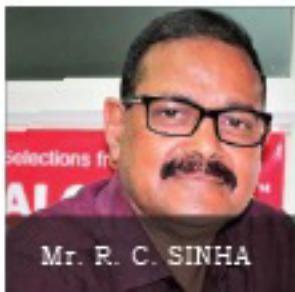




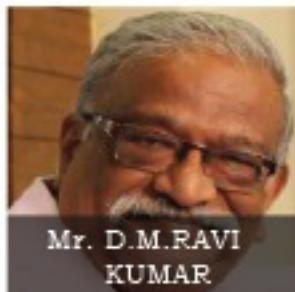
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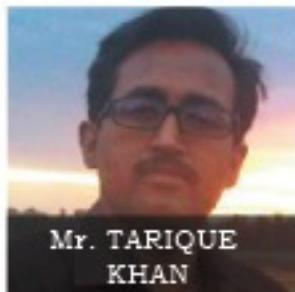
Mr. R. C. SINHA



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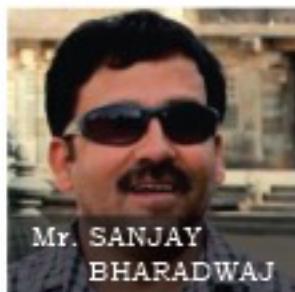
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Mr. R.C. SINHA



Mr. D.M.RAVI KUMAR



MATHEMATICS

Mr. VINNAKOTA SRIKANTH



GEOGRAPHY

Mr. PRIYESH SINGH SENGAR

OTHER OPTIONALS

ANTHROPOLOGY

POLITICAL SCIENCE

TELUGU LITERATURE

HISTORY

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Polity and Governance

1. Altruistic surrogacy

Altruism is defined as “unselfish regard or devotion to the welfare of others” — a quality that all surrogates arguably must possess to make the physical and emotional sacrifices demanded by surrogacy. Many surrogacy supporters argue that all surrogacy is altruistic in nature, which can make it somewhat difficult to truly define altruistic surrogacy.

However, the term “altruistic surrogacy” generally refers only to those arrangements in which the surrogate does not receive compensation for her services beyond reimbursement for medical costs and other reasonable pregnancy-related expenses. Many of these arrangements are between family members or close friends and are completed as independent surrogacies. The alternative to altruistic surrogacy is commercial surrogacy, in which the surrogate is fairly compensated for her time and energy, the sacrifices she makes and the many physical and emotional challenges she faces throughout the surrogacy process.

The sections below explore the process, costs, pros and cons of altruistic surrogacy, as well as some important considerations for prospective intended parents to take into account before pursuing this type of surrogacy arrangement.

How does altruistic surrogacy work?

The surrogacy process is generally the same for altruistic surrogacy as it is for commercial surrogacy. However, most intended parents in altruistic surrogacy arrangements work with surrogates they already know. Because of the incredible selflessness required of altruistic surrogates, many are women who volunteer their gestational services for their siblings, children, or other close family members or friends.

These arrangements are known as "identified surrogacy" because the intended parents and surrogate have already found their match before working with a surrogacy professional. Identified surrogacy puts intended parents and surrogates a few steps ahead in the surrogacy process and eliminates the need for an agency's matching services. However, it is highly recommended that intended parents and identified surrogates work closely with a surrogacy professional throughout the remainder of the process to complete the necessary legal and medical requirements, and to provide the surrogate any support she made need.

Altruistic Surrogacy Cost

Altruistic surrogacy is often less expensive than commercial surrogacy because of the intended parents do not compensate their surrogate. Despite these savings, there are still several important services and professionals involved in the altruistic surrogacy process, as well as many variable expenses that can impact the overall cost of the surrogacy.

Here are some of the services and fees that may be applicable to altruistic surrogacy arrangements:

- Medical expenses, including the embryo transfer or artificial insemination, fertility injections, and labor and delivery costs
- Donation fees if an egg donor or sperm donor is required
- Attorney fees
- Counseling expenses
- Additional fees, including maternity clothing and travel costs to transport her to and from appointments
- Agency fees

These surrogacy costs are variable depending on a number of factors, including your state's laws and cost of living, the professional you work with and your surrogate's needs. For a better understanding of surrogacy costs, speak with a surrogacy professional to discuss your individual circumstances.

