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ANALYST

Current Affairs Fortnightly

COVER STORY

Cultural Engagement with Africa To Reduce Racism

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State of Play
Snapshot of Merged SBI
(September 2016 figures)

Number of branches:	22,978
Number of credit accounts:	2.73 crore
Number of ATMs*:	21,000
Total credit outstanding:	₹15.91 lakh crore
Market share in credit:	22.09%
Deposit growth:	14.1%
Credit growth:	10.2%

(Source: RBI) (*Source: SBI website)

Despite the efforts, people with HIC/AIDS were fired from their homes, and denied access to medical care & social services

In reponse, public health offcials worked tirelessly to provide the general public with accurate information.

Fired
Evicted

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COVER STORY

Cultural Engagement with
AFRICA TO REDUCE RACISM

Context

"

Racist attacks against Africans in India are based on skin colour, a prejudice over their lifestyle and suspicion over alleged involvements in the illegal drug trade. Indians are also not very familiar with African culture - Africa is not a very popular tourist destination among Indians.

In other words, there are both moral and sometimes legal reasons to act against racism. There are also strong pragmatic reasons as well. Racial prejudice and racism can harm not only the victims, but also the larger society, and indirectly the very people who are engaging in the acts.

Analysing, how discourses of the Indian involvement with Africa are constructed in relation to India's ideas of its own progress reveals what space Africa occupies in the Indian consciousness.

"It is essential for our common future on the planet that the marginalisation of Africa be ended and that all parts of the world be accorded equal attention and focus within our globalised world"   **– Nelson Mandela**

Introduction

Africa and India's relations are witnessing increasing attention, due to the altered geography of power that is emerging, with Asian countries like China and India coming to the fore as aspiring global powers.

AFRICA- A CONTINENT OF 54 COUNTRIES was once infamously relegated as 'The Hopeless Continent' by The Economist. Much has changed in recent years across Africa, from the strengthening of democratic governance and economic growth experienced by many African states. Such is the euphoria on Sub-Saharan Africa that even The Economist dedicated an 'Africa Rising' cover to the increasingly positive narrative of Sub -Saharan Africa's development trajectory.

India has a long history in Africa, playing a crucial role in the movement against apartheid in South Africa by refusing to maintain diplomatic relations in the 1990s. It could have positioned itself as a more conducive Asian country for African visitors. But as the number of Africans on its soil grows, the inherent racial biases seem to become more pronounced.

Indian doctrine of '**Vasudhaiva Kutumbakam**' (the whole universe is one family) which led Indians to embrace victims of religious or racist persecutions, but there have been several atrocious cases of racism in the last year towards Africans in India. The vicious race crime is a clear sign of terrible ignorance, arrogance towards Africans.

India and Africa - shared History

➤ The people of Africa and India has shared trade and cultural ties dating back to ancient times, when Indian merchants from its western coasts traded along the eastern coast of Africa. Both have had a common past, experiences and challenges and have been victims of exploitation and injustice in the colonial era, which had developed a bond of mutual empathy and purpose to free themselves from the yoke of domination and discrimination. They have abundantly drawn inspiration, ideas and moral support from each other to carry forward their struggle against colonization and racial discrimination.

➤ Mahatma Gandhi's powerful weapon of Satyagraha based on truth and non-violence, which won India its Independence, has inspired a generation of African leaders in their struggles against oppressors. Even after years "The Mahatma" remains the strongest binding force between the people of India and Africa. As the first colonized country to become independent, India has been fully committed to carrying forward the struggle against colonialism and racial discrimination till its African brothers won their hard earned freedom.

➤ The deepening of economic and strategic ties between India and Africa, home to over two billion people and some of the fastest-growing economies, is indeed an exhilarating story. But at the end of it all, the enduring strength of India-Africa relations remains a sense of deep-rooted empathy, solidarity and people-to-people contacts. And it is the strengthening of this popular and cultural base, which holds the key to the continued vibrancy of this important diplomatic relationship of the 21st century.

➤ The participation of the 54 African countries can make this alliance a success, considerably boosting India's profile in the process. Similar pragmatic and strategic concerns are the driving force behind India's engagement with Africa.

➤ In fact, the support of African countries is the key to India's ambitions of a permanent seat on the UN Security Council and a greater role in global decision making.

➤ Traces of India and Indian cultural influence can be seen across Africa. From Marrakesh to Maputo, from Dakar to Durban, Bollywood songs and films enthrall and enchant Africans. Chapatis are served for Christmas and biryani is a must for wedding receptions in various East African countries and samosas are forever.

➤ Indian-origin words and expressions like duka, kachumbari and harambee are firmly embedded in the warp and weft of Kiswahili. A troupe of blind musicians from Egypt and devi dancers from Burkina Faso cast their spell on Indian audiences in New Delhi. India's Nizami Brothers' Qawwali group and classical vocalists such as Pandit Jasraj and flautist Hariprasad Chaurasia send audiences into raptures in African town.

➤ Indian and African writers share the stage and discuss profound ideas at the 'Shared History: The Indian Experience' festival that provides a platform for dialogue and collaborative work between Indian and South African musicians, literary figures and dancers. This cultural connectedness and transfusion between the people of India and Africa is not accidental. It is rooted in history and tradition. Indian traders set sail in wooden dhows centuries ago to African countries circling the Indian Ocean. In his travelogue, the legendary Marco Polo writes of seeing merchants from Gujarat and Saurashtra on Africa's East Coast and praised them as "the best and the most honourable that can be found in the world". Subsequently, Indian trade with East Africa expanded so much that the rupee replaced the Maria Theresa thalers as the principal currency in the region. The construction of the railway line between Mombasa and Kampala in late 19th century was another milestone in the history of India's tryst with Africa that brought in around 34,000 Indian indentured labourers and led to greater cultural inter-penetration.

➤ In fact, Indian contacts with Africa date back to prehistoric times. Often attributed to the early ancient trade links directed by strong monsoon currents that led seafaring traders to traverse the Arabian Sea and establish profitable economic connections, the links between the Indian subcontinent and the African continent can be traced back deeper into time, to the shifting of landmass, commonly known as Gondwanaland.

➤ The connection between India and Africa, home to an over-two-million-strong Indian diaspora, has been a continuous process of socio-cultural and economic exchange.

➤ The Indian influence on education, small trade and cuisine is as real as the influence of Bollywood.

➤ Cultural interaction has found patronage from institutions like the Indian Council for Cultural Relations (ICCR), which has taken an eclectic range of Indian dance and music groups to various African capitals. It's an uplifting sight to see Africans swaying to spiritually stirring performance by Delhi's Nizami Brothers' Qawwali group. African audiences, probably familiar with the sitar and tabla, have also experienced the music of such traditional Indian instruments as the sarod and sarangi. Performances by classical music exponents are as popular as Bollywood stars like Amitabh Bachchan, Anil Kapoor and Sonu Nigam.

➤ The historical ties between India and Africa and their shared heritage have created unique dance forms where stylised movements of Bharatanatyam and Kathak fuse with the traditional rhythms of the African gumboot dance of miners and the dances of Zulu warriors in traditional leopard skins. Dr Vinod Hassel, a fourth-generation dancer from India, pioneered the teaching of Indian dance to African youth in townships nearly 15 years ago. Blending traditional African percussion instruments and dance steps with flowing Kathak and modern Indian dance forms, Hassel's innovative example soon inspired a whole generation.

➤ Beyond the world of music and dance, what brings India and Africa together is a shared value system. Says eminent scholar Olabiyi Babalola Joseph Yai: "I

am no Orientalist, but I know that African cultures and the cultures of India are convergent. The two cultures are based on very similar weltanschauung. For millennia, they have emphasised the oneness of existence, the harmony between gods, nature and human beings. They both believe in the formula: I am because we are."

➤ It is this sense of cultural affinity and kinship that led South African President Jacob Zuma to underline the historic and unique relations between India and Africa that hark back to the struggle against apartheid. "We have been together through difficult times as well as happy times. I enjoy the (Indian) music and the food. We are at home in India," says the charismatic African leader.

➤ Though changing global realities necessitated pragmatic approaches and shift in its role and priorities, India has always been maintaining warm relations with African nations. The Indian Diaspora in Africa which is estimated to be 2.6 million strong, spread across 46 countries has played a significant role in acting as a bridge, have been acknowledged to have made significant contribution to the development of their respective countries and continue to bind people of both these civilizations.

➤ Indian-African relations over the years have witnessed a sea change with a much factored in pragmatic approach that intends to build long term partnership to reinforce strengthen and accelerate co-operation in socio, cultural, economic field with special stress on energy sector, human resources development, security and maritime co-operation. India and Africa have many things in common, from abundance of natural resources to similar demography along with a domestic markets with huge potential which brings in natural synergy for building sustainable partnerships, making India the natural choice as the development partner for Africa.

Recent case

For three years in a row, India has been in the news for racist attacks against African nationals. The latest came after a local boy died of suspected drug overdose in Greater Noida, a satellite town of the Indian capital. Police had detained five Nigerians after parents of the boy accused them of supplying the drugs. However, when they were released due to a lack of evidence, the local people turned on them. Hundreds of people joined the rampage. Another violent mob attacked two African students outside a shopping mall in Noida.
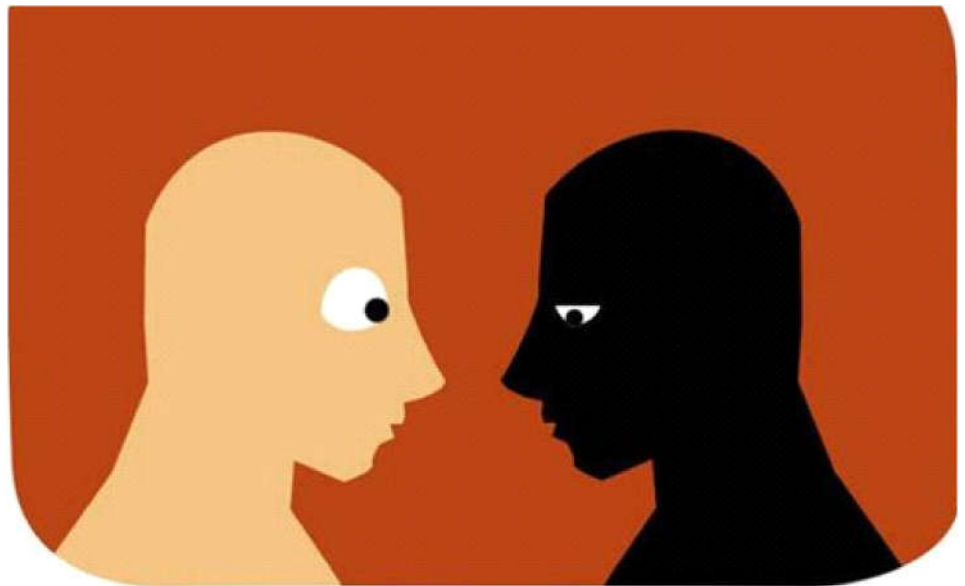
As India becomes more diverse and the world's residents more mobile, we must be prepared to act in order to reduce the potential for hostility due to differences in our physical traits and other characteristics.

What are the perspectives of groundwork realities?

Indians, with their preference for "whiteness" and their total lack of information and exposure to Africa's rich cultural heritage and its contemporary politics, have denied Africans in India their basic humanity which is demonstrated in their accusations of "cannibalism" the ultimate denouncement of the "inhuman other".

This unfamiliarity feeds into with Indians' instinctive dislike of dark-skinned people to create openly racist behaviour, leading to dangerous mob situations. Perhaps, a quick dip into Indian mythology reveals how racism based on skin colour has been normalised in India for centuries now. Most gods and kings and heroes are fair-skinned, while demons and villains are depicted as dark-skinned.

The aggravated hate crimes against Africans are not only limited to Delhi and its environs but also have spread in remaining cities of India.

Africans in India face everyday racism that makes them feel very unsafe. The attitude of the police reflects and exacerbates this racial violence and discrimination. African students are mostly left to protest the hate crimes, and the government, keen to placate the African governments, offers the obligatory sorry and promises to look into the incident and bring about justice.

India needs to create more awareness about Africa and its importance to India. There is need for a law to penalise racial attacks such as these.

Changing people's attitudes and institutional practices is hard but necessary work. A commitment among individuals, organizations, and institutions to valuing diversity is essential for healthy communities. Changes will not happen overnight, but people can begin to take small steps towards making a difference. These small steps build the foundation for more organized, deeper, and larger efforts to build inclusive communities.

RACIAL PREJUDICE means to have an unfavorable or discriminatory attitude or belief towards someone else or another group of people primarily on the basis of skin color or ethnicity. When racial prejudice is supported by institutions and laws, racism is present.

Racial prejudice and racism feed on each other. If racial prejudice is not reduced, it could lead to racism, and if racism is not addressed, it could lead to more prejudice. This is why strategies to address discrimination on the basis of race should be thorough and multifaceted so that both individual attitudes and institutionalized practices are affected.

Addressing racial prejudice and racism also means dealing with racial exclusion and injustice. Ultimately, this means that community building effort is promoting democracy, a value of India and its Constitution.

Why racial prejudice and racism should be reduced?

➤ They impede or prevent the object of racism from achieving his or her full potential as a human being.

➤ They impede or prevent the object of racism from making his or her fullest contribution to society.

➤ They impede or prevent the person or group engaging in racist actions from benefiting from the potential contributions of their victim, and, as a result, weaken the community as a whole.

➤ They increase the present or eventual likelihood of retaliation by the object of racist actions.

➤ They go against many of the democratic ideals upon which India and other democracies were founded.

➤ Racism is illegal, in many cases.

What needs to be done?

➤ One approach to changing stereotypes and prejudice is by changing social norms—for instance, through education and laws enforcing equality.

➤ Intergroup contact should be made. One factor that increases this motivation is **interdependence**—*a state in which the group members depend on each other for successful performance of the group goals*. The importance of interdependence can be seen in the success of cooperative learning techniques, such as the jigsaw classroom. The **jigsaw classroom** is an approach *to learning in which students from different racial or ethnic groups work together, in an interdependent way, to master material.*

➤ India's external affairs and home ministries need to make concerted efforts to sensitize the police and the public at large about how racism contradicts the nation's past and present ideals.

➤ One way to do this is to raise awareness about how Indians and people of Indian origin are able to live peacefully and prosper in African countries and other parts of the world.

➤ In addition, the external affairs ministry should have a department dedicated to addressing human rights violations against foreigners in the country. The government should pass and enforce appropriate and corrective laws to tackle racism in India.

➤ Indian NGOs also have a role to play. They can take cue from their counterparts assisting distressed Indians in foreign countries, a role recognised by the external affairs ministry. Those working on human rights need to speak out against discrimination and racist violence, and provide positive action and legal support to the victims. They could also lead community awareness programmes against racism and push for adequate legislation, drawing on the Durban Declaration and Programme of Action.

➤ As most Africans in India are students, the human resources ministry needs to hold anti-racism campaigns on university campuses. Educational institutions in India should be told about the importance of scholarship programmes for Africans. Efforts should also be made to educate Indian students about African countries.

➤ Students from Africa should be given appropriate lodging and boarding facilities in and around the campus or in the vicinity of other students' residences instead of being confined to a few 'African' neighbourhoods. Such geographical demarcations increase the risk of alienation and stigmatisation.

➤ An Education Council, should be created that actively promotes opportunities for studying in India for aspiring higher education students across Africa. India has many tertiary institutions that focus on primary areas crucial for Africa's development especially in terms of vocational and technical skills, therefore India should place more emphasis on this.

➤ Encourage the study of India or South Asia across African universities. India has many professors and faculties well versed in African studies, and yet unfortunately there are little to no expertise on India in Africa.

➤· The MEA should work in collaboration with state owned media and privately owned media in India to facilitate and encourage more cover of Africa on Indian media to give a more nuanced view of the continent. Additionally, it should take

a similar strategy in Africa requesting and collaborating with state owned media or media players across Africa, to pay attention to Indian media and dedicate more coverage of India on the continent.

► African diplomatic missions in Delhi may gather together interested friends of Africa to establish a Pan Africa-India Friendship Foundation and collaborate with it in the task to strengthen P-to-P relations.

Way forward

At a time when the Union government has initiated a major diplomatic outreach to Africa as exemplified by its hosting of the India-Africa Forum Summit in 2015, such racial attacks on Africans jeopardise government efforts. African students come to India dreaming of obtaining quality education in a diverse country. However, many end up bitterly disappointed when they face abuse and harassment. Not only is this bad for India's international image, if India cannot control racist outbreaks at home it reduces New Delhi's moral and diplomatic space to protest when racist attacks are perpetrated against Indians abroad.

While it goes without saying that a zero-tolerance policy must be adopted towards racial attacks, there's also a need to address derogatory perceptions prevalent among people about Africans. Widespread ignorance exists about African culture and history as exemplified by the usage of terms such as 'Nigerian' and 'habshi' for all African visitors. For such racism to exist in the 21st century is unconscionable. Hence, community-level programmes need to be initiated to bring locals and Africans together and foster greater understanding.

Conclusion

Racism has existed throughout human history. It may be defined as the hatred of one person by another — or the belief that another person is less than human — because of skin color, language, customs, place of birth or any factor that supposedly reveals the basic nature of that person. It has influenced wars, slavery, the formation of nations, and legal codes.

However a much more concerted effort must be made by the Indian government, and Indian citizens, intellectuals and artists to make Africans feel safe in India. The police too, who are often implicated in these racist incidents, must be trained, and issues of racism within the force seriously prosecuted. Students on Indian campuses must be made aware of racism towards foreign students and shown that it is no different from the racism faced by Indian students abroad, which India so vehemently denounces. In addition, for a country of India's size and given the increasing number of Africans coming to India to study and for medical tourism, a far wider cultural engagement with the continent is necessary not only to combat the malevolent racism, but also to expand the global horizons of the Indian public.

ECONOMIC ISSUE

Consolidation in Banking Sector:
PROS AND CONS

> **Context**
>
> *Government of India has decided to merge 5 associate banks of State Bank of India, and Bharatiya Mahila Bank with SBI. It will significantly help in meeting the needs of growing Indian economy; will help increase Indian banks international standing, customer satisfaction. At the same time doubts are being raised about the potential threats to stability of the economic system, dominance of one bank, reduced competition. Therefore there is a need to ensure that benefits are maximized and risks are reduced by better planning and regulation.*
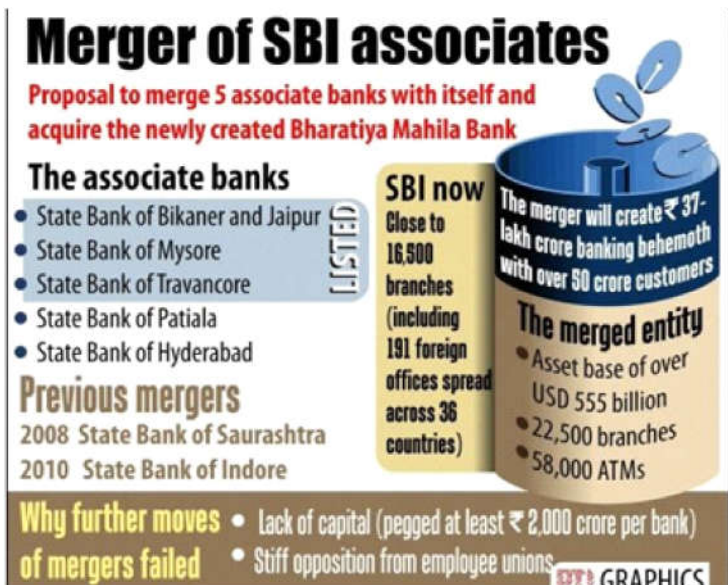
Introduction

The five banks set to merge with SBI are State Bank of Bikaner and Jaipur, State Bank of Travancore, State Bank of Mysore, State Bank of Hyderabad and State Bank of Patiala. SBI will also absorb Bharatiya Mahila Bank. In the past, SBI has absorbed two other associates – State Bank of Saurashtra in 2008 and State Bank of Indore in 2010. These mergers were supposed to pay the way for an accelerated phase of consolidation involving SBI and its associates, but this has not happened.

With banks being getting consolidated what will be market position?

State Bank of India's associate banks, Bharatiya Mahila Bank will be merged with State Bank of India. The new entity will be among the top 50 banks in the world, with a balance sheet of around Rs 41 trillion, 277,000 employees, 22,500 branches and 500 million customers.

Merger of SBI associates

Proposal to merge 5 associate banks with itself and acquire the newly created Bharatiya Mahila Bank

The associate banks
- State Bank of Bikaner and Jaipur (LISTED)
- State Bank of Mysore (LISTED)
- State Bank of Travancore (LISTED)
- State Bank of Patiala
- State Bank of Hyderabad

Previous mergers
2008 State Bank of Saurashtra
2010 State Bank of Indore

SBI now Close to 16,500 branches (including 191 foreign offices spread across 36 countries)

The merger will create ₹ 37-lakh crore banking behemoth with over 50 crore customers

The merged entity
- Asset base of over USD 555 billion
- 22,500 branches
- 58,000 ATMs

Why further moves of mergers failed
- Lack of capital (pegged at least ₹ 2,000 crore per bank)
- Stiff opposition from employee unions

PTI GRAPHICS

Why bank consolidation and what will be benefits?

- ➤ Indian economy is growing at a pace which is one of the highest in the world. The sustainable growth requires efficient financial system, which can provide capital for large scale investment in infrastructure sector. With many of Indian companies looking for large investments locally and internationally, mergers and acquisitions in other sectors going on (eg. merger in Telecom sector), it is the need of the hour.

- ➤ Market Share of PSBs is on decline. Their share in total deposits fell from 77% in 2012 to 71% in 2016. Credit share also fell from 76% to 68%. Therefore there was need to bring more professionalism into the PSBs. With large number of small banks it would have been difficult for government to carry out this task.

- ➤ Along with this the banking sector is looking to tackle NPA problem, with losses mounting. Merger will help in boosting the profile of the bank, will help it access capital at low cost, will help in reducing its operational cost and thus losses.

- ➤ With better synergies, technical and professional capacities the NPA problem can be tackled in much more efficient way. It may also reduce government burden in the form of need for recapitalization of banks.

- ➤ Corporate are moving towards bond market because of increasing NPAs and high cost of borrowing, which could further hurt the profitability of banks. Therefore it makes sense to make it easy for borrowers to borrow from banks by providing them access to a single bank with large sums of money, having diversified products, professionalism and low cost of funding.

Benefits of the merger

Merger of banks will provide a large number of benefits to economy, banks and customers. Merger will have following benefits:

For Economy:

- ➤ A large bank will be much more efficient in mobilization and allocation of capital. The needs of large scale infrastructure projects will be fulfilled in much better way. The issue of lack of co-operation among various banks will be removed.

- ➤ With greater synergies, greater reach the cost of internal operations of the banks will be reduced, which in turn will reduce cost of lending. The companies accessing funds will benefit from it.

For Bank:

Banks will benefit from economies of scale, cost savings, improved standards, reduced manpower, greater use of technologies etc.

- ➤ It will help in improving the efficiency by benefiting from economies of scale and improving technical efficiency.

- ➤ It will help smaller banks and their workers to get accustomed to latest managerial practices, new products, latest technologies which will help them improve their efficiency and standards.

- ➤ It will also reduce artificial competition between the PSB banks, wherein they were involved in getting same set of customers, with same set of needs and banks offering similar products.

- ➤ The costs of banking operations like renting of office spaces, cost of processing of retail customers, administration (similar posts at district will be abolished), inter-bank clearance transaction charges etc will be reduced.

For Customers:

➤ Customers will benefits from greater basket of products, more efficient staff, single source for multiple products and in a way improve their overall experience.

For Employees:

➤ The employees of associate banks will benefit in the form of better access to new technologies, better working culture; whereas employees of SBI will benefit from the more localized knowledge and experience of associate banks. Therefore it will be beneficial for both.

What are the possible problems and issues?

Though bank merger provides lot of benefits it is not without its problems and challeneges in the form of overall financial stability, one bank dominance and transition to new system for employees and customers.

➤ **Impact on financial stability:** World over it has been proved that large banks does not improve the overall financial stability. Any systemic risks to the big bank can create problems for whole economy. Big banks have created stability problems as happened in Japan in 1990s, US during financial crisis and in China.

