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It is the primary mode of transport for the urban poor, and at the same time a climate and environmentally friendly form of transport.

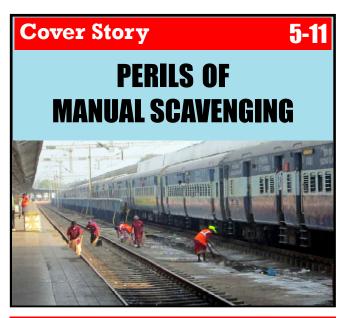
Altruistic Surrogacy in India

Cabinet has approved the Surrogacy (Regulation) Bill, 2016 that seeks to ban commercial surrogacy but allow altruistic surrogacy, analyzing the concept of altruistic surrogacy.

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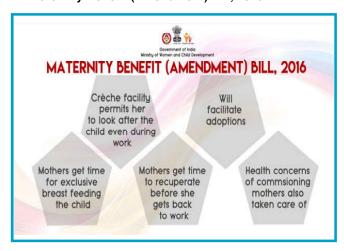
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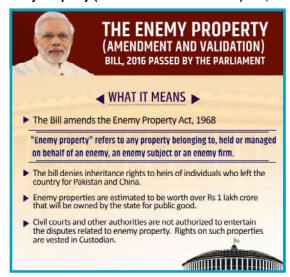


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COVER STORY

Perils of MANUAL SCAVENGING



Even today caste remains a major source of occupational and class division. When the world has made significant progress in human development, in India there exist a community called as Manual Scavengers which make its living by carrying human excreta and servicing the community sanitation with a baggage of their caste identity.

The recent death of three workers while decongesting manhole in Bangalore bring to light the stark reality of manual scavenging in India. The practice of manual cleaning of sewers without safety equipments is not only violation of the laws of the land but reflects the inhuman attitude towards certain sections of society and the life conditions they face. There is urgent need to take proactive actions against such practices and those violating the laws should be strictly punished.

The present article seeks to critically examine the conditions of the manual scavengers with reference to failure of the state in ensuring the scavenging community their due rights and the role of the state.

In addition this article will also suggest remedial measures and progressive steps for bringing the scavenging community into the mainstream of our country and make a contribution to its development.

Introduction

Manual scavenging is a profession which has been in existence since the human civilization. The inhuman practice of manually removing night soil which involves removal of human excrements from dry toilets with bare hands, brooms or metal scrappers; carrying excrements and baskets to dumping sites for disposal, is not only diabolic but perhaps the highest degree of human rights violation.

A plethora of legislations were enacted for ensuring an equitable and casteless society, but the conditions of the scavenging communities have remained deplorable. It is an irony that after decades of independence; it was in the year 1993 and latest in 2013, that the Government of India passed a dedicated legislation to ban the inhuman and degrading practice of manual scavenging.

Recently an incident of manual scavenging in the Bangalore has come to light after a sewer man was allegedly forced to clean a clogged manhole without any safety gear.



In another incident, the death of three workers while decongesting manhole without safety equipments bring to light the stark reality of manual scavenging in India.

The practice of manual cleaning of sewers without safety equipments is not only violation of the laws of the land but reflects the inhuman attitude towards certain sections of society and the life conditions they face. There is urgent need to take proactive actions against such practices and those violating the laws should be strictly punished.

Manual scavenging Definition

Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013 gives a detailed definition of 'manual scavenger' as:

"a person engaged or employed, at the commencement of this Act or at any time thereafter, by an individual or local authority or an agency or a contractor, for manually cleaning, carrying, disposing of, or otherwise handling in any manner, human excreta in an insanitary latrine or in an open drain or pit into which the human excreta from the insanitary latrines is disposed of, or on a railway track or in such other spaces or premises, as the Central Government of a State Government may notify, before the excreta fully decomposes."

Manual Scavenging in India

- Census 2011 found 7.9 Lakh cases of manual scavenging.
- Socio Economic Caste Census 2011 revealed that 1.8 Lakh households are engaged in it for livelihood.
- India is the only country in the world where a particular section of the society is traditionally responsible for keeping the habitation clean by removing the waste products of the society including the human excreta.
- Manual scavenging still survives in parts of India without proper sewage systems. It is thought to be most prevalent in Gujarat, Madhya Pradesh, Uttar Pradesh, and Rajasthan. Some municipalities in India still run public dry-toilets.
- The biggest violator of this law in India is the Indian Railways which has toilets dropping all the excreta from trains on the tracks and they employ scavengers to clean it manually.
- According to socio-economic caste census report (2011), Maharashtra has 63,713; Madhya Pradesh has 23,093; Uttar Pradesh has 17,619; Tripura has 17,332; Karnataka has 15,375 manual scavengers. However, the exact number of manual scavengers living in India is still an open ended question.

Why manual scavenging is prevalent in India?

Scavenging has been an occupation imposed upon certain citizens of the country by the society, which later on continued as a traditional occupation among Scheduled Castes. This class of citizens of India is known as Manual Scavengers.

- Manual scavenging exists primarily because of absence of water borne latrines. The Houselisting and Housing Census, 2011 reported that there are about 26 lakh insanitary latrines in the country.
- With emergence of urban areas these people were also employed for cleaning of sewers or septic tanks.
- Low level of education, awareness about their rights, laws and low self esteem force them to take such work.
- Lack of empathy among the government, contractors and household members employing manual scavengers is another reason, wherein these class of people fail to see the agony of the manual scavengers.





- Poor implementation of the existing laws has also helped in continuation of this practice.
- These section of society are not organized and don't have any significant voice in the government structures which cause their voice being unheard.

Effects on the Scavengers

- Manual scavengers are exposed to the most virulent forms of viral and bacterial infections that affect their skin, eyes, limbs, respiratory and gastrointestinal systems.
- The toxic gases from sewers create death threat for them. Their children are also caught up in this quagmire. Under these circumstances, it is almost impossible for their children to become educated. Even though, in modern times these people desire to leave the profession, their social, economic, educational and cultural aspects have made it difficult for them to find an alternate profession.
- The social stigma of untouchability continues to stick, in one form or the other largely because of the unclean nature of their occupation.

Provisions - Constitutional Legal & Institutional

Constitutional Provisions

The Constitution of India came into force with the grand norms of civil rights protection and the source of caste and class annihilation i.e., Article 17 (abolition of untouchability). Since manual scavengers belong to the backward section of society, they are entitled to some special rights apart from rights under the Indian constitution.

Some of the important and relevant constitutional provisions are as follows:

- Article 14: Equality before law (Right to Equality)
- Article 16(2): Equality of opportunity in matters of public employment
- Article 17: Abolition of Untouchability
- Article 19(1)(a): Right to practice any profession, or to carry on any occupation, trade or business
- Article 21: Protection of life and personal liberty
- Article 23: Prohibition of traffic in human beings and forced labour etc
- Article 41: Right to work, to education and public assistance in certain circumstances
- Article 42: Just and humane conditions of work
- Article 46: Promotion of educational and economic interests of scheduled castes, scheduled tribes and other weaker sections
- Article 47: Duty of the State to raise the level of nutrition and the standard of living and to improve public health
- Article 338: Constitution of a National Commission for Schedule Caste

Legislative framework

The Protection of Civil Rights Act, 1955: Initially the Untouchability (Offences) Act, 1955, had been enacted to abolish the practice of untouchability and social disabilities arising out of it against members of the scheduled castes. It was amended in 1977 and is now known as the Protection of Civil Rights Act, 1955. Under the revised Act, the practice of untouchability was made both cognizable and non-compoundable offence and stricter punishment was provided for the offenders.



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- The Scheduled Castes & Scheduled Tribes (Prevention of Atrocities) Act, 1989: The Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Act, 1989, came into force on January 31, 1990. The main objective of the Act is to prevent the commission of offences of atrocities against the members of the scheduled castes and the scheduled tribes, to provide for special courts for the trial of such offences and for the relief and rehabilitation of the victims of such offences and for matters connected therewith or incidental thereto.
- **Employment of Manual Scavengers and Construction of Dry Latrines** (Prohibition) Act, 1993: The EMSCDL Act, 1993, provides for the prohibition of employment of manual scavengers as well as construction or continuance of dry latrines.
- National Commission for Safai Karamcharis Act, 1993: The Act established the National Commission for Safai Karamcharis to study, evaluate and monitor the implementation of various schemes for safai karamcharis as an autonomous organization and also to redress their grievances. The Act is a welfare legislation enacted for the welfare of persons engaged in cleaning and plumbing jobs in various state departments.
- National Commission for Schedule Caste (NCSC): The commission is constituted with a mandate to safeguard the interest of schedule castes in India. Article 338 (5) of the constitution of India lays down certain duties of the NCSC such as to investigate and monitor all matters relating to the safeguards provided for the scheduled castes and evaluate the working of such safeguards.

PEMSR Act, 2013 - Salient Features

- The Act prohibits the employment of manual scavengers, the manual cleaning of sewers and septic tanks without protective equipment, and the construction of insanitary latrines.
- Its main objectives are Prohibition of employment as manual scavengers and Rehabilitation of manual scavengers.
- The Act recognizes the link between manual scavengers and weaker sections of the society. It therefore, views manual scavenging as being violative of their right to dignity.
- Under the Act, each local authority, cantonment board and railway authority is responsible for surveying insanitary latrines within its jurisdiction. They shall also construct a number of sanitary community latrines.
- Each occupier of insanitary latrines shall be responsible for converting or demolishing the latrine at his own cost. If he fails to do so, the local authority shall convert the latrine and recover the cost from him.
- The district magistrate and the local authority shall be the implementing authorities.
- Offences under the Bill shall be cognizable and non-bailable, and may be tried summarily.
- It provides for detailed vigilance mechanism and monitoring committee at district, state and central level.
- The Act specifically provides for carrying out surveys for identifying persons employed as manual scavengers.

Government Initiatives

Government has taken a number of initiatives focussing on conversion of insanitary latrines, rehabilitation and employment of manual scavengers, scholarships for their children being the main focus area.



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- Self Employment Scheme for Rehabilitation of Manual Scavengers (SRMS): It's a successor scheme to NSLRS (National Scheme for Liberation and Rehabilitation of Scavengers and their Dependents), was introduced in January, 2007 with the objective to rehabilitate remaining manual scavengers and their dependents in alternative occupations, in a time bound manner.
- National Safai Karamcharis Finance and Development Corporation: For the responsibility of rehabilitation of the identified manual scavengers.
- Pre-Matric Scholarship to the Children: Under the Scheme of "Pre Matric Scholarship to the Children of those engaged in Occupations involving cleaning and prone to health hazards", being implemented by the Ministry of Social Justice and Empowerment. Under this scheme the children of manual scavengers are provided scholarship.
- **Integrated low cost sanitation scheme:** Ministry of Urban Employment and Poverty Alleviation along with HUDCO have joined hands in taking up a very major program for Integrated Low Cost Sanitation for conversion of dry latrine system into water borne low cost sanitation.
- Nirmal Bharat Abhiyan (NBA) (2009-14) and Swach Bharat Abhiyan (SBA) (2014-19): Since the root cause of manual scavenging is the insanitary waste disposal practices (dry latrines, open defecation etc.). Total Sanitation Campaign (TSC) was conceived in 1999 which was renamed as Nirmal Bharat Abhiyan in 2012 to ensure 100% sanitation in rural and urban areas by 2017. The NBA was replaced by SBA in 2014.

SBA has been conceived with following objectives.

- Elimination of open defecation.
- Eradication of Manual Scavenging.
- Modern and Scientific Municipal Solid Waste Management.
- To effect behavioral change regarding healthy sanitation practices.

Issues and Challenges

Despite all the efforts, manual scavenging continues to exist in India and it passes on from generation to generation. Reasons for the perpetuation of this menace are -

- Unfortunately, the spirit of Article 17, was followed in principle rather than in practice. Poor implementation of the existing laws has also helped in continuation of this practice. The National Safai Karmachari Commission which was mandated to implement the act has not been functioning properly.
- In urban areas municipalities are cash short to use machines for cleaning of the sewers or provide protective equipments. They generally blame contractors for any loss of life.
- The States/UT's are slow in identification of insanitary latrines and manual scavengers as there is no time-bound plan for identification of insanitary latrines and manual scavengers.
- Further, in a case filed in the Supreme Court of India, many States/UTs gave affidavit that there are no insanitary latrines in their jurisdiction. Due to fear of contempt of the Court, they hesitate in reporting existence of insanitary latrines and manual scavengers in their States/UTs.
- At present the work of conversion of insanitary latrines into sanitary latrines is being attended to as a part of broad program of construction of toilets. There is a need to have a time-bound approach as per the mandate of the MS Act, 2013, for conversion of insanitary latrines.



- State's failure to stop illegal employment of manual scavengers by local households. The Indian government's track record of imposing penalties upon those who perpetuate manual scavenging under the EMSCDL Act, 1993 is extremely poor. In fact, according to the National Advisory Council, "almost no one has been punished under this law."
- Difficulties in accessing the criminal justice system due to prevalent discrimination. Dalits require significant assistance in accessing the criminal justice system when they are victims of crime.
- Threats and harassment from community employers. According to Human Rights Watch Report of 2014, women who practice manual scavenging confessed that since dry toilets are cleaned daily, they face pressure from the community if they miss even a day.
- Banks are hesitant about providing loan to manual scavengers.
- People engaged in manual scavenging rely upon the daily food donations they receive for subsistence. In order to leave manual scavenging they must have immediate access to alternate employment. These communities, however, face significant barriers to entering the labour market, including social boycotts and economic boycotts in retaliation for refusing to clean.
- Inadequate surveys and failure to identify people still engaged in manual scavenging.
- Lack of empathy among the government, contractors and household members employing manual scavengers is another reason, wherein these class of people fail to see the agony of the manual scavengers.
- These section of society are not organized and don't have any significant voice in the government structures which cause their voice being unheard.

Case Study

Judicial intervention in manual scavenging

Judiciary on the other hand has always played an active role in strengthening the cause of socio-economic welfare by translating several directive principles into enforceable rights for the upliftment of poor and weaker section of the society. A liberal interpretation of Article 21 of the constitution has created numerous rights and has given a new direction to social welfare jurisprudence in India. With regard to judicial response towards the manual scavengers, recently courts have adopted a stern attitude towards the manual scavenging and pulled up the State authorities for failing to eliminate manual scavenging.

Safai Karamchari Andolan v/s Union of India:

In the present case the Supreme Court acknowledged the menace of manual scavenging in India as an inhuman, degrading and undignified profession. The Supreme Court observed that PEMSR Act, 2013 and the EMSCDL Act, 1993 neither dilutes constitutional mandate of Article 17 of the constitution nor does it condone inaction on part of union and state government. The Supreme Court held that the PEMSR Act, 2013 expressly acknowledges article 17 and 21 of the constitution as the rights of persons engaged in sewage cleaning and cleaning tanks as well persons cleaning human excretion on railway tracks.

The Supreme Court also referred to several international covenants and instruments, to which India is a signatory, that seeks to guarantee a dignified human life in respect of his profession and other walks of life e.g., Universal Declaration of Human Rights (UDHR), Convention on Elimination of Racial Discrimination (CERD) and the Convention for Elimination of all Forms of Discrimination Against Women (CEDAW).





Safai Karamchari Andolan

Safai Karmachari Andolan (SKA), an Indian human rights organization that has been campaigning for the eradication of manual scavenging, the construction, operation and employment of manual scavengers.

The mission of Safai Karmachari Andolan is the liberation and rehabilitation of all persons engaged in manual scavenging across India from their caste-based hereditary and inhuman occupation. Safai Karmachari Andolan's major focus is to organize and mobilize the community around the issues of dignity and rights, accompanied by strategic advocacy and legal intervention.

Bezwada Wilson (Ramon Magsaysay Award 2016)

Bezwada Wilson is an Indian activist and one of the founders and National Convenor of the Safai Karmachari Andolan (SKA). His work at SKA, a community-driven movement, has been recognized by the Ashoka Foundation which has nominated him a Senior Fellow on 27 July 2016 and he was honoured with the Ramon Magsaysay Award.

- Millions of people in India are still not privileged enough to wake up in the dawn of freedom. Their days start with cruel practice of manual scavenging and end with the same scare of next morning. Women among them are in majority who carrying the vicious practice of scavenging. Indian society, which itself divides into caste, has inhuman face. A face, in which certain communities are imposed with work designated according to caste, and among them manual scavenging is
- The administrative lethargy in eliminating insanitary latrines can be seen as the root cause of manual scavenging in India from the fact that according to 2011 census of India, there are 13,14,652 latrines where night soil is disposed into open drain; 7,94,390 latrines are manually serviced and 4,97,236 latrines are serviced by animals.

Way Forward

- It can be concluded that despite several governmental initiatives the plight of manual has not shown much improvement. Though policy makers have initiated several social welfare reforms directed towards manual scavengers, but have considerably failed to ensure their success on ground. Actual satisfaction of basic needs and amelioration of the scavenging community has not only been ignored by the policy makers but even the organized schedule caste movements have failed to address the cause of manual scavengers.
- The National Commission for Safai Karamchari must be made responsive and responsible to the needs of time. Swachh Bharat Mission may be used to actively target conversion of insanitary loo on priority basis. Liberated manual scavengers must be linked to social security and other welfare schemes to ensure that they are not dependent on this inhuman work for their survival. All these steps if taken seriously the problem of manual scavenging can be eliminated from the roots.
- In India the practice of manual scavenging must be completely abolished, otherwise it will remain a blot on India and its value system. India aspires to be world power in 21st Century and for that an aggressive campaign focused on attitudinal change of all the sections of the society must be followed.



GOVERNANCE ISSUE

Why Making **AADHAAR MANDATORY IS NOT SUITABLE**



Recently government has made seeding of Aadhaar mandatory for a number of services like income tax returns, online railway ticket booking, buying SIM card, etc. Use of Aadhaar as an unique, universal identity proof, as a tool for authenticating transaction or service delivery to eliminate ghost and duplicate beneficiaries in government schemes has generated lot of debate about the issue of exclusion of those without Aadhaar number, privacy, potential data theft and financial loss. In this debate it must be analyzed that whether making Aadhaar mandatory is suitable or not?

Introduction

In India, the biggest barrier that prevents the poor from accessing benefits and subsidies are an inability to prove identity. Public as well as private sector agencies across the country typically require proof of identity before providing individuals with services. As a result, every time an individual tries to access a benefit or service, he must undergo a full cycle of identity verification.

Such duplication of effort and 'identity silos' increase overall costs of identification, and cause extreme inconvenience to the individual. This approach is especially unfair to India's poor and underprivileged residents, who usually lack identity documentation, and find it difficult to meet the costs of multiple verification processes.

Thus to provide an identity to all individuals, the Unique Identification Authority of India (UIDAI) was established in January 2009, as an attached office to the Planning Commission. The purpose of the UIDAI is to issue a unique identification number (UID) to all Indian residents that is:

- Robust enough to eliminate duplicate and fake identities, and
- Can be verified and authenticated in an easy, cost-effective way.

The UIDAI's approach will keep in mind the learnings from the government's previous efforts at issuing identity.

A clear identity number would transform the delivery of social welfare programs by making them more inclusive of communities now cut off from such benefits due to their lack of identification. It would enable the government to shift from indirect to direct benefits, and help verify whether the intended beneficiaries actually receive funds/subsidies.

However the question arises whether it should be made mandatory for all government social security schemes or not?





What is Aadhaar?

It is a 12 digit unique identification given to residents. It contains demographic data which include name, date of birth, gender, communication address. Along with it contain biometric information of finger prints and iris scan. It does not contain caste, religion data etc.

Why it has been issued?

There were multiple benefits of the Aadhaar concept. These are discussed as below:

- Universalization, uniqueness and inclusion: To provide unique Identity proof to all residents so that no one is excluded from the government welfare programmes in absence of any other identity, which used to happen earlier.
- **Reduction in corruption:** As Aadhaar is unique it can be used for de-duplication, elimination of fake beneficiaries in government schemes. DBT (Direct Benefit **Transfer**) also protects beneficiaries from harassment and removes administrative difficulties.
- **Protection of privacy and misuse of information:** e-KYC can be used as a check against misuse of personal data in photocopy format. Therefore it protects violation of privacy, misuse of personal data. Otherwise telecom companies used to give sim card by misusing identity proofs.

What are certain features of Aadhaar?

- Privacy by design as randomization, minimal information along with high level of encryption are used to ensure privacy.
- Has legal basis in Aadhar Act which criminalizes impersonation, misuse of Aadhaar information by any agency.
- It is not linked to entitlements i.e., having Aadhaar does not entitles to certain benefits.

Why government is interested in wide spread use of Aadhaar by making it mandatory?

- It is government's eagerness to interlink databases and use data-mining to gather useful information like tax frauds, etc.
- To use its uniqueness feature to eliminate middleman in services like rail ticket booking.
- It will allow various government departments to co-ordinate their actions, minimizes administrative hassles.
- Government cites examples of huge savings in LPG subsidy, de-duplication achieved in PDS, MDM and ensuing savings as reason to adopt it.
- By keeping it voluntary it will only add to the already existing identification cards and will not help government in achieving its objective, as those who indulge in avoiding tax, siphoning of money will not use it and others will use.

