of 25,000 square feet each, an open bidding space of three lakh square feet, 200 shops/offices, a well-appointed guest house, a farmer training centre, soil testing lab and produce grading facilities, underground cabling and storm-water drainage systems.
- The key feature which sets it apart from other APMC-owned yards in India is its being built with hardly any state support or bank loans. The Amreli APMC started in 1953, is the oldest in the Saurashtra region.

APMC

- An agricultural produce market committee (APMC) is a marketing board established by a state government in India. APMC operate on two principles:
  - Ensure that farmers are not exploited by intermediaries (or money lenders) who compel farmers to sell their produce at the farm gate for an extremely low price.
  - All food produce should first be brought to a market yard and then sold through auction.

SANKALP & STRIVE SCHEMES TO BOOST SKILL INDIA MISSION

- The Cabinet Committee on Economic Affairs has approved two new World Bank supported schemes of Rs. 6,655 crore – named as ***Skills Acquisition and Knowledge Awareness for Livelihood Promotion (SANKALP) and Skill Strengthening for Industrial Value Enhancement (STRIVE)***. SANKALP and STRIVE are outcome focused schemes marking shift in government's implementation strategy in vocational education and training from inputs to results. SANKALP is Rs 4,455 crore Centrally sponsored scheme including Rs. 3,300 crore loan support from World Bank STRIVE is a Rs. 2,200 crore - central sector scheme, with half of the scheme outlay as World bank loan assistance.
- There has been a long felt need for a national architecture for promoting convergence, ensuring effective governance and regulation of skill training and catalysing industry efforts in vocational training space. The two schemes SANKALP and STRIVE shall address this need by setting up national bodies for accreditation & certification which shall regulate accreditation and certification in both long and short term Vocational Education and Training (VET).
- Both the schemes are aimed at institutional reforms and improving quality & market relevance of skill development training programs in long and short term VET.
- The schemes shall provide the required impetus to the National Skill Development Mission, 2015 and its various sub missions. The schemes are aligned to flagship Government of India programs such as Make in India and Swachhta Abhiyan and aim at developing globally competitive workforce for domestic and overseas requirements.
- The schemes will develop a skilling ecosystem that will support the country's rise in the Ease of Doing Business index by steady supply of skilled workforce to the industry. The schemes will also work towards increasing the aspirational value of skill development programs by increasing the marketability of skills, through better industry connect and quality assurance.

PM MODI TO INAUGURATE FIRST EVER ALL INDIA INSTITUTE OF AYURVEDA

- Prime Mininster Dedicated the First ever All India Institute of Ayurveda (AIIA) to the Nation on Ayurveda Day on 17th October, 2017 at New Delhi. It is set up as an apex institute along the lines of AIIMS, under the Ministry of AYUSH.
- The AIIA will bring synergy between the traditional wisdom of Ayurveda and modern diagnostic tools and technology. AIIA has gained a wide national and International recognition within the short duration of its establishment.
- It is facilitating quality patient care, research and bridging the gaps in the scientific information about quality, safety and efficacy of Ayurveda products and developing benchmarks of Ayurvedic education, research and healthcare.
- The AIIA has been awarded with NABH Accreditation, therefore becoming the first medical institute under the Ministry of AYUSH to hold the coveted status provided for its clinical services. It has an NABH Accredited Hospital and an Academic Block. Patient Services are being provided in the hospital block of AIIA and medicines are given free of cost.

SAMPOORNA BIMA GRAM (SBG) YOJANA

- In a bid to provide affordable life insurance services to people, particularly those living in rural areas of the country, the government has launched Sampoorna Bima Gram (SBG) Yojana and expanded the coverage of Postal Life Insurance (PLI).
- Under Sampoorna Bima Gram (SBG) Yojana, at least one village (having a minimum of 100 households) will be identified in each of the revenue districts of the country, wherein endeavour will be made to cover all households of that identified village with a minimum of one **RPLI** (Rural Postal Life Insurance) policy each.
- Coverage of all households in the identified Sampoorna Bima Gram village is the primary objective of this scheme.
- Under the scheme expansion of clientele base of PLI, it has now been decided that benefits of **PLI** will no more be confined to Government and semi-Government employees, but will also be available to professionals such as Doctors, Engineers, Management Consultants, Charted Accountants, Architects, Lawyers, Bankers etc. and to employees of listed companies of NSE (National Stock Exchange) and BSE (Bombay Stock Exchange). The decision has been taken to enlarge the cover of social security and bring maximum number of people under the protection of Postal Life Insurance (PLI).