➤ **Situation of one bank domination:** SBI after merger will be 5 times larger than its nearest rival. What impact it will have on competition in the banking sector needs to be seen. It will also create interests within political class, employees and managers of the bank. Managing such a behemoth will need skillfulness on part of all stakeholders.

➤ **Does it solve NPA problems:** There is no direct evidence that will help in solving the NPA problem which is afflicting the banking sector.

➤ **Political interference: PSBs** In India are known to suffer from political interference. With such a large bank the inducements to interfere will be much more.

➤ **Employees:** Many employees will have to opt for VRS (Voluntary Retirement Scheme), remaining will have to adapt to new culture, practices. This will create some confusion, aberrations which needs to sorted out.

➤ Immediate negative impact would be from pension liability provisions (due to different employee benefit structures) and harmonisation of accounting policies for bad loans recognition.

➤ It is also said that the regional flavour and regional focus of small banks will be lost. Along with this the problems which were faced by associates bank may get transferred to big bank.

Way forward

It is said that despite some difficulties and challenges it is a welcome step. Efforts should be towards minimization of interim glitches and difficulties for staff, customers. Proper training mechanisms for staff members, support system for customers must be created. In the long run the banking regulator must look at the competition scenario in banking sector and enhanced regulatory practices to minimize the associated risks.

ECONOMIC ISSUE

Mahila Bank and
REPERCUSSIONS AFTER MERGER

Context

> *The Bharatiya Mahila Bank (BMB) was created to enhance access to financial services at affordable rates, promote asset ownership, entrepreneurship for the purposes of inclusive growth and empowerment of women in general.*
>
> *The Bank was established by the UPA government on November 19, 2013 (Indira Gandhi's Birth Anniversary). Starting with seven branches, it grew to 103. It was intended to provide financial services, mostly to women and women self-help groups. India became the third country in the world to have a bank especially for women, after Pakistan and Tanzania.*
>
> *However, the uniqueness of the bank was slowly eroded as other competitors launched all-women branches and customized products for women. The Centre decided to merge it with SBI to consolidate public sector banks. Around 500 employees and 4 lakh customers will now be absorbed by the SBI.*

About Bharatiya Mahila Bank (BMB)

➤ With the increasing wealth that women control, female clients are an important part of the client population for banks and will continue to be in future also. These economically powerful consumers are looking for female-friendly banks who offer financial advice for women and their families.

➤ Only 26% of Indian women have bank account with a formal financial institution in comparison to 46% of men.

➤ Considering the lower participation of women in financial institutions, the government had come up with the opening of Bharatiya Mahila Bank (the women only bank) in 2013 to ensure more participation of women in it.

➤ The aim of the bank was to inspire people with entrepreneurial skills and in conjunction with NGOs, plan to locally mobilize women to train them in vocations like toy-making or driving tractors or mobile repairs.

➤ The Bank was also asked to place emphasis on funding for skills developments to help in economic activity with concessional interest rates loans to women.

➤ One of the other objectives of the bank was to promote asset ownership amongst women customers which will reduce their risk of suffering from domestic violence.

Why decision for merger taken?

- ➤ However with increasing competition among the banking institutions, many other banks have also introduced the women only branches and customized products for women across various cities of the country and in rural areas also (especially the SBI).

- ➤ With lower/no penetration of Bharatiya Mahila Bank Branches, the process of women' inclusion was slow especially in rural areas where women are the most who are unbanked. For more penetration, BMB would still require 4-5 years or more to include effective number of rural population to bank with.

- ➤ The present Government's aim is to bring many unbanked persons into the mainstream of banking institutions especially in rural areas require faster inclusion for effective delivery of various government schemes such as Jan-Dhan Yojana and Direct Benefit Transfer Scheme.

- ➤ Considering the urgent need for faster inclusion of women (especially in rural areas) into financial institution, the Bharatiya Mahila Bank has been merged with the State Bank of India to expedite the outreach of banking services to women effective from April 1st 2017.

- ➤ The objectives of affordable credit to women as well as propagation of women-centric products need to be quickly achieved through a wider network and lower cost of funds.

Why Merger with SBI?

- ➤ The decision to merge BMB with SBI has been taken in view of the advantage of the large network of SBI among other things.

- ➤ In the three years since BMB was established, it has extended loans of Rs 192 crores to women borrowers, while the SBI group has provided loans of about Rs.46,000 crore to women borrowers.

- ➤ SBI has a large outreach of more than 20,000 branches and lowest cost of funds in the sector. Out of the total workforce of around 2 lakh employees in SBI, 22% are women.

- ➤ SBI group already has 126 exclusive all-women branches across the country while BMB has only seven.

- ➤ The proportion of administrative and managerial cost in BMB is much higher to reach the same coverage. For the same cost, a much higher volume of loans to women could be given through SBI.

Benefits of Merger

- ➤ Merger will help BMB, to expand its coverage beyond its outreach gearing up small banks at par with international standards for innovative products and services with the accepted level of efficiency.

- ➤ This will also help in improving the professional standards by ending the unhealthy and intense competition among BMB. In the global market, the Indian banks will gain greater recognition and higher ratings with improved competitions.

- ➤ Technical inefficiency is one of the main factors responsible for banking crisis. The scale of inefficiency is more in case of small banks. Hence, merger would be good.

- ➤ The size of each business entity after merger is expected to add strength to the Indian Banking System in general and Public Sector Banks in particular. However,

the strength of the SBI is going to be increased with more effective and centralized management.

► Synergy of operations and scale of economy in the new entity will result in savings and higher profits.

► A great number of posts of CMD, ED, GM and Zonal Managers will be abolished, resulting in savings of crores of Rupee.

► Customers will have access to fewer banks offering them wider range of products at a lower cost.

► Mergers can diversify risk management.

► The recapitalization burden to the PSBs on the central government in case of crisis will come down substantially which will help in meeting more stringent norms under BASEL – III, especially capital adequacy ratio.

► From regulatory perspective, monitoring and control of less number of banks will be easier after mergers. This is at the macro level.

Arguments against Merger

► Immediate negative impact of merger would be from pension liability provisions (due to different employee benefit structures) and harmonization of accounting policies for bad loans recognition.

► Mergers will result in shifting/closure of many ATMs, Branches and controlling offices, as it is not prudent and economical to keep so many banks concentrated in several pockets, notably in urban and metropolitan centers.

► New power centers will emerge in the changed environment. Mergers will result in clash of different organizational cultures. Conflicts will arise in the area of systems and processes too. The weaknesses of the small banks may get transferred to the bigger bank also.

► Also, India right now needs more banking competition rather than more banking consolidation. In other words, it needs more banks rather than fewer banks. This does not mean that there should be a fetish about small-scale lending operations, but to know that large banks are not necessarily better banks.

Conclusion

► Given the economic scenario considering the increased banking inclusion in India, the merger is a good step to reach the far flung areas especially to the women who are absent from the mainstreaming of banking institutions. Since the merger is about people, a huge amount of planning is required to make consolidation process smoother. However, the consolidated effort from the part of the government, the banking institution and customer is needed to bring the positive result of merger.

INTERNATIONAL ISSUE

Global Initiative Launched to
FIGHT FAKE NEWS

Context

> *The post-truth era, widespread use of internet and proliferation of digital platforms have accorded to new importance to the credibility of news items. When 'news items' have the possibility of changing the political discourse, influencing elections, fomenting tensions, rebellions there is need for media outlets, governments, business & tech giants and public at large to come together to fight the epidemic of fake news. As part of this effort 'the News Integrity Initiative" was launched by Facebook, Google, Mozilla and other tech giants.*

What is fake news?

According to The Guardian, Fake news is a type of **hoax or deliberate spread of misinformation** (false information), be it via the traditional print or broadcasting news media or via Internet-based social media. To qualify as fake news, a story has to be written and published with the intent to mislead in order to gain financially or politically.

➤ **The driving forces** behind this false information are incredibly diverse and range from simple error, misunderstandings or misinterpretation all the way to malpractice or even willful malice by sources attempting to drive a particular agenda. Malicious sources can range from governments spinning a false narrative to scammers trying to make a quick buck.

➤ Expansion of digital mediums of communication, social media platforms like **Facebook newsfeed** give new wings to fake news.

➤ Disinformation (the purposeful construction of true or partly true bits of information into a message that is, at its core, misleading) has become the main vehicle in post-truth era, where truth is mixed with falseness to influence the minds of the populace.

What is the new initiative to tackle fake news?

A group of tech industry leaders, academic institutions, non-profits and other organizations are jointly launching a $14 million fund to support the **News Integrity Initiative**, a global consortium focused on helping people make informed judgments about the news they read and share online.

The Initiative's mission is

➤ to advance news literacy,

➤ to increase trust in journalism around the world, and

➤ to better inform the public conversation.

The initiative will fund applied research and projects, and convene meetings with industry experts. The initiative's mission is "to advance news literacy, to increase trust in journalism around the world and to better inform the public conversation".

The founding funders are **Facebook**, the **Craig Newmark Philanthropic Fund**, the **Ford Foundation**, the **Democracy Fund** and others.

HOW TO SPOT FAKE NEWS

CONSIDER THE SOURCE
Click away from the story to investigate the site, its mission and its contact info.

READ BEYOND
Headlines can be outrageous in an effort to get clicks. What's the whole story?

CHECK THE AUTHOR
Do a quick search on the author. Are they credible? Are they real?

SUPPORTING SOURCES?
Click on those links. Determine if the info given actually supports the story.

CHECK THE DATE
Reposting old news stories doesn't mean they're relevant to current events.

IS IT A JOKE?
If it is too outlandish, it might be satire. Research the site and author to be sure.

CHECK YOUR BIASES
Consider if your own beliefs could affect your judgement.

ASK THE EXPERTS
Ask a librarian, or consult a fact-checking site.

IFLA
International Federation of Library Associations and Institutions

What else can be done to fight fake news?

A number of steps or efforts can be made to tackle fake news. These include efforts from media organizations, governments, public etc.

➤ **Awareness creation and teaching:**

Telling people students about what a fake news looks like:

Is the story missing a byline? Is the headline in ALL CAPS? Is there excessive punctuation? Are they promising you something "the media" doesn't want you to know?

Who published it? Is the tone a little sensational? Is the content genuinely trying to inform you, or just trying to mislead you.

➤ **Accountability:** It must be ensured that those who published fake news are held accountable through penal provisions.

➤ **Information availability and reliability:** Fake news rely on absence of credible information. Therefore governments, media houses must try to provide credible information to people to fight disinformation campaign with information campaign. Facebook has also ramped up efforts to flag news stories that may be false, and has launched a "journalism project" that aims to support the news ecosystem.

➤ **Using technology** like algorithms, Artificial intelligence to identify fake news. But this method requires higher levels of sophistication which is missing at present.

➤ **Attacking on the funding source:** Facebook and Google have already taken steps to cut off advertising revenues to news sites promoting misinformation.

Some other efforts to tackle fake news world over

➤ **The Czech government's interior ministry**, for instance, has opened a **Centre Against Terrorism and Hybrid Threats** in a bid to fight fake news. The centre was set up after 40 Czech language websites emerged containing false stories, predominantly about migrants. Specialists working for the centre are attempting to counter false information via a **dedicated Twitter account.**

➤ **Facebook is already partnering with fact-checking organisations** in Germany and France. As part of a recent update, users are able to flag articles they suspect contain false information. These are then handed over to an independent evaluation centre. When a false story is identified, rather than being removed, it is tagged with a warning that it contains fake news and appears lower down in users' feeds.

➤ **Cross Check,** a collaborative verification programme involving technology firms including **Facebook a**nd **Google.**

Way forward

Since fake news can have devastating effect on the peace, stability, communal harmony, polity of a nation all stakeholders must come together and try to understand the ecosystem of the fake news and then attack on that ecosystem. Otherwise it will be very difficult to curb it. All kinds of interventions like policy, technological, civil society must be ensured for it.

SOCIAL ISSUE

Anthropological Survey
OF INDIA

Context

" *The Anthropological Survey of India (AnSI) is a premier research organisation under the Ministry of Culture which conducts bio-cultural investigation/research on India population, collects and preserves documents of scientific interest about the people of India.*

A recent AnSI publication has brought to the fore startling revelations about the Particularly Vulnerable Tribal Groups (PVTGs) in the country including the fact that no baseline surveys have been conducted among more than half of such groups.

Background

➤ Founded in 1945 in Varanasi, shifted to the Indian Museum at Calcutta (Kolkata) in 1948, the Anthropological Survey of India (AnSI) is the apex Indian organisation involved in anthropological studies and field data research for human and cultural aspects, working primarily in the fields of Physical Anthropology and Cultural Anthropology.

➤ While maintaining a strong focus on indigenous populations, it also attempts to document the cultures of other communities and religious groups.

➤ Headquartered at Kolkata and branches in Port Blair, Shillong, Dehra Dun, Udaipur, Nagpur and Mysore in addition to two field stations at Jagdalpur and Ranchi, the Anthropological Survey of India through its anthropological research contributes in respect of the biological, social and cultural heritage of the country.

Objectives

➤ To study the tribes and other communities that form the population of India both from the biological and cultural point of view.

➤ To study and preserve the human skeletal remains, both from modern and Archaeological.

➤ To collect samples of arts and crafts of the tribes of India.

➤ To function as a training center for advanced students in anthropology and for administration.

➤ To publish the results of the researches.

Highlights of the Survey

➤ In its recent baseline surveys the AnSI has published a book revealing that of the 75 Particularly Vulnerable Tribal Groups (PVTGs), baseline surveys exists for about 40 groups only, even after declaring that there are 75 PVTGs.

➤ Among the 75 listed PVTG's the highest number are found in Odisha (13), followed by Andhra Pradesh (12), Bihar including Jharkhand (9) Madhya Pradesh including Chhattisgarh (7) Tamil Nadu (6) Kerala and Gujarat having five groups each. The remaining PVTGs live in West Bengal (3), Maharashtra (3), two each in Karnataka and Uttarakhand and one each in Rajasthan, Tripura and Manipur. All the four tribal groups in Andamans, and one in Nicobar Islands, are recognised as PVTGs.

➤ Base line surveys are done to precisely identify the PVTG families, their habitat and socio-economic status, so that development initiatives are implemented for these communities, based on the facts and figures. The publication emphasises that State governments must urgently conduct such surveys to arrive at accurate demographic and socio-economic figures of the PVTGs.

➤ The baseline survey highlights that there is a need to revise the list to avoid overlapping and repetition among the various PVTGs. For instance, the list contains synonyms of the same group such as the Mankidia and the Birhor in Odisha, both of which refer to the same group.

➤ Some of the PVTGs are distributed in more than one State. The Birhor are recognised as a PVTG in four States, while 10 other group are PVTG in two States, namely the Sahariya, Kurumba, Koraga, Korwa, Jenu Kuruba, Kattunayakan, Katkari/Kathodi, Kharia, Kolam, and Lodha.

➤ By calculating and fixing the above problems, the number of PVTGs at the national level would be 63 as per the publication.

➤ Regional and State-specific variations in welfare schemes for PVTGs has also been highlighted. While Odisha has established exclusive micro-projects for the PVTGs, there are none such in for the five PVTGs in Gujarat.

➤ In Tamil Nadu, development schemes are being monitored through the Tribal Research Centre, Ooty, and implemented by the State government. However, in Karnataka, all affairs of two PVTGs are handled by the Social Welfare Department, which extends some schemes as per their knowledge, barely receiving any professional advice. Only recently, the Karnataka Tribal Research Centre was been established at Mysore while many States did so decades ago.

➤ There is an urgent need to come up with the exact number of PVTGs. This would do away with overlapping names and go a long way in having a clear idea about the tribes and implementing welfare schemes directed at the communities.

Unequal Treatment

➤ Many of these PVTGs are the victims of unequal treatment by the states. In some cases, a PVTG receives benefit of welfare schemes only in a few blocks in a district, while the same group is deprived in adjacent blocks.

➤ The reason is that micro-projects extend benefits only within their jurisdiction. For example, the Lanjia Saora are recognized as a PVTG across Odisha but the micro-projects are established only in two blocks, and the benefits are catered to by micro-projects in these blocks only, while the rest of the Lanjia Saora are treated among the Scheduled Tribes (STs).

Huge variation in Population

➤ The Survey also highlights that there is a huge variation in the number of PVTGs ranging from a few individuals as in case of Great Andamanese, Onge and

Sentinelese and about a little more than a thousand people as in the case of Toda of Nilgiris.

► Although PVTGs are slowly witnessing decadal increase in their population, quite a few still face stagnation such as the Birhor in central India. Some are declining like the Onge and Andamanese.

► Smallest population size among the PVTGs are the Senteneles (as per the last contact effort on March 9, 2005, groups of 32 and 13 persons were sighted at different places). They still shy away from others. The Great Andamanese (57 persons) and the Onge (107 persons in 2012 as per Andaman Adim Janjati Vikas Samiti) are the dwindling populations.

► In main land, the Toto of West Bengal (314 families with 1,387 persons as per 2011 census) and the Toda of Tamil Nadu (1,608, inclusive of 238 Christian Todas as per TRC, Udagamandalam [Ooty], 2011) have population less than 2000 persons. The Saharia people of Madhya Pradesh and Rajasthan are the largest among the PVTGs with population more than 4 lakhs.

► Literacy rate among the PVTGs has gone up significantly over the past. From a single digit literacy rate, the figures have increased to 30 to 40 % in many of the PVTGs. However, as is the case with entire India, female literacy rate is still considerably lower compared to male counterpart. There is also a sign of considerable increase in the age of marriage among PVTGs and the incidence of girl child being married while still being a minor, among these tribes has been decreasing.

About Particularly Vulnerable Tribal Groups

► The Particularly Vulnerable Tribal Groups (PVTGs) in general are socially as well as economically very backward in the sense that they have little access to the resources for their development, low rate of literacy, relatively small population size, dwindling in numbers and some of the groups are at the verge of extinction.

► Most of PVTGs are facing shrinkage of their original habitat even uprooted and getting cultural shock with some kind of alien diseases from which they are not able to cope. Due to changes in their ecological settings as well as outside influences, they are facing the problem of survival in general: either in their health and nutritional aspects or in the process of acculturation.

► The general health status of the PVTGs is not satisfactory as the ICMR report says that "Analysis of health indices of the tribal population in Odisha are worse than the national average: Infant mortality rate is 84.2; mortality rate under five is 126.6 children, underweight is 55.9%, anaemia in children is 59.8%, children with acute respiratory tract infection is 22.4%; children with dysentery and diarrhoea is 21.1%; women with anaemia is 64.9 per 1000. A high incidence of malnutrition has also been documented in the tribal dominated districts.

► Among the prevalent diseases; malaria, tuberculosis, respiratory tract infection, diarrhoeal disorders, skin infections including leprosy and iron deficiency anaemias mostly in women and children are the major diseases reported.

► Ministry of Tribal Affairs has revised the Central Sector Scheme known as "Development of Particularly Vulnerable Tribal Groups (PVTGs)", w.e.f. 1st April, 2015, under which the Ministry provide 100% financial assistance through State Governments for activities including housing, land distribution and land development, agricultural development, animal husbandry, construction of link roads, installation of non-conventional sources of energy or other innovative activity, for the comprehensive socio-economic development of PVTGs, based

on Conservation-cum-Development (CCD) Plan prepared by the concerned State Governments on the basis of assessment of their requirements. Under the Scheme, priority is accorded for their protection and improvement in terms of the social indicators like livelihood, health, nutrition and education, so as to decrease their vulnerability.

Conclusion

➤ Anthropological Survey of India swung in to an all round modernization drive by employing state-of-the-art technologies and infrastructural development in a big way to go ahead with its mandate. However, the need of the hour is to update the list by conducting proper survey and framing the policy and implementing them towards better upliftment of these PVTGs.

➤ Last but not the least, the focus of the government by involving several NGOs are utmost important to preserve the rich heritage culture and diversity of India.

ECONOMIC ISSUE

Working Analysis of
DEFENCE PSU

Context " *Public-sector defence companies, the backbone of India's indigenous defence production, presented a picture of overall optimism at the Aero India 2017. Various platforms developed by them like, combat aircraft (the Tejas and the licence-produced Su-30MKI), and helicopters like the Dhruv ALH, Light Combat Helicopter, and the Light Utility Helicopter were at display, showcasing the increased capabilities of Indian Defence Public Sector Undertakings (DPSUs). However the issues of delays in production, cost escalations, mismatch in demand and supply continue to plague Indian defence forces and DPSUs, which needs to be tackled urgently.*

Indian Defence Public Sector Undertakings and their performance

India has **eight Defence Public Sector Undertakings (DPSUs)** under the control of Department of Defence Production, Ministry of Defence (MoD). These Undertakings together with 39 Defence Ordnance Factories (OFs) form the backbone of India's defence production, and are responsible for making India self-sufficient in defence production.

The necessity of establishing DPSUs was to meet advanced weapons and equipments required by the armed forces, and work towards the goal of self- reliance in defence production.

Over the years, the Undertakings have grown both in size and as well as in their portfolio of items. However, the growth of DPSUs in terms of range and depth of production has not corroborated with the requirements of the Armed forces. This is evident from huge arms import by India. This in turn raises the question on the capability and efficiency of DPSUs in meeting the Armed Forces' requirements.

Some of the important achievements of Indian DPSUs in recent are:

➤ **Hindustan Aeronautics Ltd (HAL)**, India's premier defence aerospace manufacture is developing systems like Tejas, Dhruv ALH, Light Combat Helicopter, and the Light Utility Helicopter and licensed production of Su-30Mki. They are also in process to develop Indian Multi-Role Helicopter (IMRH), which is expected to compete with Russian helicopters in the range. A total of 40 Tejas Mk1 and 83 upgraded Mk 1As are on firm order for the IAF.

➤ **The Defence Research & Development Organisation (DRDO)**, set up to "develop cutting-edge technologies for the armed forces", has a mind-boggling total production value of Rs 2,60,000 crore. It along with **ADA (Aeronautical Development Agency)** had designed the Tejas, and is to start design work on the

Advanced Medium Combat Aircraft (AMCA). The AMCA is to incorporate fifth-generation technology, including stealth – not excluding radar-absorbent paint. DRDO has also developed **Airborne Early Warning and Control (AEW&C) system**, missile systems for defense forces.

➤ **Bharat Electronics Limited (BEL**) makes **defence electronics** for every Indian aircraft, naval ship, missile and land vehicles. Its very diversified product range includes radars, **electronic warfare equipment, Identification Friend or Foe, Head-up Displays, and electro-optical devices**. Such products have also been used to upgrade older aircraft like the Jaguar and Mirage 2000. It has developed Digital Flight Control Computer and the Radar Warning Receiver for Tejas.

➤ The **Council for Scientific and Industrial Research** had set up the **National Aerospace Laboratories (NAL**) for research and development as well as design work.

Issues in their performance

➤ **Huge arms imports:** According to Stockholm International Peace Research Institute (SIPRI), India is the largest importer of arms and account for 15% of total arms imports. This shows the gap between the requirement of defense modernization and indigenous capabilities, which has to be filled by DPSUs.

➤ **Quality control**: HAL still needs to enhance quality control as well as maintainability and reliability of its products, some of which, like the Intermediate Jet Trainer, have fallen by the wayside.

➤ **Demand–supply mismatch in requirements**: Navy has declined LCA-Tejas Naval version on grounds of its weight. Also Tejas is more suitable for air-defense but performance lacks in areas of payload capacity and range.

➤ **Design capacities of engines:** HAL still does not have an in-house design capability for engines. That is to be rectified with the design of two technology demonstrators, the HTFE-25 turbofan and the HTSE-1200 turboshaft helicopter engine. HAL could, some day, develop large engines for fighters and helicopters of its own design. Attempts to develop Nirbhay, subsonic missile have also not been fruitful.

➤ **Low level of exports:** Indian exports in the defence sector are meager, which also indicates the poor capabilities of Indian DPSUs. Though Indian exports in Missile were restricted because of Missile Technology Control Regime, but still they are far below.

➤ **Low labour productivity:** DPSUs in general suffer from low productivity compared to their counterparts in the global defence industry. The top five arms producing companies in the world together have an average labour productivity of $0.3 million; whereas the eight DPSUs' combined productivity is less than $0.06 million.

What are the steps taken in recent and what else needs to be done?