Case study

Centre has made Aadhar card mandatory for receiving subsidised foodgrains from all PDS shops.

Proposed Benefits

Using Aadhaar to identify beneficiaries in PDS databases will eliminate duplicate and fake beneficiaries from the rolls, and make identification for entitlements far more effective.

- Aadhaar enables remote, online biometric and demographic authentication of identity.
- It will also allow portability as residents can collect entitlements from any FPS within the state.
- This would curb diversions, and help identify bottlenecks in delivery.
- An Aadhaar-linked MIS would enable the PDS to address broader procurement, storage and monitoring challenges.
- Aadhaar authentication at the delivery point the FPS would enable governments to transfer entitlements to residents through an electronic system.

Challenges

- Installation of "Point of Sale" (PoS) machines at PDS shops, and verifying the identity of cardholders by matching their fingerprints against the Aadhaar database over the Internet has led to inefficiencies in states like Jharkhand and Rajasthan.
- This system requires multiple fragile technologies to work at the same time: the PoS machine, the biometrics, the Internet connection, remote servers, and often other elements such as the local mobile network.
- The Central government continues to push for compulsory Aadhaar-based biometric authentication in the PDS. This is a violation of the Supreme Court orders, as the Court did not make Aadhar compulsory for PDS users.
- The main vulnerability today, is not identity fraud (e.g. bogus cards), but quantity fraud: PDS dealers often give people less than what they are entitled to, and pocket the rest.

Should Aadhaar be made mandatory?

All the above mentioned features along with the fact that UID has been issued to 112 crore population entices government to make it mandatory for various scheme like MDM, MGNREGA, PAN card etc.

But making it mandatory is not suitable because:

- **Exclusion:** Since all the residents have not been issued Aadhaar and there has been high rates of authentication failures in states of Jharkhand a (49%) and Rajasthan. Absence of internet connection, difficulty in matching the finger prints of labour class are some of the reasons. Therefore if made mandatory it will exclude marginalized sections from the welfare programmes.
- Violation of Supreme Court judgment: Making mandatory will violate the SC decision, under which it cannot be made compulsory for welfare schemes.
- **Potential misuse of private data:** Though there is no privacy law and privacy is not a fundamental right, but that does not mean there are no privacy concerns. What recourse does a citizen have with respect to breach of information, who will be liable are some questions which must be answered. So till all these issues are not addressed decision about its mandatory nature must be postponed.
- Authenticity of claims of reduction in LPG subsidy because of Aadhaar has been questioned by CAG and some other institutions. Therefore true affects of Aadhaar on service delivery needs to be established.
- If we look from governance point of view Aadhaar increases tendency towards centralization. It will give immense powers to central government.



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- Another question which can be asked were other options to reduce corruption like strengthening local governance, citizen and civil society participation were effectively tested.
- Do highly vulnerable and poor people of India have to question authorities if they are denied benefits if Aadhaar is made mandatory.

What should be done?

In all this debate it must be kept in mind that Aadhaar is means to achieve the objective of equitable society, wherein government can efficiently help the vulnerable sections of society and curb tax evasion, corruption etc.

Therefore Aadhaar in itself is not the end, but a means to end and must be used in a voluntary manner, in which the public is made aware of the potential benefits and harms that it carries.

Along with this data security laws, privacy laws, grievance redressal mechanisms for authentication failure and denial of benefits must be formed so that people's faith is increased.



GOVERNANCE ISSUE

Safety of AADHAR DATA

The recent incident of breach of Aadhaar biometric data breach was detected after UIDAI found multiple transactions done with the same fingerprint, which raised concerns of illegal storage of the data.

This raises the issue of safety of Aadhar details as the manner in which the biometric details of the citizens are collected by private contractors and NGOs hired by UIDAI without any safeguard makes it prone to misuse not only by private actors but also by the State.

Thus hereby analyzing the risk involved and steps needed to safeguard it.

Introduction

Aadhar is said to be transformative tool for government as it brings financial inclusion, plugs leakages, reduce corruption and many more benefits. However, in recent there were reports claiming that Aadhaar data was breached and biometrics were misused for creation of parallel databases by some interested parties. Since very important private data in form of biometrics is with UIDAI, it raises some apprehensions over the security and possible misuse of data.

What are the security features employed to address the issues?

UIDAI is committed towards secure, citizen-friendly and inclusive performance and therefore employs a host of security features and penal provisions of Aadhar Act to ensure safety and security of data.

The main issues related to security of data are:

- Security of Aadhar Data
 - At the point of capture
 - In UIDAIs database
 - With the agencies like banks, telecom operators using it for KYC purpose.
 - Unauthorized capture of biometric data
- Recourse available in case of breach of data security
- Security at data storage level
- UIDAI uses one of world's most advanced encryption technologies in transmission and storage of data. As a result, during the last 7 seven years, there has been no report of breach or leak of residents' data out of UIDAI.
- UIDAI is continuously updating its security parameters and undertakes security audits and takes necessary steps to augment its security features.





- If a person wants to lock his data, he or she can do it. No other person can unlock it and one can keep it locked as long as one wishes.
- Once the Aadhaar data is locked, even banks cannot access the biometric information stored in the main server.

Security at data capture level

- Only registered devices can capture biometric data and such biometrics will be encrypted at the point of capture itself. This will strengthen the security feature.
- Any **unauthorized capture** of iris or fingerprints or storage or replay of biometrics or their misuse is a criminal offence under the Aadhaar Act.

Data security with user agencies

- Only Authentication User Agencies (AUAs) and e-KYC User agencies (KUAs) through authorized Authentication Service agencies (ASAs), as per the Act, are permitted to obtain e-KYC (without biometrics) data of their customers.
- The E-KYC data can be given by UIDAI to these agencies only after they obtain consent of their customers and can be used only for the purpose for which it was
- No unauthorised party can store or share the information obtained by biometric authentications using Aadhaar on its own without the consent of the individual.
- Violations of above provisions attract strict penalties under the Aadhaar Act which will be enforced strictly.

What are the recent events of breach of security?

- Despite these elaborate provisions there has been rumour of breach of Aadhar provisions in the Axis Bank case where a Banking Correspondent attempted to misuse his own biometrics.
- Some banks and telecom companies hire unauthorized private agencies for the biometric authentications /e-KYC which leads to storage of data in parallel databases outside the purview of any privacy law.

In both the case which was detected by UIDAI internal security system, UIDAI states that such banks and telecom companies have to first become their AUA or ASA in order to retrieve any e-KYC information of their customers from them. The detection of the breach in itself is a proof of the inbuilt security measure.

However, there are few more issues which can be raised.

- No data is safe as technological capacities of state and non state actors are continuously increasing. Eg. Russia making Unique data of Turkish people public.
- There is no legal remedy for the citizens if their data is stolen and only UIADI can approach for any legal remedy.
- Sec. 43 of IT Act makes body corporate responsible for the protection of information. But Aadhar act does not mention whether UIADI, other agencies combined or individually is responsible for this and liable for breach of data.
- There is no provision for compensation of breach of data.

What are the risks associated with it?

Any breach of data security has huge risks associated with it. Identity theft, financial loss are the two main risks which can be of great harm.



> As government is employing Aadhar for plugging leakages any identity theft can lead to diversion of government benefits and other financial losses.

- Since the level of digital awareness, digital security awareness, cyber security preparedness in Indian is low, those whose data has been compromised will find it difficult to take remedial measures.
- Biometric data if leaked can be used for other criminal activities also.

What should be done?

Since government is collecting and using huge amount of data, there is an urgent requirement that it must take all measures to ensure its security. Therefore there is a need to pass data protection laws, privacy laws which will clearly establishes the responsibilities and liabilities of the agencies and rights of citizens.

Aadhaar is an important tool of good governance which tries to ensure transparency, social justice. It has helped more than 4.47 crore people to open bank accounts through Aadhaar E-KYC.

It has enabled the government to do Direct Benefit Transfer under various schemes such as LPG Subsidy under Pahal, Scholarships, MNREGA, and Pensions directly into the bank accounts of beneficiaries eliminating corruption, diversion, and leakages by middlemen etc.

Through Aadhaar based Direct Benefit Transfers the government has saved over Rs. 49,000 Crore during the last two and half years. Therefore it is the duty of the citizen to have faith in government and obligation of government to respect that faith with full proof system.



SOCIAL ISSUE

MORAL POLICING



India has several vigilante groups that claim to protect the Indian culture. Recently, on Women's Day there have been instances in Kerala's Kochi where such groups armed with sticks, raided the city's picturesque marine drive and heckled and chased away couples. Later on public marched on marine drive sending strong message against moral policing. This raised debate over the moral policing and its feasibility in present times.

A pluralist society is one in which there are different views on questions of politics, morality and religion. The conflicts of ideas and practices are an inevitable and permanent part of human society. Even if one tries to get rid of them by force, in the use of that force, there is still a conflict.

The best way to resolve issues is to understand others perspectives, and respect their opinion. Moreover, not always try to enforce particular thoughts and belief systems upon anyone. However, sometimes things are stretched a little too far, when people go to the extent of using violence to enforce their beliefs upon others. Instead of following the legal stand they start punishing people who have taken a different stand and spark debate on issue of moral policing.

What is moral policing?

A commonsensical meaning of Moral policing means guarding for moral values and ensuring they are obeyed. However in recent time moral policing is the term used to describe the actions of vigilante group who strive to enforce a particular moral code based on their perceived notion of Indian values and culture. Their aim is to protect Indian culture which is under threat from westernization and consumerism. Some of Indian laws and organs of state are also involved in moral policing.

Family, society, educational institutions have been the place of imbibing moral values in new generations and ensuring that they are followed. However, the problem arises when the values prescribed and values learnt by new generation through new means of media, cinema, market, globalization, liberalization are in conflict. This situation gives rise to vigilantism, which sometimes become abusive.

Why moral policing is done?

Moral policing has several dimensions including protecting Indian culture, protecting younger generation from the influence of western culture etc. However, it has some other social, religious, economic dimensions too.

It is part of new values of freedom, individualism v/s old thinking of chastity, consumerism, sexuality, public behavior

With the influence of TV, internet, social media the new generation is attracted to ideas of freedom and individualism. They want to assert their freedom, enjoy life while elders and those among young feel that this is wrong try to assert them.

Social and cultural dimensions

- Entrenched patriarchy: As most of the moral policing is directed against couples seeking private space in public sphere it tries to suppress the expression of freedom on the part of females, which shows the patriarchal attitude of moral policing. This patriarchal attitude is again reflected in dress code directives to females in educational institutions etc.
- Heteronormality: Moral policing also tries to stress the entrenched idea of heterosexuality by attacking those who try to show any alternative behavior.
- Ascriptive social values of showing respect to the elders by not engaging in any affectionate behavior in front of them or in public.
- Action against those involved in drugs, bars, pubs also reflect the disdain for drinking habits which have not been a part of popular Indian culture.

Communalism:

- With increasing education, freedom and instances of love marriage some of the sections of society are concerned with increasing chances of inter-caste, interreligious marriages. These sections want to preserve the purity of human stock by forcing endogamy and thus resorting to moral policing.
- Preservation of culture which is under attack from western values of consumerism, assertion of freedom, public display of affection etc.

In September 2005, a fatwa was issued against Sania Mirza because her attire on the tennis court and billboard advertisements were "un-Islamic".

Economic angle:

- Some parents, elders and other members of society feeling that inter-mingling of boys and girls, younger generation enjoying too much freedom, their lifestyle will affect student's studies and their future.
- Therefore for their better future they try to enforce certain moral codes. Kerala police Operation Gurukalam and Operation Vidhayala were from this

Sartorial codes of young people have also invited police disciplining: low waist jeans and fancy haircuts, especially by young people were targeted as "Operation Vidyalaya" in Kerala.

Legal prescriptions

Section 292 and 294 of IPC deals with obscenity in books and in public places. However, the primary civil institutions of such disciplining—the family, the caste or religious community, and educational institutions—are all facing crises with information technology and the rise of social media with the new generation trying to assert themselves through campaigning on social media, mobilizing support and the kiss of love campaign was example of it.

Who are the actors involved in moral policing?

- Typically, the perpetrators are gangs of men (particularly school and college teachers, and in a very recent incident, policewomen) who accost couples or groups, allege sexual impropriety, and go on to publicly humiliate, assault, or threaten them. Often they incarnate as local people—civil society, so to say, zealous of protecting "decency" and even the "security" of women in their localities.
- Police and judiciary have been found involved in instances of moral policing. Operation Majnu of Ghaziabad police to warn the couples using park space,



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courts banning display of books, art galleries which depict alternate sexual view point and police not eagerly defending freedom of speech of various groups are examples of it.

- Vigilante brigades may also be political party activists keen to target the leaders or prominent members of their rivals or members of social, cultural groups like VHP, caste panchayats dictating dress codes.
- Civil Society, neighbors also do such acts.

Impact

Actions of moral policing are arbitrary, opportunistic, smack of nepotism etc. There is no accountability for behavior of such groups. They commit undue harassment, which may have severe mental effects on the affected persons.

In internet age various vigilante groups have recorded the video clips and uploaded them on internet, which itself is violation of the IT Act.

It amounts to enforcing one's wishes on others without authority of law. The use of force, formulations of laws is sole domain of governments. Such groups try to usurp that and which questions the legitimacy of governments when they force to curb such actions.

Conclusion

There cannot be only one view of culture and that can't be forced upon. Culture is something which constantly transforming, no one can preserve it as it is. But there are certain aspects of culture which makes India distinct and have been conserved by engineering them into our daily lives. There is need to preserve such elements like respecting elders, sense of community bonding, not doing things which harm others or offends others without reason etc. which makes India unique. Such values, which saner voices deem fit, must be taught and conserved through teachings, education system so that they derive their authority and sanctity. Different methods of educating can be used through mass media, through street plays, school syllabus etc.

But unfortunately the saner voices in society do not speak the cruder voices go do harm. Such actions must be stopped because moral policing should be done in a moral way.



SOCIAL ISSUE

Maternity Benefit

(AMENDMENT) BILL, 2016



Maternity Benefit (Amendment) Bill, 2016 was passed by Lok Sabha on 9th March 2017. With it already passed by Rajya Sabha, it paves way for the implementation of some very important provisions which will help in ensuring the healthy development of the new born and proper recuperation of the mother after child birth. However concerns are raised about its impact on the women workforce participation rate. It will have to be seen whether employers give more importance to their short term financial gains or countries future.

Introduction

Maternity Benefit is a payment made to women who are on maternity leave from work and covered by social insurance.

However, with an increasing number of women entering the workforce, there is a renewed focus on whether the benefits provided by existing legislations encourage inclusivity or not.

To increase inclusivity, the Law Commission of India recommended increasing the period of maternity leave under the 1961 Act to 24 weeks, and bringing the unorganised work force within its ambit.

Present laws

Currently, women employed in certain sectors, like factories, mines, shops and establishments with 10 or more employees, and other establishments notified by the state government are eligible for paid maternity leave up to 12 weeks under the Maternity Benefits Act, 1961.

Various other labour laws also provide for maternity benefits. The Employees' State Insurance Act, 1948 provides for payment of wages to an insured woman, during her 12-week maternity leave. Women employed in newspapers or working as journalists are entitled to similar maternity leave under the Working Journalists (Conditions of Service) and Miscellaneous Provisions Act, 1955. Further, women employed in the central government are provided about 24 weeks of paid maternity leave and additional child care leave up to a period of two years.

What are the provisions of the bill?

The Bill seeks to amend the Maternity Benefit Act, 1961 to provide for the following:

a) Maternity leave available to the working women to be increased from 12 weeks to 26 weeks for the first two children.





- b) The new law will apply to all establishments employing 10 or more people.
- Maternity leave for children beyond the first two will continue to be 12 weeks.
- Maternity leave of 12 weeks to be available to mothers adopting a child below the age of three months as well as to the "commissioning mothers". The commissioning mother has been defined as biological mother who uses her egg to create an embryo planted in any other woman.
- Every establishment with more than 50 employees to provide for crèche facilities for working mothers and such mothers will be permitted to make four visits during working hours to look after and feed the child in the crèche.
- The employer may **permit a woman to work from home** if it is possible to do so.
- Every establishment will be required to communicate these benefits available to the women at the time of her appointment.

These changes will ensure that a working woman gets time to exclusively breast-feed her child for 6 months after the birth. This period also enables the working mother to recuperate herself before she goes back to work.

What provisions remain unchanged?

Several provisions of the MB Act remain unchanged. This includes the eligibility criteria for receiving maternity benefit under the MB Act. A woman who has worked for at least 80 days in the 12 months immediately preceding her expected date of delivery will continue to be eligible. Further, an employer will continue to be prohibited from employing a woman for a period of six weeks immediately following her delivery, miscarriage or a medical termination of pregnancy.

What is the importance of the Bill?

Several expert bodies like the WHO have recommended that 24 weeks of maternity leave is required to protect maternal and child health. The 6.5 months' maternity leave would not only help the new mother recuperate from the rigours of child birth, but also give her time to bond with the newborn. This should be perceived as a time investment put into progressively shaping the country's future generation.



Fig.: 1

Giving maternity break and allowing them to join work will increase the loyalty of the women towards organization and their performance.

What are the concerns?

Though it is a very good step but a number of concerns regarding the private sector shunning women employees, exclusion of unorganized sector, disproportionate burden of child upbringing on women have been raised.

- **Inclusion of paternity leave:** It is felt that when families are becoming nuclear, women are educated, employed and equal likewise the responsibility of child upbringing must also be shared equally by men. It was a missed opportunity in this regard.
- Informal sector: The bill does not take into consideration the 96 percent women who work in the unorganized sector, who do not have an identifiable employer, nor do they have a designated place of work, for eg., those who are working under Mahatma Gandhi National Guarantee Employment Act, 2005.
- Some have argued that the limit of 50 employees for establishing crèche facility should have been lower.
- Cost competitiveness concerns of private sector: Unfortunately for the Private Sector, it may be perceived as a liability because the employer would have to not only accommodate the absence of the resource, but also incur financial expenditure without immediate productive input. It may lead to less recruitment of women workforce.
- Growth of women employees within organization: Leaves also impact increments and promotion of women employees. It prevents them from reaching top levels in organizations. There is no provision to ensure that such loss of promotion and increment opportunities is taken care of.
- The Bill is likely to open the door for private organizations to adopt discriminatory hiring practices and exclude women based on their age and marital status.

Way Forward

It is high time to create a work space that respect the talent and hard work of the women employees, their contribution to organization, family, society and nation and help them in this. Today, Indian women contribute only 17 percent to the GDP which falls severely short of the 37 percent global benchmark. As women become more educated their participation is going to increase in work force, but that needs change in mindset of employers. In the passed bill, some additions can be made to make it more workable.

Some of them are:

- To ensure that bill does not reduce women participation rate. Government can consider sharing the paid leave cost with small organizations.
- The Scandinavian and Nordic countries follow a social insurance model where the burden is not just on the employer, and they recognize parental and paternity leave besides maternity leave.
- The Bill should contain an anti-discrimination clause to ensure that the recipients of the benefits under the Bill, in public or private employment, are not discriminated against on grounds of sex, pregnancy, maternity or family responsibilities in any aspect of employment.



SOCIAL ISSUE

Altruistic Surrogacy

IN INDIA



The ever-rising prevalence of infertility world over has lead to advancement of assisted reproductive techniques (ART). Herein, surrogacy comes as an alternative when the infertile woman or couple is not able to reproduce. Surrogacy is an arrangement where a surrogate mother bears and delivers a child for another couple or person.

Commercial surrogacy is legal in India while it is illegal in England, many states of United States, and in Australia, which recognize only altruistic surrogacy. In contrast, countries like Germany, Sweden, Norway, and Italy do not recognize any surrogacy agreements.

India has become a favorite destination of fertility tourism. Each year, couples from abroad are attracted to India by so-called surrogacy agencies because cost of the whole procedure in India is as less as one third of what it is in United States and United Kingdom (10-20 lakhs).

Such commercialisation of motherhood has raised ethical, philosophical, and social questions and raised fears of the exploitation of women as baby-producers, and the possibility of selective breeding. In several instances, complications have arisen regarding the interests and rights of the surrogate mother, child, and intending parents. Yet, there are no clear legal provisions in place yet.

Union cabinet has recently approved the introduction of a Surrogacy (Regulation) Bill, 2016 that seeks to ban commercial surrogacy but allow altruistic surrogacy. Bill is still pending with the parliament.

The present article analyses the status of surrogacy in India, benefits of altruistic surrogacy and the key features of the Surrogacy Regulation Bill 2016 introduced in the parliament.

Introduction

Surrogacy is a practice where a woman gives birth to a child for an intending couple and agrees to hand over the child after the birth to the intending couple. India's booming surrogacy industry sees thousands of infertile couples, many from overseas, hiring the wombs of local women to carry their embryos through to birth.

> Altruistic surrogacy involves no monetary compensation to the surrogate mother other than the medical expenses and insurance coverage during the pregnancy. On the other hand 'Commercial surrogacy' includes surrogacy or its related procedures undertaken for a monetary benefit or reward (in cash or kind) exceeding the basic medical expenses and insurance coverage.