Pros and Cons of Altruistic Surrogacy

Between the right surrogate and intended parents, altruistic surrogacy can be a positive experience with many benefits for intended parents. However, there are also some challenges with altruistic surrogacy to keep in mind before entering into this type of surrogacy agreement.

Here are some common advantages and disadvantages of altruistic surrogacy:

PROS

- Altruistic surrogacy is generally less expensive than commercial surrogacy because intended parents do not pay their surrogate.
- Altruistic surrogacy is legal in many U.S. states and countries where commercial surrogacy is banned, making it a more widely available option for intended parents.
- Intended parents pursuing an identified altruistic surrogacy may feel a greater peace of mind and stronger sense of trust throughout the pregnancy because it is being carried by a close family member or friend.

CONS

- Most altruistic surrogates are close friends or family members of their intended parents. Intended parents who are not pursuing identified surrogacy are not likely to find a match with an altruistic surrogate through an agency's matching services.
- Altruistic surrogates may feel underappreciated or even exploited at times, and friends and family members may feel pressured to enter a surrogacy arrangement in which they do not receive compensation. These situations could potentially have a negative impact on the intended parents' relationship with the surrogate.

- Intended parents may feel less in control of the surrogacy when the surrogate is not compensated; for example, some intended parents may feel hesitant to make specific requests of the surrogate because they are not paying her in exchange.

Final Thoughts

Under the right circumstances, altruistic surrogacy can be an incredible and rewarding experience for everyone involved. For intended parents, it is a remarkable and selfless gift and a more cost-effective way to grow their family. However, it is also important to think about the potential complications that could arise before entering into an altruistic surrogacy agreement with a friend or family member.

Surrogacy is a life-altering experience for everyone involved, and intended parents should be aware of the potential long-term impact this form of surrogacy could have on their relationship with the friend or family member who carries the pregnancy for them. Surrogates and intended parents should seek counseling services before and during the surrogacy process to ensure this is the best choice for them.

2. PM Modi inaugurates India's longest rail-road bridge in Assam

Why in news?

Prime Minister Narendra Modi inaugurated the 4.94-km-long Bogibeel Bridge in Assam, India's longest rail-cum-road bridge, on the mighty Brahmaputra.

PM Modi flagged off the first train from Tinsukia in south bank to Naharlagun in Arunachal Pradesh in north bank.

Important facts:

- The bridge has been thrown open on the birth anniversary of former Prime Minister Atal Bihari Vajpayee under whose government the work had started in 2002. The foundation stone of the project was laid by former Prime Minister HD Deve Gowda in 1997.
- The Bogibeel Bridge, which was a part of the Assam Accord and sanctioned in 1997-98, is likely to play a crucial role in defence movement along the India-China border in Arunachal Pradesh.
- Constructed at an estimated cost of Rs 5,900 crore, the bridge has a “serviceable period of around 120 years”. It is situated 17 km downstream of Dibrugarh city in Assam, and it has been constructed for double-line broad gauge track along with three-lane roads.
- The road distance from Dibrugarh to Itanagar will be reduced by 150 km and the railway travel distance between these two points will shorten by 705 km, while this bridge will provide an alternate and shorter route from Dibrugarh through north bank of Brahmaputra to Delhi and Kolkata via Rangiya.

- Although it will ease out inconvenience caused to people living on the northern side of Brahmaputra to a great extent, officials said the defence requirement played an important role while sanctioning the structure and its design.
- The biggest advantage of the bridge will be easy movement of troops from southern to northern bank. This means travelling to the farthest most point of India's border with China will be shortened by several hundred kilometres.
- This bridge will be the lifeline of the north eastern part of the country and will facilitate connectivity between north and south banks of river Brahmaputra in the eastern region of Assam and Arunachal Pradesh.
- Students and patients have to cross the river on boat to come to Dibrugarh, which houses the famed Dibrugarh University and Assam Medical College, besides a dozen other such centres
- The bridge will enhance the national security of the eastern region by facilitating swift movement of defence forces and their equipment. It was constructed in such a way that even a fighter jet can land on it in case of emergency.
- Bogibeel is India's first and only fully welded bridge construction. It is also for the first time European codes and welding standards were adhered to in the construction of a bridge in India.
- Bogibeel Bridge falls in Seismic Zone-V, which is most vulnerable to earthquakes with magnitudes more than 7.0. To offer good stability, the heavy spans (1,700MT) are provided with seismic restrainers.
- Realising its strategic importance, the central government had declared the construction of the bridge as a National Project in 2007, thereby assuring availability of fund for speedy construction.