Government has taken a number of steps to ensure that DPSUs performance is improved.

➤ **Make in India and Defence Procurement Policy** initiatives of GoI are aimed at improving the manufacturing ecosystem in India. Focus on IDDM (Indigenously Designed, Developed and Manufactured) as the most favored route of procurement in defence acquisitions will benefit DPSUs.

➤ **Focus on co-production and transfer of technology** from foreign producers for example in Brahmos, Barak missile, Rafale fighter is going to improve the

technological know-how of the Indian DPSUs, which will improve their capacities in the long run.

➤ **India's entry into MTCR** will provide Indian DPSUs foreign markets for their exports of missiles, helicopter systems. This will increase their profitability, and provide them with revenues for future growth.

Though these steps will help but a lot needs to be done to ensure a quantum leap in the DPSUs performance. Issues like:

➤ **Autonomy:** There are accusations of too much interference in the functioning of DPSUs, which effect their human resource planning, project planning and results into failures and cost escalations of projects. Therefore these must be provided with operational autonomy with consequent accountability mechanisms. The example of **ISRO must be taken to** turnaround the DPSUs.

➤ **Performance audit: Shekatkar Committee** has recommended the performance audit of non-combat units of Ministry of Defence and this should be done quickly to analyze the shortcomings of DPSUs.

➤ **Collaborations** with industries, international organizations must be focused to provide synergies in defense production.

Conclusion

India with expanding economy and strategic interests spread across globe needs modernized armed forces, which in turn require domestic production capabilities.

Though the volume of production by DPSUs has increased over the years, the value addition by them has progressively decreased. This in turn indicates larger the production value lower the value addition. A deeper insight into companies' production profile reveals that most of DPSUs are over-dependent on external sources for raw material, components and spare parts, and capital goods for the production requirements. The over dependency is not costly, but raises the fundamental question of strategic importance of some of DPSUs.

Therefore great responsibility lies on the DPSUs for ensuring the modernization of the Indian armed forces. DPSUs must be provided with autonomy, funds, research collaborations and other strategic tie ups with likeminded countries to enhance their capacities.

GOVERNANCE ISSUE

Motor Vehicles (Amendment) Bill:
CRITICAL ANALYSIS

> **Context**
>
> *Motor Vehicles Amendment Bill, 2016 has been passed in Lok Sabha. Bill provides for amending the existing categories of driver licensing, recall of vehicles in case of defects, protection of good samaritans from any civil or criminal action, increase of penalties for several offences under the 1988 Act.*

Introduction

The Motor Vehicles (Amendment) Bill, 2016 has been listed for consideration and passage in the current Budget Session of Parliament. India, as a signatory to the Brasilia Declaration, intends to reduce road accidents and traffic fatalities by 50% by 2022.
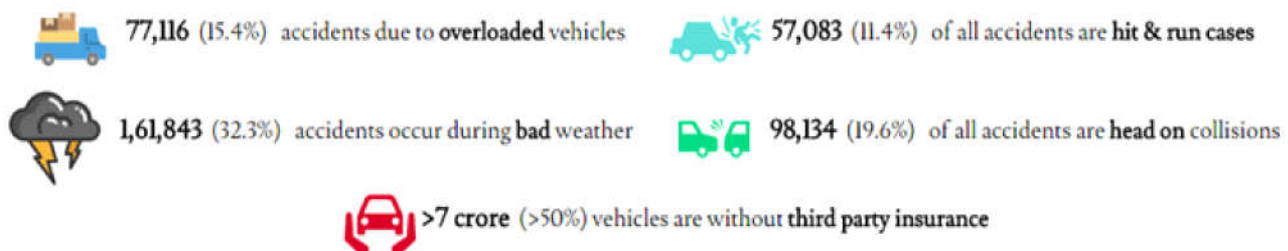
About Brasilia Declaration

Brasilia Declaration is a call to rethink transport policies in order to favour more sustainable modes of transport such as walking, cycling and using public transport.

It highlights strategies to ensure the safety of all road users, particularly by improving laws and enforcement; making roads safer through infrastructural modifications; ensuring that vehicles are equipped with life-saving technologies; and enhancing emergency trauma care systems.

The Brasilia Declaration encourages WHO and partners to facilitate the development of targets to reduce road traffic crashes and fatalities, and support the definition and use of indicators linked to the SDG targets related to road safety.

The World Health Organization's (WHO) global status report on road safety published this year states that 1.25 million people die due to road accident every year, making it a global health hazard. It is also the leading cause of death among people aged between 15 and 29.

Present scenario

77,116 (15.4%) accidents due to **overloaded** vehicles

57,083 (11.4%) of all accidents are **hit & run** cases

1,61,843 (32.3%) accidents occur during **bad** weather

98,134 (19.6%) of all accidents are **head on** collisions

>7 crore (>50%) vehicles are without **third party insurance**

Proposed changes

➤ **Cashless Treatment for Road Accident Victims:** The bill instructs the central government to develop a scheme to provide cashless medical treatment to people injured in road accidents within the first hour of its occurrence. This clause has been included in recognition of the fact that the likelihood of saving the life of a severely injured person is the highest if medical attention is given within the first 60 minutes.

➤ **Inclusion of Good Samaritan Guidelines:** The bill also incorporates the Good Samaritan guidelines which were issued by the Ministry of Road Transport and given the force of law by the Supreme Court on March 30, 2016, in their entirety. These guidelines protect Good Samaritans (bystanders who come forward, in good faith, to help road accident victims) from civil and criminal liability and make it optional for them to disclose their identity to the police or medical personnel.

➤ **Higher Penalties**: The bill increases the penalties for several offences.

   ◻ The minimum fine for being caught driving under the influence of alcohol or drugs has been increased from Rs.2,000 to Rs.10,000 and for rash driving; it has been increased from Rs.1,000 to Rs.5,000.

   ◻ People found driving without a seat belt can be fined Rs.1,000 and the penalty for driving without a helmet is a fine of Rs.1,000 along with a 3-month suspension of the offender's driving licence.

➤ **National Transportation Policy**: To establish a framework for road transportation planning, for granting of permits, and identify and set priorities for the road transport system. The policy is to be created in consultation with the various state governments.

➤ **Recognition of Offences Committed by Juveniles**: The bill also covers traffic violations committed by juveniles and places the responsibility on their guardians or on the owner of the motor vehicle involved. They will be let off only if it is proven that the offence was committed without their knowledge or that all due diligence to prevent it was exercised. Apart from this, the registration of the motor vehicle in question will be cancelled. Juveniles themselves will be tried under the Juvenile Justice Act.

If a vehicle is registered in the parent's name and a minor causes a fatal accident while driving it, the parent could go to jail for a maximum term of three years. This should discourage the culture of underage drivers causing mishaps while speeding or carrying out stunts.

The lack of awareness about the consequences of letting their children drive is common in many urban households. Instead of checking the menace, some parents take pride in letting their children drive young. And the offenders are getting younger every passing year. According to government data, the Delhi Police fined 225 juveniles for underage driving in 2015 alone. The menace of drink driving is even more widespread.

➤ **Aggregator services**: It defines an aggregator as a digital intermediary or market place and their services may be used by a passenger to connect with a driver for transportation purposes. It makes mandatory for these aggregators to obtain licenses and comply with the Information Technology Act (IT), 2000.

➤ **Increased Compensation for the Family of The Deceased**: If an individual dies in a hit and run case, the central government is required to provide a compensation of Rs.2 lakh or more to their family. Currently, the compensation provided for such cases is Rs.25,000.

➤ **Automated Fitness Training for Vehicles**: To test the fitness of motor vehicles by October 1, 2018. This move should do a better task of keeping unsafe vehicles off the road and reduce corruption in transportation departments.

➤ **Electronic Monitoring**: To ensure proper electronic surveillance on national and state highways and urban roads. The central government is supposed to create a comprehensive set of rules for this.

➤ **National Registry for Licenses and Registrations**: To unify and streamline the process of issuing and documenting registrations and licenses issued, the bill formalizes the creation of a 'National Register for Driving License' and a 'National Register for Vehicle Registration' through the Ministry of Road Transport and Highways' existing **Vahan** (for vehicle registry) and **Sarthi** (for driving licenses) platforms.

Other Apps

e-Challan is a comprehensive digital solution for transport enforcement and traffic police that is integrated with Vahan and Sarathi applications. It will provide a number of user friendly features covering major functionalities of the traffic enforcement system. It will provide improved transparency by connecting all stakeholders through a common system and ensuring data integrity; it will also provide ease of operations, efficient monitoring through digitization of records that will enhance the visibility of offenders; and overall better traffic management.

m-Parivahan is a citizen centric app that will facilitate access to various transport related services. The app provides for virtual driving license and registration certificate through back end connection to Transport National Register. If a vehicle number is entered into the app, it will give full details of the car and the owner including his DL and RC. This will provide a way to check genuineness of a vehicle and driver, help in passenger safety when hiring a driver or when buying a second hand vehicle. However, the user has to be registered so that his credentials can be established. One of the ways of doing this would be through an Aadhar based OTP.

The app will also facilitate good Samaritans through technology. They can report accidents by clicking pictures and reporting to traffic authorities in states and to RTOs, with the option of hiding their identity if they so wish. They can also report traffic violations. States will be asked to provide linkages to the 108 service for better response.

➤ To facilitate transport solutions for Divyang, the bottlenecks have been removed in respect of grant of driving licenses as well as alterations in the vehicles to make it fit for use of Divyang.

➤ **Recall of vehicles**: It empowers Union government to order for recall of motor vehicles if a defects in the vehicle may cause damage to the environment, or the driver, or other road users.

Implications

➤ The compensation for hit and run cases will be increased from Rs 25,000 to Rs 2 lakh. There is also a provision for payment of compensation up to Rs 10 lakh in the case of road accidents fatalities. To help road accident victims, "Good Samaritan" guidelines have been incorporated in the Bill.

➤ The driving training process has been strengthened enabling faster issuance of transport licenses. This will help in reducing the shortage of commercial drivers in the country.

➤ The Bill also proposes that in the case of offences committed by juveniles, the guardian/owner shall be deemed guilty. The juvenile would be tried under JJ Act. Registration of the motor vehicle will also be cancelled.

► With an aim to enhance road safety, the bill proposes to increase penalties, that it hopes will act as deterrent against traffic violations. Stricter provisions are being proposed with respect to offences like driving without licence, over-speeding, juvenile driving, drunken driving, dangerous driving, overloading etc.

► There is also a proposal to improve the registration process for new vehicles. Registration at the end of the dealer is being enabled and restrictions have been imposed on temporary registration, under the new Bill.

► Under the new Bill, the process for testing and certification of automobiles will be regulated "more effectively". The testing agencies issuing automobile approvals have been brought under the ambit of the Act.

► To bring harmony of the registration and licensing process, government proposes to create National Register for Driving Licence and National Register for Vehicle registration through "Vahan" & "Sarathi" platforms. This will facilitate uniformity of the process across the country.

► To improve delivery of services, e-governance is a highlight of the bill. This includes doing away with the requirements of educational qualifications for transport licenses, enabling online learning licenses, increasing validity period for driving licenses.

► There is also a proposal to mandate the automated fitness testing for the transport vehicles with effect from October 1, 2018. The government is of the opinion that this would reduce corruption in the transport department, while at the same time improving road worthiness of a vehicle. Penalties have also been proposed for deliberate violation of safety/environmental regulations.

► Stricter provisions for helmets have been introduced along with provisions for electronic detection of violations.

However, the Bill caps the maximum liability for third party insurance, but does not cap the compensation amount that courts can award. In cases where courts award compensation higher than the maximum liability amount, it is unclear who will pay the remaining amount.

Under the Act, compensation for hit and run victims comes from a Solatium Fund. The Bill creates a new Motor Vehicle Accident Fund in addition. With a Fund already existing to provide compensation for hit and run accidents, the purpose of the new Accident Fund is unclear.

To conclude, the Amendment is a welcome step as road accidents in India take more lives than natural disasters and diseases do and these figures are on the rise.

ECONOMIC ISSUE

Increased Regulation in Formal Banking Will Lead to
SHADOW BANKING

Context

" *Financial Stability Board, a regulators task force for G-20 economies, estimates that the Shadow Banking (SB) system makes up 25 to 30 percent of the total financial system of the world. According to their estimate, this largely unregulated sector was worth about $80 trillion in 2014 up from $26 trillion more than a decade earlier. While the sector's assets declined during the global financial crisis, they have since returned to their pre-crisis peak.*

There are concerns that more business may move into the shadow banking system as regulators seek to bolster the financial system by making bank rules stricter.

What is Shadow Banking?

The shadow banking system covers all financial intermediaries that perform bank like activities but are subject to little regulation. The term was coined by Paul McCulley in 2007.

Like traditional banks, shadow banks provide credit and liquidity but, unlike their traditional counterparts, they do not have access to central bank funding or safety nets like deposit insurance.

Shadow banking includes money market funds, private equity funds, hedge funds, securitization, securities lenders, structured investment vehicles, mobile payment system, pawnshops, peer-to-peer lending websites, bond trading platforms set up by technology firms and asset management companies. Broad definitions also include investment banks and mortgage brokers.

The type of entities which are called shadow banks elsewhere are known as the non-banking finance companies (NBFCs) in India.

How do Shadow Banking works?

Unlike traditional banks, shadow banks do not take deposits. Instead, they rely on short-term funding provided either by asset-backed commercial paper or by the repo market, in which borrowers offer collateral as security against a cash loan and then sell the security to a lender and agree to repurchase it at an agreed time in the future for an agreed price.

Shadow banks, which are often based in tax havens, invest in long-term loans like mortgages, providing credit across the financial system by matching investors and

borrowers individually or by becoming part of a chain involving numerous entities, some of which may be mainstream banks.

How increased regulation will lead to Shadow Banking?

Edge over traditional Banking- Since they do not take deposit they are not required to maintain SLR, CRR with central banks (these are parked in central banks by commercial to protect the interest of customers in case of financial insolvency), hence they have more liquidity with them which are utilized to serve the customer. Apart from CRR, SLR and the provision to Primary Sector Lending Norms also leaves very less scope to have more money in the hands of traditional Banks.

Cost efficient credit facility-Partly because of their specialization and partly because of liquidity in their hand they are in position to provide cost efficient credit facility to customers. More liquidity in their hands allows them to reduce per unit cost on loan.

Collateral free credit- In order to maintain sound functioning of Banking system the BASEL norms prescribe Banks to maintain a certain CRIR, hence the banks have limit in terms of providing collateral free loans to whereas shadow banking need not to maintain such CRIR and hence can provide collateral free credit. In this way it helps in increasing access to loans.

Risk taking ability- Shadow banking institutions like hedge funds often take on risks that mainstream banks are either unwilling or not allowed to take by various regulations of central banks. This means shadow banks can provide credit to people or entities that might not otherwise have such access.

Contraction of formal sector credit- Due to twin balance sheet problems viz. NPA and Corporate balance sheet in banking system, central banks have put strict regulation through its monetary policy tools. In that case banks are either hesitant to provide risk associated loans to customers or customers are unwilling to take loans because of high interest rate. This does not only affect only the companies but entire economy as a whole. However, in this situation the shadow banking acts as an important buffer for the real economy, providing an invaluable source of funding as bank credit contracted.

Formal banks are under stress- Shadow banks have flourished in part because the traditional ones, battered by losses incurred during the financial slump, are under pressure. Tighter capital requirements and fear of heavy penalties have kept them grounded. In China, where banks are discouraged from lending to certain industries and are mandated to offer low interest rates on deposits, shadow banks fill the gap. About two-thirds of all lending in the country by shadow banks are in fact "bank loans in disguise"

Critics worry that unlike banks, which lend against deposits from customers, non-banks loan money using investor's cash and rotating lines of credit.

Risks with Shadow Banking

Risk in financial system- As shadow banks do not take deposits, they are subject to less regulation than traditional banks. They can therefore increase the rewards they get from investments by leveraging up much more than their mainstream counterparts and this can lead to risks mounting in the financial system.

Avoid rules and cause financial crisis- Unregulated shadow institutions can be used to circumvent the strictly regulated mainstream banking system and therefore avoid rules designed to prevent financial crises.

Spread the problems to traditional banking system- Shadow banks can also cause a buildup of systemic risk indirectly because they are interrelated with the traditional

banking system via credit intermediation chains, meaning that problems in this unregulated system can easily spread to the traditional banking system.

Global financial crisis- As shadow banks use a lot of short-term deposit-like funding but do not have deposit insurance like mainstream banks, a loss of confidence can lead to "runs" on these unregulated institutions. Economist Paul Krugman said a run on shadow banks was "the core of what happened" to bring about the global financial crisis of the late 2000s.

Risk with collateral free loans- Shadow banks' collateralized funding is also considered a risk because it can lead to high levels of financial leverage.

Bubbles in the market- By transforming the maturity of credit — such as from long-term to short term — shadow banks fuelled real estate bubbles in the mid 2000s that helped cause the global financial crisis when they burst.

Conclusion

However, there has been cry all over the world to regulate the shadow banking sector. G 20 leaders have come up with regulatory norms for shadow banking in 2012. The United States and the European Union are already approving rules to increase regulation of areas like securitization and money market funds.

In the United States the Dodd-Frank Act, passed in 2010, made provisions which go some way towards regulating the shadow banking system by stipulating that the Federal Reserve would have the power to regulate all institutions of systemic importance.

In India, some of the regulatory measures include identifying systemically important non-deposit taking shadow banks (NBFCs in India's case) as those with asset size of Rs 100 crore and above and bringing them under stricter prudential norms (CRAR and exposure norms), issuing guidelines on Fair Practices Code, aligning the guidelines on restructuring and securitization with that of banks, permitting NBFCs-ND-SI to issue perpetual debt instruments, etc.

It is the constant endeavor of Reserve Bank to enable prudential growth of the sector, keeping in view the multiple objectives of financial stability, consumer and depositor protection, and need for more players in the financial market, addressing regulatory arbitrage concerns while not forgetting the uniqueness of shadow banking (NBFC) sector.

ECONOMIC ISSUE

Four GST Bills Passed
BY LOK SABHA

Context

> *GST on 29th March cleared its last legislative hurdle with the Lok Sabha giving its nod to the last batch of bills crucial for the implementation of this seminal tax reform. It paves the way for implementation of GST from July 1st. GST is the biggest indirect tax reform India has seen in decades and is expected to absolve several state level levies into one thus creating a uniform tax regime. This is expected to help the economy widen the tax base over a period of time, improve tax compliance and tax to GDP ratio and an example of co-operative federalism.*

About the Bills

GST is supposed to eliminate the cascading effects of taxes on production and distribution, as well as differing centre-state tax regimes and bring in '**one country one tax' regime** which will facilitate ease of doing business.

The GST structure in India consists of:

➤ Central GST whose proceeds will go to union,

➤ State GST whose proceeds will go to states, and

➤ Integrated GST (CGST+SGST) whose proceeds will go to union and the destination state.

Since GST structure consists of 3 different GSTs, it required separate bills to be passed for the same. Along with this the states were apprehensive of any loss in revenue because of GST introduction; therefore Union assured them of compensation for first 5 years. All it required that following four bills be passed for the implementation of GST regime.

I. The Central Goods and Services Tax Bill 2017 (The CGST Bill)

II. The Integrated Goods and Services Tax Bill 2017 (The IGST Bill)

Multi-tiered system

Tax rate	Indicative items
0%	50% of the consumer price basket, including foodgrains
5%	Mass consumption items like spices and mustard oil
12%	Processed foods
18%	Soaps, oil, toothpaste, refrigerator, smartphones
28%	White goods, cars
28% plus cess	Luxury cars, pan masala, tobacco, aerated drinks

III. The Union Territory Goods and Services Tax Bill 2017 (The UTGST Bill)

IV. The Goods and Services Tax (Compensation to the States) Bill 2017 (The Compensation Bill)

➤ **The CGST Bill** makes provisions for levy and collection of tax on **intra-state** supply of goods or services or both by the Central Government.

➤ **IGST Bill makes** provisions for levy and collection of tax on **inter-state** supply of goods or services or both by the Central Government.

➤ **The UTGST Bill** makes provisions for levy on collection of tax on **intra-UT** supply of goods and services in the Union Territories without legislature. Union Territory GST is akin to States Goods and Services Tax (SGST) which shall be levied and collected by the States/Union Territories on intra-state supply of goods or services or both.

➤ **The Compensation Bill** provides for **compensation** to the states for loss of revenue arising on account of implementation of the goods and services tax for a period **of five years** as per Section 18 of the Constitution (One Hundred and First Amendment) Act, 2016.

The passing of these bills will pave way for the early introduction of the GST regime.

What are the issues raised?

While the passing of the four bills represents a decade-long achievement, there are a number of issues that are still to be considered as India moves towards the July 1, 2017 'deadline'.

1. Multiple GST tax rate structure and taxation through executive order:

➤ The Central GST Bill, 2017 allows the central government to notify rates at which CGST will be levied, subject to a cap of 20%, thus changing tax rate without requiring the approval of Parliament. Under the Constitution, the power to levy taxes is vested in Parliament and state legislatures. Though the proposal to set the rates through delegated legislation meets this requirement, the question is whether it is appropriate to do so without prior parliamentary scrutiny and approval.

➤ The Central GST Bill, 2017 provides for the centre to notify CGST rates, allowing for a multiple tax rate structure. The goods and services to be taxed at different rates will also be notified by the government. It may be argued that such a structure may be against the idea of a levying GST at a single rate on all goods and services.

➤ The most difficult task will be clubbing different goods and services in different brackets, because at present these are taxed at different rates by different states.

2. GST on services consumed across multiple states:

➤ Currently services are taxed by Center and the state where they are consumed does not matter. The final revenue is shared among states based on Finance Commission recommendations. Under GST in case of inter-state supply of services the tax will be shared between center and the state in which recipient party is registered. This means that while a service may be consumed across multiple states, the tax revenue would be attributed to the state where the recipient is registered or his office is located. This could lead to higher tax attributed to states that have more registered offices.

3. *Anti-profiteering authority:*

➤ The Central GST Bill allows the central government to set up an anti-profiteering authority by law. The authority will be responsible for ensuring that the reduction of tax rates on account of implementation of GST results in a commensurate reduction in prices. It may be argued that this may allow the government to monitor and control prices of all goods and services, which may interfere with the idea of these prices being determined based on their demand and supply in the market.

4. **Sharing of un-utilised money:**

➤ Un-utilised money in the GST Compensation Fund at the end of five year period will be apportioned by states in the ratio of their SGST collections in the last year of transition. This is against the general sharing of revenue which is based on Finance Commission formula.

Way forward

Though Indian GST may be not the perfect one according to the text book case as it reflects the competitive federalism aspects of India, where different states exert pressure to get their concerns accommodated. Despite of its weakness of multiple rates, exemption of certain items like tobacco and petroleum products and increased compliance burden for service sector, the GST regime is assumed to usher in significant positive changes in the Indian economy which will help it to make 'long jump' it needs.

DISASTER MANAGEMENT

Heat Waves IN INDIA

> **Context**
>
> *Extreme heat is fast becoming a serious threat, especially in developing countries where large numbers of poor are vulnerable to heat related illness and death. As the scorching summer season shows no sign of ebbing away, the farmers and daily wage labourers, who work in the construction and transportation sector, are the worst hit as their profession demands them to work in the Sun for most part of the day.*
>
> *From crop failures to power outages and human hazards, heat wave conditions can wreak havoc. Several Indian states have recorded more than 600 deaths due to the heat with temperature rising to 46-47 degrees in 2016 and the worst condition is awaiting in 2017.*
>
> *Hereby analyzing the steps needed to face the Heat waves, taking the case study of Ahmadabad.*

What is Heat Wave?

➤ A Heat Wave is a period of abnormally high temperatures, more than the normal maximum temperature that occurs during the summer season in the North-Western parts of India. Heat Waves typically occur between March and June, and in some rare cases even extend till July. The extreme temperatures and resultant atmospheric conditions adversely affect people living in these regions as they cause physiological stress, sometimes resulting in death.

Heat Wave Criteria by Indian Meteorological Department

➤ Heat Wave need not be considered till maximum temperature of a station reaches atleast 40°C for Plains and atleast 30°C for Hilly regions.

➤ When normal maximum temperature of a station **is less than or equal to** 40°C Heat Wave Departure from normal is 5°C to 6°C. Severe Heat Wave Departure from normal is 7°C or more.