> Union cabinet recently has approved the introduction of a Surrogacy (Regulation) Bill, 2016 that seeks to ban commercial surrogacy but allow altruistic surrogacy. In a case, Bollywood producer Karan Johan got twins through surrogacy, however, the bill seeks legal ban on single man/woman or single parent having baby through surrogacy.

Altruistic Surrogacy

- Altruistic surrogacy means a practice whereby a woman voluntarily agrees, for no financial gain, to become pregnant and bear a child for another person or persons to whom she intends to transfer the child's care at, or shortly after, the child's birth. (Specific expenses incurred, associated with the pregnancy and birth, may be reimbursed). This is also known as compassionate surrogacy.
- Altruistic' surrogates, in most cases, are very close to the intended parents. Family members, close friends, etc - and it's the closeness of their relationship that drives them to be a surrogate. It is completely different from commercial surrogacy which generally refers to any surrogacy arrangement in which the surrogate mother is compensated for her services beyond reimbursement of medical expenses.

Surrogacy in India

- With a range of alternative medical solutions to childlessness becoming available, surrogacy has emerged as one route for many couples. While some countries have banned the practice, commercial gestational surrogacy, in which a woman is paid to have a baby to whom she has no genetic link, has caught on in countries such as Mexico and India.
- After the first surrogate delivery in India in June 1994, India has steadily emerged as an international destination. Relatively inexpensive medical facilities, knowhow in reproductive technology, and the availability of women, largely from poor socio-economic situations and who are willing to take up the task, have aided the growth.
- Today there are thousands of clinics in India that offer such services. From what was generally confined to close relatives or friends in altruistic mode, the network has become extended, with payment of money to surrogate mothers becoming the norm. Services are even being advertised. Such commercialisation of motherhood has raised ethical, philosophical, and social questions and raised fears of the exploitation of women as baby-producers, and the possibility of selective breeding.
- In several instances, complications have arisen regarding the interests and rights of the surrogate mother, child, and intending parents. Yet, there are no clear legal provisions in place yet. The Indian Council of Medical Research in 2005 issued guidelines for the accreditation, supervision and regulation of surrogacy clinics, but those remain on paper.

Provisions in India

Supreme Court, in 2015, has banned the commercial surrogacy in India on account of the fact that such surrogacy involves trading of human embryo, apart from the exploitation of women through such commercialized arrangement. It



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also recognized several other evils of this practice such as exploitation of surrogate mother and child in terms of health, financial and post natal care, lack of enforcement of contracts, abandonment of surrogate child due to legal complexity or complications during birth etc.

However, it allows Altruistic surrogacy in India and directed the central government to bring necessary laws regarding surrogacy practices in India. Realizing the importance of bringing surrogacy under the ambit of law the **government** prepared draft bill on surrogacy seeking to ban commercial surrogacy while at the same time recognizing Altruistic surrogacy in the country.

The Surrogacy (Regulation) Bill, 2016

Current Status: Pending

Ministry: Health and Family Welfare

Key Features:

- **Regulation of surrogacy:** The Bill prohibits commercial surrogacy, but allows altruistic surrogacy. Altruistic surrogacy involves no monetary compensation to the surrogate mother other than the medical expenses and insurance coverage during the pregnancy. Commercial surrogacy includes surrogacy or its related procedures undertaken for a monetary benefit or reward (in cash or kind) exceeding the basic medical expenses and insurance coverage.
- Purposes for which surrogacy is permitted: Surrogacy is permitted when it is, (i) for intending couples who suffer from proven infertility; and (ii) altruistic; and (iii) not for commercial purposes; and (iv) not for producing children for sale, prostitution or other forms of exploitation.
- Eligibility criteria for intending couple: The intending couple should have a 'certificate of essentiality' and a 'certificate of eligibility' issued by the appropriate authority.
- A certificate of essentiality will be issued upon fulfilment of the following conditions: (i) a certificate of proven infertility of one or both members of the intending couple from a District Medical Board; (ii) an order of parentage and custody of the surrogate child passed by a Magistrate's court; and (iii) insurance coverage for the surrogate mother.
- The certificate of eligibility is issued upon fulfilment of the following conditions by the intending couple: (i) Indian citizens and are married for at least five years; (ii) between 23 to 50 years old female and 26 to 55 years old male; (iii) they do not have any surviving child (biological, adopted or surrogate); this would not include a child who is mentally or physically challenged or suffers from life threatening disorder or fatal illness. Other conditions may be specified by regulations.
- Eligibility criteria for surrogate mother: To obtain a certificate of eligibility from the appropriate authority, the surrogate mother has to: (i) be a close relative of the intending couple; (ii) be an ever married woman having a child of her own; (iii) be 25 to 35 years old; (iv) be a surrogate only once in her lifetime; and (iv) possess a certificate of medical and psychological fitness for surrogacy.
- Appropriate authority: The central and state governments shall appoint one or more appropriate authorities within 90 days of the Bill becoming an Act. The functions of the appropriate authority include; (i) granting, suspending or cancelling registration of surrogacy clinics; (ii) enforcing standards for surrogacy clinics; (iii) investigating and taking action against breach of the provisions of the Bill; (iv) recommending modifications to the rules and regulations.
- Registration of surrogacy clinics: Surrogacy clinics cannot undertake surrogacy related procedures unless they are registered by the appropriate authority. Clinics must apply for registration within a period of 60 days from the date of appointment of appropriate authority.
- National and State Surrogacy Boards: The central and the state governments shall constitute the National Surrogacy Board (NSB) and the State Surrogacy Boards (SSB), respectively. Functions of the NSB include, (i) advising the central government on policy matters relating to surrogacy; (ii) laying down the code of conduct of surrogacy clinics; and (iii) supervising the functioning of SSBs.

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- Offences and penalties: The Bill states the following offences: (i) undertaking or advertising commercial surrogacy; (ii) exploiting the surrogate mother; (iii) abandoning, exploiting or disowning a surrogate child; and (iv) selling or importing human embryo or gametes for surrogacy. These offences will attract a minimum penalty of 10 years and a fine up to 10 lakh rupees.
- The Bill specifies a range of offences and penalties for other contraventions of the provisions of the Bill and initiating commercial surrogacy.

Benefits of Altruistic surrogacy

- The altruistic surrogacy saves the thousands of needy mothers from the curse of infertility.
- Since such arrangement is done among close relatives, the child gets social attachment, parenthood and caring.
- Such surrogacy is purely voluntary in nature hence prevents scope for any sort of exploitation of women.
- Such arrangement leaves the scope for commercialization of surrogacy and trading of embryos which are unethical in nature.
- Contracts under such arrangements are better enforced because of social pressure.
- The provisions made under the bill protect the rights of children born out of surrogacy and surrogate mothers.

Concerns related to it

- Altruistic surrogacy agreements involving the family members based on personal convenience, feasibility need not be necessarily formally written down, nor necessarily notarized on bond paper other legal compliances, etc.
- Such agreements may have no standing before the court of law. In case of any disagreements between the parties to the surrogacy arrangement over refusal to comply with their promises or handing over of child there is no means to neither hold the other party accountable nor there is any legal recourse enforce such agreement before the court of law.
- A grave repercussions of altruistic surrogacy is the likelihood of surrogacy being driven underground involving illicit inter country movement of women to be surrogate mothers for monetary returns into foreign nations or safe surrogacy heavens globally. This may subject the surrogate to worst sufferings including hormonal drugs over dosages, multiple embryo implants leading to multiple pregnancies, successive foetal reductions or abortion, even death, along with this crimes as trafficking, abduction, confinement of women to be surrogate mothers may increase as well.

Way Forward

With the increasing infertility rate among couples and in the context of modern social reality where singles, homosexuals or live-in couples might wish to have a biological child through the surrogacy route, the conditions like surrogate being close relative might thwart their chances of being parents. Hence demand from such section is made that it should be liberalized and proper regulation should be made in this context.

Law commission in its 228th report on "Need for Legislation to Regulate Assisted Reproductive Technology Clinics as well as Rights and Obligations of Parties to a Surrogacy" made the following recommendations-



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- Surrogacy arrangement should continue to be governed by contract amongst parties, which contains consent of surrogate mothers, her husband, medical procedures of artificial insemination and cost of specific expenses to carrying child etc.
- A surrogacy arrangement should provide for financial support for surrogate child in the event of death of the commissioning couple or individual before delivery of the child, or divorce between the intended parents and subsequent willingness of none to take delivery of the child.
- A surrogacy contract should necessarily take care of life insurance cover for surrogate mother.
- Sex-selective surrogacy should be prohibited.
- Cases of abortions should be governed by the Medical Termination of Pregnancy Act 1971 only.
- One of the intended parents should be a donor as well, because the bond of love and affection with a child primarily emanates from biological relationship.
- Legislation itself should recognize a surrogate child to be the legitimate child of the commissioning parent(s) without there being any need for adoption or even declaration of guardian.



ENVIRONMENTAL ISSUE

Non-Wotorised Transport:

THE NEED OF THE HOUR



There is an urgent need to conserve energy and land, control pollution and 'greenhouse gas emissions', and to alleviate poverty. Urban transport (UT) is a significant cause and also a solution to these issues. Hence planning and management of UT services and infrastructure require immediate attention.

In this Non-motorized transport can play a significant role. It includes walking, cycling and cycle rickshaws plays an important role in Indian cities. It is the primary mode of transport for the urban poor, and at the same time a climate and environmentally friendly form of transport.

Introduction

Non-Motorised Transport (NMT) includes all means of transport that are human powered. Non-Motorised Transportation includes Walking, Bicycling, rickshaw, and variants such as Small-Wheeled Transport (skates, skateboards, push scooters and hand carts).

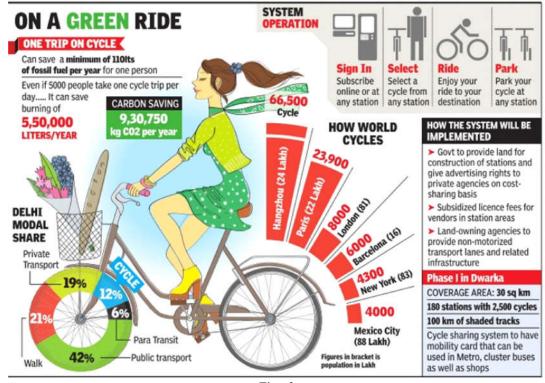


Fig.: 2



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As a mode of transport, non-motorised is available to almost everyone. All of them are green modes of transport, their carbon footprint is very low. The majority of nonmotorised class of transport modes are healthy, versatile and reliable. They encourage local movement and hence support local community facilities. Most of the low income group and middle income group use NMT. NMT is a very important last mile connectivity option.

Still NMT is neglected as an important transport option in favour of more capital intensive, infrastructure intensive and polluting means of transport.

Why it should be part of urban transportation?

Indian cities are expected to exceed 800 million inhabitants by 2050. The growing demand for mobility and the increasing motorization rates are putting strain on the existing resources and are resulting in highly polluted and congested cites.

It has thus become imperative to address the growing challenges in urban transportation such as:

- **Air pollution in cities:** In terms of its impact on air quality, a 2016 World Health Organization study shows that ten of the top twenty most polluted cities in the world are in India, with fossil fuel used in cars being the main contributor.
- **Increasing congestion on roads:** There has been a 10 per cent annual increase in registered motor vehicles in India in the past decade while since 1951, it has grown 472 times. According to a report by Delhi Traffic Police the average time taken to cover 40 Km has increased from 1.3 hrs to 3.4 hrs in last decade.
- **Health issues and lifestyle diseases:** Because of sedentary life style the incidences of non-communicable diseases in urban areas. The use of NMT, which is healthy transport system will help in reducing the incidences of NCDs.
- High cost of motorized transport: With increasing congestion, the investments needed in building flyover, subways, underpass etc. has increased leading to overall increase in the cost of infrastructure development. Use of NMT as last mile connectivity and main medium can help increase use of mass modes of transportation and overall reduction in congestion and thus reducing capital requirement for infrastructure development.
- **Increasing accident rates:** Between 2010 and 2015, incidence of road accidental deaths increased by an annual average rate of 1.2%. There were over 500,000 road accidents in 2015, up from 489,000 in 2014.
- Climate change: Transportation sector is the biggest contributor to the climate change. Therefore it is necessary to move away from environmentally polluting motorized transport system.

What are the issues with NMT?

- Safety: Safety of the NMT is the most pressing issue as most fatalities resulting from road accidents include pedestrians or cyclists. Availability of safe pathways for them and punishing the motorized intruders should be taken up seriously.
- Planning: NMT has not been an important component of the urban planning or transport planning, which will increase the cost of retrofitting, as:
 - **Separate pathways:** Separate and dedicated pathways for 'walk to work' or cyclist are missing.
- **Lobbying by motorized transport companies:** There are vested interests of big corporate houses in ensuring that NMT does not become an important part of Urban Transport Planning.



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Attitude of people: Generally it is the attitude of the people which thinks that pedestrians, rickshaws, cyclist are a nuisance on the road. Along with this using NMT is associated with economic status and is reserved for low income groups.

What are the steps needed?

Though NMT was an important component of National Urban Transport Policy, 2006 and National Mission of sustainable habitat but any significant improvements on the issue are missing. There is a need for renewed focus from all stakeholders (Union, state and local governments; public and private sector) to make NMT a reality.

Union government is finalizing Green Mobility Scheme. The draft states the expected outcome of the scheme as encouraging non-motorised transport through 8,000 kms of footpaths and cycling infrastructure. The bike-sharing project is proposed to involve more than 73,000 public cycles.

Public Bike Sharing

Many smart cities have initiated on their own to promote green mode of non-motorized transport.

Bhubaneswar Smart City Limited (BSCL), the implementing agency of the smart city, will create 50 bicycle stations at select locations across the city, with technical assistance from Germany.

It will work on 'hire to ride' mode. Each bicycle will have an unique barcode number for identification. People will have to submit their identity proofs to rent bicycle after payment of a nominal fee.

This has to be complemented with:

Holistic urban planning:

- So that the commuting distance is minimum and suitable for NMT.
- Proper integrated transportation system for any urban area with NMT acting as last mile connectivity.
- Pedestrian and cyclist plans must be made mandatory for any transport infrastructure.

Governance:

- Institute a central monitoring and evaluation committee to ensure that all centrally funded infrastructure projects comply with NMT vision. Similar bodies to focus on NMT should be instituted at state and local levels.
- **Legislation:** A comprehensive legislation addressing the issues of important engineering guidelines for walkways, traffic volume reduction measures and penalties for motorists encroaching the NMT pathways must be brought.
- Safety: Safety audit of all roads with regard to NMT, NMT friendly pathways design guidelines should be formulated and continuous monitoring through data collection should be done. Local cycle and walking route maps must be created.
- **Involvement of private sector** to make the cycling to work as an entrepreneurial field, so that more investment in the NMT sector and this will also do away with the vested corporate interests.
- Awareness generation measure about the benefits of NMT by focusing on schools, colleges and corporate sector. This will help in changing the attitude of people and they will take NMT quickly.



ECONOMIC ISSUE

Growing Cyber INSURANCE MARKET



The infrastructure, the users, and the services offered on computer networks today are all subject to a wide variety of risks posed by threats that include distributed denial of service attacks, intrusions of various kinds, eavesdropping, hacking, phishing, viruses, spams, etc. In order to counter the risk posed by these threats, network users have traditionally resorted to antivirus and anti-spam software, firewalls, intrusion-detection systems (IDSs), and other add-ons to reduce the likelihood of being affected by threats.

In spite of improvements in risk protection techniques over the last decade due to hardware, software and cryptographic methodologies, it is impossible to achieve perfect/near-perfect cyber-security protection. In this context, in order to indemnify losses due to cyber attack there is a need for Cyber Insurance and due to increasing risks pose by such attack cyber insurance market is rapidly growing.

Introduction

In the wake of concerns over cyber risk escalating by the day due to speed of digital transformation, sophistication of hackers' alertness and spread of hyper-connectivity, businesses need to do much more to integrate cybersecurity into their risk management programmes. This is leading to growth of cyber insurance market.

What is Cyber Insurance?

Cyber risk insurance or cyber liability insurance coverage (CLIC) is designed to help an organization to mitigate risk exposure by offsetting costs involved with recovery after a cyber-related security breach or similar event.

Risks of this nature are typically excluded from traditional commercial general liability policies or at least are not specifically defined in traditional insurance products. Coverage provided by cyber-insurance policies may include first-party coverage against losses such as data destruction, extortion, theft, hacking; liability coverage indemnifying companies for losses to others caused.

Why Cyber Insurance is growing?

The digital revolution has created a highly interconnected world that is awash with data, much of it sensitive and much of it vulnerable to fraud, theft and compromise. Add to that malware, denial of service and other malicious attacks, and cyber risk emerges as one of the biggest threats of our age. Cyber criminals are constantly probing for weaknesses and adapting their tactics. The targets are also broadening.

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Current ANALYST

The impact of business interruption is compounded by knock-on losses including fines, litigation and reputational damage including physical and intellectual property. All businesses operate within an increasingly interconnected and interdependent ecosystem, in which it is not just their own systems and data that are vulnerable, but those of their suppliers, customers and strategic partners. Businesses are also concerned about the threat of attacks on the infrastructure they rely on. Cyber crimes are costly, hard to detect and difficult to combat threat. From an insurance perspective, while analogies are often made with terrorism or catastrophe risks, cyber risk is, in many ways, a risk like no other.

Speed of digital transformation, sophistication of hackers' alertness and spread of hyper-connectivity are other factors which are increasing the risk and demand for Cyber Insurance. The global cyber insurance market could grow to \$5 billion (about Rs. 33,000 crore) in annual premiums by 2018 and at least \$7.5 billion (about Rs. 49,500 crore) by the end of the decade, according to a report issued by PwC in 2015.

India's case

At a time when cyber threats are on the rise for banks for increasing cashless transactions and effects of demonetization, insurers see rise in demand for cyber insurance. Recently, in one of the biggest ever breaches of financial data in the country, customers of 3.2 million debit cards belonging to different banks were hit by cyber frauds where their ATM details were compromised. In FY11 India was the 10th most heavily cyber-attacked country in the world, last year it was second only to United States. So, uptake of such products has huge potential.

Obstacles to development of cyber-insurance

There is limited actuarial data on the financial impact of cyber attacks, which makes this a difficult risk to evaluate or price with any precision. While underwriters can estimate the cost of getting IT systems back up and running in the same way as if they were put out of action by fire or flood, there simply isn't enough data to estimate the further losses resulting from brand impairment or compensation payments to customers, suppliers and other stakeholders. The uncertainty is compounded by the fact that cyber security breaches can remain undetected for several months, even years, which opens up the possibility of accumulated and compounded losses down the line.

Product and process innovation and also advanced analytics will help foster improved cyber insurance solutions and extend both the boundaries of insurability and reach of cover.

Role of Government

Some cyber risks, especially related to extreme catastrophic loss events, might be uninsurable. In this case there is a merit in creating insurer or reinsurer of last resort by the government.

Secondly, governments have an important role in promoting cyber resilience, including measures to improve cyber information capture and diffusion, and setting laws and regulations about how cyberspace is used and protected.

Conclusion

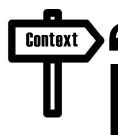
With increase use of Computer networks and digitisation in every aspect of life, threats and risks of Cyber attack of various forms have increased. This makes a case for new form of insurance i.e. Cyber insurance. For proper development of the sector, government need to formulate suitable techno legal regulations and deliberate on creation of insurer or reinsurer of last resort.



POLITICAL ISSUE

Contempt of Court

PROCEEDINGS AGAINST JUDGE



The recent conduct of Justice CS Karnan one of the Judges of the Calcutta High Court has raised various questions regarding the efficacy of Collegiums System, availability of mechanisms to control the errant judges. This has also hit the image of the judiciary. As a result Supreme Court took suo moto cognizance of the Justice Karnan's actions and started contempt of court proceedings against him, thus forcing one to think that how those who are tasked to dispense justice are obstructing justice delivery.

Why contempt proceeding have been issued?

The apex court has taken the suo moto cognizance of the Karnan's alleged misconduct while he was serving as a judge in the **Madras high court** and turned the alleged contemptuous letters written by Justice Karnan against the Madras HC Chief Justice which were addressed to the CJI, Prime Minister and others, into contempt proceedings against him.

These contempt proceedings are an effort to reign in an errant judge. Earlier a number of steps like:

- Taking away judicial work from the judge
- Transferring him to other High Court

Some of the controversies related to Justice Karnan:

- On January 23, 2017, Justice Karnan had published an open letter to the Prime Minister naming "an initial list" of 20 sitting and retired Supreme Court and High Court judges, accusing them of corruption.
- In 2016 he stayed a court order against his own transfer from the Madras High Court.
- In 2013 he said that pre-marital sex between adults of marriageable age amounts to marriage and girls can seek status of wife. Later on he gagged criticism of his decision.
- In 2011, Justice Karnan had written to the National Commission for Scheduled Castes (NCSC) complaining of victimisation by the other judges because he was a Dalit.