3. Triple talaq

Context:

- The Lok Sabha has passed the Muslim Women (Protection of Rights on Marriage) Bill, 2018, also known as, Triple Talaq Bill.
- The Bill makes instant triple talaq void and illegal. It seeks to make the practice of instant triple talaq a punishable offence with imprisonment of up to three years.

What is Triple Talaq or instant divorce?

- India's Supreme Court banned "triple talaq", or instant divorce, practiced by some in the Muslim community, saying it is "unconstitutional".
- Triple talaq is the practice under which a Muslim man can divorce his wife by simply uttering "talaq" three times. It is prevalent among India's Muslim community majority of who follow the Hanafi Islamic school of law.

- This mode of divorce is not universal among Muslims across the world, as many other Islamic schools of thought prefer the divorce process to be deferred, in many cases over a period of three months.
- The government has cited the example of many predominantly Muslim countries, including Pakistan, that have banned triple talaq.

Why it is in the news?

- A Muslim organisation named Bharatiya Muslim Mahila Andolan (BMMA), launched a campaign to ban “triple talaq” or “nikah halala”- a practice where divorced women, in case they want to go back to their first husbands, have to consummate a second marriage.
- It has generated debate around the rights of Muslim women as the issue of divorce, marriage, and inheritance come under the purview of the Muslim Personal Laws. India has a provision for personal laws for all religious communities.
- But the All India Muslim Personal Law Board (AIMPLB), a non-governmental organisation that aims to educate Muslims on the protection and application of Islamic laws, has opposed the move to ban triple talaq and polygamy. The latter is illegal in India.
- Critics say divorce and polygamy are not the main issues facing the Muslim community, the majority of who are close to the bottom of economic and educational indicators in the country.
- The AIMPLB has opposed what it calls government interference in the personal laws of the Muslim community, who form nearly 14 percent of India’s 1.3 billion populations.
- The Shariat Application Act was passed 10 years before India gained independence from the British colonial power in 1947.
- But Indian nationals, including Muslims, can opt to marry under the secular Special Marriage Act enacted by the Indian parliament in 1954.

Gender Justice:

- Islam considers marriage as a contract and it has laid down procedures on how to annul it. A woman can seek divorce under what is called as “khula”, while the husband can end the marriage by pronouncing talaq thrice, after which arbitration is required.
- But activists have highlighted the misuse of instant divorce by men as a reason to ban it. Cases of husbands divorcing their wives through text messages and over phones have come to light.
- According to the findings of a BMMA study, more than 90 percent of 4,710 women interviewed wanted a ban on unilateral divorce.
- But none of the Quranic guidelines of discussion, arbitration, witnesses, specified time period or even a genuine attempt to resolve differences are being followed. In such circumstances, the question of alimony or the rights of children doesn’t arise.

- "Nearly 41 percent of women themselves wanted divorce. If a woman herself wants divorce and husband gives, it is out of mutual agreement. It is a divorce by consent. In Islam it is known as **Talaq-e-Mubarra**. It's OK.
- It is only when these two situations are not there, triple divorce will look bad.
- In that situation the better solution would be that the three pronouncements should be considered as one. So that there is a scope for reconciliation.

Divorce and polygamy rate among Indian Muslims:

- The Quran allows polygamy with strict conditions, but polygamy is the least among Indian Muslims when compared with other religious groups.
- According to census data from 2011, the divorce rate among Muslims was 0.56 percent less than the Hindu community, which stood at 0.76 percent.
- So far, the government has not conducted any survey on the extent of triple talaq among Muslims
- They say the government should form a committee of experts for Muslim law reform rather than seeking an immediate court ban, and conduct surveys to get a real sense of the problem.

Arguments against triple talaq

- It goes against the rights of equality and women's empowerment. It propagates the dominance of men over women.
- According to a study, 92% of Muslim women in India wanted the triple talaq to be banned.
- It gave men the right to arbitrarily divorce their wives without any valid reason.
- New-age technology has given birth to new modes of triple talaq such as through skype, text messages and email.
- Many Islamic countries have outlawed this practice including Bangladesh, Pakistan and Indonesia. There is no reason for a democratic and secular India to continue this lopsided practice.
- It goes against the constitutional principles of gender equality, secularism, right to life of dignity, etc. It goes against Article 14 (Right to Equality) and Article 15(1) which states that there shall be no discrimination against any citizen on the basis of gender, race, etc. and this kind of talaq is biased against the interests of women.
- The constitution of the country says that it shall strive to bring a uniform civil code for the entire country. Doing away with triple talaq will definitely be a step closer to the constitution-makers' dream of having a uniform civil code for all citizens.