➤ When normal maximum temperature of a station **is more than** 40°C Heat Wave Departure from normal is 4°C to 5°C. Severe Heat Wave Departure from normal is 6°C or more.

➤ When actual maximum temperature remains 45°C or more irrespective of normal maximum temperature, heat waves should be declared. Higher daily peak temperatures and longer, more intense heat waves are becoming increasingly frequent globally due to climate change.

➤ India too is feeling the impact of climate change in terms of increased instances of heat waves which are more intense in nature with each passing year, and have a devastating impact on human health thereby increasing the number of heat wave casualties.

Causes of Heat Waves in India

► Sudden descend of the air masses from the upper layer of the atmosphere, releasing heat resulting in the increase of temperature.

► Cyclonic pattern of clouds and winds over the Bay of Bengal drifted away, bringing an abrupt end of pre-monsoon showers. Sparse pre-monsoon showers, which brought less moisture than the normal, leaving large parts of the India arid and dry. This weather pattern coupled with El-Nino effect often increases temperature in Asia.

► Hot winds are blowing from the deserts and these are combining with the dry winds on surface, increases the temperature, eg, Loo.

► Scientists believe that one of the main reasons for these heat waves is the occurrence of El-Nino in the Pacific coast of South America which adversely affects the Indian monsoon. El-Nino results in less rain and corresponding higher temperatures.

► This view is in line with the findings of the fifth assessment report of the UN Inter-governmental Panel on Climate Change. This latest report has warned that the last three decades have been the warmest since 1850 when scientists started keeping records.

► The reason for these rising temperatures is primarily because carbon dioxide concentrations have increased 40% since pre-industrial times. The result is that both, the atmosphere and the oceans are going up.

► Glacial melting and increase in deforestation also adversely impact weather cycles.

► The report states that the total amount of carbon human beings emit should not exceed 800 gigatons in a year, but the year since 2015-16-17 more than 600 gigatons have already been emitted each year.

► The projections of this IPCC report both mid-term (2045 to 2065) and long-term (2081 to 2100) for South Asia and specifically for India can hardly be considered favourable. The report has warned that north and west India will face an increase in temperatures while south India will face an increase in tropical nights.

Health Impacts of Heat Waves

The health impacts of Heat Waves typically involve dehydration, heat cramps, heat exhaustion and/or heat stroke. The signs and symptoms are as follows:

► **Heat Cramps:** Ederna (swelling) and Syncope (Fainting) generally accompanied by fever below 39°C i.e, 102°F.

► **Heat Exhaustion:** Fatigue, weakness, dizziness, headache, nausea, vomiting, muscle cramps and sweating.

► **Heat Stoke:** Body temperatures of 40°C i.e, 104°F or more along with delirium, seizures or coma. This is a potential fatal condition.

A case study: Steps taken by Ahmadabad to face Heat waves

► May 2010, Ahmadabad, Gujarat's largest city with a population of 5.5 million, witnessed heat-waves with record-breaking temperatures that exacted a toll of 4,462 lives. This was 1,344 deaths more than the toll in May 2009.

► The high mortality shocked the Amdavad Municipal Corporation (AMC), public health experts and institutes, civil society groups and other stakeholders, who joined hands to prepare a comprehensive Heat Action Plan (HAP) in 2013.

➤ A first in South Asia, the HAP's primary goal was to create public awareness about extreme climates and necessary steps to tackle it and save lives.

Heat Action Plan

➤ The civic body of Ahmadabad tied up with the Georgia Institute of Technology, Rollins School of Public Health of Emory University, Indian Institute of Public Health, US based non-profit advocacy group-Natural Resource Defense Council and the UK based Climate and Development Knowledge Network (CDKN) for the innovative project.

➤ The plan involves community outreach initiatives, putting an early warning system in place that provides a seven-day advance forecast about high temperatures and impending heat-waves, and capacity-building of health-care professionals to treat people with heat-related complications.

➤ A nodal officer coordinates with other agencies and groups to implement the plan in summer when temperatures go up to 48°C. Once the HAP is activated, the AMC issues colour-coded alerts or heat warnings based on weather forecasts.

➤ For example, a yellow alert is issued when the temperature is expected to range from 41.1°C to 43°C while an orange alert indicates a range of 43.1°C-44.9°C. The red alert signifies extreme heat upwards of 45°C.

➤ Other actions envisaged in the plan include stocking hospitals and health centres with ice packs, extra water supplies in the slums and vulnerable areas, opening drinking water centres in the city, running fountains and water sprinklers at crossroads and in gardens, and altering school and college timings to ensure that children don't venture out during peak heat.

➤ Activated as the temperature rises 40°C, this Heat Action Plan have brought down the mortality rate by 20-25%.

➤ Impressed with the Ahmedabad model, civic bodies in Nagpur and Bhubaneswar have also launched a similar initiative bringing down the casualties caused by Heat-waves.

Conclusion

➤ With climate change fuelling more intense and frequent heat waves in India, a new scale of coordinated action is essential to protect communities, especially their most vulnerable members. As India gears up for another searing summer in 2017, state-level Heat Action Plans provide an opportunity for cities and states to take leadership in building heat-resilience in India and work with the National Disaster Management Authority and the Indian Meteorological Department to protect millions who may suffer from the dangerous health effects of extreme heat.

Bangladesh and
TEESTA RIVER

> **Context**
>
> *India and Bangladesh share 54 rivers between them. Despite setting up a Joint River Commission for water management as early as 1972, tensions between the countries on how to share Teesta water remain. At stake are the lives of countless people from West Bengal and Bangladesh who depend upon the river for survival. During the recent visit of Bangladeshi Prime Minister in April, the Teesta river water sharing issue came up and she described friendship as 'flowing river', which signifies generosity, give and take and expected India to sign river water sharing agreement in same spirit. But because of internal political compulsions the deal remains elusive.*

India Bangladesh Relation

India and Bangladesh share a unique bond and a special relationship rooted in a common cultural heritage, shared principles and values and forged by common aspirations and sacrifices of its people. India is committed to carry forward the mission of strengthening the historic bonds and impart a vision for the future that is durable and sustainable and conducive for the collective prosperity of the region.

Bangladesh's geopolitical importance for India is due to three factors.

➤ First, Bangladesh's location is a strategic wedge between mainland India and Northeastern seven states of the Indian Union. Each of these states is land-locked and has shorter route to the sea through Bangladesh. Currently, Kolkata port is used by these states for both domestic and imported cargo.

➤ Bangladesh is a natural pillar of "Look East Policy". A friendly Bangladesh that ensures no anti-India terror or insurgent activities can be carried out from its soil unlike in the past will substantially assist India in handling security problems in some of its restive north-east States. Importantly, a 'neutral' Bangladesh also ensures containment of an assertive China in this region, including along the strategic sea-lanes of the Bay of Bengal.

➤ Further the navigable rivers in India's Northeast that could connect West Bengal or Orissa ports pass through Bangladesh. The only entry to and exit from the Northeastern region of India is through the Shiliguri Corridor that is close to the Chinese border and within striking distance of Bangladesh. The Shiliguri Corridor is the most sensitive 'choke point' for the Indian Union.

However, the bone of contention between India and Bangladesh is Teesta River.
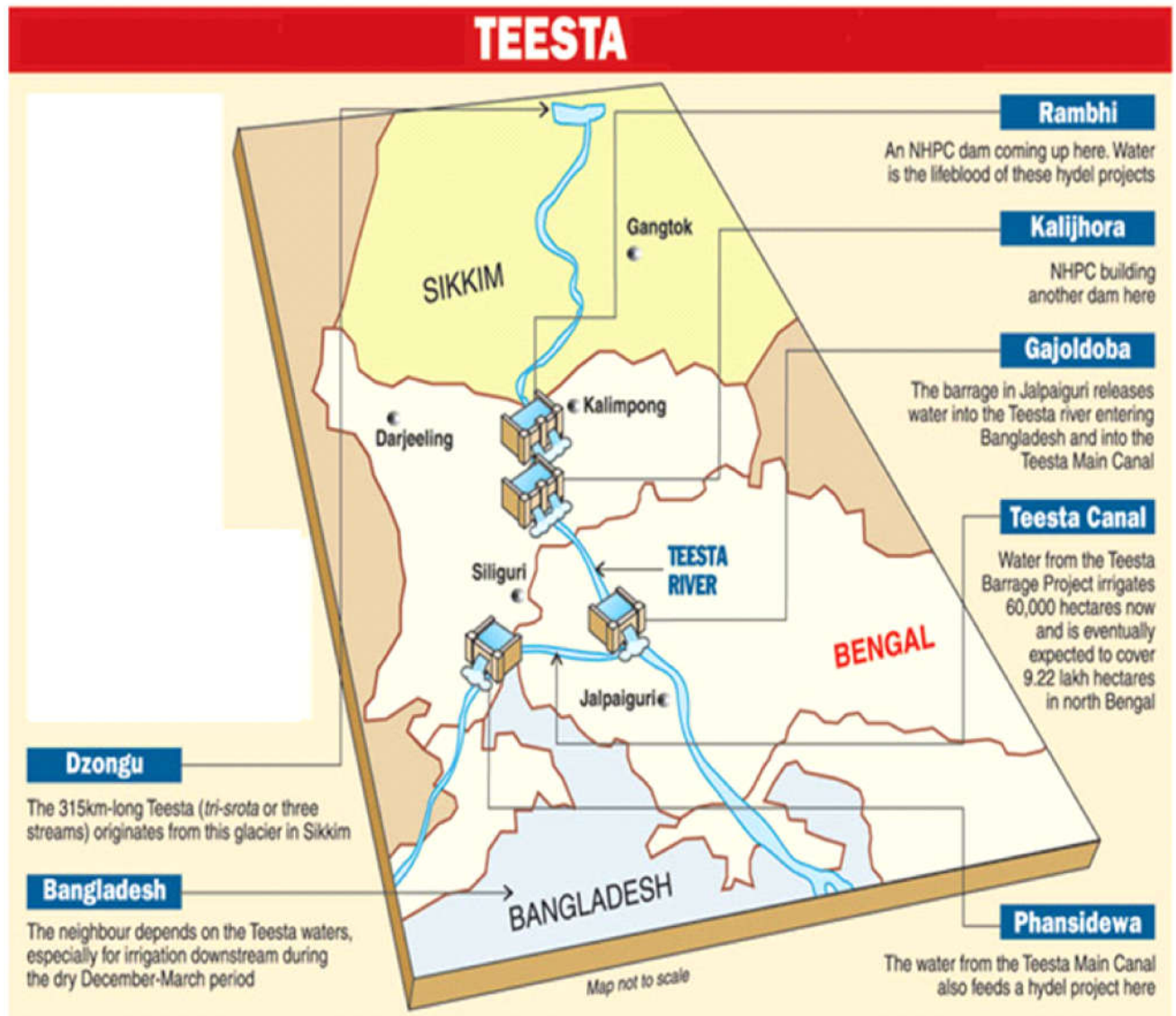
Teesta Water Agreement

About Teesta river

➤ **The Teesta River (or Tista River) is a 315 km (192 mi) long river** flowing through the Indian states of West Bengal and Sikkim, before going to Bay of Bengal through Bangladesh.

➤ Teesta originates from Kangse Glacier, Charamu Lake in Sikkim and 83% of its catchment area lies in India.

➤ Hydroelectric potential, use of water for irrigation, fisheries are some of the uses of Teesta river.

➤ It irrigates 9.22 lakh square KM of land in West Bengal, 67MW of electricity is generated and 6 hydroelectric power projects are running or planned across it. Therefore it can be said the lifeline of West Bengal especially the northern region.

History

➤ Historically, the root of the disputes over the river can be located in the report of the Boundary Commission (BC), which was set up in 1947 under Sir Cyril Radcliffe to demarcate the boundary line between West Bengal (India) and East Bengal (Pakistan, then Bangladesh from 1971).

➤ In its report submitted to the BC, the All India Muslim League demanded the Darjeeling and Jalpaiguri districts on the grounds that they are the catchment areas of Teesta river system. It was thought that by having the two districts, the then and future hydro projects over the river Teesta in those regions would serve the interests of the Muslim-majority areas of East Bengal. Members of the Indian National Congress and the Hindu Mahasabha opposed this. Both, in their respective reports, established India's claim over the two districts.

➤ In the final declaration, which took into account the demographic composition of the region, administrative considerations and 'other factors' (railways, waterways and communication systems), the BC gave a major part of the Teesta's catchment area to India. The main reason to transfer major parts of Darjeeling and Jalpaiguri to India was that both were non-Muslim-majority areas. Darjeeling had a 2.42% Muslim population while Jalpaiguri had 23.02% Muslims. The League's claim was based on 'other factors'.

➤ During East Bengal's days as a part of Pakistan, no serious dialogue took place on water issues between India and East Pakistan. After the liberation of East Pakistan and birth of a sovereign Bangladesh in 1971, India and Bangladesh began discussing their trans-boundary water issues.

➤ In 1972, the India-Bangladesh Joint Rivers Commission was established. In its initial years, the most important concerns of bureaucrats from both countries were the status of river Ganges, construction of the Farakka barrage and sharing of water from the rivers Meghna and Brahmaputra.

➤ Although the issues related to the distribution of water from the Teesta was discussed between India and Bangladesh, the river gained prominence only after the two countries signed the Ganga Water Treaty in 1996.

➤ In 1983, an ad-hoc water sharing agreement was reached between India and Bangladesh, whereby both countries were allocated 39% and 36% of the water flow respectively.

➤ Bangladesh wants equal sharing of the waters, especially during the Dec-May lean season period.

► The new bilateral treaty which was to be signed in 2013 during then PM visits expands upon this agreement by proposing an equal allocation of the Teesta River, as desired by Bangladesh. But the last time refusal of the West Bengal government put the deal into trouble and after that West Bengal Government has stuck to its stand.

Why West Bengal CM is opposing the deal?

► It is estimated that the Teesta River has a mean annual flow of 60 billion cubic meters but a significant amount of this water flows only during wet season(June-Sept) leaving scant flow during the dry season (October-May) wherein the average flow gets reduced to about 500 million cubic metres (MCM) per month.

► This creates issues of equitable sharing during lean season.

► Bangladesh has claimed that West Bengal's Gazaldoba barrage is 'unilaterally' channelizing a large volume of water on the Teesta, due to which the country's historic flow has been reduced to only 10% and its Teesta Irrigation Project has suffered.

► It is also claimed that since Bangladesh has higher per capita water availability, then why to equally share waters of Teesta. Apart from that after construction of

Teesta Barrage in 1998 by Bangladesh, farmers there are taking three crops per year.

Why Teesta Agreement is important for both countries?

➤ The Teesta river issue is not a water sharing issue alone but signifies:

   a) The importance of water as a future resource and the tensions it can create.

   b) The principles (technical, humanitarian) which should be employed to solve the dispute.

   c) Can determine the health of the relations among two nations.

➤ Bangladesh has been one of India's strongest allies in South Asia. And if New Delhi wants it to remain so, it has to move fast on signing an agreement on sharing the waters.

➤ Bangladesh is going for elections in 2019 and water sharing agreement can be a deciding factor. Though India should not take sides, but history tells that India-Bangladesh relations have been stringer under Awami League government.

➤ Regional integration, India's access to North East, security of North East are some areas in which Bangladesh co-operation is of great importance.

➤ Any delay and non-consideration of the Bangladesh's viewpoint may create political backlash in Bangladesh which may be utilized by China and other parties not having positive correlation with India.

Important Agreements/MoUs entered between GoI and Government of Bangladesh

➤ Twenty-two agreements were signed in the area of defence, nuclear energy, cyber security and media, though the two leaders witnessed the signing of only four pacts – on the judicial sector, a $4.5 billion development assistance line of credit, on outer space and on passenger and cruise services. In addition, India has offered a new $500 million line of credit specifically for defence purchases.

➤ The defence relationship was the highlight of Ms. Hasina's visit to Delhi this time as it included a memorandum of understanding on a defence framework, and a $500 million line of credit (LoC) for defence procurement by the Bangladesh military forces, the largest such LoC India has extended to any country so far. What makes this line of credit more significant is that Bangladesh will not be bound to use it to source its supplies only from Indian companies. This is India's way to reposing confidence in the Hasina government that it will not challenge New Delhi's vital interests.

➤ It is also extending a $4.5 billion line of credit to Bangladesh, over and above the existing $2.8 billion to fund around 17 infrastructure projects which includes port upgradation work at the Mongla, Chittagong and Payra ports. Given the critical need for enhancing connectivity in South Asia, India is pushing for early implementation of the Bangladesh-Bhutan-India-Nepal (BBIN) Motor Vehicles Agreement, aimed at facilitating seamless transport of goods over land customs stations. Bus and train services between Kolkata and Khulna have been started, and there are plans to revive inland waterway channels.

Way forward

In recent times there have quite a bonhomie between the countries which was seen in finalization of Land Boundary Agreement, agreement on rail, road connectivity and can be used to carry through the Teesta deal. Water sharing agreement should be concluded quickly by taking into account the needs of both the countries which could be satisfied through latest technologies available to maximize the efficiency in water use. **Given the water is a state issue** and West Bengal apprehensions of loosing irrigation potential in north region because of the treaty needs to be addressed before taking any step.

SOCIAL ISSUE

National Commission for Socially and EDUCATIONALLY BACKWARD CLASSES

Context

> *The present government proposes to replace the existing National Commission for Backward Classes (NCBC), a statutory body, with a new constitutional body, tentatively named the National Commission for Socially and Educationally Backward Classes (NCSEBC). A Constitutional Amendment (123rd) bill for the same purpose was introduced in the Parliament.*

Backgrounder

➤ The government had created a Commission for the Scheduled Castes and Scheduled Tribes via a resolution in 1987. It was given **constitutional status** by passing Constitution (65th amendment) Act, 1990, leading to creation of National Commission of Scheduled Castes and Scheduled Tribes (NCSCST) in 1992.

➤ By the Constitution (89th Amendment) Act, 2003; the NCSCST was split into two different commissions viz. NCSC and NCST by inserting Article 338-A.

➤ National Commission for Scheduled Castes (NCSC) was mandated to look into the grievances and complaints of **backward classes also.**

➤ However, in 1992, the Supreme Court in **Indra Sawhney case** had directed the government to create a **permanent body** to entertain, examine and recommend the inclusion and exclusion of various Backward Classes for the purpose of benefits and protection.

➤ Towards this, the parliament passed National Commission for Backward Classes Act in 1993 and constituted the **National Commission for Backward Classes as a statutory body.**

➤ Currently, this body is responsible to look into the inclusion and exclusion of backward classes only.

➤ To safeguard the interests of these classes more effectively, there was a need to give **constitutional status to NCBC**.

➤ For this purpose, the amendment has been introduced and passed in Lok Sabha.

➤ The name of "National Commission for Socially and Educationally Backward Classes" is correctly chosen in line with constitutional terminology. In 1951, Jawaharlal Nehru insisted on this name in a new clause (4) of Article 15.

What are the proposed changes?

The Amendment bill not only seeks to give constitutional status to the body but also expand its powers to hear complaints from the OBCs and inquire into their grievances, which is very much important for the effectiveness of the affirmative actions by government for socially and educationally backward communities. The important provisions of the bill are:

Present OBC Commission:

► **National Commission for Backward Classes** is a **statutory body** under the Ministry of Social Justice and Empowerment established on 14 August 1993.

► It was constituted pursuant to the provisions of the **National Commission for Backward Classes Act, 1993.**

► The commission was the outcome of Indra Sawhney & Ors. Vs. Union of India.

► Supreme Court Directed the Union and state governments to constitute a permanent body in the nature of a Commission for entertaining, examining and recommending upon requests for inclusion and complaints of over-inclusion and under-inclusion in the list of OBCs.

► The Supreme Court held that the Constitution recognised **only social and educational** — and not economic — backwardness.

I. Creation of a National Commission for Socially and Educationally Backward Classes under new Article 338 B;

II. Insertion of provision after Article 341 and 342 viz. 342 A to provide **for Parliament's approval for every inclusion** into and **exclusion** from the Central List of Other Backward Classes;

III. Insertion of a new Clause (26C) under Article 366 to define Socially and Educationally Backward Classes;

IV. Repeal of National Commission for Backward Classes Act, 1993 (No. 27 of 1993) and Rules framed there under;

V. Dissolution of the Commission constituted under the Act of 1993;

VI. Composition of the new Commission i.e, National Commission for Socially and Educationally Backward Classes, with a Chairperson, Vice Chairperson and three other Members.

Three major changes are likely to result from this transition from statutory status to Constitutional status and other proposals:

► **Power to Inquire into complaints:** The first of these changes is that the proposed body will have the same legal status as the Scheduled Caste (SC) or Scheduled Tribe (ST) commissions. The SC/ST commissions have been accorded the status of civil courts, which means that they can take cognisance of the complaints and grievances of the members of the communities they represent and are empowered to initiate legal action to redress them. The current OBC commission does not have this right and the proposed change will remedy this lack and meet a longstanding demand of backward community leaders.

► **Power of Exclusion and inclusion of castes in OBC list:** A second change is that with the grant of constitutional status to the NCSEBC, the power to revise the Central List of backward classes will be transferred from the central government **to Parliament**.

► **Power of states to accord OBC status:** A third likely change, on which constitutional experts will have the last word, is that state governments will no

longer have the right to maintain and revise their own OBC lists, just as they are unable to affect the lists of SCs and STs.

What difference these changes will create?

► **Constitutional status** will help in increasing the status of the body and any tinkering with its powers, functions in future will be difficult.

► **Power of exclusion and inclusion to Parliament is a** step forward since it might ensure that debates on such issues will be more comprehensive and transparent. Also it will help the Central government to avoid any pressure from powerful castes group, which otherwise at present tries to arm-twist the government.

► **Definition of socially and educationally backwardness** will defined under art 342A through this amendment. It will be very much important as this definition will be used for inclusion and exclusion of castes.

► If the power to add or remove is taken from states and given to Parliament, then this will also be a major step as in absence of vocal media, civil society and pro-active judiciary at the state levels many states have tried to misuse their powers.

► A new Article 342(A) will make it mandatory to take the concurrence of Parliament for adding or deleting any community in the SEdBC list. This will introduce greater **transparency.** It is more difficult to get a wrong decision through Parliament, which is under constant public gaze and scrutiny, than through executive orders issued from within the four walls of executive office.

► SEdBCs require not only list-inclusion and reservation, but also **comprehensive and holistic** development and advancement of each community towards equality with Socially Advanced Castes (SACs) in all parameters of development and welfare.

► The constitutional status will ensure that various sections of Muslim community such as kahar, kewat-mallah, kumhar, kunjda, gujjar, ghosi, jogi, mali, teli, natt, fakir, hajjam, dhobi etc will become constitutionally eligible to get benefits of various welfare programmes and schemes. With a constitutional status, the Commission will become as powerful as National Commission for Schedule Castes and National Commission for Schedule Tribes.

► It can now effectively work towards the welfare and uplift of people who come from socially and educationally backward classes.

► This Commission will also discharge other functions related to the protection, welfare and development of backward classes and empower them by utilising the inherent powers of Articles 16(4) and 15(4) of Constitution.

Many apprehension have been raised that new provisions will be used to include politically dominant and some sections from upper classes, which have been demanding reservation in recent (like Jats, Kapus, Patels etc.). These apprehensions will remain till the criteria for identification is spelt out.

One, on the task of identifying backward classes, the new entity will not even be expected to do the job. Hereafter Parliament will determine who is a BC for the 'Central' List. Two, since it has no responsibility to define backwardness, it cannot address the current challenge of well-off castes' demands to be included as BCs.

Reservation as a policy for ensuring equality

► The fundamental objective of reservation in beginning was to provide a real and concrete guarantee of equal citizenship rights to excluded sections of society. This was an unconditional commitment that had nothing to do with backwardness,

poverty or illiteracy and was ensured for SCs and STs. The end was equal citizenship for all and eradication of caste discrimination, while reservation (and its particular method of a predetermined quota) was only the means, and one among many at that time.

➤ Later on through Mandal commission reservation policy was extended to OBCs and the criteria used of socially and economic backwardness, for which 11 criteria was given **in Indra Sawhney case**. It was to ensure that these sections of society are also brought forward through various affirmative actions.