This shows a serious flaw in our Constitutional scheme which envisages removal through impeachment and nothing short of it as a means to control judge behavior. It needs to been seen what kind of effect these proceedings have on the behavior of judge and the contempt proceedings also cant' remove him.

However there are voices which say that his allegations of corruption against judges must have been investigated. But it must be kept in mind that allegations must have accompanying prima facie evidence, otherwise everyone will start accusing others and this will hamper work.

What is Contempt of Court?

It is defined as:

- Anything that curtails or impairs the freedom of limits of the judicial proceedings
- Any conduct that tends to bring the authority and administration of Law into disrespect or disregard or to interfere with or prejudice parties or their witnesses during litigation.
- Consisting of words spoken or written which obstruct or tend to obstruct the administration of justice
- Publishing words which tend to bring the administration of Justice into contempt, to prejudice the fair trial of any cause or matter which is the subject of Civil or Criminal proceeding or in anyway to obstruct the cause of Justice.

Constitutional Provisions

- Art. 129: Supreme Court to be a court of record.—The Supreme Court shall be a court of record and shall have all the powers of such a court including the power to punish for contempt of itself.
- Art. 215: High Courts to be courts of record.—Every High Court shall be a court of record and shall have all the powers of such a court including the power to punish for contempt of itself.
- Art. 144: Civil and judicial authorities to act in aid of the Supreme Court.—All authorities, civil and judicial, in the territory of India shall act in aid of the Supreme Court.
- Art. 141: Law declared by Supreme Court to be binding on all courts— The law declared by the Supreme Court shall be binding on all courts within the territory of India.
- Art. 142: Enforcement of decrees and orders of Supreme Court and orders as to discovery, etc.— (1) The Supreme Court in the exercise of its jurisdiction may pass such decree or make such order as is necessary for doing complete justice in any cause or matter pending before it, and any decree so passed or order so made shall be enforceable throughout the territory of India in such manner as may be prescribed by or under any law made by Parliament and, until provision in that behalf is so made, in such manner as the President may by order prescribe.
- Art. 261 (1): Full faith and credit shall be given throughout the territory of India to public acts, records and judicial proceedings of the Union and of every State.

What are contempt proceedings?

Whenever anyone through actions tries to interfere in the administration of justice, tries to scandalize judiciary, defy a court's authority, cast disrespect on a court, then it tantamount to contempt of court.

India contempt of court is of two types:

- Civil Contempt: Under Section 2(b) of the Contempt of Courts Act of 1971, civil contempt has been defined as wilful disobedience to any judgment, decree, direction, order, writ or other process of a court or wilful breach of an undertaking given to a court.
- **Criminal Contempt:** Under Section 2(c) of the Contempt of Courts Act of 1971, criminal contempt has been defined as the publication (whether by words, spoken or written, or by signs, or by visible representation, or otherwise) of any matter or the doing of any other act whatsoever which:
 - Scandalises or tends to scandalise, or lowers or tends to lower the authority of, any court, or
 - Prejudices, or interferes or tends to interfere with the due course of any judicial proceeding, or





Interferes or tends to interfere with, or obstructs or tends to obstruct, the administration of justice in any other manner.

Present system of ensuring accountability and way forward

Though the present contempt proceedings represent a novel procedure to control judge behavior, some other methods have been used in the past. In case of complaints against a judge consists of an in-house mechanism and impeachment proceedings.

- In the "in-house procedure" to tackle errant judges the Chief Justice of India constitute a three-member committee consisting of two chief justices of the high courts and a high court Judge.
- If the committee recommends removal of the judge, the CJI can advise the concerned judge to resign or seek voluntary retirement.
- If he unwilling to do so, the CJI can order that no judicial work be allocated to the judge and inform the President and Prime Minister of the same with a request to initiate the proceedings for removal of the judge.

This procedure is infrequently used; the proceedings are wrapped in secrecy; the judge continues to hold the post, and if the impeachment motion fails, it may not be possible to deny him work. So in such case it depends upon whether judge has a sense of morality or not. Therefore there is need to pass the Judicial Standards and Accountability Bill as soon as possible which will establish an institutionalized mechanism to tackle such cases. Along with this there is need to understand how such judges gets appointed and the new appointment procedures under MoP (Memorandum of Procedures) must be free from such lacunas.



ENVIRONMENTAL ISSUE

Climate Change and Cities

The effects of urbanization and climate change are converging in dangerous ways. Cities are major contributors to climate change: although they cover less than 2% of the earth's surface and have 54% of population, cities consume 78% of the world's energy and produce more than 60% of all carbon dioxide and significant amounts of other greenhouse gas emissions, mainly through energy generation, vehicles, industry, and biomass use. At the same time, cities and towns are heavily vulnerable to climate change. Hundreds of millions of people in urban areas across the world will be affected by rising sea levels, increased precipitation, inland floods, more frequent and stronger cyclones and storms, and periods of more extreme heat and cold.

Introduction

Due to uncontrolled urbanization in India, environmental degradation has been occurring very rapidly and causing many problems like land insecurity, worsening water quality, excessive air pollution, noise and the problems of waste disposal.

There is a two way linkage between urbanization and climate change. Thus, hereby analyzing the linkage and steps needed to mitigate that effect.

How cities contribute to climate change?

Cities, by their very nature, are energy intensive i.e. they need more supply of electricity, water, and land. Besides, the changing lifestyles that allow people to splurge - shopping in malls, living in high-rises with spas, swimming pools, gyms, etc. definitely shoots up the requirements of essential resources like water and electricity.

- In a city like **Delhi**, the average decadal **population growth since 1951 has been 45.8 percent**, where migration accounted for more than 23 percent of the total increase in population.
- Mumbai has doubled its population in last 40 years. >
- According to state report on Sanjay Gandhi National Park (SGNP) in Mumbai, 200 hectares of reserved forest lands of SGNP have been encroached by about 61,000 families. This has destroyed the park's biodiversity to an extent that it has caused some critical environmental damages.
 - High levels of population growth and encroachment of green spaces: Very high rate of population growth of metro cities have led to encroachment of green spaces like wetlands, forests, rivers etc. It makes urban areas vulnerable to extreme events like foods, draught etc,
 - Slums and other illegal encroachments create additional burden on cities because their resource requirement have not been taken into consideration at the time of planning. These are also associated with most inefficient utilization of resources.





- **Inefficient building designs:** Which does not recycle resources, does not use natural light, ventilation and thus waste energy.
- **Transportation:** High use of personal vehicles result into higher fossil fuel use and greater GHG emission which then contribute to climate change.

All these activities result into reduction of carbon stock on the earth because of reduced green surfaces, release of extra GHG into atmosphere as a result of inefficient resource utilization. Urban heat island is another phenomenon because of very high level use of concrete material.

How cities are affected by climate change?

According to IPCC (Intergovernmental Panel on Climate Change) AR5 (Assessment Report 5) Synthesis Report, climate change will increase risks like **heat stress**, storms and extreme precipitation, inland and coastal flooding, landslides, air pollution, drought, water scarcity, the rise in the sea-level and storm surges in the cities.

- Many major coastal cities globally with populations of more than 10 million people are already under threat. In India also Mumbai is facing the threat of rising sea level.
- Climate change may also negatively impact infrastructure and worsen access to basic urban services and quality of life in cities. The floods in Chennai, Gurugram in 2016 created havoc for authorities.
- In addition, most of the vital economic and social infrastructure, government facilities, and assets are located in cities.
- The most affected populations are the urban poor i.e., slum dwellers in developing countries – who tend to live along river banks, on hillsides and slopes prone to landslides, near polluted grounds, on decertified land, in unstable structures vulnerable to earthquakes, and along waterfronts in coastal areas.
- According to the Twelfth Five Year Plan, India loses up to 2 percent of its GDP due to natural disasters of which floods and high winds account for 60 percent.

What should be done?

The challenge therefore is to link climate change to local environmental and other developmental priorities.

- On the supply side, there are strategies that make certain alternative sources of energy more attractive to users than fossil fuels.
- On the demand side, a better planned city with reduced urban sprawl, greener buildings, and better public transport can reduce a city's carbon footprint while at the same time providing a better quality of life for its citizens and an environment that is more attractive for business.

Protection of natural resources like water bodies, wetlands, salt pans, and mangroves play a significant role as they have the capacity to absorb such climatic shocks; failing which the cities would be washed away in no time. Here's where green buildings come into the picture as they are more sustainable and can help in retaining vital resources. It's never too late in bringing green buildings in policy making and it can't be neglected anymore.

How green buildings can help in mitigating climate change?

A building which can function using an optimum amount of energy, consume less water, conserve natural resources, generate less waste and create spaces for healthy and comfortable living, as compared to conventional buildings, is a green building.



Conventional methods of building use tremendous quantities of material, many of them non-renewable and toxic, and pay little attention to the impact the building has on the environment. Green buildings not only reduce these impacts but are also healthier and consume less energy saving money in the long run.

- Olympia Tech Park Chennai: Rated as one of the largest LEED Gold rating buildings of the world, this tech park has the lowest energy consumption, high natural lighting systems, 100 per cent water recycling and other environment-friendly practices.
- Patni Knowledge Centre, Noida: With the prestigious platinum LEED rating, the building is built over 4,60,000 sq.ft. in Suburban Noida and is designed in a way that it captures 73% of daylight within the office. Nearly 50% of land is covered with grass which doesn't let wastes and sewage water go out.

INDIRA PARYAVARAN BHAWAN

- These buildings are developed considering the building layout for adequate solar orientation and proper ventilation which in turn reduces the heat intake and maximizes the glare-free daylight. They are also efficient in treating waste water.
- Building Integrated Photovoltaic can reduce the electricity consumption while using the already available building surfaces.
- Solar passive design techniques, which can help cut down the need for artificial ventilation, heating, and cooling systems, can significantly contribute to mitigating the urban heat island effect.

Present scenario

Energy-efficient green buildings, at present, account for only five percent of the total stock in India. Of all the cities, which have been selected under the smart city development program, only Bhubaneswar leading the Smart City list - has shown actual commitment to make its housing infrastructure green. The rest of the cities seem to be ambiguous on this aspect.

Moreover, there seem to be no binding on inculcating green building aspects in the construction sector which are presumably most resource-intensive ones.

Another important aspect is that of wastage of available resources. A recent report by Knight Frank says that the Mumbai Metropolitan Region has 1.71 lakh unsold apartments which are worth a humungous Rs 1.80 lakh crore. Question arises that what happens to the unsold inventory and resources like water, sand, electricity, other raw materials which are used to create these spaces?

Efforts in direction of green buildings in India

- The **Indian Green Building Council**, part of the Confederation of Indian Industry (CII) was formed in the year 2001. The council offers a wide array of services which include developing new green building rating programmes, certification services and green building training programmes.
- GRIHA (Green Rating for Integrated Habitat Assessment): The system has been developed to help 'design and evaluate' new buildings (buildings that are still at the inception stages). A building is assessed based on its predicted performance over its entire life cycle – inception through operation.
- The Indian Bureau of Energy Efficiency (BEE) launched the Energy Conservation Building Code (ECBC). The code is set for energy efficiency standards for design and construction with any building of minimum conditioned area of 1000 Sq mts and a connected demand of power of 500 KW or 600 KVA.





What should be done to increase share of green buildings?

- The city corporations should make these climate responsive techniques invariably a part of its bye-laws, to tame the impact of changing climate to a pronounced extent.
- Green building components should be monitored and regulated irrespective of any rating systems in cities, especially for new construction.
- The city corporations should retain the ecologically sensitive zones, like salt pans, mangroves, wetlands, lakes especially in the cities like Bangalore, Mumbai, and Delhi, where development is rampant.
- Needless to say, the youth, citizens and policy makers should be positively made aware of the urgent need of environmental issues on the sustainable development and relevant measures.
- The city and local governments can play a significant role in mainstreaming the mitigation actions into the developmental process.



SOCIAL ISSUE

Concept of Open Prison



Mahatma Gandhi has said, "Hate The Crime And Not The Criminal". All men are born equal and are endowed by their creator with some basic rights. These rights are mainly right to life and liberty, but if any person doesn't comply with ethics of the society then that person is deprived of these rights with proper punishment. Many experts believe that the main objective of prisons is to bring the offenders back to the mainstream of the society. Open prison system is one such system which tries to reform and mainstream such individuals who were convicts by circumstance rather than by character. One of such initiatives, the open prisons of Rajasthan has brought changes into the lives of inmates.

What is open prison system?

The open prison system traces its origins back to temporary labour camps set up under the British Raj, which drew their workforce from prisons.

The All India Jail Committee 1956-57, made appreciative recommendations for prison reforms. One of these recommendations was the establishment of open jails and the main emphasis was on self-discipline and self-help.

However, as the 1983 report submitted by the Justice Mulla Committee (set up to review and improve the open prison system) makes clear, the objectives of these prisons today are radically different. From "extracting hard labour under humiliating conditions" they have changed to providing "prisoners with useful work" in a way that could help restore self-respect and give them a sense of "pride and achievement".

- Mulla Committee: All India Committee on Jail Reforms 1980-83:
- Krishna Iyer Committee: It was constituted in 1987 for women prisoners.
- Open prisons in Buxar (Bihar) allow prisoners to stay with their families in one-room residential units.
- The inmates of a prison in **Durgapura**, **Jaipur**(**Rajasthan**), even own vehicles that they use to commute to jobs outside.
- The inmates at Durgapur are mainly engaged in farm work at the Agricultural Research Institute next door. Some does office work at the Institute while others work in the city.

Open prison concept is also a part of jail reform scheme. Open jails are minimum security prisons. Certain conditions are specified for prisoners to qualify for open prisons. Prisoners with good behaviour satisfying certain norms prescribed in the prison rules are admitted in open prisons. For example, as per the Open Air Camp Rules of 1972, Rajasthan prisoners who have served a third of their term are eligible for shift to open jails.



Current ANALYST

Today, 17 States operate open prisons. While an absence of high walls and large numbers of guards is common to all of them, each State also has its own unique variation to the concept. State of Rajasthan has highest number of open prisons.

Case study of Rajasthan

Rajasthan has long established open prison camps and currently has 29 of these with a capacity of 1,332 prisoners. Six new open prisons have been established at 'gaushalas' in different towns, enabling the inmates to work at cow shelters.

Statewide, there are 60 vacancies in the open camps, which are filled by inmates of Central and District Jails with a record of good conduct.

Prisons without high walls and strict surveillance in Rajasthan are transforming the lives of inmates convicted of serious crimes.

The inmates are making the most of their stay, earning a livelihood and having the freedom of living with immediate family members.

Under the Open Prison Rules, prisoners' earnings are entirely theirs without any deduction. They must pay nominal administrative charges to the administration.

How it impacts the prisoners?

Since reformation is one of the important aspect of criminal justice system, open prisons tries to achieve that by ensuring that the convicts does not harbor any grievances against the state, society while they serve their term. This prevents them from falling again into criminal activities. Different benefits of open prison concept are:

- The psychological affect: Since open prisons give inmates opportunities to work and earn they become self sufficient, can send money to their families and save for future. This feeling of being self sufficient brings motivation and purpose into their life.
- Helps in their social integration: Since during open prison days they mingle with outsiders, family members it helps into their easy integration into the system after completion of their term. Otherwise inmates find it difficult to adjust to the circumstances.
- Rehabilitation and employment: Since they are trained into special activities, continue certain works they find it easy to get a job.
- **Support to family:** As many in the prison may be the sole earners of the family through this they are able to send money back to family. This may help the education of children, food security of family, prevent wife from exploitation and help the aged parents.
- Social service and self confidence: Through their services prisoners also serve society and thus provide essential services. Like inmates of Himachal Pradesh sell food prepared by them to the attendants of patients in hospital. Such acts help in bringing a feeling of self sufficiency.
- Motivation for others to improve: It motivates other prisoners to improve their behavior so that they may also get chance to be part of open prison system, thus helping in the management of prisoners.
- Help in conservation of natural resources and widens the scope of rehabilitative process.
- They help in reducing overcrowding in jails.
- Construction cost is fairly reduced.



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Current ANALYST

Prison officers: Concept of open prison is built on the principle of trust and thus reduces the instances of internal strife among the prisoners, their behavior changes significantly and it makes the management of the prison less arduous task for prison officers, which is reflected in the comments of an officer and a prisoner below.

As concerns with Officer, "Trust is the most important pillar of this institution. It is impossible to guard such a large open area. A prisoner could go to Bengaluru and come back between roll calls."

Related to Prisoner, "I live 99% life free now, but if I run away I won't feel even 1%

Compatibility with idea of justice

Justice as retribution: Generally in society idea of justice is associated with idea of retribution. Historically eye for eye and later more rule based punishment for criminality has been established. Criminals were treated as someone who have character full of vices and must be kept away from society. However this theory fails to consider the circumstances which forces individuals to turn into criminals. This theory also does not impose any duty on society, institutions to reform convicts.

Justice with reformation: Another viewpoint is that an individual is good in character, but because of circumstances turned evil and therefore must be given chance to reform. It imposes a duty of society and institutions to work in this direction.

What it needs?

- **Humanitarian attitude** towards the convicts. Faith in their willingness to change.
- **Emotional intelligence**, so that the officer in charge can take the prisoners together with the idea and make them understand that running is not in their favour.
- Courage to move on the path you feel is right.
- Administrative mechanisms which support such initiatives. Continuous monitoring mechanisms, support from NGOs, other institutions like workshops, training institutes which can help prisoners.

Criticism and what else is needed

- It has been argued that after initial success there had been no significant addition to the existing jails after 1980. And the idea of special jails for women did not get much support either. It has hampered the progress on the reformative front.
- Some say, "Is it rightful that in an anxiety for reformation of prisoners, the basic fact that they are notorious and formidable criminals be neglected."

However, despite all the shortcomings and criticisms for the working of open prisons, it is an accepted fact that this system has become an important part of the present day prison system. And the service it has provided to the nation over the time is not only significant but appreciable. But the attitude of society has still not changed. They still consider criminals as criminals. The family members of the convicts, convicts themselves have to face the discrimination from society. This attitude must change and society must accept those who have reformed if the true reformation has to be achieved.



GOVERNANCE ISSUE

Border Road Organization WHAT IS IT UPTO?



India has extremely complex borders. It has 14818 kilometres of land borders and a coast line of 7516.6 kilometres. 92 of India's 593 districts are border districts in 17 states. Managing such a diverse border is a complex task but vital from the point of view of national security.

Managing the borders is difficult for several reasons. Some of our maritime boundaries are still unsettled. Land borders are not fully demarcated. Sections of our borders are based on artificial boundaries and not based on natural features. Border guarding forces are often under resourced and ill equipped.

In the past, the disaster of 1962 war with China brought the humiliation for the Indian military as we were ill prepared at securing our Borders. Thereafter, in a strategic blunder, the government decided not to develop its infrastructure along the China border. Later, it took more than four decades for the decision to be reversed. In 2007, the government decided to aggressively develop infrastructure along the border with China to catch up.

Recently, a CAG report tabled recently in Parliament, has burst the myth about the ambitious catch up, and revealing the picture of targets not met and huge cost escalations in the mean time. Of the 61 India-China Border Roads (ICBRs) scheduled to be completed by 2012, only 22 had been completed as late as March 2016 with massive cost overruns.

The following article analyses the Border Management scenario in India and the role of BRO in securing Borders with neighbouring countries.

Introduction

In the past, the disaster of 1962 war with China brought the humiliation for the Indian military. Thereafter, in a strategic blunder, the government decided not to develop its infrastructure along the China border. It took more than four decades for the decision to be reversed. In 2007, the government decided to aggressively develop infrastructure along the border with China, in a late and desperate measure to catch up.

Recently, a CAG report tabled in Parliament has burst the myth about the ambitious catch up, painting a picture of targets not met and huge cost escalations.

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Current ANALYST

All 61 India China Border Roads (ICBR) included in Border Roads Development Board (BRDB) programme were planned to be completed by 2012. However, only 15 roads had been completed by 2012. Out of the balance 46 roads, only 7 roads were completed by March 2016, extending the Planned Date of Completion (PDC) of balance roads up to the year 2021.

This means 22 roads or 36% had only been completed up to March 2016 despite incurring an expenditure of 4536 crore or 98% against the estimated cost of 4644 crore for 61 ICBRs.

Background

India has extremely complex borders. It has 14818 kilometers of land borders and a coast line of 7516.6 kilometers. All states except Madhya Pradesh, Chattisgarh, Jharkhand, Delhi and Haryana have an international border or a coast line. 92 of India's 593 districts are border districts in 17 states. Indian borders run through plains, hills and mountains, deserts, riverine territories and marshes. Managing such a diverse border is a complex task but vital from the point of view of national security.

Managing the borders is difficult for several reasons. Some of our maritime boundaries are still unsettled. Land borders are not fully demarcated. Sections of our borders are based on artificial boundaries and not based on natural features. Border guarding forces are often under resourced and illequipped.

Border Road Organisation (BRO)

- The Border Roads Organisation (BRO) develops and maintains road networks in India's border areas and friendly neighbouring countries. Currently, the organisation maintains operations in twenty-one states, one UT (Andaman and Nicobar Islands), and neighbouring countries such as Afghanistan, Bhutan, Myanmar, and Sri Lanka.
- The BRO operates and maintains over 32,885 kilometres of roads and about 12,200 meters of permanent bridges in the country. Presently, BRO is also involved in the construction of a tunnel at the Rohtang pass which is estimated to be ready by 2019.