- However, the National Commission of Women says that this matter cannot be linked to uniform civil code. Nevertheless, it should be banned in order to protect the interests of Muslim women.
- The Supreme Court has also declared that this practice is unconstitutional and not protected by Article 25 which regards the freedom of religion. Also in December 2016, the Allahabad High Court had said that no personal law board was above the constitution.
- Experts also opine that only the essential or integral features and aspects of a religion are protected by the Constitution. Triple talaq was not an integral feature of Islam.

Challenges in banning triple talaq

- Religious groups infer the banning of a traditional practice sanctified by Sharia as interfering in the religious aspects of minorities.
- The courts should decide two things basically:
 - Whether personal law can be subject to the constitution or not
 - How to view the relationship between triple talaq and Muslim personal law

Past rulings:

- In the Shah Bano case in 1985, the SC granted Shah Bano, a 62-year old woman the right to alimony from her husband.
- But in 1986, the government passed the Muslim Women (Protection of Rights on Divorce) Act which diluted the positive impact created by the Shah Bano case.
- In 2001, in the Danial Latifi & Anr versus Union of India case, the SC upheld the validity of the Shah Bano judgement.
- In August 2017, a five-judge bench of the SC declared the triple talaq as unconstitutional in a majority 3:2 judgement. This was the culmination of a petition filed by Shayara Bano, whose husband of 15 years had divorced her through a letter where he pronounced talaq three times, to declare the divorce as void.

The latest ruling is truly a watershed moment in women empowerment movement in India. The court has given progressive thoughts enshrined in the Constitution precedence over personal law in society.

4. Separate High Court for Andhra Pradesh and Telangana

Context:

In pursuance of article 214 of the Constitution and the Order issued by the Supreme Court of India and in exercise of powers conferred under clause (a) of sub-section (1) of section 30, sub-section (1) of section 31 and sub-section (2) of section 31 of the Andhra Pradesh Reorganisation Act, 2014, the President has constituted a separate High Court for the State of Andhra Pradesh, namely, the High Court of Andhra Pradesh, from the 1st day of

January, 2019 with the principal seat of such High Court at Amaravati in the State of Andhra Pradesh and the High Court of Judicature at Hyderabad shall become the High Court for the State of Telangana.

The new High Court for Andhra Pradesh will be the 25th High Court in the country. The new Andhra HC is expected to function from a temporary structure in Amaravati till a permanent building is set up at the 'Justice City' being planned in Amaravati.

Constitutional provisions related to High Court in India:

- Article 214 provides that every State shall have a High Court, however, Article 231 states that Article 214 shall not be a bar for constituting a common high court for two or more States.
- Only Parliament may by law establish a Common High Court for two or more States. This means that, unless Parliament by law establishes a Common High Court for two or more States, every State has to have a High Court, i.e., upon formation of a new State a new High Court is also formed.
- Article 216 provides that every High Court shall consist of a Chief Justice and such other number of judges as the President may from time to time deem necessary to appoint.
- Article 217 relates to appointment of HC judges.

5. Ensuring transparency in Selection of Sportspersons

Implementing Various Sports Promotional Schemes:

- Ministry of Youth Affairs and Sports (MYAS) through Sports Authority of India (SAI) has been implementing various sports promotional schemes to tap sports talent across the country irrespective of their financial status.
- Under the Schemes – SAI Training Centers (STC), Special Area Games (SAG), sports talents belong to rural, tribal, coastal, hilly and backward areas of the country are selected.
- The selected trainees are provided financial support in the form of expert coaches, sports equipment, boarding and lodging, sports kit, competition exposure, educational expenses, medical/insurance and stipend as per the approved scheme norms.
- Under the Scheme of Assistance to National Sports Federations, the Government supports the identified sportspersons, including those from weaker sections of society/teams for intensive coaching through national coaching camps, foreign exposures/competitions etc.

Objectives of the scheme:

- To develop and promote various disciplines of sports including selection of players for various national and international sports competitions is the responsibility of the concerned National Sports Federations (NSFs).

- The NSFs work in an autonomous environment and the Government is not directly involved in their functioning, including selection of sports persons.
- To ensure transparency in selection process Government has issued guidelines according to which selection of sportspersons for major international events is to be done by a Selection Committee.