➤ But from almost the very beginning of our republic, we have managed to completely forget this fundamental aspect of reservation and have come to think of it as a welfare programme, so much so that today we insist on confusing ends with means.

Reservation and present day neo-liberal society

In the context of the 21st century, a policy like reservation is faced with many tough challenges.

➤ The **neoliberal economic policy**, which now dominates both the public as well as the private sectors, neither wants to create decent jobs nor is capable of doing so. With more jobs shifting to private sector, more focus on high skilled jobs, automation, globalization and accompanied competition the policy of reservation in jobs will face challenges.

➤ There is also a need of stocktaking of the policy. Who have benefitted, is their need for sub-categorization of the reservation, what other alternatives can be used to achieve equality, are some of the questions which needs to be asked.

There are several other reasons why reservation is no longer adequate for tackling caste discrimination and inequality. The time has come when we should be looking for options beyond and in addition to reservations, keeping in mind always that caste is primarily a social and political issue rather than an economic one.

GOVERNANCE ISSUE

HAM RADIO

> **Context**
>
> *HAM Radio also known as Amateur Radio is a scientific activity which describes the use of radio frequency spectrum for the purposes of non-commercial exchange of messages, wireless experimentation, self-training, private recreation, radio-sport, contesting and emergency communication.*
>
> *It is a technology which encourages 'self learning, experimentation and inter communications.'*
>
> *HAM radio operators provide services helpful during the disasters, rescue, etc. thus analyzing the Concept of HAM radio, their role, etc.*

Introduction

Ham radio operators are a group of people nurturing a special interest in wireless communication technology. People from all the spheres of life are found among the ham radio operators. They operate their wireless transceivers (a combined unit of radio transmitter and receiver) during their pastime for the sheer joy, thrill and excitement involved in doing a worldwide radio communication. Unlike the broadcast radio stations (to whom we usually tune our radio receivers to listen to), ham radio is a two-way communication system. Ham radio operators can put their voice on-the-air to be listened into and at the same time replied back by their fellow radio operators around the world.

The Central Board of Secondary Education (CBSE) has also taken some initiative to include 'Ham Radio' in their course curriculum under the scheme of Work Experience. The Member of Parliament Local Area Development Scheme has also included 'Ham Radio' as one of its projects and as per the direction of the Ministry of Programme Implementation, a Member of Parliament (MP) can spend money to establish ham radio stations in the schools located in his area. If these schemes are fruitfully utilised, many youngsters would be able to take interest in ham radio which they may also make into career.

About Ham Radio Operators

➤ Amateur radio operators, colloquially known as **HAMs**, are hobbyists who use radio waves to communicate wirelessly through Morse code, voice or even images with people around the world.

➤ Amateur (HAM) Radio is both a Hobby activity and Service. It is an activity of self learning, inter-communication & technical investigation carried on the duly authorized persons (i.e. Amateur Radio Operators) for a personal aim and without pecuniary interest. There are over 30 lakh people all over the world who pursue this activity in their free time, in India we have around 20,000 amateur radio operators.

➤ Ham Radio operators uses two way radio stations to communicate with others similarly authorized using various modes of communication like voice, morse codes, computers, internet etc. These operators are licensed by the Wireless Planning & Coordination wing of Ministry of Communications and Information Technology, Govt. of India and enjoy a far more privileges of radio operation after clearing an Exam conducted by the Ministry.

➤ The advanced Amateur radio communication techniques include Automatic Position Reporting Systems using GPS information, Internet linking of Repeater stations, Interface with internet for exchange of emails, images etc. as well as visual communication modes.

➤ A wireless communication network through Amateur Radio is one of the most effective and alternate medium of communication and can play a significant role in providing reliable communication when other normal communication fail.

➤ The skills of the trained amateur radio operator can be used for public service in times of need and emergencies. In numerous occasions, under extreme circumstances, very efficient amateur radio communication and humanitarian assistance was provided by Hams particularly during Uttarkhand Floods 2012, Aila cyclone-2009, Krishna floods-2009, Indian Ocean Tunami-2004, Gujarat Earthquake-2001, Orissa Super Cyclone-1999 and many other natural/man-made calamities in the country.

How does HAM Radio work?

➤ **HAM (Amateur Radio Operators)** are able to use many frequency bands across the radio spectrum — these frequencies are allocated by the **"Wireless Planning and Coordination Wing (WPC)—a division of the Ministry of Communications and Information Technology"** for amateur use.

➤ HAM may operate from just above the AM broadcast band to the microwave region, in the gigahertz range. Many ham bands are found in the frequency range that goes from above the AM radio band (1.6 MHz) to just above the citizens band (27 MHz).

➤ During daylight, 15 to 27 MHz is a good band for long-distance communications. At night, the band from 1.6 to 15 MHz is good for long-distance communications. These bands are often referred to historically as short-wave bands (as in "short-wave radio").

➤ Unlike frequencies used by FM radio stations and TV stations, which are line-of-sight and therefore limited to 40 or 50 miles, short-waves "bounce" off the ionosphere from the transmitter to the receiver's antenna. The higher the frequency is, the "shorter" the wavelength is.

➤ Some ham radio operators use the very reliable Morse code, while others use voice. Morse code signals (beeps) often get through when voice transmissions cannot. There are also various digital modes as well, and hams use radio modems to communicate in various networks.

Origin in India

➤ **In India** the first amateur radio operator was licensed in 1921 and by the mid 1930s, there were around 20 amateur radio operators in India who also played an important part in the Indian independence movement with the establishment of illegal pro-independence radio stations in the 1940s.

➤ After 3 decades of India's independence there was slow growth in the numbers of operators until the then Prime Minister of India an amateur radio operator,

'Rajiv Gandhi (VU2RG)' waived the import duty on wireless equipment in 1984. Since then, numbers have picked up and as of 2016, there were more than 20,000 operators in the country.

➤ The term 'Ham Radio' was first a pejorative that mocked amateur radio operators with a 19th century term for being bad at something, like **ham-fisted** or **ham actor**. It had already being used for bad wired telegraph operators.

Regulatory Body

➤ The Wireless Planning and Coordination Wing (WPC)—a division of the Ministry of Communications and Information Technology—regulates amateur radio in India. The WPC assigns call signs, issues amateur radio licences, conducts exams, allots frequency spectrum, and monitors the radio waves.

➤ In India, the Amateur Radio Society of India (ARSI) (a national NGO), represents amateur radio interests at various forums including national and international regulatory authorities, and represents India at the International Amateur Radio Union. Popular amateur radio events include daily ham nets, the annual Hamfest India, and regular DX contests.

➤ Public figures in India who are licensed ham operators include Indian National Congress president Sonia Gandhi (VU2SON), Bollywood actor Amitabh Bachchan (VU2AMY), Kamal Hassan (VU2HAS), and former Minister for Information Technology Dayanidhi Maran (VU2DMK).

Strategies to improve HAM Radio Station

1) **Deepen linkages with Development:** There is a need for community radio to deepen its linkages with development and build synergies with social movements like Freedom of Information, Freedom of Expression, Food Security, Gender issues etc.

2) **Innovative use of mixed media/technology:** Community Broadcasting needs to strategically combine old and new communication technologies and develop mixed media models. Some examples are: ARRnet is short for the Aceh Radio reconstruction Network that started in November, 2005 in Indonesia. Comprising a membership of 46 community radio stations in Aceh and North Sumatra, the network was dedicated to community based rehabilitation and reconstruction posts the 2004 Tsunami. It used a mixed media model that combined community radio, website, telephone and fax lines to enable it to reach out to the last mile, last post. The operational strategy was a direct process whereby the member stations sent information to the ARRnet hub in Banda Aceh, from where it was uploaded directly on to the internet. There are other interesting examples that demonstrate how a mixed media model has been effectively used to reach the last mile, last post.

3) **Strengthen relationship between community and public broadcasting sectors:** There needs to be more engagement between the community broadcasting and public broadcasting sectors. In India, community based groups have (especially in the pre 2006 period) bought time and broadcast programmes produced by the community over the Government owned All India Radio which also has a substantial local radio network across the country.

4) **Engage with Academia:** There is a need to build linkages with Academia. There needs to be more research and impact assessment studies that track and evaluate performance of Community Radio stations and study their co-relation with development. The Ethnographic Research programmes initiated by UNESCO in South Asia exemplify this point. At the same time, there needs to be more support

provided for training in community radio and develop a pool of country/regional resource persons that undertake community radio capacity building.

5) **Explore funding mechanisms:** Funding support from government also needs to be explored. The example of France throws up the possibility of a support mechanism like a community radio fund. Closer home, in the Philippines, there are collaborative alliances like the Local Government Units (LGU) initiative.

6) **Strengthen Networking:** Even while community radio may be a recent entrant in some countries in Asia Pacific, there needs to be a greater emphasis on networking both at the country and regional levels. Networks comprising community radio practitioners, advocates and community media production groups at the country and regional level are required to strengthen the case for legal reform, technology access and fund raising. Examples like ACORAB in Nepal, CRF in India and JRKI in Indonesia are examples of efforts in the Asia Pacific region to advocate for enabling environments and judicious legislation in their countries. They are also valuable mechanisms for content sharing and dissemination, awareness and capacity building. The experience of AMARC strengthens the case for building cross regional and global networks. AMARC today is a network of about 6,000 community radio stations in 110 countries. The network comprises members from diverse and marginalized communities with expertise in advocacy, capacity building, technology facilitation and content sharing.

Conclusion

➤ Considering the utility and potential of HAM Radio not only in emergencies, but also as a means of triggering and promoting interest in science and technology, the National Council for Science and Technology Communication (NCSTC) and Vigyan Prasar have been making efforts to popularize HAM Radio in India. This hobby has the potential of involving a large number of the young and energetic citizens of our country in a process of learning by doing in the field of electronics as well as wireless communication technology.

➤ The present education system provides ample scope for organisations like HAM Radio or NIAR to contribute towards strengthening and supplementing the learning experiences of children by designing well focused programmes, especially in electronics, that encourages self learning via electronic kits and toys and initiation into hobbies like amateur radio etc.

➤ Hence, the need of the hour is to spread awareness among masses about HAM Radio (Amateur Radio), its applications and benefits.

GOVERNANCE ISSUE

Digital Health
Technology Eco-System

Context

Technologies have extended its pace across various sectors of the society from production industry to the communication, construction, online dealings, trading and many more. However, health care is no exception to it. Everything from mobile innovations to wearables and advanced technologies are changing the way doctors care for patients and the way patients care for themselves.

From patients' intake to record keeping to testing and treatment, these innovations are transforming every aspect of health and wellness. In today's modern era, the use of technologies in health sectors is unavoidable and these are being readily embraced by doctors, hospitals, specialists and other providers.

The National Health Policy, 2017 also advocated for extensive deployment of digital tools for improving the efficiency and outcome of the healthcare system and proposes establishment of National Digital Health Authority (NDHA) to regulate, develop and deploy digital health across the continuum of care.

Thus hereby analyzing the concept of Digital Health Technology Ecosystem.

What is Digital Health Technology?

➤ Digital Health Technology is the convergence of Digital and Genomic Technologies with health, healthcare, living and society to enhance the efficiency of healthcare delivery and make medicines more personalized and precise.

➤ The discipline involves the use of information and communication technologies to help address the health problems and challenges faced by patients. These technologies include both hardware and software solutions and services, including telemedicine, web-based analysis, email, mobile phones and applications, text messages, and clinic or remote monitoring sensors.

➤ In other words, generally, digital health is concerned about the development of interconnected health systems to improve the use of computational technologies, smart devices, computational analysis techniques and communication media to aid healthcare professionals and patients manage illnesses and health risks, as well as promote health and wellbeing.

Technology and Healthcare

ICT can be used to improve healthcare services by providing:

➤ Information access to doctors, patients, researchers, healthcare professionals, and others to get desired changes in behaviors and outcomes of all the stakeholders.

➤ Design less expensive, robust and more realistic methods of testing the effectiveness of alternative clinical practices.

➤ Construct better measures of healthcare outcomes, delivery system characteristics, and other variables that may affect outcomes.

➤ Electronic patient database must be developed which provides an easy and quick access to large databases and data can be easily accessed and transmitted through communication medium.

➤ By providing decision support systems to facilitate the physicians and doctors in decision making.

Example of Technologies

The contribution of technologies towards human health is immense, here we look at some ways technology is helping people lead longer, healthier life.

A. Electronic Health Records (EHR)

➤ Digitalization of health sector help us to keep record of reports and earlier treatments online which can be helpful in delivering better healthcare outcomes by reducing errors and making it easier for doctors, hospitals and pharmacies to deliver fully integrated, trackable and collaborative care.

➤ The slow development of EHR since long is due to privacy and security concerns among the masses apart from efficiency which is another side effect of EHR, especially when healthcare is so data driven.

B. Tele-health

➤ This umbrella term for everything from nursing call centers and video conferencing to patient portals and remote monitoring is one of the most important modern innovations in the healthcare sphere.

➤ This approach saves patient's time and money which they would spend traveling to see a specialist. In many cases, the specialist may be able to advise the attending primary care providers (PCP) on how to treat or manage the patient's condition or at the very least, can streamline the referral process and help ensure that the patient gets the right referral the first time.

➤ Thanks to virtual continuing education platforms, rural PCPs can enhance their knowledge of treating specialty conditions, allowing patients to receive treatment in their home communities. This can improve patient outcomes, since it enables them to maintain vital social support networks and reduce or eliminate the stress of traveling for treatment far away.

➤ Studies repeatedly show the benefit of virtual modes of care, particularly in rural settings and Intensive Care Units (ICUs). In addition to the obvious improvements to patient outcomes, there are numerous cost benefits to tele-health for both providers and people.

C. Wearables

➤ Home monitoring devices track patient vital signs like heart rate, blood pressure and blood sugar; movements and prescription compliance; and more, and then

send that clinical data to care providers as a report or in real time. According to a report, 3 million patients worldwide were using home monitoring in 2014 with that number expected to jump to 19.1 million by 2018.

D. Streamlined Communication

➤ A number of startups have begun offering online access to doctors, specialists and nurses, potentially saving sick or injured people a trip to the Emergency Room (ER) or an in-office visit.

➤ But for those patients who would prefer to speak to their own providers, services like MyHealth Online and others are giving both providers and their patients another avenue of communication beyond phone calls.

➤ And when language puts barriers in front of communication, programs like Omni fluent Health are helping medical professionals avoid dangerous misunderstandings.

E. Gamification

➤ The power of games to influence behavior is well known but it wasn't until recently that the technology existed to capitalize on that power.

➤ The Games for Health Project is one initiative that is seriously exploring how video games can be used to engage patients and empower more consistent self care. Gaming as brain training has plenty of support in numerous studies, and video games are now helping people do things like manage their diabetes, recover more quickly from physical injuries and cope with mental illness.

➤ Is this the beginning of Health 2.0? Most likely the answer is yes. Companies like T-Mobile are teaming up with technology partners and doctors to develop healthcare advancements that benefit providers and patients by making care more efficient and cutting costs on both sides.

➤ While many of the most interesting of these programs and technologies are still in the pilot stages, most show promise and more importantly, are proving popular with healthcare professionals and patients alike.

Technology is Cutting Health Care Costs

➤ Perhaps the biggest benefit of telemedicine is that it is drastically reducing the cost of care. More patients are receiving preventative and primary care, which can nip expensive chronic conditions in the bud.

➤ They're also spending less on specialists, since they can receive this care without leaving their communities. Remote patient monitoring, virtual doctor visits, and mobile apps for health and disease management could mean more lives saved, better patient outcomes, and fewer readmissions to hospitals across the board, all at a lower cost.

➤ With more resources at their disposal, doctors and patients in rural areas are expected to work together much more effectively.

India's initiatives towards Digitalization of Health

➤ Indian government has started ambitious initiatives like Digital India and Internet of Things that intend to bridge the digital divide in India on the one hand and enabling e-delivery of services in India on the other. There are many segments of Digital India projects and e-health is one of them.

➤ E-health initiatives of Indian government aim at providing timely, effective and economical healthcare services to Indian population. E-health is particularly relevant for masses that have little access to healthcare services in India.

➤ The National Health Policy of India envisions prevention of diseases and promotion of good health through cross sectoral actions, access to technologies, developing human resources, encouraging medical pluralism, building knowledge base, developing better financial protection strategies, strengthening regulation and health assurance.

➤ The National Health Policy of India also envisions Health Management Information by:

a) Ensuring district-level electronic database of information on health system components by 2020.

b) Strengthening the health surveillance system and establish registries for diseases of public health importance by 2020.

c) Establishing federated integrated health information architecture, Health Information Exchanges and National Health Information Network by 2025.

Some of the initiatives are:

a) National eHealth Authority

National eHealth Authority (NeHA) is a proposed body as a promotional, regulatory and standards setting organization to guide and support India's journey in e-Health and consequent realization of benefits of ICT (Information and Communication Technology) intervention in Health sector in an orderly way.

b) Health Management Information System

To monitor the performance and quality of the health services being provided under the NHM, it is important to introduce mechanisms that would strengthen the monitoring and evaluation systems, through performance statistics, surveys, community monitoring, quality assurance etc.

The Health Statistics Information Portal facilitates the flow of physical and financial performance from the District level to the State HQ and the Centre using a web based Health Management Information System (HMIS) interface. The portal will provide periodic reports on the status of the health sector.

c) Electronic Health Records

An electronic health record (EHR) is a digital version of a patient's paper chart.

EHRs are real-time, patient-centered records that make information available instantly and securely to authorized users.

While an EHR does contain the medical and treatment histories of patients, an EHR system is built to go beyond standard clinical data collected in a provider's office and can be inclusive of a broader view of a patient's care.

Introducing and streamlining EHR in Indian health care would help government address health care from a futuristic approach than a causal one.

d) SEHAT

To provide healthcare facilities in rural areas, the government launched a tele-medicine initiative in collaboration with Apollo Hospitals under which people can consult doctors through video link.

The CSCs will also provide diagnostic services and promote sale of generic drugs through collaboration with Ministry of Health, by setting up Jan Aasudhi Stores.

Advantages of Information and Communication Technology in Health Care are:

➤ Improved timelines (better quality of healthcare delivery)

➤ Effectiveness (right intervention / audit trails for adverse events)

➤ Efficiency (less resources in terms of manpower, time and cost)

➤ Informed patients and their care-givers

➤ Better access

➤ Diagnostic accuracy

➤ Reduced waiting times

➤ Better referral management

Conclusion

➤ An amalgamation of digital and healthcare services could provide the long-awaited personalized healthcare approach that would empower participating individuals to make informed decisions. These changes will lead to quality care, improved consumer satisfaction, and cost-effectiveness.

➤ However, Public Health is a State subject and Government of India provides financial and technical support to States/UTs to strengthen their healthcare system. However, the decision to establish NeHA is a welcome move which will have deep, long lasting ramifications on healthcare delivery.

➤ The need of the hour is to formulate policies, strategies and its effective implementation which will require holistic support from all stakeholders by establishing network of different institutions to promote e-Health and Tele-Medicine/remote healthcare/ virtual healthcare and such other measures.

Ear Tagging of Cattles

> **Context**
>
> *The government has embarked on an ambitious programme to give a 12-digit unique identification number to 88 million cows and buffaloes in the country.*
>
> *Recently the Haryana government has adopted a multi-pronged strategy to handle the menace of stray cattles, by tagging of animals in cattle sheds and working for their rehabilitation.*
>
> *Hereby, discussing the technology behind the ear tagging of cattle, its benefits, etc.*

Introduction

Animal identification verification and tracking are usually done for verification of ownership, bio-security control, identification and tracking for research, tracking health of animals, as well as agricultural purposes.

There are a variety of methods to identify which includes leg rings, tags, microchip (parrots), telemetry (falconry birds), collar, earmarking, ear tags (electronic and non-electronic), Semi-permanent paint, tattoo, microchip implants, lip tattoo, anklets, Rumen bolus (electronic), cowbell.

Ear tagging is the process of applying a plastic or metal tag to the ear of an animal for identification. Information that is included on an ear tag are details such as ownership of the herd and record of dates that medical and other treatments were administered. Ear tags may also contain chemicals that are dispersed to treat insects or combat infection. Electronic ear tags are equipped with an RFID chips for electronic data storage and retrieval of information contained on the tag.

About RFID technology

Radio Frequency Identification (RFID) uses radio waves to communicate between two objects: a reader and a tag. RFID communication is the same as two way radio communication in the sense that information is transmitted or received via a radio wave at a specific frequency.

RFID tagging is an ID system that uses small radio frequency identification devices for identification and tracking purposes. An RFID tagging system includes the tag itself, a read/write device, and a host system application for data collection, processing, and transmission. An RFID tag (sometimes called an RFID transponder) consists of a chip , some memory and an antenna .

RFID tags that contain their own power source are known as *active* tags. Those without a power source are known as *passive* tags. A passive tag is briefly activated by the radio frequency (RF) scan of the reader.

Fundamentally they comprise two main elements:

► *Electronics circuitry:* The electronics within an RFID tag are kept to the minimum to ensure that cost are minimised and power levels are kept as low as possible.

► *Antenna:* The antenna within the RFID tag is the element that takes the largest amount of space. It must be able to operate satisfactorily at the frequency of operation. With wavelengths being smaller at higher frequencies (especially UHF and microwave), this makes antennas for these frequencies much more efficient.

Procedure of Ear Tagging

Affixing the tag is a meticulous job, a yellow-coloured tag with two parts has to be fixed with the help of a tool in the centre of the ear lobe. The tag made from thermoplastic polyurethane elastomer, costing .Rs 8 a piece, weighs just eight grams to cause minimum inconvenience to the animal. Proper hygiene and cleanliness during the tagging process is necessary to reduce the risk of infection.

Once the tag is fixed, the technician will use a tablet to update the number in an online database and also provide the cattle owner with an 'animal health card' recording the UID number, owner's details, status of periodic deworming and vaccinations of the animal as well as breeding details. This will help track the cattle along with all relevant details.

It has also fixed targets for individual states to be completed within 2017. Uttar Pradesh has to affix tags on 14 lakh cattle every month, for instance, while Madhya Pradesh has to tag 7.5 lakh cattle a month.

Once the animal has been tagged, proper care must be taken to ensure the animal stays healthy. Daily topical application of hydrogen peroxide directly to the ear and ear tag puncture for five to seven days following the tag application will assist in preventing infection.

Ear Tagging benefits

► It helps in storing the information of each and every animal with breeding, feeding and yield data.

► Milking and egg laying database and monitoring can be easily recorded and maintained, enabling classification, individual preventive measures or maintaining group health improvement.

► Tagging helps in improving agro-management through increased efficiencies, controlled and monitored feed as well as reduced feed and labor costs, enhanced outcomes and exponentially improved group health of animals.

► Identification and recording of animals using radio frequency identification [RFID] chips has a lot of merit for reducing malpractices related to implementation of government programs in the animal husbandry sector and insurance and also in recording the breed, yield and behavior of animals.

► The necessity for proof of ownership and identification helps keepers to maintain records of origin, identity and destination of animals. It will help to keep up-to-date records of all animal births, deaths, movements, treatment, vaccination, castration, pregnancy, insemination, accident and other information with dates.

► By collecting secure, authentic and real-time data, one can get correct statistical analysis and on time information which will help in decision making.

► It will also help in to provide proper and timely treatment to the cattle with health related case history and improving management, sales of breeding animals and genetic improvement.

➤ RFID tagging will help to get constructed data which will help to achieve goal for better breed, more productivity which helps for better production.

➤ Scientific intervention can be made resulting in better breeding and an increase in quality milk production.

➤ The tag is tamper-proof, cannot be opened by a wrench and is designed to last for years.

➤ It offers the advantage of being more easily adapted to computerized tracking and scanning systems for recording and storing animal records as compared to visual systems.

ENVIRONMENTAL ISSUE

Renewable Energy will Soon
REPLACE COAL

Context

" *Renewable Energy Minister Piyush Goyal has recently remarked that India's 60-65% of installed power generation capacity will be green energy. His remarks owes significance primarily on two grounds viz. falling of prices of power production from renewable sources and rapid growth of renewable energy capacity in Country.*

In February, in two separate capacity auctions, solar and wind tariffs fell to historic lows - Rs 3.30 and 3.46 a kWh, respectively. Apart from falling prices, Renewable energy capacity in India crossed the 50-GW mark in January this year, doubling in just five years. Solar power capacity, which was hardly anything five years back, reached 10 GW. Going with this pace, as empathized by Renewable Minister, this will set to cross 20,000 mw in next 15 months.