The Genesis

The early years post Independence saw India with a 15000 kilometers long border to be secured and a vast, remote and economically backward North and North Eastern Region, with an inadequate road communication network, to support its future development.

Mission

- To support the armed forces meet their strategic needs by committed, dedicated and cost effective development and sustenance of the infrastructure.
- To achieve international levels of quality excellence and time consciousness in a diversified sphere of construction activity in a cost effective manner.
- Optimise potential and expertise through increased involvement in agency, transnational and national development projects.
- To attain leadership in development, adoption, assimilation and use of state of the art technology.
- To create the environment for accurate, real time and effective decision making through optimising use of information technology.
- Through a focus on core competencies; ensure highest level of skill and proficiency in construction activity.





- To sustain a sense of values in the Organisation that will ensure a high level of self esteem in each individual and immeasurable synergy in the Organisation.
- To help enrich the quality of life of the community and ensure all round growth.

Role of the BRO

- In Peace Develop & Maintain the Operational Road Infrastructure of General Staff in the Border Areas. Contribute to the Socio-Economic Development of the Border States.
- In War To Develop & Maintain Roads to keep Line of Control through in Original Sectors and Re-Deployed Sectors.

Administrative Control of BRO

- BRO receives funds and undertakes the tasks assigned by the **Ministry of Defence.**
- The BRO has been functioning under the administrative control of Ministry of Defence (MoD).
- The total authorised strength of BRO personnel is 42598. The number of personnel working presently is 34853.
- The effective recruitment in BRO is less due to difficult working conditions and extensive deployment in Border areas.

Some Successful Projects

- The BRO undertakes projects in India and friendly countries. These projects typically include developing roads, bridges, and airfields in hostile environments shunned by private enterprises, whether due to security concerns related to hostilities, or because of environmental challenges.
- Some of these projects carry out some of the development initiatives of the Indian government in foreign territories like Tajikistan, Afghanistan, Myanmar, and Bhutan. These include the Delaram-Zaranj Highway in Afghanistan, completed and handed over to the Afghan government during 2008 and the restoration of the Farkhor and Ayniair bases in Tajikistan.
- The BRO also played a vital role in reconstruction work in the aftermath of the devastating 2004 Tsunami in Tamil Nadu, the 2005 Kashmir earthquake and the 2010 Ladakh flash floods.
- Project Himank Himank is a project of the Border Roads Organisation (BRO) in the Ladakh region of northern most India that started in August 1985. Himank is responsible for the construction and maintenance of roads and related infrastructure including the world's highest motorable roads across the Khardung La, Tanglang La and Chang La passes. Himank's work ensures access to sensitive military areas including the world's highest battle-ground at the Siachen Glacier and PangongTso Lake (14500 ft) whose waters span the de facto India-China border.

CAG report and Indo-China Border Roads (ICBRs)

- In the aftermath of the brief but bloody border war with China in 1962, India had maintained a policy to not build border roads reasoning that they could be used by the Chinese forces to make quick inroads. However the policy was reversed by a high level China Study Group and the Government had identified the construction of 73 strategically important roads to improve connectivity.
- India's bid to build quality all-weather roads along its border with China through to connect remote areas, move military weapons and equipment in the event of



> an aggression and 'assert' its territorial claims in the region near the Line of Actual Control (LAC) has been compromised due to poor quality of road construction and alleged irregularities in border roads works.

- The Cabinet Committee on Security (CCS) in 1999 approved the construction of these roads and set the Border Roads Organisation (BRO) target of 61 roads among 73 strategic roads to be completed between 2003 and 2006. The target was later extended to 2006-2012. But the work is far from over yet.
- Among those built, of some of these roads are unfit for the movement of heavy military guns like Bofors, Smerch and Pinaka. An audit of the project work by CAG has squarely blamed the poor quality, late completion, poor monitoring, over reporting of progress of works on the agencies entrusted with the execution of the 'important' project.
- As of March 2016, a total of 707.24 km as against 3409.27 km of roads at an estimated cost of Rs 4536 crore has been completed. This is 'only 36 per cent' of the total project covering only 22 of 61 roads under the project. Of the 24 roads examined in detail 17 were found to be substandard.
- Some of the reasons for slow progress are shortage of manpower, absence of good contractors in most of their work areas adds to the misery of the consistently decreasing labour force. Environment clearances not coming in time and inclement weather are other work stoppers.

Conclusion

BRO has played a pivotal role in construction and management of Roads and other related infrastructure along border areas. These are areas with tough terrain, extreme temperature and strategic importance. However, as pointed out in recently released CAG report work in North Eastern sector has passed deadlines several times. All issues, especially adequate manpower and environmental clearances need to be addressed to insure early development of Roads in Strategically important Northern and North East Sector.



ECONOMIC ISSUE

Consumer Price Index

PAST AND FUTURE



In an emerging and developing economy moderate inflation is desirable to spur growth impulses and sustained deflation is a challenge as it generally lowers aggregate demand and economic activity.

In the Indian economy inflation as per the Consumer Price Index-New Series (CPI) and other inflation indices has been in low positive territory while Wholesale Price Index (WPI) is in the negative zone, since November 2014. Under the Monetary Policy Framework Agreement signed between the Government and the Reserve Bank of India, year on year change in CPI has been accepted as the anchor for inflation in the Indian economy.

After moderating continuously over the last six months to a historic low, retail inflation measured by year-on-year changes in the consumer price index (CPI) turned up in February to 3.7 per cent. By and Large Inflation has been continuously receding in past six months.

In this context it is important to look into basics of CPI and recent trends. Secondly, we shall look at future outlook for inflation.

Introduction

- Consumer Price Index is a measure of change in retail prices of goods and services consumed by defined population group in a given area with reference to a base year (2012). This basket of goods and services represents the level of living or the utility derived by the consumers at given levels of their income, prices and tastes.
- The consumer price index number measures changes only in one of the factors i.e. prices. This index is an important economic indicator and is widely considered as a barometer of inflation, a tool for monitoring price stability and as a deflator in national accounts. The dearness allowance of Government employees and wage contracts between labour and employer is based on this index.

RBI and **CPI**

The Reserve Bank of India (RBI) has started using CPI-combined as the sole inflation measure for the purpose of monetary policy. As per the agreement on Monetary Policy Framework between the Government and the RBI dated February 20, 2015 the sole objective of RBI is price stability and a target is set for inflation as measured by the Consumer Price Index-Combined.

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The formula for calculating Consumer Price Index is Laspeyre's index which is measured as follows

[Total cost of a fixed basket of goods and services in the current period * 100] divided by - Total cost of the same basket in the base period

Weightage of various broad groups in CPI inflation is as follows:

S.No.	Group	Weight
1	Food and beverages	45.86
2	Pan, tobacco and intoxicants	2.38
3	Clothing and footwear	6.53
4	Housing	10.07
5	Fuel and light	6.84
5	Miscellaneous	28.32

Trends

- The average CPI inûation declined to 4.9 per cent in 2015-16 from 5.9 per cent in 2014-15. It was 4.8 per cent during April-December 2016. Inûation hardened during the first few months of 2016-17, mainly due to upward pressure on the prices of pulses and vegetables. It dipped to two-year low of 3.4 per cent in December 2016 as a result of lower prices, especially of food items.
- Inflation Rate in India averaged 7.25 percent from 2012 until 2017, reaching an all time high of 12.17 percent in November of 2013 and a record low of 3.17 percent in January of 2017.
- Consumer prices in India increased 3.65 percent year-on-year in February of 2017, following a record low rise of 3.17 percent in January and higher than market expectations of 3.58 percent. Food inflation accelerated to 2.01 percent from 0.53 percent.

Upside and Downside Risks

- Risks are evenly balanced around the inflation trajectory at the current juncture. There are upside risks to the baseline projection.
- The main one stems from the uncertainty surrounding the outcome of the south west monsoon in view of the rising probability of an El Niño event around July-August, and its implications for food inflation.
- Proactive supply management will play a critical role in staving off pressures on headline inflation. A prominent risk could emanate from managing the implementation of the allowances recommended by the 7th CPC.
- In case the increase in house rent allowance as recommended by the 7th CPC is awarded, it will push up the inflation. Another upside risk arises from the oneoff effects of the GST.
- The general government deficit, which is high by international comparison, poses yet another risk for the path of inflation, which is likely to be exacerbated by farm loan waivers, especially in UP. Recent global developments entail a reflation risk which may lift commodity prices further and pass through into domestic inflation. Moreover, geopolitical risks may induce global financial market volatility with attendant spillovers.



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On the downside, international crude prices have been easing recently and their pass-through to domestic prices of petroleum products should alleviate pressure on headline inflation. Also, stepped-up procurement operations in the wake of the record production of food grains will rebuild buffer stocks and mitigate food price stress, if it materialises.

Conclusion

After hitting all time high in 2013, CPI inflation has subsided to around 3% in late 2016 - early 2017. However, serious risk lies in future from food side. In order to rein inflation in food group, which has the weight age of almost half in CPI index calculations, we need to implement structural reforms in agriculture which increase productivity, increase drought resistance of crop and increase area under irrigation.



ENVIRONMENTAL ISSUE

Human-Elephant Conflict



Elephant-human conflict is a result of habitat loss and fragmentation. When elephants and humans interact, there is conflict from crop raiding, injuries and deaths to humans caused by elephants, and elephants being killed by humans for reasons other than ivory and habitat degradation.

Elephants cause damage amounting from a few thousand dollars to millions of dollars. Every year, 100 humans (in some years it may be 300 people) and 40-50 elephants are killed during crop raiding in India.

Thus, analyzing the human animal conflict.

Introduction

Human-Elephant conflict (HEC) refers to a range of direct & indirect negative interaction between people and elephant which potentially harm both in the form of crop damage, injury & death to people and killing of the animal. This is not a new phenomenon; however, in recent years such conflicts and consequent damages are rising.

According to Ministry of Environment and Forest data, 391 people and 39 elephants died in 2014-15 across India, as a result of the man-elephant conflict. The total number of human and elephant deaths, however, has registered a decline compared with 2013-14 and 2012-13. In 2013-14, 413 human and 72 elephant deaths were recorded, while 422 humans and 101 elephants died in 2012-13. Yet it shows a four-fold increase in the number of human deaths from elephant attacks nationwide since the 1980s.

Further, compensation paid due to loss of crops and property because of human animal conflict is rising. As per the environment ministry's data, Rs. 34.52 crore were spent on compensation in 2014-15 compared with Rs. 30.29 crore in 2013-2014. This indicates that elephants are increasingly foraging for food outside the "designated" forest areas.

Data

- Only 22 per cent of elephant habitat is found within our protected area network the remaining elephant range lies outside, in places now overrun by people.
- The estimated 28,000 wild elephants in India are distributed over about 3% of the country's geographical area.
- An average of 350 people have been killed annually over five years (2006-10) in the conflict with elephants.
- Elephants damaged an average of 330 sq km of crops annually for the years 2008-10.
- The Central and State Governments together spend 10 to 15 crore rupees every year on controlling elephant depredation and paying ex-gratia to affected people.
- 40-50 elephants are killed annually while crop-raiding.





Reasons for HEC

- Habitat loss, fragmentation and crop raiding: Habitat loss and fragmentation and consequent crop raiding is considered as main reason for human elephant conflict. India has 27 formally notified elephant reserves extending over about 60,000 sq km. There are about 88 elephant corridors, which are heavily fragmented and only 24 per cent of the corridors are under complete forest cover. This fragmentation is further increasing due to growing human population, demands for cultivable lands & destruction of forest habitat for human habitation and developmental needs leading to further intensification of human-elephant conflict.
- Restriction in movement and availability of food: About 70 per cent of the area falling under designated elephant corridor is one kilometer or less. This restricts their movement, as elephants are highly mobile creatures and a herd needs to travel at least 10 to 20 kilometers per day, and availability of food in forests. Both the factors lead their forages in nearby towns and villages and consequently crop raiding. Such crop raiding affects the livelihood of people and their agriculture, hence in order to save a conflict arises between them.
- Lethal retaliation against elephant and poaching: Due to conflict and resultant loss of lives, property, crops and livelihood, it attracts lethal retaliation against **elephant** by human being causing death of elephants. At times, it threatens local support for conservation of elephants and hence gives opportunity to poaching of them in high conflict corridors.
- Changing elephant behavior ecology: Ecologists explore another dimension to this conflict i.e. changing elephant behavioral ecology. The poaching of adult males in the 1970s to 1990s has meant that younger males don't have older counterparts to learn from. According to them the older males had established certain patterns of interaction with humans and human habitations that they had adapted over generations. Adverse experiences had taught them to limit their crop raiding to short nightly intrusions into agricultural areas adjoining forests. But now, with "the break of such knowledge" because of the poaching of older males, the younger generation appears to have lost its fear of humans and tends to intrude deeper into habitations.

What needs to be done?

Human-elephant conflict can take their toll both on human lives and property as well as elephant populations. Ways of reducing or resolving such conflicts are vital for the peaceful existence of both human and elephants.

- Early Warning system: In order to mitigate HEC system of early warning can help in significant ways. Such system is successfully deployed by Tamil Nadu forest department in Valparai region of the state. With the use of technology such as television, bulk sms services, elephant alert indicators, broadcast system in public transport people are informed about the location of elephants so that they can plan accordingly to avoid conflicts.
- **Restoration of habitats:** As a long term measure, restoration of already degraded habitats is of utmost necessity. Protection and proper management planning should be immediately made to foster natural regeneration of forest. Communities living within or near forest can be an essential component of forest conservation, by actively engaging with forest management activities and defending their territories against poachers and loggers.
- Involvement of community: Involvement of the local community in minimizing elephant depredation and managing the critical issues of HEC could be strong initiative in the fringe areas. Improving the livelihood security, introduction of

> alternative living options and improved agricultural practices will reduce the pressure for annual land expansion too, which should in turn reduce the need for forest clearance.

- Conservation education and awareness: Eco-development initiatives need to be encouraged in the fringe villages, along with a series of conservation education and awareness programmes.
- **Elephant deterrent cash crops:** The alternative elephant deterrent cash crop concept could be a promising move towards minimizing the conflict.
- **Speeding up compensation process:** The compensation process should be prompt for loss of life and property. This will help to get back the lost faith of the local community to the forest department.

Conclusion

There are no readymade solutions for human-elephant conflict. Resolving conflicts between people and elephants would require understanding human-elephant relationships, identifying and designing suitable measures, and involvement of local people and government departments which are crucial to see desired results. Each location is unique in its situation therefore site-specific strategies need to be evolved.

However, latest studies on Asian elephants living in contiguous compact habitats show that not all elephants in a population raid crops. However, in highly fragmented landscapes, the entire population may be involved in elephant-human conflict.

In addition to these direct conflicts between humans and elephants, elephants also suffer indirect costs like degradation of habitat and loss of food plants.



ECONOMIC ISSUE

Reforming trade in AGRICULTURE PRODUCTS



Almost half of India's population depends on agriculture, however its share in GDP is less than one-fifth. This creates anomalies like rising inequality between agriculture and industry cum services sectors and among rural -urban areas. India's development goal depends crucially on improving agriculture productivity and reforming the sector. This is vital to double the farm's income by 2022. The biggest reforms could be related to post-harvest area like marketing and trade of agriculture products.

Such reforms are important not only because these have direct implication on price received by farmers but it shall also create an efficient and robust market to attract investments especially from private sector and talent required for ensuring a bright future for agriculture in India.

In this context we shall look at reasons for fragmented agriculture market and ways to reform it. We shall look at some subtle issues including excessive government intervention which hinders development of agro-processing industries.

One India in Agriculture marketing and trade

Today, marketing is extremely crucial and almost every sector has embraced marketing principles to ensure best possible outcomes. However, agricultural development in India has entirely ignored the potential of marketing and has continued to follow its old trajectory.

There is no single market for Agriculture produce in India, rather APMC acts enacted by states mandate farmers to sell their produce to designated Mandis. Thus farmer has to sell to commission agent in mandi at whatever prices they dictate as farmers cannot sell directly to private firms or consumers.

There is a lack of cold storage and other infrastructure in these mandis and they add layers of middlemen between producer and consumer and lead to price difference between what farmer gets and what consumer pays. In order to streamline trade across India in agriculture products Agri-market Reforms are required.

To address the demands for marketing of increased and diversified agricultural marketable surplus there is a need to strengthen the network of regulated markets (APMC) and augment it with alternative marketing channels. In order to keep pace with the changing production pattern and growing marketable surplus, the Government advocates development of adequate number of markets equipped with modern www.iasscore.in

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infrastructure, with increased private sector participation and development of other marketing channels like direct marketing and contract farming etc. The Government is actively pursuing with States to amend their marketing laws to provide suitable legal framework and policy atmosphere to usher such developments.

Further, as a part of reforms, Government announced a scheme for setting up of National Agriculture Market (NAM). Under NAM, a common e-market platform is to be deployed for on-line trading across the States/Country. It is expected that NAM would address the marketing constraints of fragmentation, lack of transparency in bidding, poor price discovery, information asymmetry between sellers and buyers and provide farmers with a larger share of the consumer rupee.

Other Hindrances to Trade

Currently, a farmer can take the produce from the farm to a certified warehouse, get the quality inspected and receive a negotiable warehouse receipt (WR) with a unique identity (ISIN). This WR can be traded on the exchange like any other negotiable instrument.

Theoretically, this works fine and has several advantages. It provides better price realisation for farmers, safer collateral for lenders like banks and NBFCs, a more efficient market place for hedgers and speculators, and better quality and lower disruptions in supply for the end customer.

But, in practice, the system faces many issues, as below:

- Slow growth of FPC: The typical farm size in India is very small and the total produce of a farm would probably be lower than a single tradable lot at the exchange. Creating a pool of farmers through initiatives like Farmer Producer Companies (FPC) is a good idea, but the initiatives have been slow to take off.
- Market intervention by the government: It is a major deterrent to private participation. The suspension of forwards contracts, ban on trading of chana and castor in 2016 have had an impact on the volumes and market confidence.
- Higher Storage costs: The other issue is that the storage cost at certified warehouses is higher than the cost at the non-certified ones, this directly impacts the percentage of produce that gets dematerialised.
- Frequent changes in the policy parameters/goal posts of trade in agricultural products in the form of changes in import duties and minimum export prices, etc., create instability of policy for any investment in the agro-processing industry. These changes in policy parameters have limited impact on the price the consumer pays, because of the time taken to arrive at the decision and the same translating into additional/reduced supplies. The entire activity of changes in the policy parameters vitiates the concept of a market and needs to be discontinued.

Conclusion

The low levels of productivity, growth and incomes ailing the farm sector in India and causing immense agrarian distress is well known. Without undertaking radical reform in trade of agriculture produce it is impossible to transform agriculture and double farmers' income. In this context, addressing above mentioned issues is imperative.



ECONOMIC ISSUE

Improving Liquidity FOR SME SECTOR



A recent report has highlighted issue of lack of liquidity in stock market for SME participants. Such participants are now looking at ways to increase the liquidity to attract more institutional and retail investors. Market participants are now lobbying hard with the capital market regulator to review the trading norms to increase liquidity in the segment.

To have a better understanding of the issue we shall look at different technical term related to understanding the issue and ways to increase liquidity for SME sector.

SME Firms

The MSMED Act, 2006 defines the Small and Medium Enterprises based:

- On the investment in plant and machinery for those engaged in manufacturing or production, processing or preservation of goods and
- On the investment in equipment for enterprises engaged in providing or rendering of Services.

Manufacturing Sector				
Enterprises	Investment in plant & machinery			
Small Enterprises	More than twenty five lakh rupees but does not exceed five crore rupees			
Medium Enterprises	More than five crore rupees but does not exceed ten crore rupees			
Service Sector				
Enterprises	Investment in equipments			
Small Enterprises	More than ten lakh rupees but does not exceed two crore rupees			
Medium Enterprises	More than two crore rupees but does not exceed five core rupees			

SME Exchange

SME exchange is a stock exchange dedicated for trading the shares of small and medium scale enterprises (SMEs) who, otherwise, find it difficult to get listed in the main exchanges. The concept originated from the difficulties faced by SMEs in gaining visibility or attracting sufficient trading volumes when listed along with other stocks in the main exchanges.

To be listed on the SME exchange, the post-issue paid up capital of the company should not exceed Rs. 25 Crores. This means that the SME exchange is not limited to the Small and Medium Scale enterprises which are defined under the Micro, Small and Medium Enterprises Development Act, 2006. As of now, to get listed in the main

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boards like, National Stock Exchange, the minimum paid up capital required is Rs. 10 cr and that of Bombay Stock Exchange is Rs. 3 cr. Hence, those companies with paid up capital between Rs. 10 cr to Rs. 25 cr have the option of migrating to the Main Board / or to SME exchange. The companies listed on the SME exchange are allowed to migrate to the Main Board as and when they meet the listing requirements of the Main Board and there shall be compulsory migration of the SMEs from the SME exchange, in case the post issue paid up capital is likely to go beyond Rs 25 crore limits.