Economic News

INDIA EU ANNUAL SUMMIT

- The 14th annual Summit between India and the European Union (EU) was held in New Delhi on 6 October 2017.
- During the meet the leaders reviewed the wide-ranging cooperation under the India-EU Strategic Partnership. Recognising that India and the EU are natural partners, the leaders reaffirmed their commitment to further deepen and strengthen the India-EU Strategic Partnership based on shared principles and values of democracy, freedom, rule of law and respect for human rights and territorial integrity of States.
- The leaders committed to work in a result-oriented and mutually beneficial manner to further strengthen the India-EU Strategic Partnership by deepening their trade cooperation, enhancing investment flows in both directions and broadening dialogue and engagement on global and regional issues, including climate change, as well as migration and the refugee crisis, and resolved to further strengthen their bilateral and multilateral cooperation in these areas.
- List of Agreements signed during 14th India-EU Summit
  - Implementing Arrangement between the European Commission and the Science and Engineering Research Board (SERB) for Indian Researchers hosted by the European Research Council grantees in Europe.
  - Finance Contract of Bangalore Metro Rail Project Phase-2-Line R6 for Euro 300 million out of total loan of Euro 500 million.
  - Joint Declaration between the Interim Secretariat of the International Solar Alliance and the European Investment Bank.

UDAY KOTAK PANEL ON WOMEN AS INDEPENDENT DIRECTORS

- The Securities and Exchange Board of India (Sebi) panel on corporate governance led by Uday Kotak proposed sweeping changes. The recommendations are listed below:
  - Panel proposed more powers for independent directors, limiting chairmanship to non-executive directors, and called for a greater focus on transparency and disclosures to improve corporate governance.
  - The panel recommended that a listed company should have at least six directors on its board. Current Sebi regulations do not mandate a minimum number. The panel has suggested at least one independent director be a woman.
  - It also proposed that directors attend at least half the total board meetings held in a financial year. If they fail to do so, they would require shareholders' nod for continuing.
  - Companies have asked to make public the relevant skills of directors, and the age of non-executive directors has been capped at 75 years.
  - In addition, the chairperson of a listed company will be a non-executive director to ensure that s/he is independent of the management.
  - An independent director cannot be in more than eight listed companies and a managing director can hold the post of an independent director in only three listed companies.
  - The committee has recommended that the number of independent directors on a company board be increased from 33% to 50%.
  - The minimum sitting fees of independent directors has been halved from the current Rs1 lakh per meeting as stipulated by the Companies Act 2013 to Rs50,000 for the top 100 companies by market capitalization.
  - Detailed reasons would need to be furnished when an independent director resigns. This is to ensure that they remain independent of the company management.
  - An audit committee is being proposed with the mandate to look into utilization of funds infused by a listed entity into unlisted subsidiaries, including foreign subsidiaries in cases where the total investment is at least Rs100 crore or 10% of the asset size of the subsidiary.
  - The committee has also recommended that Sebi should have clear powers to act against auditors under the securities law.
  - For government companies, the committee has recommended that the board have final say on the appointment of independent directors and not the nodal ministry.
  - The panel has also proposed to tweak the definition of a "material" subsidiary to one whose net worth or income exceeds 10% (currently 20%) of the consolidated income, or net worth of the listed entity. This has been done to improve disclosure, since only the activities of material subsidiaries are disclosed to shareholders.

BUREAU OF INDIAN STANDARDS (BIS) ACT 2016

- A new **Bureau of Indian standards (BIS) Act 2016** which was notified on 22nd March, 2016, has been brought into force with effect from 12th October, 2017.
- The salient features are:
  - The Act establishes the Bureau of Indian Standards (BIS) as the National Standards Body of India.
  - The Act has enabling provisions for the Government to bring under compulsory certification regime any goods or article of any scheduled industry, process, system or service which it considers necessary in the public interest or for the protection of human, animal or plant health, safety of the environment, or prevention of unfair trade practices, or national security. Enabling provisions have also been made for making hallmarking of the precious metal articles mandatory.
  - The new Act also allows multiple type of simplified conformity assessment schemes including self-declaration of conformity against a standard which will give simplified options to manufacturers to adhere to the standards and get certificate of conformity.