Buoyed by advantageous factors that today renewable energy sector is enjoying and disadvantageous situation that the fossil fuel is at, experts are claiming that renewable energy will soon replace coal. Hereby, examining the claim.

Introduction

Energy security has emerged as an important policy issue all over the world. Global energy markets have relied heavily on fossil fuels like coal, crude oil and natural gas, which provide almost 80 per cent of the world's supply of primary energy. Being non-renewable, they have certain limits of availability due to which they depict global destabilizing price shocks, more so in recent years. The extensive worldwide use of fossil fuels has resulted in serious environmental concerns – particularly the climate change. One of the key challenges facing the developing world is how to meet its growing energy needs and sustain economic growth without contributing to climate change. An emphasis on energy security has also led to the quest for alternative sources of energy that could reduce dependence on petroleum.

Renewable energy can help in filling the gap. Renewable energy uses energy sources that are continually replenished by nature—the sun, the wind, water, the Earth's heat, and plants. Renewable energy technologies turn these fuels into usable forms of energy—most often electricity, but also heat, chemicals, or mechanical power.

Why renewable energy is preferred?

Besides sustainable development, renewable energy can promote development in the socio-economic areas of country. It affects all aspects of developmental issues such as health, population levels, education, social, economic, and environmental including livelihoods, access to water, and agricultural productivity.

➤ Climate is changing and fossil fuel emissions are contributing greatly to that change. By contrast, solar energy panels and wind turbines generate zero emissions in their generation of electricity.

➤ Generating electricity from renewable energy rather than fossil fuels offers significant public health benefits. The air and water pollution emitted by coal and natural gas plants is linked to breathing problems, neurological damage, heart attacks, and cancer. Replacing fossil fuels with renewable energy has been found to reduce premature mortality and lost workdays, and it reduces overall healthcare costs. The aggregate national economic impact associated with these health impacts of fossil fuels is huge in term of percent of gross domestic product (GDP).

➤ Renewable energy sources like wind, solar, tidal and thermal are vast and inexhaustible while fossil fuels are finite. They are expected to last for few hundred years or even decades.

➤ Compared with fossil fuel technologies, which are typically mechanized and capital intensive, the renewable energy industry is more labor-intensive. This means that, on average, more jobs are created for each unit of electricity generated from renewable sources than from fossil fuels.

➤ The costs of renewable energy technologies have declined steadily, and are projected to drop even more so it can help stabilize energy prices in the future.

➤ Wind and solar are less prone to large-scale failure because they are distributed and modular. Distributed systems are spread out over a large geographical area, so a severe weather event in one location will not cut off power to an entire region. Modular systems are composed of numerous individual wind turbines or solar arrays. Even if some of the equipment in the system is damaged, the rest can typically continue to operate.

➤ The risk of disruptive events will also increase in the future as droughts, heat waves, more intense storms, and increasingly severe wildfires become more frequent due to global warming. Renewable energy sources are more resilient than coal, natural gas, and nuclear power plants in the face of these sorts of extreme weather events.

For example, coal, natural gas, and nuclear power depend on large amounts of water for cooling, and limited water availability during a severe drought or heat wave puts electricity generation at risk. Wind and solar photovoltaic systems do not require water to generate electricity, and they can help mitigate risks associated with water scarcity.

Will renewable energy be able to replace Fossil fuels?

➤ **Cost of power**- High cost of power from renewable sources has remained the issue for consumers, producers and investors. This factor appears to be tamed with the February auction where government's assurance of 'duly purchasing the power' and 'payments without delay' has helped the prices to drop. Prices are likely to drop further once "inter-state open access" i.e., allowing producers the freedom to put up their plants anywhere in the country and sell their energy to any customer, gets implemented.

➤ **Technological Advancement**- Technological advancement in the storage technology and grid management has significantly improved viability and feasibility of the renewable projects. The rapid strides that storage technology is making, coupled with falling in prices of advanced battery based storage technologies such as Lithium-ion, the problem of intermittency in renewable

power production is also coming under control. Like a tank that can catch water whenever possible and release it steadily down a pipe, a storage system can help bring in smoothness of power supply.

► **Smart Grid Management**- Software-aided smart grid management is coming into play. Very soon, the first contract for the establishment of a 'renewable energy management centre' will be awarded. The REMC is essentially a SCADA system designed specifically for wind and solar power, and will match the predicted supply of power with the demand elsewhere. The first REMC will come in Chennai, but soon a dozen of them will be set up across the country.

► **Government's Policy push for renewable energy**- India is committed to an ambitious renewable programme, ramping up renewable capacity from 35 gigawatts today to 175 gigawatts by 2022. To reach this goal government is promoting various measures. Government has started National Mission on Solar Energy. A number of fiscal measures such as reduction in custom and excise duty for importing renewable energy equipment, domestic policy measures to support equipment producers have pushed the agenda of renewable energy in the country.

► **Huge potential for growth**- Government of India has a target of adding 175 GW of renewable power in the country by 2022, which offers massive investment opportunities across the value chain. With about 300 clear, sunny days in a year, the theoretically calculated solar energy incidence on India's land area is about 5000 trillion kilowatt-hours (kWh) per year. Similarly, India's vast coastline of 7500 kms creates huge opportunity for wind power generation in the country. Contrary to this coal offers limited potential for growth especially when demand is going down worldwide.

► **Favorable international environment**- Paris climate deal, signed by almost 200 countries, vowed to promote renewable sources of energy in the world. Like other country India is keen to work towards a low carbon emission pathway and announced its Intended Nationally Determined Contribution (INDCs) which requires it to reduce its emission intensity of its GDP by 33 to 35 per cent by 2030 from 2005 level. This means that share of renewable energy must be 40% by 2030 against 6% in 2006.

Disadvantages with the coal

► **Campaign against coal**- Since coal is one of the important contributor of carbon emission, the Paris climate deal vowed to end the use of coal for power generation. Further, globally, environmentalists have launched a war against coal. Several funds and financial institutions (notably the investment fund of the Norwegian government) have decided not to put their money in coal-related projects, and to gradually pull out the investments already made. India has significantly affected from this growing call to phase out fossil fuels especially coal.

► **Increasing cost of coal and decreasing investment**- Tightening of emission norms is making coal plants costlier. For example- in India, the coal tax has quadrupled to Rs 200 ($3) a tonne since 2014. This has resulted in an implicit carbon tax of $2 a tonne of CO_2 on domestic coal. Together these two factors are making the sector less attractive for investors.

► **Renewable replacing the demand of coal**- Demand for coal has fallen worldwide, for example, in US it has decreased by 11%, while in Europe it is down by 10%. Falling in demand has affected new investment in coal including clean coal technologies. Further, with the emergence of renewable as a feasible alternative

source of electricity, investments in coal-based power plants are uncertain worldwide. The trend is bound to make inroads in India as well.

Conclusion

However, it may be too early to write off the usage of coal in India especially when 25% population is still deprived of electricity. Coal may still provide about 40-60 per cent of India's energy requirement until 2030. It may remain the country's primary energy source for the next few years.

So, in the short run, while promoting the renewable sources of energy, equal efforts should be made to find effective techniques to clean and green coal in the country while in the long run, renewable energy is the only solution. And the astonishing fall in the prices of renewable energy in February have just set the tone for tectonic and disruptive shift from coal to renewable energy in the future.

Government's efforts coupled with international pressure and environmental constraints have made sure that this shift happens today rather than tomorrow, and dramatically rather than gradually. The major impact of this will happen on coal based power companies, which now will have to revisit their strategies and rethink their investment plans.

SOCIAL ISSUES

Social Stigma Attached
WITH HIV

Context

> *Recently, the Supreme Court has asked all states to give special consideration to children affected with HIV or living with HIV.*
>
> *The order came on the heels of a petition, which alleged that children affected by HIV or living with those affected with HIV were "routinely denied" their rights at an "alarming regularity".*
>
> *Supreme Court observed that the state governments need to consider issuance of notification to include children living with or affected by HIV as belonging to disadvantaged group under the provisions of the Right to Education Act.*
>
> *Hereby analyzing the social stigma associated with the HIV and how the latest provisions of the Bill will help in improving the situation.*

Introduction

HIV-related stigma and discrimination means prejudice, negative attitudes and abuse targeted at people living with HIV and AIDS. In 35% of countries with available data, over 50% of men and women report having discriminatory attitudes towards people living with HIV. Being a traditional society, this problem is much worse in India where, third after South Africa and Nigeria, 2.1 million people are affected with HIV AIDS.

The consequences of stigma and discrimination are wide-ranging. Some people are shunned by family, peers and the wider community, while others face poor treatment in healthcare and educational settings, erosion of their rights, and psychological damage. These all limit access to HIV testing, treatment and other HIV services.

Why is there stigma around HIV and AIDS?

The fear surrounding the emerging HIV epidemic in the 1980s largely persists today. At that time, very little was known about how HIV is transmitted, which made people scared of those infected due to fear of contagion. This fear, coupled with many other reasons, means that lots of people falsely believe:

► HIV is a serious, life-threatening illness. There is a long history of illnesses being stigmatised - cancer and tuberculosis are two other examples.

► People who don't understand how HIV is transmitted may be afraid of 'catching' it through social contact.

► Some people have strong views about sexual behaviour. They may think that there are situations in which sex is wrong or that certain people shouldn't behave in particular ways.

> The way people think about HIV depends on the way they think about the social groups that are most affected by HIV. Some people already have negative feelings about women, gay men, immigrants, black people, drug users and others.

Stigma may take many forms. Some include:

> Verbal – Taunts, gossip, blame and rumors.

> Institutional stigma includes job loss due to HIV status, eviction from housing, loss of educational opportunities and denial of healthcare and other facilities.

> Discrimination.

> Targeting and victimizing vulnerable groups such as women and girls, sex workers, men who have sex with men, and injecting drug users. Targets may be subjected to violence and the refusal of health and other services.

HIV/AIDS related stigma (H/A stigma) is invoked as a persistent and pernicious problem in any discussion about effective responses to the epidemic. In addition to devastating the familial, social, and economic lives of individuals, H/A stigma is cited as a major barrier to accessing prevention, care, and treatment services.

W.H.O Guidelines

In 2015, the World Health Organization (WHO) published new treatment guidelines that emphasized on removing barriers to access better HIV treatments. It prescribed that an effective response to the HIV epidemic must undertake the root causes of stigma and discrimination to HIV patients.

> Protect the human rights of all including HIV patients. Government must pass anti-discrimination laws, decriminalize the discrimination against HIV patients and at the same time provide them protection against any sort of violence.

> It should recognize stigma related to HIV as a major healthcare problem and hence, accordingly, design healthcare service for them and implement it.

> The guideline emphasized on empowering the patients regarding their rights. They must be encouraged to act on violation of their rights.

> Educating the people to address the fears and to change their attitude can be great deterrent to stigma related to HIV aids.

The HIV and AIDS (Prevention and Control) Bill, 2017

Recently, Parliament has passed the **HIV and AIDS (Prevention and Control) Bill, 2017** paving the way for legal protection of HIV protection against stigma and providing better health care services. Following are the key provisions of the bill:

> It forbids any kind of discrimination against affected people in terms of employment, admission to educational institutes, renting property, insurance and standing for public or private offices.

> People affected with HIV will have 'right' to access public facilities such as shops, restaurants, hotel, public entertainment venues, public facilities and burial ground, without any sort of discrimination.

> This bill endeavors to provide the affected people with proper treatment and access to good health.

> The bill debars anyone to publish information or promote hatred against HIV positive patients.

> It makes provision to the affected person to safeguard his/her property. They can live in a shared household without any bias and utilize all the shared facilities.

- ► Affected person's informed consent will be essential to carry out any HIV test, medical treatment or research on them. The HIV status would be kept completely confidential, if required, by court's order.

- ► All the HIV affected people to have right to prevention, testing, treatment and counseling services. Therapies such the Anti-Retroviral Therapy (ART) and infection management to be provided. The State and the Central Government will also provide welfare schemes especially for women and children.

- ► The bill also stipulates that priority should be given to cases related to HIV positive persons, at the same time maintaining complete confidentiality.

- ► An ombudsman will be appointed in every state to enquire about complaints regarding violations of the act. The Ombudsman shall submit a report to the state government every six months stating the number and nature of complaints received, the actions taken and orders passed. There is also a provision of penalty of Rs 10,000 if the ombudsman's order is not complied with.

- ► Cases relating to HIV positive persons shall be disposed off by the court on a priority basis. In any legal proceeding, if an HIV infected or affected person is a party, the court may pass orders that the proceedings be conducted by suppressing the identity of the person, or in camera, and to restrain from revealing the identity of the person.

Drawbacks of the Bill

However, the bill has been criticized by experts on following grounds-

- ► It does not guarantee access to anti-retroviral drugs and treatment for opportunistic infections.

- ► Centre's commitment to take all measures necessary to prevent the spread of HIV or AIDS is not reflected in the Bill, in the form of the right to treatment.

- ► The law only enjoins the States to provide access "as far as possible" which undermines the provision of access of medical treatment as a right.

- ► No time limit has been prescribed. State rules should prescribed for inquiries into complaints, something highlighted by the Standing Committee on Health and Family Welfare that scrutinized the legislation.

Conclusion

The Bill is the right step towards bringing a ray of hope by pulling out people affected by HIV/AIDS from social alienation, and giving them access to proper healthcare. Such a measure is also necessary to make the forward-looking provisions in the new law meaningful, and to provide opportunities for education, skill-building and employment. As a public health concern, HIV/AIDS has a history of active community involvement in policymaking, and a highly visible leadership in the West. It would be appropriate for the Centre to actively engage community in removing the stigma attached with HIV AIDS.

ENVIRONMENTAL ISSUE

Public Participation in ENVIRONMENT MANAGEMENT

Context

"

Maintenance of the healthy environment is not only the responsibility of the state alone but also of every citizen with which a spirit of partnership is to be realized through the environment Management of the country.

National Environment Policy 2006 is a response to India's national commitment to a clean environment, mandated in the Constitution in Articles 48 A and 51 A (g), (DPSP) strengthened by judicial interpretation of Article 21, also recognizes public participation as an effective means to deal with environmental problems.

Hereby, analyzing the importance of public participation for the environmental management.

Environmental Degradation

➤ Environmental Degradation is consequences of the active inter play of socio-economic, institutional and technological actions. It is a process through which the natural environment is compromised in some way, decreasing biological diversity and health of the environment.

➤ In other words, Environmental Degradation is described as the worsening of physical components of the environment brought in by human activities to such an extent that it cannot be set right by self-regulatory mechanism of environment. This process can be completely natural in origin, or it can be fast-tracked or caused by human activities.

Factors of Environmental Degradation in India

➤ Environmental Degradation may be driven by numerous factors such as economic development, population growth, urbanization, intensification of agriculture, more energy use and transportation etc.

➤ According to the Foundation for Sustainable Development, India's high population, coupled with its comparatively small geographic size, has resulted in major environmental degradation, including the loss of forests and the depletion of water and other natural resources. Air pollution, water pollution and an abundance of solid waste are major problems on the Indian subcontinent.

➤ Inappropriate technology, consumption choices, poverty leading to changes in relations between people and ecosystem, development activities such as intensive agriculture, polluting industry and unplanned urbanization etc. are the major drivers of environmental degradation.

► Other drivers include lack of clarity or enforcement of rights of access and use of environmental resources, policies which provide disincentives for environmental conservation (and which may have origins in the fiscal regime), market failures (which may be linked to shortcomings in the regulatory regimes), and governance constraints.

Public Participation in Environmental Management:

► Public participation is a fundamental legal principle in local governance and environmental management. It is founded on the desire to achieve sustainable decision making; the idea that better decisions will result by involving those who are affected by a decision in the decision making process.

► Public participation found particular resonance in environmental law matters due to the complex and dynamic nature of environmental issues. Such issues are intrinsically political yet involve both public and private interests. Hence they require flexible and transparent decision making that accounts for the array of knowledge and values that exist within the relevant audience.

► An effective public participation programme does not happen by accident; it must be carefully planned. A proactive effort will lead to a more effective process and outcome than a reactive, minimalist approach to public involvement.

► Public involvement needs to begin before project planning and decision-making are too far along to be influenced. The decision to participate must be genuine. Otherwise, public participation becomes a procedural exercise rather than a substantive democratic process.

► Public involvement can be used to create a project that is more suitable to, and accepted by, the public. Suitability should depend on public opinions and needs (rather than the technical feasibility of the project).

► Public input can be a crucial and valuable source of expertise before, during and after project planning and decision-making.

► Excluding the public does not ensure expediency in any case. Alienated citizens tend to delay the implementation of the project though time consuming legal action if they feel that their rights are curbed through project implementation which starts right from the '**Chipko Andolan' in 1970's**.

► It can be achieved by initiating discussions and training to mobilize experience in shaping public behaviour and consumption patterns and making wide use of their methods. Such cooperation would also increase the active public participation in the debate on the environment.

► Social participation should be encouraged to increase their involvement in environmental and development problems, through joint awareness initiatives and improved interchange with other constituencies in society.

► Another way to involve people is through public agencies (e.g., creation of a steering committee) that facilitate broad cooperation between stakeholders and the efficiency of activities being undertaken.

► Yet another way to involve people is through a citizen advisory committee that supports the work of local authorities, and constitutes a bridge between social groups and authorities, but which may have limited influence on the decision-making process.

➤ Public panels, on the other hand, are typically independently-elected representatives of a given community that have the capability of identifying problems and solutions for individual freshwater bodies or river basins.

➤ There are also a number of activities where individuals can get directly involved, including cleanup campaigns, participation in meetings and fora to insure consideration of community needs, monitoring of water quality, etc. As one example, participation in the **'Clean the mumbai beaches' of mumbai municipal corporation**, was used to make people aware of the importance of the reservoir. In response, public awareness materials were produced, and the community participated in workshop and clean-up activities.

➤ Through joint effort of the government and scientists in collaboration with the public, better management of environment is expected to be achieved by making the most appropriate decision possible.

Arunachala Hill case study

➤ Arunachala Hill situated at Tiruvannamalai in Tamil Nadu also known by various names such as Arunaagiri, Annamalai Hill, Arunachalam, Arunai, Sonagiri and Sonachalam is a major Hindu pilgrim centre in Tamil Nadu.

➤ The Tiruvannamalai region is written about in Tamil Sangam literature (circa 100 B.C. to A.D. 200), and the ruler Chevvarainatan (Chevvarai, the 'red mountain' or 'coral hill', is believed to be a reference to the Javadi hills not far from here) finds mention in the *Perumpanatruppatai,* a Sangam classic.

➤ In geological terms, the basement rocks of Tiruvannamalai (and nearby Gingee and Tirukovilur) are estimated to be around 2.25 billion years old, making them significantly older than the Himalayas.

➤ The hill since ancient is one of the five main Shaivite holy places in South India with Annamalaiyar Temple; a temple of lord shiva is located at the base of the hill. The mention about the hill is also found in various religious literatures including one of the oldest Tamil Sangam Literature.

➤ Different endemic forest types grow on the 2,669-ft.-high Arunachala — scrubby species of southern deciduous thorn forests that are better adapted to the dry interior of the region blend with tropical dry evergreen vegetation of the eastern coastal belt. As the slope of the hill is ascended, the flora turns dominantly mixed eciduous forest of the Eastern Ghats. The upper reaches are cooler and wetter, as are the valleys, which are not as exposed to the sun and wind.

➤ The top third of the hill creates its own cloud, often seen shrouding it in the non-rainy season, and plant life draws on this moisture. This is habitat for evergreen species. Moreover, a range of deciduous trees, adapted to cope with the hot summers and fire-hardy when mature, grow even on the exposed slopes.

➤ The overcrowding on the occasion of various festivals and regular visit of devotees over the years has led the hill to degrade its original vegetation resulting it to be the barren and brown. Commonly and naturally occurring fire has also led to the destruction of the rest of the plants and trees making it completely devoid of natural vegetation.

The Greening Effort in Arunachala Hill:

➤ However, recently a unique afforestation initiative **"The Forest Way" (TFW)** led by the naturalists and locals with support from forest and revenue department officials, has resulted in the Arunachala Hill shedding its barren, brown visage.

The project began informally in 2003 before it was registered as a non-profit trust in 2008.

➤ The greening initiative goes back to the mid 90s with the founding of the Annamalai Reforestation Society, a civil society, followed by the Tiruvannamalai Greening Society (TGS) founded in 2004 by the District Forest Officer with the support from the Collector and the revenue officer. According to which "Forest officials can and should take the bold step of encouraging afforestation in land controlled by the government, after correctly assessing the organisation and its plans.

➤ Lending remarkable momentum to these nascent efforts, TFW countered the damage wrought on a fragile, semi-arid ecosystem by pilgrims who arrive by the thousands, a forest wilfully set afire by goat herders so fresh shoots would grow, illegal logging of the little timber that survived, and the occasional bout of lightning in the scorching summers (Arunachala is an inselberg, a relatively isolated hill that rises abruptly from the plains).

➤ Since 2008, TFW has deployed a group of 30 permanent and 80-odd casual workers during the planting season, aided by fluctuating numbers of active volunteers. Relying only on individual donors, TFW annually reforests 15,000-18,000 trees, though of the 1.5 lakh trees they have planted so far, only about 50% take root in wet years (the average falls to less than 25% when it does not rain, as in 2016).

➤ Given the rocky terrain and average daytime temperatures of 36 degrees Celsius, the TFW team also lays 10-metre-wide fire lines every year, disturbing soil minimally while removing grass and other incendiary material. Each km of fire line costs approximately Rs. 25,000 to complete; over 20 km of fire lines criss-cross the hill has been made now.

➤ TFW's reliance on deep local knowledge has had a lot to do with its success. With local knowledge of germination of seeds, its survival, requirement of water, sunlight and other factors have brought positive results. The locals' knowledge of every round of the hill which works like GPS and Google Earth map has always helped the TWF in this initiative.

➤ The collaboration of various stakeholders has resulted in the greening of a hill denuded for so long that even locals could not believe that it could happen.

Environmental education

Environmental education is one of the most effective tools for public involvement. It must be approached, however, as a continuous, lifelong process that involves learning about nature through scientific knowledge, arts, personal experience and imagination.

➤ The first, and perhaps most important, link in the chain of environment education is at the nursery school level. Some of the best places to realize and demonstrate this principle is with water environments, particularly since rivers or ponds, lakes or streams may be found everywhere.

➤ The next stage of education is at the primary- and secondary-school level, where the above motto should be broadened considerably. The best results, regardless of age, typically is gained when educational activities are conducted in direct contact with nature, thereby facilitating emotional links and the participation of schools in monitoring and research projects.

➤ The next appropriate stage of environmental education is at the high school and university level. All available forms of environmental education can be used to provide students with direct contact to environmental issues focusing on the use and protection of environmental resources and the development of environmental awareness.

Conclusion

➤ With growing complexities of the environmental issues, public participation has come to the fore in academic analysis concerning the contemporary debates about environmental governance.

➤ Public participation may be regarded as a way of empowerment and as vital part of democratic governance.

➤ In the context of knowledge management the establishment of ongoing **participatory processes** is seen by some in the facilitator of collective intelligence and inclusiveness, shaped by the desire for the participation of the whole community or society towards environmental management.

➤ In addition, some opponents argue that the right to participate in environmental decision-making is a procedural right that "can be seen as part of the fundamental right to environmental protection".

➤ From this ethical perspective, environmental management is expected to operate within a framework coinciding the "constitutional principle of fairness (inclusive of equality)", which inevitably requires the fulfillment of "environmental rights" and ultimately calls for the engagement of public.