The market regulator, Securities and Exchange Board of India (SEBI) vide its circular dated May 18, 2010 has permitted setting up of a dedicated Stock exchange or a trading platform for SMEs. The existing bourses in India, BSE and NSE went live on 13 March, 2012 with a separate trading platform for small and medium enterprises (SME). BSE has named its SME platform as BSESME while NSE has named it as Emerge.

As is the case globally, certain relaxations are provided to the issuers whose securities are listed on SME exchange in comparison to the listing requirements in Main Board.

Trading Lot

In the financial markets, a lot represents the standardized quantity of a financial instrument as set out by an exchange or similar regulatory body. For exchangetraded securities, a lot may represent the minimum quantity of that security that may be traded. In terms of stocks, the lot is the number of shares you purchase in one transaction.

Liquidity in stock market

Liquidity describes the degree to which an asset or security can be quickly bought or sold in the market without affecting the asset's price. For example, if you bought stock ABC at Rs.10 and sold it immediately at Rs. 10, then the market for that particular stock would be perfectly liquid. If instead you were unable to sell it at all, the market would be perfectly illiquid. Also, if size of trading lot is big liquidity is hampered.

How to increase Liquidity in Stock Market?

Mitigation of lot size in secondary trades can be explored as a measure to aid liquidity levels. Investors would certainly find it more convenient to deal in SME stocks in small lots. In this context, one of the main issues being proposed is lowering the trading lot size post listing, which is currently pegged at Rs.1 lakh.

Merchant bankers are of the view that once the company has been listed for a certain period of time and a trading history has been created, the lot size could be lowered to one share so that retail investors can also participate if they are convinced with the quality and potential of the entity. Stock exchanges, however, seem to differ over the issue of lowering the lot size. While NSE favours a reduction in lot size post listing, BSE believes that the current framework has worked well and hence should not be changed.

SEBI View

When SEBI framed the guidelines for the SME segment, it intentionally kept the minimum trading lot at Rs. 1 lakh to keep out retail investors since the view was that SMEs carry higher risk compared to companies on the main board. Keeping trading lot at such high value makes sure that only informed investors participate in trading. Currently, SEBI has been consulting the market on this issue and reducing the lot size is likely to improve liquidity in securities on the SME platform.





Conclusion

Considering the role of SMEs in nation building and their potential in terms of generating employment and income as well as fostering innovation and enterprise, it is imperative that necessary enabling environment including reduction in size of trading lot is provided for these enterprises to flourish. However, the risk of failure for a Start-Up or an SME is quiet high as compared to companies which have already grown larger. So, any decision should balance these opposite arguments.



INTERNATIONAL ISSUES

UN Body Slams

SRI LANKA



34th session of UN Human Rights Council, held during March 2017, took up the issue of human rights violations in Sri Lank and their redressal. It raises questions over the slow process over the implementation of the commitments made during the Oct. 2017 session and skewed focus on reconciliation only.

What is the issue?

It has been alleged that during the last phase of Elam war large scale atrocities were committed against the common Tamilians. According to the UN figures, up to 40,000 civilians were killed by the security forces during the last phase. This along with acquisition of land for military and other governments purpose has denied the land and livelihood opportunities to Tamilians. All these issues have been raised by the Human Rights organizations globally and UNHRC has been proactively engaged in ensuring the past acts of human rights violations are seriously dealt with.

In light of these gross human rights violations there were demands for:

- Credible investigation of violence committed to establish truth.
- Justice and accountability by establishing the facts and punishing those who committed crimes by establishing special courts or tribunals.
- **Reconciliation** by taking a number of steps which will built the confidence of the Tamilians, like restoring the land etc.
- Non-recurrence to ensure that such acts are not committed again.

Some steps towards reconciliation:

- A civilian governor has been appointed for the Northern Province instead of a military man.
- In Jan 2015, Sri Lanka appoints Tamil as Chief Justice (it will be the 1st time in 2 decades that a Tamil has held the post).
- In February 2015, SL announced that Army-controlled land in the Tamil-majority North to be released.
- In March 2015, SL appointed a Special Presidential Task Force under former President Chandrika > Kumaratunga to address the issues of minorities, particularly the Tamils.
- Enacted legislation to set up an Office on Missing Persons.
- Allowing singing the National Anthem in both Sinhala and Tamil.

Which overall included:

Address the issues of land release, the land which has been taken away from the Tamilians.





- The detention of Tamil political prisoners.
- Grievances of the families of missing persons.
- The enactment of constitutional reforms.

What was committed by Sri Lanka?

In October 2015, the UN Human Rights Council adopted a resolution that Sri Lanka co-sponsored, calling for a credible judicial process to probe the island's civil war excesses. Sri Lanka assured the international community of a "four-pillar approach" to address truth, reconciliation, accountability and non-recurrence.

- The resolution called for special tribunals and reparations for victims and gave Sri Lanka 18 months to establish credible investigations.
- It was said that for transitional justice mechanism to be "credible," it should include "a special counsel, foreign judges and defence lawyers and authorised prosecutors and investigators".

What has been the progress?

The present UN Human rights chief Zeid Ra'ad Al Hussein during the 34th session in March, 2017 has raised serious issues of slow progress, continuous abuses by polices and neglect of justice component and focus on reconciliation only. He mentioned:

- That reports of abuses including torture remain widespread in Sri Lanka eight years after the end of a decades-long civil war.
- Pointed to the island's own Human Rights Commission's acknowledgement of complaints illustrating the "routine use of torture by the police throughout the country as a means of interrogation and investigation".
- Criticized the government's slow progress in addressing wartime crimes.

The main lingering issue in accountability mechanisms has been the issue of foreign judges into tribunals.

Inclusion of foreign judges into the tribunal has been politicized as interference into the internal matters of a sovereign country and has squeezed the space available for government.

Otherwise also the government and other sections are willing to press with reconciliation and delay the accountability part because that will be difficult to implement because of competitive identity politics.

Former President Chandrika Kumaratunga, the head of the Office for National Unity and Reconciliation(ONUR), in January 2017 has noted that 'development, livelihoods, education and answers to their questions about missing people' are priorities for the war-affected citizens of our country. Punitive action on alleged war crimes did not come across as an urgent need for them. She added that need for a new constitution for Sri Lanka is an even greater priority than justice for grave human rights violations committed during the final stages of the war, a perception shared by President Sirisena as well.

It was on this aspect the UNHRC chief urged "the government and people of Sri Lanka to prioritise justice alongside reconciliation to ensure that the horrors of the past are firmly dealt with, never to recur,".

What are the options available?

UNHCR and other countries gave another 2 year time period to implement the October, 2015 resolution, after the recognition of the efforts made by government towards reconciliation and understanding of the domestic situation. They understand that too



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much interference may even slow down the reconciliation process and reduce the room for present government. However the decision has been criticized on the account as it does not mention any interim timelines for implementation of the accountability provisions.

What is India's response?

For India stability in the neighbourhood is of paramount importance. It does not want Sri Lanka to destabilized again and wants the concerns of the Tamilian community to be addressed speedily, so that the issues does not spill over to Indian side and does not affect the friendly relations of the two countries. It also recognizes the sovereignty of the Sri Lanka and respect its views which does not want any foreign interference into the judicial process by a foreign country.

Along with this India has been actively engaged in the reconciliation process by providing economic assistance in the form of developing housing societies, laying down of railway lines in northern Sri Lanka, construction of a 150-bed hospital at Dickoya, upgradation of the hospital at Trincomalee and a US\$ 7.5 million grant for setting up a cancer hospital in Colombo.

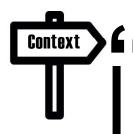
Way Forward

As UNHRC has again given 2 years time to Sri Lankan government to ensure that the four-pillar approach" to address truth, reconciliation, accountability and nonrecurrence is followed in letter and spirit it becomes an obligation on the Sri Lankan government to fulfill the faith reposed into them by the international community. It must keep in mind that long term peace and stability can be ensured through accountability only. At the same time the world community must provide all help to Sri Lanka in its development efforts.

ENVIRONMENT ISSUE

Forest Fire Situation

IN INDIA



With fires raging across Central Indian forests and the Himalayan Pine forests, the frequency of such blazes has risen by a drastic 55 per cent in the past year.

The death of Murigeppa Tammangol, a forest guard who served in Bandipur Tiger Reserve in Karnataka, in a forest fire last month, is a sombre reminder of the danger posed by forest fires to our front-line forest staff. The incident was in news, and in this context we shall look at comprehensively on different aspects of the issue.

Introduction

A wildfire or forest fire is an uncontrolled fire that is wiping out large fields and areas of land. It is typically fires that started out of a lightning strike, or people carelessly starting it, or accidentally, or even arson, that went un-noticed and got out of hand. These fires sometimes burn for days and weeks. They can wipe out an entire forest and destroy almost every organic matter in it.

The bulk of forest fires in India occur in the tropical dry forests of our country, an umbrella category encompassing scrub, Savanna grassland, dry and moist-deciduous forests. Almost 70% of forests in India are composed of these types. Particularly found in Andhra Pradesh, Assam, Chhattisgarh, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra and Odisha.

With changes in climate and land use, fire is increasingly being viewed as a major threat to many forests and their biodiversity. Rising intensity and frequency of forest fires and their spread is resulting insubstantial loss of forest functions and related ecosystem services every year. Due to severe droughts, temperate broad leaf forests, sub-alpine conifer forests, wet evergreen forests and others have now become susceptible to forest fires.

Recently, the death of Murigeppa Tammangol, a forest guard who served in Bandipur Tiger Reserve in Karnataka, in a forest fire last month, is a sombre reminder of the danger posed by forest fires to our front-line forest staff.

Constitutional Provisions

- The State's responsibility with regard to environmental protection has been laid down under Article 48-A of our Constitution, which reads as follows: "The State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country".
- Environmental protection is a fundamental duty of every citizen of this country under Article 51-A (g) of our Constitution which reads as follows: "It shall be

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the duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures."

National Forest Policy 1988

- The National Forest Policy 1988 aims for 33% of the country's geographical area under the forest cover for ecological and environmental security. While aiming to expand the forest cover in the country, it is equally important to improve the state and quality of existing forests and protect them against various threats and drivers of degradation. The threats to forests include encroachments, forest fires, illicit felling for timber and firewood, grazing, diseases and incursion of weeds and other invasive species, etc. The staffs also face threats of illegal felling of trees from organized forest smugglers / timber mafia and encroachments form land mafia.
- Integrated Forest Protection Scheme With a view to minimizing fire hazards and controlling forest fires a Centrally Sponsored Scheme "Integrated Forest Protection Scheme" was launched during the 10th plan period. In 2009, the Integrated Forest protection Scheme (IFPS) has been revised and renamed "Intensification of Forest Management Scheme" (IFMS).

Main components of Intensification of Forest Management Scheme (IFMS) are:

- Forest Fire Control and Management
- Strengthening of Infrastructure for forest protection
- Working Plan Preparation/ Survey and Demarcation
- Protection and conservation of Sacred Groves
- Conservation and Restoration of Unique Vegetation and Ecosystems
- Control and Eradication of Forest Invasive Species
- Preparedness for Meeting Challenges of Bamboo Flowering and Improving Management of Bamboo Forests

Cases of Forest Fires

- With fires raging across Central Indian forests and the Himalayan Pine forests, the frequency of forest blazes has risen by a drastic 55 per cent in the past year.
- The number has touched 24,817 in 2016, a "really alarming" rise, from around 15,937 fires in 2015, says the report by Parliamentary Standing Committee on Science and Technology. The committee has suggested a national policy on managing forest fires.
- The increase is seen even though 2015, considered a drought year, had seen a decline in frequency of forest fires of around 16 per cent.
- The three central States of Odisha, Chhattisgarh, and Madhya Pradesh contribute a third of the forest fires. Madhya Pradesh has seen a nearly ten-fold increase, from just 294 in 2015 to more than 2,600 in 2016.
- The committee was formed after a series of devastating forest fires earlier this year, including the prolonged one that charred 4,000 hectares of forest land across 13 districts of Uttarakhand.

Recent case of forest fires

The death of Murigeppa Tammangol, a forest guard who served in Bandipur Tiger Reserve in Karnataka, in a forest fire last month, is a sombre reminder of the danger posed by forest fires to our front-line forest staff.



Current ANALYST

Fighting fires with minimal equipment in challenging terrain is a thankless task that poses grave risks. It is perhaps time to ask whether a strict no-fire policy is relevant in ecological and societal contexts, rather than raise ineffective questions about how forest fires can be controlled or prevented through technology.

Causes

- The roots of our current fire crisis lie squarely in the blanket implementation of a no-fire forest policy. This 'one-size-fits-all' approach of fire protection is perhaps incompatible with the ecology of India's tropical dry forests.
- Recent ethnographic and empirical research from the Biligiri Rangaswamy Tiger Reserve indicates that a no-fire policy was likely responsible for the spread of Lantana (a species of plant which act as a fuel in case of fire) in the first place. Additionally, frequent, low-intensity forest fires possibly prevented the proliferation of Lantana in the past.
- Recent research on the ecology and bio-geographical origin of these forests indicates that fire occurrence and light availability are important factors that maintain the ecosystem. However, forest management still suffers from a colonial hangover intent on keeping production forestry systems free from fire in order to prevent the loss of 'timber stock'.
- Forest dwellers set fire to forests to clear walking paths, to collect non-timber forest products like gooseberry and Mahua flowers, and to encourage the fresh growth of grass for their livestock, and sometimes as a part of ritual practice.
- Agriculturists set fire to hill forests so that the fertilising ash from fire washes down to their fields with the monsoon rains. For the forest dweller, therefore, fires have cultural and livelihood significance. The forest department, on the other hand, has historically prevented fire in order to protect timber stocks, and initiated a system of fire-lines around valuable timber 'compartments' or coupes. By burning the fire-lines before the onset of summer, forest fires, if they occurred, could be confined to a few compartments.

How to prevent Major Fires

- Prevention of human caused fires through education and environmental modification. It will include silvicultural activities, engineering works, people participation, and education and enforcement. It is proposed that more emphasis be given to people participation through Joint Forest Fire Management for fire prevention.
- Prompt detection of fires through a well coordinated network of observation points, efficient ground patrolling, and communication networks. Mapping the vulnerable area and strengthen early warning systems and methods to control fire based on remote sensing technology and community participation. Also, awareness should be created about causes and impacts of fire on forests and local livelihoods. For successful fire management and administration, a National Fire Danger Rating System (NFDRS) and Fire Forecasting System are to be developed in the country.

Conclusion

With changes in climate and land use, fire is increasingly being viewed as a major threat to many forests and their biodiversity. Rising intensity and frequency of forest fires and their spread is resulting in substantial loss of forest functions and related

> ecosystem services every year. Due to severe droughts, temperate broadleaf forests, sub-alpine conifer forests, wet evergreen forests and others have now become susceptible to forest fires. Adequate measures should be taken to safeguard ecosystems, like mapping the vulnerable areas and develop and strengthen early warning systems and methods to control fire based on remote sensing technology and community participation.

> Also, awareness should be created about causes and impacts of fire on forests and local livelihoods.

> Instead of viewing forest fires as being purely destructive in nature, forest managers should perhaps expand their world view and be more inclusive to information from ecological and local knowledge systems that view fires as being both rejuvenating and revitalising. In order to ensure no major fire take place preventive measures should be taken.

POLITICAL ISSUE

Enemy Property (Amendment & Validation)

BILL, 2016



The present Enemy Property Bill was passed by Parliament seeks to amend the 1968 Act retrospectively from 1968 to expand the powers of the Custodian.

Introduction

After the Chinese aggression in 1962, specific properties of Chinese nationals in India were vested in the custodian as per the Defence of India Rules, 1962. Subsequently, after the Indo-Pak conflicts of 1965 and 1971, the movable and immovable properties of Pakistani nationals automatically got vested in the custodian and their vesting was continued under the 1968 Act. A similar process for Indianowned properties occurred in Pakistan.

Since then, the government of Pakistan has disposed of all the properties of Indians impounded by it in Pakistan - including in erstwhile East Pakistan - in violation of the Tashkent Declaration. This declaration – signed on January 10, 1966 – included a clause, which said that India and Pakistan would discuss the return of the property and assets taken over by either side in connection with the 1965 conflict.

Pakistan's unilateral action provides a belated vindication of the present ordinance, even though the Bill seeking to replace it also refers to claims being made to regain these properties by the legal heirs and successors of enemy nationals on the basis of certain judgments made by the Supreme Court and the high courts.

To prevent the vested properties from falling into the hands of legal heirs of those who moved to other countries, the government moved a similar Act.

What is enemy property?

The 1968 Act regulates enemy property, and specifies the powers of the Custodian. The central government designates properties belonging to those who migrated from India to **Pakistan and China** after independence as 'enemy property'.

It has designated such during the 1962, 1965 and 1971 conflicts. It vested these properties in the 'Custodian of Enemy Property', an office of the central government.

What is the monetary value of enemy property?

According to a government submission in Lok Sabha in March 2016, there are close to 9,300 enemy properties in India; of these 149 (mostly in Assam, West Bengal and Meghalaya) belong to Chinese nationals. The government estimates the net value of all enemy property in India Rs 1.04 lakh crore.

What are the issues?

The main contentious issue regarding the enemy property are:

- What are the powers of the custodians regarding property?
- What happens to the enemy property if the enemy ceases to be an enemy (he become national of other country like US, UK)?
- What happens to the property after the death of enemy person, should it be transferred to heirs? As in many cases children remained in India, whereas parents migrated to Pakistan (for instance in case of Raja of Mahmoudabad). Children who remained in India cannot be declared as enemy and denied property rights.

In the older bill the custodian of the enemy property was just an administrator of the property. The ownership rested with the owner. Therefore, on the death of the enemy, the enemy property could be inherited by their legal heirs.

In Union of India v Raja MAM Khan, the Supreme Court on October 21, 2005, held that on the death of an enemy, the property devolves in succession and ceases to be enemy property if the successor is a citizen of India.

However, Pakistan has disposed off such properties way back in 1971, in violation of the Tashkent Agreement (which said that India and Pakistan would discuss the return of the property and assets taken over by either side in connection with the 1965 conflict). The Indian government is now trying to pay back in the same coin.

Salient features of the Bill:

The main objective of the amendments is to guard against claims of succession or transfer of properties left by people who migrated to Pakistan and China after the wars. The present bill has its origin in 2010, when than UPA government proposed some changes. 2010 amendment by the UPA government permanently vested the property with the custodian (government) even after the death of the "enemy owner".

Excludes enemy property from law of successio

- Once an enemy property is vested in the custodian, it shall continue to be vested in him as enemy property irrespective of whether the enemy, enemy subject or enemy firm, has ceased to be an enemy due to reasons such as death, etc.
- Laws of succession would not apply to enemy property anymore.

Powers of custodian

- The present amendment is a step ahead of 2010 version and it vests ownership rights into the custodian, thus making the government sole owner of enemy property.
- Once an enemy property is vested in the Custodian of Enemy Property for India, it shall forever remain with the government.
- Retrospective effect: The 2016 ordinance (now a bill) is retrospective in nature and nullifies all legal transactions (mostly sale of enemy property land to others) on enemy property from 1968. This means that a person who may have bought an enemy property in good faith when such sale and purchase was legal now stands to lose the property.
- Excludes jurisdiction of lower courts: The amended bill limits options for legal recourse as it prohibits lower courts from hearing disputes around enemy property. Aggrieved persons can only lodge ultra vires petitions challenging the validity of the act in high courts or the SC.





What is the criticism of the Act?

"The new Act is depriving citizens of their ancestral properties. This may be open to a constitutional challenge," reckons senior SC lawyer Anand Grover.

- Six MPs, namely, K.C. Tyagi, K. Rahman Khan, D. Raja, P.L. Punia, Husain Dalwai and Javed Ali Khan disagreed with the select committee (which was studying the bill) report. In their view, the Bill violated basic principles of natural justice, human rights and settled principles of law. It adversely affects and results in punishing Indian citizens and will have no effect on any enemy government, they pointed out.
- It will also cause undue harassment as people will have to go to High Court or Supreme court not the lower courts.
- The committee's report reveals that initially 2,100 enemy properties were identified. Now it has risen to 16,000 which casts doubt on the mechanism of identification of the enemy properties and its continued vesting in the custodian.
- There are instances of harassment of common man who bought such properties. As vested interests attempts to get such properties declared enemy properties.
- The manner of passing the bill through voice vote in Rajya Sabha when opposition walked out because there was no proper discussion is also worth noting. Earlier also ordinance has been issued four times for the same bill.

Conclusion

There are arguments that the act will protect the properties from going into the hands of land mafia, which was involved in it and the property can be used for pursuing public interest, as valuation of property is huge. But in all this it must be kept in mind that rights of Indian citizens, who stayed in India because of their affection towards the country must not be violated and undue harassment must not be meted out to them. National interest and public interest instead of tit-for-tat policy should be criterion for law making.



ENVIRONMENTAL ISSUE

Tiger Reserves and its

IMPLEMENTATION IN INDIA



With the Uttarakhand forest department focusing on tiger conservation, the State is soon to get two new tiger reserves, work towards which is under way.