- The Act enables the Central Government to appoint any authority/agency, in addition to the BIS, to verify the conformity of products and services to a standard and issue certificate of conformity.
- Further, there is provision for repair or recall, including product liability of the products bearing Standard Mark but not conforming to the relevant Indian Standard.

GOVERNMENT EASES NORMS FOR MINING ATOMIC MINERALS IN COASTAL AREAS

- Ministry of Environment, Forest and Climate Change (MoEFCC) has taken the decision to relax guidelines for mining of critical atomic minerals like uranium in fragile coastal regions, even if such minerals are found elsewhere. The decision is significant and in line with the Government's overall push for atomic power. India currently has 6.7 gigawatts (GW) of installed nuclear capacity but the government has an ambitious target of 63GW of such capacity by 2032.
- The notification says "atomic minerals are required for strategic and other requirements by the Department of Atomic Energy (under the central government) and are processed for strategic applications including power generation". It will cover atomic minerals occurring alone or together with other minerals.
- A total of 11 atomic minerals are covered under the latest notification. Some of them are beryl, lithium, rare-earth minerals containing uranium and thorium, niobium, phosphorites and other phosphatic ores containing uranium and thorium minerals. Titanium bearing minerals, tantallium bearing minerals and zirconium-bearing minerals are also included.
- This decision signaled a significant shift in government policy and opened up fragile coastal areas to mining, potentially increasing the vulnerability of fast eroding coastal stretches of the country.
- This step involves an amendment to the Coastal Regulation Zone (CRZ) Notification 2011. Earlier, mining of rare minerals could be carried out with environment ministry's permission only if they are not found anywhere else.
- It also opens up inter-tidal areas of CRZ-1 for manual extraction even though CRZ-1 is the most sensitive coastal zone and there are strict norms on activities allowed in this zone.

Miscellaneous News

KANDLA PORT RENAMED AS DEENDAYAL PORT

- Kandla Port, located on the Gulf of Kutch in Gujarat, is one of the twelve major ports in the country. As per the Ministry's notification, the Central Government, in exercise of powers conferred on it under Indian Ports Act, 1908, made the amendment to replace "Kandla" with "Deendayal".

BIMSTEC DMEX 2017

- The First 'BIMSTEC Disaster Management Exercise- 2017' (BIMSTEC DMEx-2017) will be conducted by the National Disaster Response Force (NDRF) as the lead agency from October 10-13, 2017 in Delhi and the National Capital Region (NCR).
- This Exercise will be a platform for sharing Best Practices on all aspects of Disaster Risk Reduction (DRR), strengthening regional response and coordination for Disaster Management among the BIMSTEC member countries.
- The main focus of the BIMSTEC DMEx-2017 will be on testing the region's preparedness and resilience towards effective activation of inter-Governmental interaction/dialogue/ agreements for immediate deployment of regional resources for disaster response.
- It will help create synergy and synchronize efforts to institutionalize regional cooperation among the member countries.
- The exercise will help strengthen the effective utilization of the Search & Rescue Teams for Disaster Relief & Emergency Response, including Emergency Rapid Assessment Teams and Management of mass casualties especially in situations involving breakdown of infrastructure and communication.
- The BIMSTEC region is home to around 1.5 billion people, constituting around 22% of the global population with a combined GDP of US $2.7 trillion economy.

- Majority of the BIMSTEC countries are exposed to a variety of hazards due to the geo-climatic characteristics of the region. These hazards range from avalanches and earthquakes to glacial lake outburst floods (GLOF) in the Himalayas in the North, droughts and floods in the Plains, and cyclones that originate in the Bay of Bengal and the Arabian Sea. Importantly, many countries in the region share common geological formations and river basins, and natural hazards frequently transcend national boundaries.

US LEAVES UNESCO

- The United States has withdrawn from Unesco over what it claims is the organisation's "continuing anti-Israel bias" and become a permanent observer instead.
- Unesco has long faced accusations of corruption, mismanagement and political bias in its resolutions.
- The US helped found Unesco in the wake of the Second World War, with the aim of ensuring peace through the free flow of ideas and education. The country's withdrawal marks yet another move by the Trump administration to distance itself from global organisations.

About UNESCO

- Its World Heritage Committee each year designates sites considered "of outstanding value to humanity" and intervenes when sites are in danger of destruction or damage. The program provides countries with technical assistance and professional training to preserve the sites, and now includes "intangible" heritage such as folk songs or traditional dances in its lists. A World Heritage site designation is coveted and seen as a boost to tourism.
- Unesco works to improve literacy, with a special focus on girls in poor countries who get little or no schooling. The agency provides teacher training and materials and encourages programmes for girls to pursue careers in science.
- The agency seeks to coordinate climate knowledge, including studies of impacts on Unesco's network of biosphere reserves, and to improve international education about how global warming occurs and affects people around the world.