INTERNATIONAL ISSUE

Chemical Attack
IN SYRIA

> **Context**
>
> *The modern use of chemical weapons began with World War I, when both sides to the conflict used poisonous gas to inflict agonizing suffering and to cause significant battlefield casualties. Such weapons basically consisted of well known commercial chemicals put into standard munitions such as grenades and artillery shells.*
>
> *Like nuclear weapons, chemicals are considered weapons of mass destruction. Most armies don't use them - while preparing to protect themselves against them - and military brass worldwide has for the most part kept them out of warfighting doctrine.*
>
> *Chlorine, phosgene (a choking agent) and mustard gas (which inflicts painful burns on the skin) were among the chemicals used. The results were indiscriminate and often devastating. Nearly 100,000 deaths resulted. Since World War I, chemical weapons have caused more than one million casualties globally.*
>
> *The recent Chemical Weapons Attack that killed dozens of people in Syria's northern Idlib province has drawn the concerns of world leaders towards it again.*
>
> *The UN Security Council called an emergency meeting to discuss the chemical weapons attack in Idlib and described it as a despicable act. Following the meeting an intensive search operation was launched in Syria.*

Chemical Weapons in Syria:

➤ In July 2012, Syria publicly acknowledged that it possesses chemical weapons. For a number of years preceding this announcement, the United States intelligence community assessed that Syria has a stockpile of chemical weapons, including mustard gas, blister agents, and nerve agents such as sarin and VX. Syria has the capability to deliver these agents using aerial bombs, ballistic missiles, and artillery rockets.

➤ Scattered reports of chemical attacks have been made since the beginning of the Syrian Civil War in 2011, but a large scale attack in August 2013 – with UN inspectors already on the ground – got the world's attention. Following the attack, UN backed by US signed a surprise agreement with Syria to remove all of Syria's previously undisclosed chemical weapons.

➤ In September 2014, The UN Security Council ordered Syria to account for and destroy its chemical weapons stockpile, and threatened to authorize the use of

force in the event of non compliance. In October 2014, Syria became a signatory to the Chemical Weapons Convention, prohibiting it from producing, stockpiling or using chemical weapons.

➤ Ahead of disarmament, Assad's government disclosed it had some of 1,300 tons of chemical weapons, including sarin, XV nerve agent and mustard gas.

What is a Chemical Weapon?

➤ A Chemical Weapon (CW) is a specialized munition that uses chemicals formulated to inflict death or harm on human beings. It releases toxic gas, liquid or solid that can poison people and the environment.

➤ Because they are relatively cheap and easy to produce, chemical weapons are referred to as the **"poor man's bomb"**. Even though modern munitions, through precision of application and specialised use, can cause catastrophic damage, chemical weapons trigger unmatched horror and leave deep psychological scars.

Various types of Chemical Agents:

➤ The toxic component of a chemical weapon is called its 'chemical agent'. Based on their mode of action (i.e. the route of penetration and their effect on the human body), chemical agents are commonly divided into several categories: choking, blister, blood, nerve and riot control agents.

The most commonly used chemical agents include:

➤ **Soman:** With Sarin and another chemical weapon known as Lewisite — a blistering agent — the nerve agent Soman is said to have made up much of the former Soviet Union's chemical arsenal. It is considered a volatile substance effective mainly through inhalation.

➤ **Sarin:** It is a colourless, odourless nerve gas extremely potent - even trace amounts can kill humans- but its threat after being released in the atmosphere is short lived. **The UN has confirmed the use of Sarin in the deaths of 87 people in Idlib province of Syria on April 4, 2017.**

➤ **VX:** VX, or O-ethyl S-diisopropylaminomethyl methylphosphonothiolate, is brownish, in liquid form, and its vapors are odorless. VX agents are among the most toxic substances known. Mere droplets can kill. It can remain on material, equipment and terrain for long periods. Uptake is mainly through the skin but also through inhalation of the substance as a gas or aerosol.

➤ **Mustard gas:** Possibly the world's most commonly used chemical weapon, it was widely used in World War I, and gets its name from its distinctive odour of rotten mustard. It is slow acting, and only about 5% to 10% of people exposed to it usually die.

➤ **Hydrogen Cyanide:** It is a commercially produced "**blood agent**" used in plastic and organic chemical products in many parts of the world. It is a colorless vapor at normal temperatures with a smell likened to bitter almonds. Hydrogen cyanide has high toxicity and in sufficient concentrations rapidly leads to death.

➤ **Tabun:** It is a colourless or brownish as a liquid and odourless as a vapour. Tabun, also an organophosphate like many pesticides, is considered among the easiest of nerve gases to manufacture, even in the non-industrialized world.

Chemical Weapons Conventions:

➤ Considering the huge casualties faced during World War I and widespread public outrage, the Geneva Protocol was signed in 1925, which prohibited the use of chemical weapons in warfare.

► While a welcome step, the Protocol had a number of significant shortcomings, including the fact that it did not prohibit the development, production or stockpiling of chemical weapons. Also problematic was the fact that many States that ratified the Protocol reserved the right to use prohibited weapons against States that were not party to the Protocol or as retaliation in kind if chemical weapons were used against them.

► The Cold War period saw significant development, manufacture and stockpiling of chemical weapons. By the 1970s and 80s, an estimated 25 States were developing chemical weapons capabilities. But since the end of World War II, chemical weapons have reportedly been used in only a few cases, notably by Iraq in the 1980s against the Islamic Republic of Iran.

Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction:

► Adopted during 1992 Conference on Disarmament, Geneva, after 12 years of negotiations, The Chemical Weapons Convention (CWC) is a universal non-discriminatory, multilateral, disarmament treaty that bans the development, production, acquisition, transfer, use, and stockpile or to retains Chemical Weapons (CW). The treaty entered into force on April 29, 1997.

► In order to prepare for the entry-into-force of the CWC, a Preparatory Commission of the **Organisation for the Prohibition of Chemical Weapons (OPCW)** was established with the responsibility to prepare detailed operation procedures and to put into place the necessary infrastructure for the permanent implementing agency provided for in the Convention.

► Headquarters for this organization were established in the Hague, the Netherlands. The CWC entered into force on 29 April 1997, 180 days after deposit of the 65th instrument of ratification.

► The treaty puts all the States Parties on an equal footing. Countries having stockpiles of chemical weapons are required to declare and destroy them in a specified time frame and those, who produce and use chemicals that can be converted into chemical weapons have to be open and transparent about the use they put these chemicals to.

► The CWC also requires the complete and verifiable (inspectable) destruction of existing CW stockpiles. The CWC addresses one of the national programmes and indirectly addresses the threat of chemical terrorism.

► As of April 2017, there are **192 nations as the members** of OPCW representing about 98% of the global population. The parties' main obligation under the convention is to effect this prohibition, as well as the destruction of all current chemical weapons.

Why the convention failed?

► Convention did not fail. However, the disarmament, which was carried out amid a chaotic civil war, has been the subject of some doubt, and there is evidence that the Islamic State group and other insurgents have acquired chemical weapons that have carried the recent (4th April 2017) chemical attack in Idlib causing 87 deaths. However, the eyewitnesses have blamed Syrian Military and Russian Military for carrying out the attack.

► Although Syria destroyed much of his stockpile then, there are allegations that it kept some supplies. The military also has ready access to chlorine, which can be used as a weapon but is also an industrial chemical needed for peaceful uses, including water purification.

Table 1. Effects and treatment of some chemical weapons developed for military use

	Nerve Agents		Blister Agents (injure skin, eyes, and airways)		Blood Agents (cause blood changes and heart problems)		Choking Agents	
Examples	Sarin	VX	Mustard	Lewisite	Hydrogen Cyanide	Cyanogen Chloride	Chlorine	Phosgene
Odor	Odorless		Garlic or Mustard	Geraniums	Burnt almonds		Bleach	Mown hay
Persistency*	Non-persistent (min. to hrs.)	Persistent (>12 hrs.)	Persistent		Non-persistent		Non-persistent; vapors may hang in low areas	
Rate of Action	Rapid for vapors; liquid effects may be delayed		Delayed	Rapid	Rapid		Rapid at high concentrations; delayed at lower concentrations	
Signs and Symptoms	Headache, runny nose, salivation, pinpointing of pupils, difficulty in breathing, tight chest, seizures, convulsions, nausea, and vomiting		Red, burning skin, blisters, sore throat, dry cough; pulmonary edema, eye damage, nausea, vomiting, diarrhea. Symptoms may be delayed 2 to 24 hrs		Cherry red skin/lips, rapid breathing, dizziness, nausea, vomiting, convulsions, dilated pupils, excessive salivation, gastrointestinal hemorrhage, pulmonary edema, respiratory arrest		Eye and airway irritation, dizziness, tightness in chest, pulmonary edema, painful cough, nausea, headache	
First Aid	Remove from area, treat symptomatically, Atropine and pralidoxime chloride (2-PAM chloride), diazepam for seizure control		Decontaminate with copious amount of water, remove clothing, support airway, treat symptomatically		Remove from area, assist ventilations, treat symptomatically, administer cyanide kit		Remove from area, remove contaminated clothing, assist ventilations, rest	
Decontamination	Remove from area, remove clothing, flush with soap and water, aerate							

*How long a chemical remains at toxic levels

► After US publicly abandoned his "red line" on the use of chemical weapons in Syria, there has been little overt military threat to Assad for deploying powerful and once-taboo weapons against rebel-held areas.

What should be done?

► Doctors and experts have called for greater supplies of gas masks and the antidote to sarin to be sent to rebel-held areas of Syria to help limit casualties in the case of another attack. That response is in part recognition of the futility of international efforts to limit use of chemical weapons in Syria.

Conclusion:

► Syria had one of the largest chemical weapons stockpiles in the world – including mustard and Sarin – and Syrian Government was using these awful weapons to kill its own people. In addition, if in possessions given the situation on the ground in Syria, this dangerous arsenal is at risk of capture by or transfer into the hands of extremists.

► However, considering the humanitarian facts the world leaders should recognize the destruction caused and casualties happened and should work towards eliminating the use of mass destruction weapons from the face of the earth. The positive efforts are also required from the part of Syrian government to save their civilians.

ECONOMIC ISSUE

N K Singh Panel Report on
FRBM ACT

Context

> *A five member panel (committee) constituted in May 2016, to set a new fiscal consolidation roadmap on revising the Fiscal Responsibility and Budget Management (FRBM) Act has submitted its report to the Ministry of Finance on January 23rd 2017.*
>
> *Headed by former Revenue Secretary N K Singh, the government had mandated the committee to explore whether it should adopt a flexible fiscal deficit target instead of a fixed number every year.*
>
> *Since its introduction, the Act has been facing a tougher road in its implementation. Paused four times since its enactment in August 2003, including for a reset of the fiscal deficit target in 2008-09 following the global financial crisis, the FRBM Act has become a subject of animated debate.*

Backgrounder to the FRBM Act

Fiscal Responsibility and Budget Management (FRBM) became an Act in 2003. The objective of the Act is to ensure inter-generational equity in fiscal management, long run macroeconomic stability, better coordination between fiscal and monetary policy, and transparency in fiscal operation of the Government.

The FRBM rule specifies reduction of fiscal deficit to 3% of the GDP by 2008-09 with annual reduction target of 0.3% of GDP per year by the Central government. Similarly, revenue deficit has to be reduced by 0.5% of the GDP per year with complete elimination to be achieved by 2008-09. It is the responsibility of the government to adhere to these targets. The Finance Minister has to explain the reasons and suggest corrective actions to be taken, in case of breach.

FRBM Act provides a legal institutional framework for fiscal consolidation. It is now mandatory for the Central government to take measures to reduce fiscal deficit, to eliminate revenue deficit and to generate revenue surplus in the subsequent years. The Act binds not only the present government but also the future Government to adhere to the path of fiscal consolidation. The Government can move away from the path of fiscal consolidation only in case of natural calamity, national security and other exceptional grounds which Central Government may specify.

Further, the Act prohibits borrowing by the government from the Reserve Bank of India, thereby, making monetary policy independent of fiscal policy. The Act bans the purchase of primary issues of the Central Government securities by the RBI after 2006, preventing monetization of government deficit. The Act also requires the government to lay before the parliament three policy statements in each financial

year namely Medium Term Fiscal Policy Statement; Fiscal Policy Strategy Statement and Macroeconomic Framework Policy Statement.

Why a new FRBM?

India is in a very different place than it was in 2003, when it adopted the first FRBM Law.

1. **India is increasingly getting financially integrated with the world economy.** Capital flows and portfolio flows have increased dramatically.

2. Increased international financial integration has coincided with **domestic financial sector reforms.** Statutory Liquidity Ratio (SLR) imposed on banks have come down from 30% in the late 1990s to 21.5% recently. More recently the Government of India, withdrew the legal tender status of Rs. 500 and Rs. 1000 banknotes.

3. At the same time, the **global backdrop has also changed substantially.** The prolonged global slowdown, developments in China, uncertainties in the Eurozone, demographic imbalances in several countries (like the aging population of Japan), low inflation have made the international environment increasingly challenging. More recently, the perception of increased protectionism in the United States after the results of presidential elections have further made the global environment highly uncertain. These external challenges also come at a time when India has become increasingly globalized.

4. Simultaneously, however, the **thinking on fiscal rules globally has changed.**

   a. Most countries have multiple fiscal rules.

   b. Furthermore, where practicable, these rules have provisions to allow fiscal space for exogenous shocks.

   c. Finally, they are complemented by independent fiscal councils, escape clauses, and automatic correction mechanisms – to impart transparency, flexibility and credibility to the framework.

Mandate

It's mandate included –

1. To review the working of the FRBM Act over last 12 years and to suggest the way forward;

2. To look into various factors going into determining the FRBM targets;

3. To examine the need and feasibility of having a 'fiscal deficit range' as the target in place of the existing fixed numbers (percentage of GDP) as fiscal deficit target; if so, the specific recommendations of the Committee thereon; and

4. To examine the need and feasibility of aligning the fiscal expansion or contraction with credit contraction or expansion respectively in the economy.

Key Recommendations

New statutory framework for debt and fiscal targets

► Repeal the existing FRBM Act, 2003 and the FRBM Rules, 2004.

► Enact a new Debt and Fiscal Responsibility Act and in pursuance of the new Act, enact and adopt the Debt and Fiscal Responsibility Rules, as per drafts suggested by the Committee.

Debt is the new anchor

➤ The Committee recommends a move to public debt to GDP ratio as a medium-term anchor for fiscal policy in India.

➤ There are four key economic arguments that form the basis for moving to debt.

◘ First, the standard government solvency constraint suggests debt to be the ultimate objective of fiscal policy.

◘ Second, there was broad consensus that a debt ceiling combined with fiscal deficit as an operational target can jointly provide a robust fiscal framework for India.

◘ Third, India, with a public debt close to 70% of GDP, currently stands out as among the most indebted countries amongst the relevant peer group of emerging markets.

◘ Finally, public debt exemplifies an important factor in the assessments of rating agencies.

◘ In addition to these economic arguments, a non-economic argument by committee members is that "debt", and "debt repayments" are concepts that can be communicated easily to the public, and are also embedded in the psyche of the ordinary citizen.

With Fiscal Deficit as the Operational Target

➤ A medium-term debt ceiling is not sufficient by itself, and needs to be combined with a key operational target, which the Committee recommends to be the fiscal deficit.

➤ A debt sustainability analysis (DSA) conducted for the central government suggests that a debt ceiling of 40% of GDP for the central government can be attained in the next 5-6 years only if the government sticks to the fiscal path envisaged under the present FRBM.

Targets

Recommended Path of Debt and Deficits

	Debt to GDP (%)	Fiscal deficit (% of GDP)	Revenue deficit (% of GDP)
FY17	49.4	3.5	2.30
FY18	47.3	3.0	2.05
FY19	45.5	3.0	1.80
FY20	43.7	3.0	1.55
FY21	42.0	2.8	1.30
FY22	40.3	2.6	1.05
FY23	38.7	2.5	0.80

➤ **Debt to GDP Ratio:**

◘ Adopt a prudent medium-term ceiling for general government debt of 60% of GDP, to be achieved by no later than FY23.

◘ Within the overall ceiling specified above, adopt a ceiling of 40% for the Centre, and the balance 20% for the States.

➤ **Fiscal deficit:**

�“ Adopt fiscal deficit as the key operational target consistent with achieving the medium-term debt ceiling.

◙ The path of fiscal deficit to GDP ratio of 3.0% in FY18-FY20, 2.8% in FY21, 2.6% in FY22, and 2.5% in FY23 be adopted.

➤ **Revenue deficit:**

◙ Revenue deficit to GDP ratio to decline steadily by 0.25 percentage points each year with the path specified as follows: 2.3% in FY17, 2.05% in FY18, 1.8% in FY19, 1.55% in FY20, 1.30% in FY21, 1.05% in FY22, and 0.8% in FY23.

Fiscal Council

➤ Constitute an independent Fiscal Council

➤ **Composition:**

◙ It will consist of a Chairperson and two Members.

◙ Only persons with domain expertise in public finance, economics, or public affairs shall be eligible to become Chairperson or Member.

➤ **Functions:** The Fiscal Council shall perform the following functions, namely:-

◙ Prepare multi-year fiscal forecasts for Central and General Government;

◙ Provide an independent assessment of the Central Government's fiscal performance and compliance with targets set under this Act;

◙ Prepare the Macroeconomic Framework Statement;

◙ Advise the Central Government on whether conditions exist to permit a deviation for invocation **in the "escape or buoyancy clause"; and**

◙ Make recommendations to the Central Government on the action plan for returning to the stipulated fiscal targets from which the deviations have taken place.

Escape clause

➤ There is a provision of "escape clause" wherein temporary and moderate deviations from the baseline fiscal path are permitted under exceptional circumstances and in reaction to external shocks.

➤ The Committee proposes escape clauses for following trigger situations:

◙ Over-riding consideration of national security, acts of war; calamities of national proportion and collapse of agriculture severely affecting farm output and incomes.

◙ Far-reaching structural reforms in the economy with unanticipated fiscal implications.

◙ Sharp decline in real output growth of at least 3 percentage points below the average for the previous four quarters.

➤ How much deviation is allowed?

◙ The deviations from the stipulated fiscal deficit target **shall not exceed 0.5 percentage points in a year.**

�« 	One of the members, Dr. Urjit Patel, however, is in favour of 0.3 percentage points.

➤ 	The Escape Clauses can be invoked:

◙ 	By the Government after formal consultations and advice of the Fiscal Council.

◙ 	Provided it is accompanied by a clear commitment to return to the original fiscal target in the ensuing fiscal year.

Buoyancy clause

➤ 	The Committee also felt that the policy responses to sharp changes in ouptut growth should be symmetric.

➤ 	If there is a sharp increase in real output growth of at least 3 percentage points above the average for the previous four quarters, fiscal deficit must fall by at least 0.5 percentage points below target.

➤ 	Similar to the escape clause, the buoyancy clause can be invoked by the Government, after formal consultations and advice of the Fiscal Council.

Fiscal transparency

➤ 	Move towards international best practices for compilation and presentation of fiscal accounts, as laid out in the International Monetary Fund Government Finance Statistics Manual 2014 (GFSM 2014).

➤ 	Effectively utilize provisions of Article 150 of the Constitution of India to improve accounting and fiscal reporting on Central and General Government finances.

➤ 	Expeditiously review and finalise the policy on management of the National Small Savings Fund.

Institutional Reforms in General in Government's Fiscal Management

➤ 	Centre should give consent to State borrowings under Article 293 of the Constitution, and

➤ 	Centre should request the RBI to issue a consolidated annual prospectus for planned bond and loan issues by each government.

Critical Analysis

➤ 	The move for reviewing the FRBM Act has been taken with the view of linking credit expansion under various government schemes with Fiscal Deficit Limits. As the political voters has the political conviction that promises of random largesse to voters to lure them such as loan waiver in various credit schemes. This increases the debt on the state government as for compensating the promises they have to borrow (sometimes excessively).

➤ 	Excessive and unsustainable borrowing by the government is obviously perverse as it entails a cost on future generations while crowding out private investment. In the past, fiscal irresponsibility has cost jobs, spiked inflation, put the currency in a tailspin and even brought the country to the brink of a default. The possibility of default may have resulted in the liberalisation of the economy in 1991, but the key trigger was irrational public spending on borrowed money in the late-1980s.

➤ 	The FRBM Act has been created to limit the government's borrowing authority under Article 268 of the Constitution which was shooting up to 10% of GDP during 90s.

➤ But the target to limit the fiscal deficit to 3% of GDP (by 2009) was abandoned after the 2008 global financial crisis as a liberal stimulus reversed the gains in the fiscal space, creating fresh macro-level instability. The FRBM Act's deficit target is now only likely to be met by 2018.

➤ A clear fiscal policy framework in tandem with the monetary policy framework already adopted could act as a powerful signal of commitment to macroeconomic stability.

➤ Finance Minister in his budget speech has recently commented that, 'fiscal expansion or contraction should be aligned with credit contraction or expansion respectively of the economy', which suggest that there should be an inverse correlation between fiscal deficit (fiscal expansion) and bank credit (monetary expansion). This is to ensure money supply to the economy in all the cycles.

➤ However, fiscal expansion or contraction should be aligned with credit contraction or expansion, respectively, in the economy.

➤ Both the Thirteenth Finance Commission and the Fourteenth Finance Commission recommended the establishment of an autonomous body to review fiscal performance under the FRBM Act. This could evolve into a statutory Fiscal Council, reporting to Parliament through the finance ministry. Such institutions have been set up in several countries, with somewhat varying mandates. Advantages would be:

   a) A Fiscal Council, with technical expertise, would help in generating better understanding of the consistency of fiscal stance of each budget with the longer-term fiscal trajectory envisaged under the FRBM Act.

   b) It will improve the quality of Parliamentary oversight.

   c) It will also contribute to a more informed public debate.

➤ A credible fiscal framework is a critical pillar of macroeconomic management. In the Indian context, a commitment to fiscal consolidation will complement the new inflation targeting monetary policy framework.

➤ The review committee in an attempt to reform the fiscal framework of the country has proposed a new legislative framework for fiscal consolidation – the Debt Management and Fiscal Responsibility (DMFR) Bill-2017. This bill lays down an elaborate arrangement to ensure that the central government sticks to the path of fiscal consolidation and can only temporarily deviate from it by triggering a strictly drafted escape clause.

➤ A state is said to be in fiscal deficit if in a given year it spends more than what it earns through revenue. In such a situation, the state can finance its extra spending through borrowing. The amount thus borrowed adds to the public debt of the state. Public debt is not harmful per se. Just like an educational loan is not harmful for a student's career. Instead, both are crucial investments for the future.

➤ However, while a student has every incentive to be cautious while taking a loan, ruling politicians have a perverse incentive to spend much more than the revenue in a bid to woo their vote bank. This gets reflected in successively higher and persistent public debt, thus imposing a higher financial burden on future generations of citizens. Hence, the need for rules is to restrict the discretion of ruling politicians in raising public debt and promote fiscal consolidation.

In a dissenting view on key aspects of the FRBM Committee report, panel member and Chief Economic Adviser Arvind Subramanian said the following:

1. Monitor primary deficit:

a. Government should monitor primary deficit as its fiscal target, instead of the fiscal deficit.

2. Escape Clause is Problematic:

a. The formation of the escape clause is problematic as the government would not have flexibility to relax the fiscal stance to combat ordinary recessions, but would have "too much room" to expand spending during growth booms.

3. Multiple targets:

a. Multiple targets of stock (debt-GDP ratio), flow (fiscal deficit-GDP ratio) and composition (revenue deficit-GDP ratio), may force policymakers to look at too many, potentially inconsistent objectives and analytical frameworks, running the risk of overall fiscal policy being difficult to communicate for the government and comprehend for market participants.

b. Instead of this we should have a simple and consistent fiscal architecture with one target of a steady glide path that removes government primary deficit within five years.

4. Arbitrary Targets:

a. He termed the fiscal deficit targets suggested by the FRBM panel as "arbitrary" as adherence to them will result in extreme pro-cyclicality — aggravating booms and busts — with adverse effects on the economy".

Conclusion

➤ The lower fiscal deficit trajectory suggested by the committee is positive from the point of view of India's sovereign credit rating and the external value of the rupee and would also have a salutary effect on foreign portfolio investment flows into India. The Centre must swiftly take a call on the panel's recommendations — including for a new debt and fiscal responsibility law, and the creation of a Fiscal Council with independent experts.

Miscellaneous News

Business Reform Action Plan 2017

Context:

► The Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry, in partnership with the World Bank Group, released the Business Reform Action Plan (BRAP) 2017 for implementation by States/UTs in April 2017.

Details:

► The BRAP includes 405 recommendations for reforms on regulatory processes, policies, practices and procedures spread across 12 reform areas, that is:

◘ Labour regulation enablers.