Hereby, analyzing the project tiger, its implementation scenario in India and should new reserve be made or not?

Introduction

Tigers are terminal consumers in the ecological food pyramid, and their conservation results in the conservation of all trophic levels in an ecosystem. Considering this fact Project Tiger, a Centrally Sponsored Scheme of Government of India, was launched on the 1st of April, 1973 for in-situ conservation of wild tigers in designated tiger reserves.

Under this project the strategy involves exclusive tiger agenda in the core/critical tiger habitat, inclusive people-wildlife agenda in the outer buffer, besides fostering the latter agenda in the corridors.

Achievements

- Due to concerted efforts under Project Tiger since 1973, India alone has the maximum number of tigers and its source areas amongst the 13 tiger range countries. Project Tiger has been more than successful in its endeavor and has put the endangered tiger on an assured path of recovery.
- The country level tiger population has shown an increasing trend with a population estimate of 1706, lower and upper limits being 1520 and 1909 respectively in the recent all India estimation (2010), as compared to the last country level estimation of 2006, with an estimate of 1411, lower and upper limits being 1165 and 1657 respectively.
- Further, a report on Management Effectiveness Evaluation (MEE) of Tiger Reserves was released on 28th July, 2011, containing the second round of independent assessment based on refined criteria done in 2010-11 for 39 tiger reserves. Out of 39 tiger reserves, 15 were rated as 'very good', 12 as 'good', 8 as 'satisfactory' and 4 as 'poor'.
- Project Tiger has saved the endangered tiger from extinction, and has put the species on an assured path to recovery by improving the protection and status of its habitat.
- The core buffer strategy of Project Tiger has provided scope for eliciting local public support through site specific eco-development in the buffer/fringe areas.





- The Project has contributed towards several intangible environmental benefits to society, such as absorption of carbon dioxide, improvement of micro climate, rainfall and river flow.
- The Project has generated considerable wages for the benefit of fringe dwelling communities, who are deployed as local work force for protection.
- While conserving the flagship species, the Project has saved several other species of plants and animals from extinction.
- The local communities are benefiting from eco-tourism apart from ecodevelopmental inputs in fringe areas.
- The Project has served as a role model for wildlife management planning, habitat restoration, protection and eco-development. States have been provided funding support for enhancing protection through deployment of local work force, exarmy personnel. The field staff have been provided allowance as an incentive for working in difficult conditions.
- Independent monitoring of tiger reserves has been undertaken by a panel of experts, based on the framework of the World Commission of Protected Areas of the International Union for Conservation of Nature and Natural Resources (IUCN).
- The All India Estimation of tiger, co-predators and prey animals has been refined by Project Tiger in collaboration with the Wildlife Institute of India, with a peer review mechanism comprising independent experts, both national and international (IUCN).

Challenges

However, there are still challenges ahead for the effective implementation and desired results of the project. Some of the challenges include-

- Protection against poaching especially in North-eastern part of the country
- Securing inviolate space for tiger to facilitate its social dynamics,
- Addressing tiger-human interface >
- Restoration of corridors and
- Eliciting public support of local people by providing ecologically sustainable options.

Names of States	National Tiger Conservation Authority, Project Tiger	
Assam	Kaziranga Tiger Reserve, Manas Tiger Reserve, Nameri Tiger Reserve	
Arunachal Pradesh	Namdapha Tiger Reserve, Pakhui Tiger Reserve	
Andhra Pradesh	Nagarjunsagar-Srisailam Tiger Reserve	
Bihar	Valmiki Tiger Reserve	
Chhattisgarh	Achanakmar Tiger Reserve, Indravati Tiger Reserves, Udanti & Sitanadi Tiger Reserve	
Jharkhand	Palamau Tiger Reserve	
Karnataka	Bandipur Tiger Reserve, Nagarhole (extension) Tiger Reserve, Bhadra Tiger Reserve, Anshi Dandeli Tiger Reserve, Biligiri Rangaswamy Temple Wildlife Sanctuary	
Kerala	Periyar Tiger Reserve, Parambikulam Tiger Reserve	
Madhya Pradesh	Bandhavgarh Tiger Reserve, Bori-Satpura Tiger Reserve, Kanha Tiger Reserve, Panna Tiger Reserve, Pench Tiger Reserve, Sanjay Dubri Tiger Reserve	



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Maharashtra	Melghat Tiger Reserve, Pench Tiger Reserve, Tadoba Andhari Tiger Project, Shahayadri Tiger reserve, Nagzira-Navegaon Tiger Reserve, Bor Tiger Reserve	
Mizoram	oram Dampa Tiger Reserve	
Odisha	Satkosia Tiger Reserve, Simlipal Tiger Reserve	
Rajasthan	Ranthambhore Tiger Reserve, Sariska Tiger Reserve, Mukundara Hills Tiger Reserve	
Tamil Nadu	Kalakkad Mundanthurai Tiger Reserve, Anamalai Tiger Reserve, Mudumalai Tiger Reserve, Sathyamangalam Tiger Reserve	
Telangana	Kawal Tiger Reserve, Nagarjunsagar-Srisailam Tiger Reserve	
Uttar Pradesh	Dudhwa Tiger Reserve, Pilibhit Tiger Reserve	
Uttarakhand	Corbett Tiger Reserve, Rajaji Tiger Reserve	
West Bengal	Buxa Tiger Reserve, Sunderbans Tiger Reserve	

Government Efforts

Government has taken several efforts to ensure continuous growth of the population of tigers in the country while at the same time keeping the poachers and smugglers away from the tiger reserves.

Field protection

- The main focus of Project Tiger is field protection. Every tiger reserve has beat level (or analogous units in some States) patrolling camps with basic day to day monitoring done by field staff, assisted by local people on contract / daily wages.
- Communication using wireless, mobile phones, networking with neighboring field units, surveillance through day to day patrolling and Phase-IV monitoring using camera traps (with a database of minimum number of tigers in each reserve) are ensured.

Legal steps

- Constitution of the National Tiger Conservation Authority and the Tiger and Other Endangered Species Crime Control Bureau through Amendment of the Wild Life (Protection) Act, 1972 in 2006.
- Enhancement of punishment for offence in relation to the core area of a tiger reserve.

Administrative steps

- Strengthening of anti-poaching activities, including special strategy for monsoon patrolling, by providing funding support to tiger reserve States. Special Tiger Protection force has been created for this purpose.
- A scientific methodology for estimating tiger (including co-predators, prey animals and assessment of habitat status) has been evolved and mainstreamed. The findings of this estimation and assessment are bench marks for future tiger conservation strategy.
- The 18 tiger States have notified the core/critical tiger habitat (38770.30 sq. km.) of 47 tiger reserves, and the buffer/peripheral area (29906.17 sq.km.) of 46 tiger reserves (out of 47) in the country, under section 38V of the Wild Life (Protection) Act, 1972, as amended in 2006.



Financial steps

- 100% central assistance is provided for non-recurring items of expenditure to the States, besides 50% matching grant for recurring items (90% for North Eastern States), based on the Annual Plan of Operations of tiger reserve, proposed by the State vis-à-vis the Tiger Conservation Plan.
- Funding support is also provided for 24X7 e-surveillance in some sensitive reserves like Corbett, Kaziranga, Ratapani Sanctuary.

International efforts

- India has a bilateral understanding with Nepal on controlling trans-boundary illegal trade in wildlife and conservation, apart from a protocol on tiger conservation with China.
- A protocol has been signed with Bangladesh for conservation of the Royal Bengal Tiger of the Sundarban.
- A Global Tiger Forum of Tiger Range Countries has been created for addressing international issues related to tiger conservation.
- India is signatory to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).
- A sub-group on tiger/leopard has been constituted with Russia for co-operation on tiger & leopard conservation.
- Trans-boundary Cooperation Protocols with Bhutan and Myanmar are being processed.

Other initiatives

- In collaboration with TRAFFIC-INDIA, an online tiger crime data base has been launched, and Generic Guidelines for preparation of reserve specific Security Plan has been evolved.
- Steps taken for modernizing the infrastructure and field protection, besides launching 'Monitoring system for Tigers' Intensive Protection and Ecological Status (M-STrIPES)' for effective field patrolling and monitoring.
- Special assistance is being provided for mitigation of human-tiger conflicts in problematic areas.
- Regional Offices of the National Tiger Conservation Authority are operational at Nagpur, Bengaluru and Guwahati.
- A 'Standard Operating Procedure' for dealing with tiger deaths has been issued, based on advisories of Project Tiger / National Tiger Conservation Authority, with inputs from Wildlife Crime Control Bureau, State officials and experts, fine tuned to meet the present challenges.
- Launching of Phase-IV tiger reserve level, continuous monitoring of tigers using camera traps and building up data on photo captures of individual tigers have been done.

Conclusion

Tigers are an umbrella species, if we can maintain healthy tiger populations in India, we can ensure that there are healthy habitats and prey populations present to support them.



ECONOMIC ISSUE

Women Participation in

ECONOMY



Despite advancement in society regarding equality of gender, their participation in labour force is declining since 2004-05. This is counterintuitive and contradicts trends in other Asian economies. There are various reasons for this trend including family dynamics, new work culture and technological developments in farm sector.

In this article we shall look at reasons for low participation and theoretical underpinnings. We would also focus on challenges and opportunities and future reforms required in this regard.

Introduction

According to the International Labour Organisation (ILO), India and Pakistan have the lowest rates of women's labour force participation in Asia, in sharp contrast to Nepal, Vietnam, Laos and Cambodia that have the highest, with richer nations like Singapore, Malaysia and Indonesia falling in between. Moreover, even this low rate of labour force participation seems to be declining.

The National Sample Survey found that while in 1999-2000, 25.9% of all women worked; by 2011-12 this proportion had dropped to 21.9%. This is in stark contrast to worldwide trends. Of the 185 nations that are part of the ILO database, since the 1990s, 114 countries have recorded an increase in the proportion of women in the workforce, and only 41 recorded declines, with India leading the pack.

Recent Developments

The Labour Force Participation Rate (LFPR) is the percentage of the population that is either employed or actively seeking work. In India this low rate of women labour force participation seems to be declining. Furthermore, female labour force participation has been on a declining trend in India, in contrast to most other regions, particularly since 2004-05. This is in stark contrast to worldwide trends. Moreover, India's gender gap in participation (between males and females) is the one of the widest among G-20 economies at 50 percent.

Gender equality plays an important role in economic development has long been understood in the literature. Various studies have highlighted how lower female labour force participation or weak entrepreneurial activity drags down economic growth, and that empowering women has significant economic benefits in addition to promoting gender equality (Duflo 2005; World Bank 2012). The World Economic Forum's Global Gender Gap Report finds a positive correlation between gender equality and per capita GDP, the level of competitiveness, and human development indicators. Seminal work by Goldin (1995) explored the U-shaped relationship between female labour supply and the level of economic development across countries. Initially,





when the income level is low and the agricultural sector dominates the economy, women's participation in the labour force is high, due to the necessity of working to provide for consumption of goods and services. As incomes rise, women's labour force participation often falls, only to rise again when female education levels improve and consequently the value of women's time in the labour market increases.

Why LFPR among women is declining?

With declining farm sizes, rising mechanisation, and consequently dwindling labour demands in agriculture, women are being forced out of the workforce.

Women continue to bear the major share of household work and childcare, the prevalence of a rigid work environment in India and the dearth of family-friendly work institutions create impediments to women's access to white-collar jobs in the formal sector. Skewed work-family equation for women in India is the demand for investing in children's education over professional achievement.

Long distances between the home and the workplace increase both commuting time and work burdens, leaving workers with even less time for family duties. Secondly, Indian firms have chosen to follow the American model with demands for extended work hours as well as attendance on Saturdays and Sundays. This creates a time bind for both men and women where something must give.

Challenges

First, in view of shrinking farm work, we need to create opportunities for women to move from agricultural to non-agricultural manual work. Second, we must foster a work environment that allows more women, especially urban and educated women, to take up salaried jobs.

Opportunities

Recent studies have estimated that India's GDP would grow by an additional 1.4 per cent every year if women were to participate as much as men in the economy. In addition to higher economic growth, gainful work by women and especially paid employment is correlated with a host of positive outcomes, including more agency at the household level and in society more broadly, and greater investments in children's health and education

Conclusion

A number of policy initiatives could be used to address this gender gap in Indian labour force participation. These include increased labour market flexibility (which could lead to the creation of more formal sector jobs) allowing more women, many of whom are working in the informal sector, to be employed in the formal sector. In addition, supply-side reforms to improve infrastructure and address other constraints to job creation could also enable more women to enter the labour force. Higher social spending, including investment in education, can also lead to higher female labour force participation by boosting female stocks of human capital.

India should focus on leveraging Apparel, Leather and Footwear Industry. These are Labour intensive industries with high employment potential for Women. On the other hand, recent amendment to the Maternity Benefit Act, 1961 increases paid maternity leave to 26 weeks thereby reducing rigidity in female participation in economic activity.

INTERNATIONAL ISSUE

Slowdown in Gulf Economy AND ITS IMPACT ON INDIA



Gulf countries are going through a turbulent phase due to oil price downward moment since last two years. This has reduced exports, imports and a slowdown in Remittances, though trade deficit has reduced because imports are more than exports to this region.

In this article we will look at reason and consequence of slowdown, Impact on Indian economy and future prospects.

Introduction

Gulf Region once controlled the world's main energy supplies and appeared set fair for long-term economic success. But now low oil prices, widening fiscal deficits, rising populations, political turmoil, terrorism, religious intolerance and high youth unemployment conjure up a recipe for economic disaster. The economic slowdown gripping countries across the Persian Gulf can be seen in layoffs, slowed construction projects and government cutbacks.

Current Situation - Rising Deficits

In the Middle East, oil-rich states now have to cope, with rising budget deficits that have necessitated a shift from the classic rentier state economy involving a reduction in their dependence on oil revenues. This major historic shift, which will impact future generations, is increasingly being felt by the current generation of youth as several regional countries suffer mass unemployment, with graduates unable to find employment in the private or public sectors.

What is the reason behind Oil price downward Movement?

- Fall in Oil Prices: The stunning fall in oil prices, from a peak of \$115 per barrel in June 2014 to under \$35 at the end of February 2016, has been one of the most important global macro-economic setbacks. The sharp fall is broadly similar in magnitude to the decline in 1985-1986, when OPEC members reversed earlier production cuts, and in 2008-2009 at the outset of the global financial crisis. Understanding the underlying causes of price drops is essential to interpreting their macro-economic effects. The recent price decline appears to be a mix of the two.
- Less demand in US: United States domestic production has nearly doubled over the last several years due to shale gas revolution, pushing out oil imports that need to find another home. Saudi, Nigerian and Algerian oils that once sold in the United States are suddenly competing for Asian markets, and the producers are forced to drop prices. Canadian and Iraqi oil production and exports are rising year after year. Even the Russians, with all their economic problems in recent years, have managed to pump at record levels.





Less demand in Europe: The economies of Europe and developing countries are weak and vehicles are becoming more energy-efficient. On the other hand most of the western world is going through slowdown so demand has reduced in general from western world.

Impact on GULF Countries

- All GCC countries are facing public spending cuts, tightening liquidity and widespread investor uncertainty. Nearly two years after the start of the collapse in global energy prices, the economic outlook for the six economies of the Gulf Cooperation Council (GCC) has clearly deteriorated.
- All six Gulf Cooperation Council economies will record a sharp slowdown. Corporate sectors across the region are facing a much more challenging environment, amid waning fiscal support to the economy; rising financing costs due to tightening liquidity conditions; higher fuel and utility costs; and the new strains on consumers' purchasing power.
- In United Arab Emirates' economic position following the global downturn in commodity prices, as well as the wider effects the slowdown has on a range of real estate sectors, from private property sales to commercial buildings in Dubai.

Impact on India

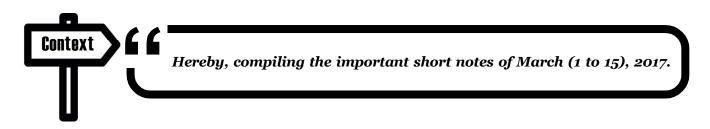
- NRI Deposits: Deposits from non-resident Indians, an important source of US dollar funding for the Indian economy, is collapsing. It fell 60% in the April-July 2016 period to just about \$2.8 billion as the layoffs in the Gulf region mounts amid sluggish oil prices. United Arab Emirates (UAE), Saudi Arabia, Qatar and other countries in the Gulf region cut spending on construction projects and sent the Indian workers back home to control budget deficits caused by falling oil prices.
- **Exports:** Saudi Arabia and UAE are among top ten export destination for India. In 2015 the combined share of export to both these countries was 14% of total exports, totalling for \$37 bn dollars. Export products include Rice, Processed Meat, Motor Vehicles, Jewellery, Precious Metals, Petroleum products and Machinery. These sectors get hit due to reduced demand.
- Imports: Saudi Arabia and UAE are among top ten import partners. The total imports constitute 11% of total imports and cost \$42 bn Dollars. The imports are dominated by Crude oil and related product. The downward spiral in international crude oil prices resulted in a decline in oil import bill by around 18 per cent which together with a sharp decline in gold imports led to a reduction in India's overall imports.
- Remittances: Subdued income conditions in source countries, particularly in the gulf region due to downward spiral in oil prices continued to weigh down on remittances by Indians employed overseas as private transfers moderated to US\$ 28.2 billion in H1 of 2016-17 from US\$ 32.7 billion in H1 of 2015-16.
- **Employment:** More than seven million Indians currently live and work in the oil-rich Gulf nations. The vast majority of them are in Saudi Arabia, UAE and Kuwait while the others are spread across Oman, Bahrain, and Qatar. A loss in jobs due to slowdown makes Indians abroad unemployed. This pushes them to India again worsening unemployment situation in India.

Conclusion and Way Forward

After remaining fairly stable for much of the last two years, international prices of crude oil have started to trend up. This might led to reversal in slowdown in gulf countries. This along with rise in the prices of other commodities like coal, etc. could exert influationary pressure and have the potential to adversely impact the trade and fiscal balances.



Miscellaneous News



Accelerometer

What is an Accelerometer?

An accelerometer is an electromechanical device that will measure acceleration forces. These forces may be static, like the constant force of gravity pulling at your feet, or they could be dynamic - caused by moving or vibrating the accelerometer.

Accelerometers are devices that measure acceleration, which is the rate of change of the velocity of an object. They measure in meters per second squared (m/s2) or in G-forces (g). A single G-force for us here on planet Earth is equivalent to 9.8 m/s2, but this does vary slightly with elevation (and will be a different value on different planets due to variations in gravitational pull). Accelerometers are useful for sensing vibrations in systems or for orientation applications.

What are accelerometers useful for?

By measuring the amount of static acceleration due to gravity, one can find out the angle the device is tilted at with respect to the earth. By sensing the amount of dynamic acceleration, one can analyze the way the device is moving. At first, measuring tilt and acceleration doesn't seem all that exciting. However, engineers have come up with many ways to make really useful products with them.

An Accelerometer can help the project understand its surroundings better. A good programmer can write code to answer all of these questions using the data provided by an accelerometer. An accelerometer can help analyze problems in a car engine using vibration testing, or you could even use one to make a musical instrument.

In the computing world, IBM and Apple have recently started using accelerometers in their laptops to protect hard drives from damage. If one accidentally drops the laptop, the accelerometer detects the sudden freefall, and switches the hard drive off so the heads don't crash on the platters. In a similar fashion, high g accelerometers are the industry standard way of detecting car crashes and deploying airbags at just the right time.

Why Pandas are black and white?

The giant panda's unique black-and-white markings have two functions: camouflage and communication. Pandas' markings are unique, it has not been possible to directly compare them to another, similarly marked species to understand the evolutionary forces that drive and maintain this pattern.



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- Panda coloration advertises it is an aggressive animal that is not to be trifled
- The panda's white fur acts as camouflage against a snowy background
- The panda's dark fur retains heat in cold environments
- The dark patches around the panda's eyes reduce daytime glare
- The contrasting color pattern on the panda's face is used to communicate with other pandas.

The scientists suggest that this dual colouration stems from its poor diet of bamboo and inability to digest a broader variety of plants. This means it can never store enough fat to go dormant during the winter, as do some bears. So it has to be active year-round, travelling across long distances and habitat types that range from snowy mountains to tropical forests.

Their distinctive black and white fur may actually be for the purpose of camouflage. Although the black and white markings may seem standout and obvious to the eye, in amongst the densely forested and often snowy mountains that the pandas call home, a mixture of black and white can often be near impossible to spot. Especially the fur of cubs that have climbed high into the trees while their parents are away gathering food.

The panda's white body markings help it hide in snow, whilst its black body markings help it hide in shade. The panda's distinctive facial markings are used to communicate with other pandas. Most of the panda its face, neck, belly, rump is white to help it hide in snowy habitats. The arms and legs are black, helping it to hide in shade.

The markings on its head, however, are not used to hide from predators, but rather to communicate. Dark ears may help convey a sense of ferocity, a warning to predators. Their dark eye patches may help them recognise each other or signal aggression towards panda competitors.