NOBEL PRIZE

Physics Nobel Prize	The Nobel Prize in Physics 2017 was divided, one half awarded to Rainer Weiss, the other half jointly to Barry C. Barish and Kip S. Thorne *"for decisive contributions to the LIGO detector and the observation of gravitational waves"*. The LIGO project's achievement was using a pair of gigantic laser interferometers to measure a change thousands of times smaller than an atomic nucleus, as the gravitational wave passed the Earth.
Chemistry Nobel Prize	The Nobel Prize in Chemistry 2017 was awarded to Jacques Dubochet, Joachim Frank and Richard Henderson *"for developing cryo-electron microscopy for the high-resolution structure determination of bio-molecules in solution"*. The technique, called cryo-electron microscopy, allowed bio-molecules to be visualised in their natural configuration for the first time, triggering a "revolution in biochemistry"
Medicine Nobel Prize	The Nobel Prize in Physiology or Medicine 2017 was awarded jointly to Jeffrey C. Hall, Michael Rosbash and Michael W. Young *"for their discoveries of molecular mechanisms controlling the circadian rhythm"*. The team identified a gene within fruit flies that controls the creatures' daily rhythm, known as the "period" gene. This gene encodes a protein within the cell during the night which then degrades during the day.
Literature Nobel Prize	The Nobel Prize in Literature 2017 was awarded to Kazuo Ishiguro *"who, in novels of great emotional force, has uncovered the abyss beneath our illusory sense of connection with the world"*.
Noble Peace Prize	The Nobel Peace Prize 2017 was awarded to International Campaign to Abolish Nuclear Weapons (ICAN) *"for its work to draw attention to*

	the catastrophic humanitarian consequences of any use of nuclear weapons and for its ground-breaking efforts to achieve a treaty-based prohibition of such weapons".
Economy Noble Prize	The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 2017 was awarded to Richard H. Thaler *"for his contributions to behavioural economics"*. Behavioural economics incorporates the study of psychology into the analysis of the decision-making behind an economic outcome, such as the factors leading up to a consumer buying one product instead of another.

GAURI LANKESH AWARD

- It was honoured to award the annual Anna Politkovskaya Award for women human rights defenders from war and conflict zones jointly to Gauri Lankesh posthumously, and to a brave Pakistani activist Gulalai Ismaial, who similarly is fighting against Islamic extremism
- Gauri was awarded with Periyar Award posthumously by the Thinkers Forum on September 17 in Bengaluru.
- The **Anna Politkovskaya Award** (French: **Prix Anna Politkovskaya**) was established to remember and honor the journalist Anna Politkovskaya (1958-2006), murdered in Moscow at the age of 48 on 7 October 2006 in order to silence her courageous reporting about the second war in Chechnya.
- The award is presented annually by Reach All Women in War (the RAW in WAR organisation) and honours women human rights defenders from around the world. The award recognizes "a woman human rights defender from a conflict zone in the world who, like Anna, stands up for the victims of this conflict, often at great personal risk".

INDIRA GANDHI AWARD FOR NATIONAL INTEGRATION

- Carnatic vocalist T.M. Krishna will be conferred with the Indira Gandhi Award for National Integration for 2015-16.
- He has been presented the award for his services in promoting and preserving national integration in the country.
- Mr. Krishna is also an activist who has worked on creating egalitarian spaces for music and breaking down caste-barriers in the form.
- He was also part of a movement to help the Tamil-dominated and war-ravaged northern province of Sri Lanka rebuild its classical music traditions.

About the award

The Indira Gandhi Award for National Integration is a prestigious award accorded by the Indian National Congress, after former Prime Minister of India Indira Gandhi. This Award is given annually starting from 1985 to distinguished persons/ institutions for promoting national integration and understanding and fellowship amongst religious groups, communities, ethnic groups, cultures, languages and traditions of India and the strengthening, through thought and action of the nation's sense of solidarity. The Awardee is selected by an Advisory Committee of eminent persons representing art, science, culture, education, literature, religion social work journalism, law and public life. The Award carries an amount of Rs. 5 lakh in cash and a citation. The Award is given on the Martyrdom Day i.e. 31 October.