◘ Contract enforcement.

◘ Registering property.

◘ Inspection reform enablers.

◘ Single window system.

◘ Land availability and allotment.

◘ Constructions permit enablers.

◘ Environmental registration enablers.

◘ Obtaining utility permits.

◘ Paying taxes.

◘ Access to information and transparency enablers.

◘ Sector specific reforms spanning the lifecycle of a typical business.

► This year there are 103 new set of reforms (out of 405) focusing on central inspection system, online land allotment system, online single window system for granting construction permits, registration under Inter State Migrant Workmen (RE&CS) Act, 1979, approval for boiler manufacturer and boiler erector etc.

► DIPP will carry out a comprehensive business-to-government (B2G) feedback exercise this year whereby feedback will be taken from businesses on the quality of implementation of the reforms claimed by the States and UTs.

► For each State/UT, the scores will be aggregated over all the surveys conducted to yield an overall score for the State/UT.

➤ The feedback scores will be used to generate a ranking of States/UTs in terms of reform implementation. Such a ranking will be different from the last year's ranking, which was a ranking of de jure reforms (or reforms based on evidence submitted by States).

➤ The online portal shall soon be enabled to allow States/UTs to upload the reforms implemented along with the evidence.

➤ BRAP 2017 also includes two new sectors i.e, Healthcare and Hospitality. The last date to implement the reform is 31 oct 2017.

Niti Aayog three year action plan

Introduction:

➤ Draft Three Year Action Agenda covers the period from 2017-18 to 2019-20, the last years of the Fourteenth Finance Commission.

Background:

➤ The government had decided to do away with the practice of preparing annual budgets on the basis of 5-year plans from the current fiscal. Financial year 2016-17 was the terminal fiscal of the 12th Five Year Plan (2012-17).

➤ In May 2016, the Prime Minister's Office advised the NITI Aayog, its premier, independent think tank, to prepare a Fifteen Year Vision, Seven Year Strategy and Three Year Action Agenda. The Fifteen Year Vision and Seven Year Strategy document spanning 2017-18 to 2031-32 is in progress.

Inputs:

➤ In preparing the Agenda, the NITI Aayog sought and received inputs from State Governments, Union Territories and Ministries of the Central Government. Extensive consultations were held with groups of scientists, economists, journalists, voluntary organizations, industry associations and experts in education, health, culture, transport and other fields. Numerous experts and institutions provided useful written inputs.

Selected Key Action Agenda Items:

➤ Three Year Revenue and Expenditure Framework:

◘ Proposes reduction of the fiscal deficit to 3% of the GDP by 2018-19, and the revenue deficit to 0.9% of the GDP by 2019-20.

◘ Shifting additional revenues towards high priority sectors: health, education, agriculture, rural development, defence, railways, roads and other categories of capital expenditure.

➤ Agriculture: Doubling Farmers' Incomes by 2022.

➤ **Industry and Services:** Job Creation.

➤ **Urban Development:** Need to bring down land prices to make housing affordable through increased supply of urban land.

➤ **Regional strategies:**

◘ North Eastern Region,

◘ Coastal Areas & Islands,

◘ North Himalayan states, and

◘ Desert and Drought prone states.

- ► **Transport and Digital Connectivity.**

- ► **Energy:** Adopt consumer friendly measures such as provision of electricity to all households by 2022, LPG connection to all BPL households, elimination of black carbon by 2022, and extension of the city gas distribution programme to 100 smart cities.

- ► **Science & Technology.**

- ► **Governance:** Re-calibrate the role of the government by shrinking its involvement in activities that do not serve a public purpose and expanding its role in areas that necessarily require public provision.

- ► **Taxation and Regulation.**

- ► **The Rule of Law:** Undertake significant judicial system reforms including increased ICT use, structured performance evaluation and reduced judicial workload.

- ► **Education and Skill Development.**

- ► **Health:** Focus on public health through significantly increasing government expenditure on it, establishing a focal point and creating a dedicated cadre.

- ► **Building an Inclusive Society:** Enhance the welfare of women, children, youth, minorities, SC, ST, OBCs, differently abled persons and senior citizens.

- ► **Environment and Water Resources.**

Barak missile

Context:

- ► The defence ministry has approved arms procurement proposals worth over Rs 860 crore, which include additional Israeli Barak-I missiles for Indian warships as well as European equipment to defuse or destroy underwater enemy mines.

About Missile:

- ► Barak-8 is long-range nuclear capable missile, developed jointly by Israel and India.

- ► It has been designed and developed by DRDO, Israel Aerospace Industries and Israel's Administration for the Development of Weapons and Technological Infrastructure.

- ► It has the capacity to identify and neutralize various forms of aerial threats such as rockets, UAVs, planes, helicopters in a single flight.

- ► Barak-8 missile's most technologically advanced aspect is its ability to intercept missiles aimed at sea-bound vessels.

- ► It is 4.5-meter long and weighs around 3 tonnes can carry a payload of 70 kilograms. It has a speed of Mach 2.

- ► It will be used by both Israeli Navy and Indian Defence Forces.

Spacex launches first recycled rocket booster

Introduction:

SpaceX successfully launched its Falcon 9 rocket from space launch complex 39A at Kennedy Space Center, Florida and then retrieved its first recycled rocket on March 30, 2017.

The companies spent at least $1 billion developing the technology to land and refly its rockets.

SpaceX (Space Exploration Technologies Corporation) designs, manufactures and launches advanced rockets and spacecraft. The company was founded in 2002 to revolutionize space technology, with the ultimate goal of enabling people to live on other planets.

Details:

➤ A SpaceX Falcon 9 rocket recovered at sea from its maiden flight last year blasted off again from Florida in April 2017 in the first successful launch of a recycled orbital-class booster, then capped the feat with another return landing on an ocean platform.

➤ The Falcon 9 booster, which previously flew in April 2016, lifted off from the Kennedy Space Center to put a communications satellite into orbit for Luxembourg-based SES SA SESFg.LU.

➤ The booster's main section then separated from the rest of the rocket and flew itself back to a landing pad in the Atlantic, where it successfully touched down for its second at-sea return.

➤ SpaceX landed an orbital rocket after launch for the first time in December 2015, a feat it has now repeated eight times.

➤ The Falcon 9 booster launched for the company's 33rd mission in April 2017 was also the first to make a successful return landing in the ocean.

➤ SpaceX aims to eventually cut its costs by about 30 percent by reusing rockets.

➤ It took Space Exploration Technologies Corp, as the California-based company is formally known, 15 years to demonstrate that a rocket typically discarded in the ocean after a single flight could be recovered and reused.

Avalanche

Context:

Unprecedented snowfall in Jammu and Kashmir triggered multiple avalanches in the Ladakh region. Five soldiers were trapped under snow when an Army post was hit in the Batalik sector.

What is Avalnache?

This is a rapid downslope movement of a large detached mass of snow, ice, and associated debris such as rocks and vegetation. Small avalanches, or **Sluffs,** occur in large numbers, while large avalanches that may encompass slopes a kilometer or more in length with millions of tons of snow, occur infrequently but cause most of the damage. Humans have been exposed to the threat of sliding snow for as long as they have inhabited mountainous regions.

Types

1. Loose snow avalanches

Mass of loose snow that originates at a single point on a slope, steeper than its natural angle of repose and gathers cohesion-less snow on the surface of the pack as it descends.

With higher momentum , it even ascend an opposite valley slope.

2. Slab avalanches

Originate in snow with sufficient internal cohesion to enable a snow layer, or layers, to react mechanically as a single entity. A slab avalanche breaks free along a characteristic fracture line, a sharp division of sliding from stable snow.

3. Wet snow avalanches

These move more slowly than dry ones and are seldom accompanied by dust clouds. Their higher snow density can lend them enormous destructive force in spite of lower velocities.

4. Direct action avalanches

These are the immediate result of a single snowstorm. They usually involve only fresh snow.

5. Climax avalanches

Result of a series of snowstorms or a culmination of weather influences. Their fall is not necessarily associated with a current storm or weather situation.

Mitigation

1. Modification of the path of avalanche movement.

2. To have control structures, such as, snow bridges, snow rakes, snow net, snow fences, avalanche gallery, diversionary dam, earthen mounds and above all planting those areas with trees.

3. Accurate forecasting and timely relaying of information would enable people; in the vulnerable areas down under, to escape to safe places.

4. A forest with thick growth of trees inhibits the formation of avalanches.

5. Travellers and Trekkers should carry with them safety and sound alarm.

Environmental Impact of Art of Living Programme

Context:

National Green Tribunal (NGT) panel has submitted an action plan to correct the ecological impact on Yamuna floodplain following Art of Living's World Culture Festival in March 2016.

Adverse effects on ecology by such events:

The use of big diesel power generators during ongoing World Culture Festival (WCF) at Yamuna floodplains is expected to have serious impact on the air quality.

►   The main event site has been totally destroyed by complete clearing of all kinds of vegetation on the floodplain (and loss of all dependent biodiversity), filling in of water bodies and all depressions, dumping of debris and garbage followed by leveling and heavy compacting of the ground".

►   Most of the ecosystem functions of natural wetlands have been completely lost. This is an 'invisible' loss of biodiversity which cannot be easily assessed, and most may never be able to return.

►   Constructions of ramps and roads, filling up of water bodies and leveling off the ground together with compaction have almost completely eliminated the natural physical features and diversity of habitats.

➤ Physical changes also occurred in the river channel due to the removal of riparian vegetation, construction of road and pontoon bridges, blocking of the side channel that would invariably disturb the flow and bottom sediments besides bringing in particulate material into it.

➤ The simplification of habitat into a flat land has eliminated all water bodies in the impacted area. These water bodies control floods, help groundwater recharge, support vegetation, fish and other biodiversity. Overall, the floodwater retention capacity of the area has been severely compromised.

➤ The floodplain has lost almost all of its natural vegetation - trees, shrubs, reeds, tall grasses, aquatic vegetation including water hyacinth. The vegetation also includes numerous microscopic forms of algae, mosses and some ferns which inhabit the soil and water bodies.

➤ Loudspeakers, fire crackers and loud musical instruments, appear to be one of the biggest culprits of noise pollution during festivals in India. A study by World Health Organization (WHO) asserts that noise pollution is not only a nuisance to the environment but it also poses considerable threat to public health.

➤ Also in direct violation of the National Green Tribunal's (NGT) orders regarding the revitalization and conservation of the Yamuna.

NGT guidelines

➤ The committee set forth an action plan and broke up ecological rehabilitation into two components—physical and biological—specifying costs and timelines for each.

➤ The costs for physical rehabilitation were put at Rs28.73 crore (two years) and those for biological at Rs13.29 crore (10 years).

➤ Measures suggested under physical rehabilitation include rejuvenation of soil in the area by de-compacting, removal of stones, and construction of embankments along roadsides.

➤ The biological component comprised of development of catchment areas and stimulation of natural topography of the floodplains.

Kudankulam Nuclear Plant

Context:

➤ India has taken over full operational control of Unit 1 of **the Kudankulam Nuclear Power Plant (KKNPP)**. An agreement was signed in this regard recently.

About Nuclear plant:

➤ **Kudankulam Nuclear Power Plant** is the single largest nuclear power station in India, situated in Koodankulam in the Tirunelveli district of the southern Indian state of Tamil Nadu.

➤ The Kudankulam 1 has been jointly built by the Nuclear Power Corporation of India and Russia's nuclear agency ROSATOM and it had started generating electricity in 2013.

➤ The plant's first reactor is the first Pressurised Water Reactor (PWR) belonging to the Light Water Reactor (LWR) category in India, and the 21st nuclear power reactor in the country. The Russian-built Kudankulam plant is the country's largest nuclear power project and is designed to help meet a surging demand for electricity.

► PWRs use ordinary water as both coolant and moderator. The design is distinguished by having a primary cooling circuit which flows through the core of the reactor under very high pressure, and a secondary circuit in which steam is generated to drive the turbine.

Reinder Police

► The **Reindeer Police** is a special branch of the Norwegian Police Service. Established in 1949 and a subdivision of Eastern Finnmark Police District, the Reindeer Police is responsible for security, law maintenance etc. related to the Sámi reindeer herding, and is also responsible for preventing and handling environmental crime. They operate in the counties of Troms and Finnmark.

► Here, far above the Arctic Circle, the reindeers' grazing grounds can be a source of conflict. Herders don't always agree on the division of their grazing grounds, with no fences separating them.

► Insults, threats, stealing or killing animals, and, more rarely, fisticuffs or gunshots: although it's nearly deserted, the far North is no stranger to violence.

Elephant Census

Context

► Four States — Odisha, West Bengal, Chhattisgarh and Jharkhand — which comprise India's most human-elephant conflict-prone region, have decided to count elephants synchronously between May 9 and 12.

► This will be the first regional synchronous elephant census with an identical set of rules for direct and indirect counting methods.

► The census has been consciously been scheduled for May 10, a full moon day on which the chances of elephant sightings are higher.

► The synchronised census will indicate the size, distribution, structure and density of the elephant population in the region.

Procedure

► The direct elephant counting method is based on sightings of elephants, while in the indirect method, surveyors follow a dung decay formula for arriving at a population estimation.

► Dung decay methods have already been used by Karnataka and Tamil Nadu.

Regulatory body issues new ad norms for celebrities

Context:

Advertising Standards Council of India (ASCI), the ad industry's self-regulatory body, has released a set of guidelines for celebrity endorsements that bring personalities, including doctors, authors, activists and educationists, into the celebrity category.

Guidelines:

► Celebrity should do due diligence to ensure that all description, claims and comparisons made in the advertisements they appear in or endorse are capable of being objectively ascertained and capable of substantiation and should not mislead or appear deceptive.

➤ Moreover, the regulator has also banned the celebrities from endorsing "any advertisement of a product or treatment or remedy that is prohibited for advertising" under the Drugs & Magic Remedies (Objectionable Advertisements) Act and the Drugs & Cosmetic Act".

➤ It also prohibits celebrities from appearing in any ad in which "a product which by law requires a health warning - is injurious to health" on its packaging or advertisement.

➤ It is the duty of the advertiser and the agency to make sure that the celebrity they wish to engage with is made aware of them (ASCI codes).

Rail Development Authority

Context:

The Union cabinet has approved the setting up of a regulator for the railways—the Rail Development Authority (RDA). It is envisaged that RDA comprising a Chairman and three Members shall make recommendations to Government for appropriate consideration/decision.

Objectives:

The aims and objectives of Rail Development Authority are:

➤ Pricing of services commensurate with costs;

➤ Enhancement of Non Fare Revenue;

➤ Protection of consumer interests by ensuring quality of service and cost optimization;

➤ Competition, efficiency and economy;

➤ Market development;

➤ Creation of positive environment of investment;

➤ Benchmarking of service standards against international norms;

➤ Providing framework for non-discriminatory open access to Dedicated Freight Corridor (DFC);

➤ Absorption of new technologies for achieving efficiency and performance standards; and

➤ Human resource development to achieve any of its stated objectives.

Nomadic Elephant

Context:

The twelfth edition Indo-Mongolian Joint Military Exercise Nomadic Elephant 2017 has begun at Vairengte in Mizoram.

Objective:

The purpose of this exercise is to develop synergy and inter-operability between the forces of both the countries for the purpose of the rebellion and counterterrorism model, under the UN's mandate.

The joint training will also lay emphasis on conducting operations by a joint subunit, comprising of troops from both the armies, in adverse operational conditions aimed at enhancing the interoperability between the two armies.

Centre on Integrated Rural Development for Asia and the Pacific

Context:

The government has approved the establishment of a unit of the Centre on Integrated Rural Development for Asia and the Pacific at national rural development institute for exchange of best practises with other countries in the areas of rural development.

The new centre will help NIRD&PR in networking with organisations specialised in rural development programmes, building institutional knowledge, exchanges of best practises with CIRDAP.

About CIRDAP

The Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP) is a regional, intergovernmental and autonomous organisation.

It was established on 6 July 1979 at the initiative of the countries of the Asia-Pacific region and the Food and Agriculture Organization (FAO) of the United Nations with support from several other UN bodies and donors.

The Centre came into being to meet the felt needs of the developing countries at that time as an institution for promoting integrated rural development in the region.

Objective

► To assist national action and promote regional co-operation relating to Integrated Rural Development (IRD), in the region.

► To act as a servicing institution for its member states.

► To encourage joint collective activities to benefit the member countries both individually and collectively.

► To poverty alleviation through people's participation in the development process.

Belle-II experiment

Context:

The High Energy Accelerator Research Organisation (KEK) completed the much-awaited 'rolling-in' of the Belle-II experiment in Tsukuba, Japan.

About the experiment

This experiment is designed to study violations of the Standard Model and dark matter.

Belle-II has better sensitivity, some 50 times higher, than its predecessor, Belle.

The experiment will focus on the search for new physics beyond the standard model via high precision measurement of heavy flavor decays and search for rare signals.

Rashtriya Vayoshri Yojana

Context:

"Rashtriya Vayoshri Yojana", a 'Scheme for providing Physical Aids and Assisted-living Devices for Senior citizens belonging to BPL category' has been launched in District Nellore, Andhra Pradesh on 1st April, 2017.

Salient features of the scheme

➤ Free of cost distribution of the devices, commensurate with the extent of disability/ infirmity that is manifested among the eligible senior citizens.

➤ In case of multiple disabilities/infirmities manifested in the same person, the assistive devices will be given in respect of each disability/impairment.

➤ ALIMCO will undertake one year free maintenance of the aids & assisted living devices.

➤ Beneficiaries in each district will be identified by the State Governments/UT Administrations through a Committee chaired by the Deputy Commissioner/ District Collector.

➤ As far as possible, 30% of the beneficiaries in each district shall be women.

➤ The State Government/UT Administration/District Level Committee can also utilize the data of BPL beneficiaries receiving Old Age Pension under the NSAP or any other Scheme of the State/UT for identification of senior citizens belonging to BPL category.

➤ The devices will be distributed in Camp mode.

Eligibility

Senior Citizens, belonging to BPL category and suffering from any of the age related disability/infirmity viz. Low vision, Hearing impairment, Loss of teeth and Locomotor disability will be provided with such assisted-living devices which can restore near normalcy in their bodily functions, overcoming the disability/infirmity manifested. The Scheme is expected to benefit 5,20,000 Senior Citizens across the country.

Funds

The expenditure for implementation of the scheme will be met from the "Senior Citizens' Welfare Fund". The Scheme will be implemented through the sole implementing agency - Artificial Limbs Manufacturing Corporation (ALIMCO), a PSU under the Ministry of Social Justice and Empowerment.

National Institutional Ranking Framework

Context:

Human Development Resources Minister Prakash Javadekar has released the National Institutional Ranking Framework (NIRF) 2017.

About the framework

➤ The National Institutional Ranking Framework (NIRF) has been launched by the Ministry of Human Resource Development on September 29th, 2015. This framework outlines a methodology to rank institutions across the country covering about 3500 educational institutes of India.

➤ The methodology draws from the overall recommendations broad understanding arrived at by a Core Committee set up by MHRD, to identify the broad parameters for ranking various universities and institutions.

➤ Although the Ranking Frameworks are similar, the exact methodologies are domain specific. Ranking methods have been worked out for 6 categories of institutions i.e., Engineering, Management, Pharmacy, Architecture, Universities and Colleges.

➤ The NIRF envisaged separate rankings for different categories of institutions in their own respective peer groups. Further, within each discipline, there is provision

for separate ranking in two categories – institutions that are engaged in research and teaching (Category A), and those engaged mainly in teaching (Category B).

Outcomes

The Indian Institute of Science (IISc), Bangalore, the first Indian institution to make it to the top 10 in a small universities global ranking, has been placed at the top in the annual national rankings released by the HRD ministry. Seven Indian Institutes of Technology (IITs) have also found their place in the list of the top 10 educational institutions released under the National Institutional Ranking Framework (NIRF), the other two being Banaras Hindu University (BHU) and Jawaharlal Nehru University (JNU).

South Asia Subregional Economic Cooperation (SASEC)

Context:

South Asia Subregional Economic Cooperation (SASEC) program of Asian Development Bank (ADB) is expanding towards the East with Myanmar formally becoming the 7th member of SASEC in 2017.

About SASEC program:

The SASEC program was formed in 2001 in response to the request of the four countries of South Asia – Bangladesh, Bhutan, India and Nepal – from ADB to assist in facilitating economic cooperation among them. These four countries comprise the South Asia Growth Quadrangle (SAGQ), formed in 1996, as a vehicle for accelerating sustainable economic development through regional cooperation. As a project-based partnership, the SASEC program has been helping realize regional prosperity by enhancing cross-border connectivity, facilitating faster and more efficient trade and promoting cross-border power trade. Maldives and Sri Lanka joined SASEC in 2014, further expanding opportunities for enhancing economic linkages in the sub-region.

Benefits of inclusion of Myanmar

► Myanmar is key to realizing greater connectivity and stronger trade and economic relations between the SASEC sub-region and the countries of East and Southeast Asia and that Myanmar's membership in SASEC can offer a host of opportunities for realizing synergies from economic cooperation in the sub-region.

► SASEC member countries recognize that most of SASEC's multimodal connectivity initiatives include Myanmar. Road corridors in Myanmar provide the key links between South Asia and Southeast Asia.

► Ports in Myanmar will provide additional gateways to the landlocked North Eastern region of India.

► Development of multi-modal connectivity between North Eastern region of India, Bangladesh and Myanmar has the potential of unleashing tremendous economic energy in the sub-region.

► SASEC's energy connectivity and energy trade prospects will be enhanced with the inclusion of Myanmar, involving its substantial resources of hydropower and natural gas.

► Moreover, developmental impacts of economic corridor in the SASEC sub-region will be maximized by exploring potential synergies with corridors in Myanmar that are linked to those in other Southeast Asian countries.

India's longest road tunnel

Context:

India's longest road tunnel has been built on the Jammu and Kashmir highway.

Salient features of the tunnel

➤ The Chenani-Nashri tunnel spans 9.28 kilometres and is expected to cut travel time from Jammu to Srinagar by at least two hours.

➤ Its uniqueness is that it has an Integrated Tunnel System, under which all the systems, such as Entrance Detection Control System, Electrical Fire Signalling System, Video Surveillance System, and Evacuation Broadcast System, are controlled through one particular software.

➤ The tunnel has an Incident Detection Systems, under which, if any accident happens, control team will get to know before the victim contacts them through the SOS call box.

➤ The tunnel has hydrants at every 150 metres, to tackle any kind of fire incidents, and at every 75 metres, there is a video surveillance monitor, through which cameras will help in the detection of any "suspicious acts" by anyone inside the tunnel.

➤ The tunnel has a transverse ventilation system enabled by ABB drives and controlled by ABB software.

➤ The tunnel, at an altitude of 1,200 meters, is a part of National Highway Authority of India's (NHAI's) project between Jammu and Srinagar, along the National Highway 44.

National Lok Adalat

Context:

The Second National Lok Adalat for 2017, conducted on April 8, through out the country from taluk level courts to High Courts, has settled nearly 6.6 lakh cases.

About Lok Adalat

➤ National Level Lok Adalats are held at regular intervals where on a single day Lok Adalats are held throughout the country, in all the courts right from the Supreme Court till the Taluk Levels wherein cases are disposed off in huge numbers.

➤ The cases ranged from matrimonial disputes, partition suits, civil matters, cheque bounce cases, motor accident claims, revenue disputes pending in courts, criminal compoundable cases and service matters pertaining to pension, retrial benefits, etc.

➤ The award of a Lok Adalat is final and cannot be challenged by way of appeals and revision, etc.

➤ Moreover, settlement of a pending court case in a Lok Adalat comes with an added incentive of refund of court fee to the party involved in the litigation.

Panel to suggest norms for Bitcoin

Context:

Finance Ministry has constituted an inter-disciplinary committee to examine the existing framework for virtual currencies, including bitcoins, and suggest measures to deal with issues like money laundering.

About the panel

The committee, to be chaired by special secretary (Economic Affairs), will submit its report within three months.

The inter-ministerial group will have representatives from revenue department, home ministry, RBI, ministry of electronics and information technology and State Bank of India.

The committee will take stock of the present status of virtual currencies, both in India as well as abroad.

It will also examine the existing global regulatory and legal structures governing virtual currencies and suggest measures for dealing with issues like consumer protection and money laundering.