Customized Training:

Under Target Olympic Podium Scheme (TOPS), customized training is being provided to identify sportspersons at the state-of-the-art sports institutes/ academies within the country and abroad.

National Sports Federations –

National Sports Federations (NSFs) are autonomous bodies registered under the Societies Registration Act 1860.

Sports Authority of India (SAI) – Apex national sports body of India

It is established in 1984 by the Ministry of Youth Affairs and Sports for the development of sports in India.

6. Shaky foundation

Context:

- The Union Home Secretary promulgated an order authorising 10 Central agencies to monitor, intercept and decrypt information which is transmitted, generated, stored in or received by any computer.
- Under the order, an individual who fails to assist these government agencies with technical assistance or extend all facilities can face up to seven years of imprisonment or be liable to be fined.

The government order is based on:

- Section 69 (1) of the Information Technology Act, 2000, and
- Rule 4 of the Information Technology (Procedure and Safeguards for Interception, Monitoring and Decryption of Information) Rules, 2009, which enables government agencies to intercept personal information of citizens under certain conditions.

The problem of present Surveillance Framework:

- The debate, therefore, is not about ‘whether surveillance at all’, but about ‘how, when, and what kind of surveillance’.
- The existing surveillance framework is complex and confusing. Simply put, two statutes control the field:
- Telephone surveillance is sanctioned under the 1885 Telegraph Act (and its rules),
- Electronic surveillance is authorised under the 2000 Information Technology Act (and its rules).

- The procedural structure in both cases is broadly similar, and flows from a 1997 Supreme Court judgment: surveillance requests have to be signed off by an official who is at least at the level of a Joint Secretary.

There are three features about the current regime.

- **First, it is bureaucratised:** Decisions about surveillance are taken by the executive branch (including the review process), with no parliamentary or judicial supervision; Indeed, the fact that an individual will almost never know that she is being surveilled means that finding out about surveillance, and then challenging it before a court, is a near-impossibility.
- **Second, the surveillance regime is vague and ambiguous:** Under Section 69 of the IT Act, the grounds of surveillance have been simply lifted from Article 19(2) of the Constitution, and pasted into the law. They include very wide phrases such as “friendly relations with foreign States” or “sovereignty and integrity of India”.
- **Third, and flowing from the first two features, the regime is opaque:** There is almost no information available about the bases on which surveillance decisions are taken, and how the legal standards are applied. Indeed, evidence seems to suggest that there are none: a 2014 RTI request revealed that, on an average, 250 surveillance requests are approved every day. It stands to reason that in a situation like this, approval resembles a rubber stamp more than an independent application of mind.

The illusion of a trade-off:

- There is a stock response: the right to privacy is not absolute.
- Surveillance is essential to ensure national security and pre-empt terrorist threats, and it is in the very nature of surveillance that it must take place outside the public eye.
- Consequently, the regime is justified as it strikes a pragmatic balance between the competing values of privacy and security.
- In this context, the evidence demonstrates clearly that a heavily bureaucratized and minimally accountable regime of surveillance does nothing to enhance security, but does have significant privacy costs.
- For example, while examining the U.S. National Security Agency's programme of mass surveillance, an American court found that out of more than 50 instances where terrorist attacks had been prevented.
- Not even a single successful pre-emption was based on material collected from the NSA's surveillance regime.
- Indeed, such a system often has counterproductive effects: a government that is not checked in any meaningful way will tend to go overboard with surveillance and, in the process, gather so much material that actually vital information can get lost in the noise.

- In the famous ‘privacy-security trade-off’, therefore, it is exceedingly important to assess the balance on the basis of constitutional principles and fundamental rights, rather than blindly accepting the government’s rhetoric of national security.
- After the Supreme Court’s 2017 judgment in K.S. Puttaswamy v. Union of India (‘the right to privacy case’), the constitutional contours within which the questions of ‘how, when, and what kind’ have to be answered have been made clear.
- The same goal i.e., protecting national security can be achieved by a smaller infringement upon fundamental rights, then the government is constitutionally bound to adopt the method that does, indeed, involve minimal infringement.