Panda coloration is ultimately driven by panda ecology: because they eat such a poor diet that they never manage to store enough body fat to allow them to hibernate, pandas must constantly for prowl for food. Since they are always seeking their next meal, pandas are never able to molt their fur quickly enough so it matches their background, as most other carnivores can do. Thus, they evolved a "compromise" color pattern and coloration consisting of black-and-white fur.

Jalyukt Shivar Yojana

Maharashtra government has launched the project "Jalyukt Shivar Abhiyaan" in a bid to make Maharashtra a drought-free state by 2019. The project involves deepening and widening of streams, construction of cement and earthen stop dams, work on nullahs and digging of farm ponds.

The mobile app, developed by MRSAC, is being used to map these locations. The mapped location can be monitored through this web page. The user will be able to download the application, view instruction manual and view mapping locations along with photographs. District-wise, taluka-wise, work-wise statistics is also available both in tabular and graphics form. The project aims to make 5000 villages free of water scarcity every year.

The aim is to revive all the available water sources in the state and conserve every drop of water. This huge project has generated thousands of jobs across the state and employed in various works under the scheme.

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The main objective of fighting drought issues in the farm lands across the state and improve their agriculture. This scheme has the objective to store and manage water recourses and use them for agriculture in those areas where farmers are suffering from low rainfall and irrigation problems.

- More than 1.2 lakh works from small ponds to large dam projects has been already completed under this project. At present there are 35,000 more works are going on.
- The Government has sanctioned a huge initial corpus of Rs. 75,000 crore for the Jalyukta Shivar Scheme. There has been a huge financial participation from the general public in the corpus amount. A total of Rs. 300 crore has been funded by the general public for the implementation of this scheme.
- Within six months from its launch, the scheme has already covered more than 6.000 villages throughout the state, including the worst draught affected districts. This initial response will surely boost up the work ambitions of the Government. The government has set a target of 5,000 villages per year to be covered with this scheme.

Jalyukta Shivar Abhiyan benefits

- The state of Maharashtra has been suffering from drought and water scarcity problems from the past few years. This has taken a hit on the yield of the agricultural sector and its direct effect is on the farmers. Hence, the Jalyukta Shivar Yojana aims to make this state a drought free zone by the end of 2019 and end the suffering of the farmers.
- Although there were several water conservation schemes present before this scheme, they were not efficient enough to fight the massive problem of drought and poor agricultural yield. This resulted more number of farmer suicides in the state. Maharashtra is one of the states with highest number of farmer suicides in India. Thus Jalyukta Shivar Yojana aims to fight this big problem and to slam brakes on the farmer suicides.

India, Oman to hold counter-terror exercises

The armies of India and Oman are scheduled to conduct their second bilateral exercise, Al Nagah-II 2017- in March with a focus on counter-terrorism.

Aim

- To build and promote bilateral Army-to-Army relations and enhance interoperability while exchanging skills and experiences between the Indian Army and the Royal Army of Oman.
- An added aim is to enhance knowledge of each other's military procedures qualitatively, thus increasing the scope for interoperability and better responsiveness to a common threat.

Background

India and Oman already have extensive cooperation in the maritime domain 'The navies of the two countries have been holding the bilateral maritime exercises called 'Naseem Al Bahr' since 1993. In addition, the Indian Navy has been cooperating with its UAE and Oman counterparts in training, operational interactions and exchange of "white shipping information" with the help of a joint cooperation committee).

India has, of late, been deepening its defence cooperation with the region). The Chief of the Naval Staff is on a tour of Oman and the UAE to explore new avenues for naval cooperation.

Interceptor Missile test successful

The Defence Research and Development Organisation (DRDO) successfully carried out a test of an interceptor missile, further validating the reliability of the underdevelopment, two-layered Ballistic Missile Defence (BMD) in shooting down enemy missiles.

- The endo-atmospheric missile, which can intercept missiles at ranges of 15-30 km, was launched at 10.15 a.m. from the Abdul Kalam Island off the Odisha coast in response to an incoming 'enemy' missile which was launched from the Integrated Test Range (ITR) in Chandipur.
- The entire operation was monitored and executed by the mission computer with human intervention. The entire sequence of events was monitored by radar and monitoring systems, electro-optical tracking systems and telemetry systems. The missile intercepted the incoming missile at an altitude of 15 km scoring a direct hit.

Launching of two missiles

- The BMD consists of two interceptor missiles, the Prithvi Defence Vehicle (PDV) for exo-atmospheric ranges and the Advanced Area Defence (AAD) missile for endo-atmosphere or lower altitudes.
- The BMD is critical to protect the country from long-range ballistic missiles proliferating in the neighbourhood. DRDO expects to have the shield ready for deployment by 2022.

NGT order on Camping

The National Green Tribunal (NGT) gave approval to beach camping in 25 sites along the River Ganga in Rishikesh. As per the tribunal's order camping will be permissible outside 100 meters radius from the middle of the river.

Background

- In December 2015, the NGT in its order had banned rafting and camping activities along 36 kms stretch between Kaudiyala and Rishikesh. It had then noted that the "camping ban" would continue till the "regulatory regime comes into force".
- The case was filed by environment activist two years ago against the unregulated and arbitrary camping activities on the river stretch alleging that, the camps were polluting the river, badly affecting the wildlife and the whole ecology of the area with unrestricted flow of sewage and debris, felling of trees to set up camps, noise with loud music, pollution with generator sets and vehicular movement on the road in the vicinity in carrying the tourist. Since then, camping has been put on hold on the stretch.
- That order was pronounced after an NGO, Social Action for Forest and Environment (SAFE) approached the tribunal against Uttarakhand government's decision to issue licenses to number of camping sites without considering carrying capacity of the river.

NGT Guidelines

- On NGT's direction, Wildlife Institute of India (WII) had conducted a study and found 33 beach sites out of total 56 recommended by the state government to be feasible for camping activities in the given stretch.
- In the judgement, eight out of 33 sites have been ruled out for camping as they fall within 100 meter criterion. Other 22 sites which partially fall within 100 meter area cannot set up camps on the site which fall in the 100 meter area.

> The order said that the Forest Department would duly consider permitting the license for camping in the forest area wherever the beach recommended for such activity has a larger portion falling within the restriction of 100 meters during lean season flow while ensuring that there shall be no damage or adverse impacts on the forest area.

> This relaxation shall only be provided when it is so jointly recommended by the Department of Tourism, Forest Department and is approved by the Principal Chief Conservator of Forests of the State and not otherwise at all.

East Economic Corridor

India and Asian Development Bank (ADB) have been partnering on the economic corridor approach. Economic Corridor Development contributes to and stimulates economic development along the route.

The economic corridor approach involves leveraging infrastructure connectivity and developing urban areas as growth centers and gateways, to unlock the full potential of markets.

Background

- Since 2013, ADB has been supporting studies on how to transform transport corridors into dynamic economic corridors. It considers how to best link the existing and planned transport corridors in various modes (surface, maritime, and multimodal transport) with other economic corridors such as the Delhi-Mumbai Industrial Corridor, the Bangalore-Chennai Economic Corridor, Amritsar-Kolkata Industrial Corridor and the corridors in the Greater Mekong Sub-region.
- This India-ADB partnership has in fact yielded useful lessons on Economic Corridor Development (ECD), through their joint work on the East Coast Economic Corridor (ECEC), India's first coastal corridor.
- The ECEC, which runs along the entire east coast from Kolkata to Kanyakumari, is a multi-modal, regional maritime corridor that can play a vital role in unifying the large domestic market, as well as integrating the Indian economy with the dynamic global value chains of Southeast and East Asia.
- Aside from an ambitious infrastructure program, the ECEC involves developing skills, and creating an attractive regulatory environment, bringing in new investments, and nurturing existing businesses to grow and innovate, and create much needed jobs.
- Phase 1 of the ECEC is the Visakhapatnam-Chennai Industrial Corridor (VCIC) which covers 11 districts in Andhra Pradesh and Tamil Nadu. ADB helped prepare the Conceptual Development Plan (CDP) and Regional Perspective Plan (RPP) for VCIC, which served as the bases for the Visakhapatnam-Chennai Industrial Corridor Development Program, which was approved by the ADB Board in September 2016.

Hyperloop Technology

Hyperloop one is known for the next generation travel infrastructure is looking to develop five high-speed corridors in India, linking the major cities of India, with Hyperloop that is a theoretical transportation mode with speed of as high as 1100 kilometres per hour. With the help from Indian government it could make the super high-speed travel in India a possibility in the coming years.

The Indian government has a very rigorous and transparent bidding process through which it awards contracts for projects like new transportation corridor.



The proposed routes include Delhi-Mumbai, Mumbai-Chennai, Bengaluru-Chennai, Bengaluru-Thiruvananthapuram and Mumbai-Kolkata.

- AECOM: Bengaluru-to-Chennai. 334 kilometres in 20 minutes.
- LUX Hyperloop Network: Bengaluru-to-Thiruvananthapuram. 736 kilometres in 41 minutes.
- Dinclix Ground Works: Delhi-to-Mumbai via Jaipur and Indore. Covers 1,317 kilometres in 55 minutes.
- Hyperloop India: Mumbai-to-Chennai via Bengaluru, covering 1,102 kilometres in 50 minutes.
- Infi-Alpha: Bengaluru to Chennai. It will cover 334 kilometres in 20 minutes.

What is it exactly stands for?

- The Hyperloop is intended to be a new way to move people or freight quickly, safely and on-demand. Most of the air is removed from inside a long tube and a levitated vehicle is accelerated through it using a linear electric motor.
- The vehicle can glide quietly at airline speeds for long distances due to the > extremely low aerodynamic drag and non-contact suspension. The system promises to be safe, quiet, weather-proof and energy efficient with no direct carbon emissions.
- Furthermore, it will be point-to-point, meaning for any user, the pod doors only open twice: once to let you in and once to let you out, hence leading to first and last mile solutions.
- Hyperloop, as a concept, envisages special pods with passengers moving at a very high-speed inside sealed tube-like tunnel. Hyperloop One, which promises to move people and things at the speed of an airline for the price of a bus ticket.
- It is creating a new form of transformative transportation that is two to three times faster than the fastest high-speed rail, on-demand versus scheduled, environmental friendly with no direct emissions, and less expensive than current high speed rail technology.
- Hyperloop One plans to use magnetic levitation in low-pressure tubes to transport people and goods at speeds faster than the airplanes.
- Hyperloop will glide silently for miles at speeds of up to 620 mph (1,000 km/h) with no turbulence.
- The pods are accelerated using electric motor and because the tube is sealed there is very little resistance inside it, which helps the pods move at a very fast pace.
- Hyperloop One will help accelerate India's growth towards building substantial infrastructure that is financially and environmentally sustainable.

Drones to be used for Monitoring Tigers

Conservation drones will soon hover over select tiger reserves of the country, marking the beginning of significant technological intervention in wildlife conservation. The need as wildlife population's move beyond their protected boundaries, advanced technology is needed to ensure their protection.

This technological intervention comes from the National Tiger Conservation Authority (NTCA) and the Wildlife Institute of India (WII), Dehradun.



For what purpose will be used

- Though intended primarily for the monitoring of tiger population in the reserves, the unmanned aircraft would collect and transmit visual data on animal movements, poaching activities and instances of forest fire from inaccessible forest terrains on a real-time basis.
- The drones could be used for the management of habitats and species.
- As wildlife populations, especially those of large animals such as rhino, tiger and elephant, move beyond the protected boundaries, advanced sophisticated technological solutions are required for their protection, as many of these animals are targets of poachers.
- The drones have programmable auto-pilot and telemetry systems, capable of recording and live transmission of information.
- Night patrolling of forest terrains using thermal cameras, radio-tracking of animals and habitat monitoring could also be possible with these vehicles.

Significance of the drone

- Though intended primarily for the monitoring of tiger population in the reserves, the unmanned aircraft would collect and transmit visual data on animal movements, poaching activities and instances of forest fire from inaccessible forest terrains on a real-time basis. The drones could be used for the management of habitats and species.
- Drones were recently used for conservation programmes in the forests of Assam and Madhya Pradesh. Drones were used in Panna Tiger Reserve.
- NTCA and WII (Wildlife institute of India), are now in the process of scaling up the project in 10 tiger reserves across the country.
- The drones have "programmable auto-pilot and telemetry systems, capable of recording and live transmission of information.

Arsenic in vein a village atrophies

As a natural part of the earth, Arsenic can be found all around us and it can be distributed throughout our environment through the air, land and water including our drinking water. Inorganic arsenic can be naturally present in ground water in Ganga-Brahmaputra plains.

The source of as in groundwater of the Ganges Delta is considered by some investigators to be geogenic and largely restricted to the Holocene aquifer sediments.

A higher level of arsenic in drinking water due to bedrocks. Although it can contaminate drinking water when it comes in contact with rocks and soil, our drinking water also runs the risk of becoming contaminated with Arsenic through industrial and agricultural pollution.

About Arsenic

- Arsenic is odorless and tasteless; it can go undetected and affect the human body with symptoms such as thickening and discoloration of the skin, stomach pain, nausea, vomiting, diarrhea, numbness in hands and feet, partial paralysis, cancer and blindness. In addition, long-term exposure to arsenic can have more chronic symptoms.
- As stated by the World Health Organization, "Long-term exposure to inorganic arsenic, mainly through drinking of contaminated water, eating of food prepared



with this water and eating food irrigated with arsenic-rich water, can lead to chronic arsenic poisoning. Skin lesions and skin cancer are the most characteristic effects."

- For removing more common contaminants such as chlorine, pollen, or pesticide, a carbon filtration system won't do the trick at removing this undetected contamnant.
- Arsenic removal from water is recommended with a Reverse Osmosis System within a point-of-use water dispenser for clean drinking water. Although most reverse osmosis systems are effective at removing arsenic as well as lead, pesticides and cysts, the semipermeable membrane within the system can grow over time as contaminants are continually pressured against it. Regular maintenance of RO system can make sure arsenic filration will continue working.

Village Sufferings in UP

- Tiwaritola from Ballia district- other hamlets in the backward region of eastern Uttar Pradesh. Awful roads, poor sanitation, unreliable power supply, river embankment woes, unbridled poverty and unemployment scar its infrastructure and social landscape. But one trait gives it additional notoriety. The drinking water sources here are heavily contaminated with arsenic.
- Every person you encounter suffers from melanosis (skin lesions or white marks that develop on their chest, abdomen or thighs). Others suffer from more serious ailments.
- The World Health Organisation (WHO) has set the permissible limit for arsenic in drinking water at 5 ppm, in Ballia, over 300 villages have arsenic above that limit, with one third having concentration levels above 100 ppm.
- Around 1.2 lakh people could be affected by arsenic in 55 villages of three blocks of Ballia. In Ballia district, 30-40% net cultivable land is under irrigation and more than 60% of this irrigation is met from drinking water, thus the risk of arsenic-contaminated water being used is high.

Centre launches survey on Gangetic Dolphins

The Centre has launched the first ever across-the-river survey in the Ganga to determine the population of aquatic life, including that of the endangered Gangetic dolphin.

The survey will create a baseline scientific data for the government to take suitable measures to improve quality of the river water.

The first leg of the census was launched on March 1 from Narora in Uttar Pradesh to Bijnor (covering distance of nearly 165 km) to establish the number of the national aquatic animal.

Fish Species

- A study to figure out fish species composition in the 2525-km-long river has been also been kick started from Harshil in Uttarakhand.
- The authority is conducting the survey through Wildlife Institute of India (WII), under the Namami Gange programme.
- Concern over the disappearing of Gangetic dolphins, one of the four freshwater dolphins in the world, from the river stretch in Narora to Kanpur due to pollution.
- The study will find out stretches where dolphin is habitating, what are the conditions there and the level of threat the long-snouted species is facing in a particular belt.
- Apart from number of dolphins, number of ghariyals and turtles in the river will also be ascertained after summer sets in fully.



> All the surveys carried out in Ganga previously were conducted in bits and pieces or were rapid. This is for the first time a comprehensive and scientific study is being conducted.

Olive Ridleys: Issues Faced

The Olive ridley sea turtle (*Lepidochelys olivacea*), also known as the **Pacific ridley** sea turtle, is a medium-sized species of sea turtle found in warm and tropical waters, primarily in the Pacific and Indian Oceans, Atlantic Ocean.

The name for this sea turtle is tied to the **color of its shell.** They are carnivores in nature.

Olive Ridley Turtles are best known for their behavior of synchronized nesting in mass numbers called 'Arribada'.

Nesting period: From October to early summer.

In the Indian Ocean, the majority of olive ridleys nest in two or three large groups near Gahirmatha in Odisha. The coast of Odisha in India is the largest mass nesting site for the olive ridley, followed by the coasts of Mexico and Costa Rica.

Tens of thousands of eggs laid by Olive Ridley sea turtles this year in Gahirmatha Sanctuary in Odisha, are getting destroyed. The conservation issue of olive ridleys is very much in news this year due to anomalous behaviour of the turtles, loss of coastal space, salinity effects etc.

- The main reason is shrinking coastal space.
- The Odisha Forest and Environment Department estimates that 6,04,046 turtles have come to lay eggs at Nasi II island of Gahirmatha from February 22.
- Since the small island could not host all those that turned up this year, only 50% of eggs may survive.
- A female sea turtle scoops beach sand out to lay 80 to 120 eggs, but its effort is undone when a second digs at the same place to lay its own.
- Gahirmatha once had 32 km of beach and nesting area of 1,80,000 square metres
- A research has shown that Nasi I and Nasi II had fragmented.
- There is attrition, but there are also times when submerged portions got exposed again.

CSIR Tech shut down

CS CSIR is filing patents in India and overseas without any appreciable benefit to society or even to organisation. Such a behaviour is leading to huge expenditure on the part of exchequer.

The plan is also expected to provide India a direct access to central Asian markets but due to certain caveats the plan is yet to be materialized.

About the issue

- CSIR- tech has been shut down due to lack of funds.
- CSIR has filed more than 13,000 patents 4,500 in India and 8,800 abroad at a cost of Rs. 50 crore over the last three years. It is a drain on public money as it costs a lot of money to file a patent.
- Moreover, the patents are filed to just add as an achievement in the scientist's work profile. No appreciable social or scientific utility is there.
- Acquiring Intellectual Property Rights (IPR) comes out of our blind adherence to the idea of patenting as an index of innovation.



Peace in the Home

The Commonwealth of Nations has launched a new initiative to help member states of the Commonwealth bring down rates of domestic violence.

While women are disproportionately affected as victims of domestic abuse, this stubborn stain on our communities is no respecter of gender, location or social or economic status. As per the Secretary general of the Commonwealth- 'When we understand that 38 per cent of women murdered globally were killed by an intimate partner, this should shock us all into action. This is why I will remain steadfast in my commitment to address this issue'.

The Commonwealth's Peace in the home: Ending domestic violence together is an integrated, holistic action plan with a package of measures to help governments tackle domestic violence. It is based on the Commonwealth Charter, which promotes human rights, gender equality, tolerance, respect and understanding; and the UN's Sustainable Development Goals.

About the 'Peace in the home' initiatives

- The programme was launched on women's day (March 8) and will continue through till February 2018 when there is expected to be an accord on ending domestic violence in the Commonwealth.
- 'Peace in the Home: Ending domestic violence together' is part of a larger strategy focused on 'A Peace-building Commonwealth' - the theme for the rest of the Commonwealth year.
- The Commonwealth initiative will build a coalition of governments, business, human rights institutions, civil society and individual citizens to bring out efforts to address domestic violence.
- It will include toolkits to help governments across Commonwealth involve multiple agencies such as schools, hospitals and doctors as well as government and law enforcement agencies to work together effectively.

Peace in the home: Ending domestic violence together includes:

- A series of toolkits to assist governments to adopt a multi-agency approach to tackling domestic violence, ensuring that schools, doctors and hospitals can work effectively with social services, government agencies, law enforcement and the judiciary on the issue.
- The release of a seminal, evidenced-based research, conducted in collaboration with Public Health department into a multi-sector approach to preventing interpersonal, collective and extreme violence, which will be presented to Commonwealth health ministers at their summit in May.
- Helping countries to highlight and share successful practices and initiatives.
- A mentorship programme for women, in collaboration with Commonwealth Youth Council and the Commonwealth Youth Gender Equality Network.
- An initiative aimed at promoting women's full and effective political participation and addressing violence against women in politics and elections.

Non lapsable fund sought for arms buy

A major defense purchase often takes years to complete, but the budget allocation lapses at the end of the financial year. As a result, the Ministry of Defense is often forced to return money meant for capital acquisition. To overcome with this issue Ministry of Defence has sent a proposal to the Ministry of Finance to setting up of a 'Non-lapsable Capital Fund Account.'



> Parliamentary standing committee welcome the move that the Ministry of Defence has now reviewed its stated position and has admitted that the utility of creation of a non-lapsable rollover fund for capital.

- Importance of such a fund cannot be completely negated as the same would help in eliminating the prevailing in providing adequate funds for various defence capability development and infrastructure projects.
- Defence procurement and acquisition is a complicated process, involving long gestation periods.
- Funds allocated for capital acquisition in a particular financial year are not necessarily consumed in that year and ultimately have to be surrendered by the defence Ministry.