Way Forward:

- Under these parameters, there is little doubt that on the three counts described above:
 - Its bureaucratic character,
 - Its vagueness, and
 - Its opacity the existing surveillance framework is unconstitutional, and must be reconsidered.
- To start with, it is crucial to acknowledge that every act of surveillance, whether justified or not, involves a serious violation of individual privacy;
- Further, a system of government surveillance has a chilling effect upon the exercise of rights, across the board, in society.
- The Right Parameters can be as follows:
 - Given the seriousness of the issue, a surveillance regime cannot have the executive sitting in judgment over the executive: there must be parliamentary oversight over the agencies that conduct surveillance.
 - They cannot simply be authorised to do so through executive notifications.
 - Equally important, all surveillance requests must necessarily go before a judicial authority, which can apply an independent legal mind to the merits of the request, in light of the proportionality standards discussed above.
- Second, judicial review will not achieve much if the grounds of surveillance remain as broad and vaguely worded as they presently are.
- Therefore, every surveillance request must mandatorily specify a probable cause for suspicion, and also set out, in reasonably concrete terms, what it is that the proposed target of surveillance is suspected of doing.

- As a corollary, evidence obtained through unconstitutional surveillance must be statutorily stipulated to be inadmissible in court.
- And last, this too will be insufficient if surveillance requests are unopposed: it will be very difficult for a judge to deny a request that is made behind closed doors, and with only one side presenting a case.
- There must exist, consequently, a lawyer to present the case on behalf of the target of surveillance even though, of course, the target herself cannot know of the proceedings.

Conclusion:

- To implement the suggestions above will require a comprehensive reform of the surveillance framework in India. Such a reform is long overdue.
- This is also the right time: across the world, there is an increasingly urgent debate about how to protect basic rights against encroachment by an aggressive and intrusive state, which wields the rhetoric of national security like a sword.
- In India, we have the Supreme Court's privacy judgment, which has taken a firm stand on the side of rights.
- In 2017 Privacy Judgement, SC ruled that "right to privacy is an intrinsic part of Right to Life and Personal Liberty under Article 21 and entire Part III of the Constitution".

The privacy judgment has already asked the government "to be sensitive to the needs of and the opportunities and dangers posed to liberty in a digital world".

Citizens' initiatives such as the Indian Privacy Code have also proposed legislative models for surveillance reform. We now need the parliamentary will to take this forward.

7. KALIA scheme

Context:

Odisha cabinet has approved the Krushak Assistance for Livelihood and Income Augmentation (KALIA) scheme, worth over Rs. 10,000 crore, for the development of farmers in the state.

Key features of the scheme:

- As per the scheme, an amount of Rs. 10,000 per family at the rate of Rs. 5,000 each for Kharif and Rabi seasons shall be provided as financial assistance for taking up cultivation.
- The assistance will be provided to take care of sustenance of farmers not able to take up cultivation due to old age, disability, disease or other reasons.
- The scheme also has a component for livelihood support for landless households. The landless households will have the option of selecting

any of the units. The scheme, among others, will particularly benefit scheduled caste and scheduled tribe households.

- Deserving families will be identified and selected by gram panchayats. About 10 lakh households will be covered over two years under this scheme at a cost of Rs. 100 crore.
- The scheme also include life insurance cover of Rs. 2 lakh and additional personal accident cover of Rs. 2 lakh will be provided to both cultivators and landless agriculture labourers covering about 74 lakh households.

Significance of the scheme:

- The KALIA is historic and it will further accelerate agricultural prosperity in the state and reduce poverty. It is a progressive and inclusive scheme and will make a direct attack on poverty by way of massive investment in this sector and making benefits reach the most needy through Direct Benefit Transfer (DBT) mode.
- Ten lakh landless households will be supported with a unit cost of Rs. 12,500 to take up activities like goat rearing units, mini layer units, duckery units, fishery kits for fishermen and women, mushroom cultivation and bee keeping.

International Relations

8. U.S.-Mexico-Canada pact

Context:

USMCA Replacing NAFTA

- After more than a year of intense negotiation, the U.S., Canada and Mexico managed to arrive at a revised trade agreement to replace the quarter-century-old North American Free Trade Agreement (NAFTA).
- A new free trade pact USMCA replaces the 25-year-old North American Free Trade Agreement (NAFTA), which Donald Trump threatened to cancel previously.
- The deal does not do anything new to promote the cause of free trade among the North American nations but it achieves the objective of averting any significant damage to the international trade system.

USMCA: United States-Mexico-Canada Agreement:

- Canada and U.S. reached a deal to a new free trade pact. This is known as USMCA, that means, United States-Mexico-Canada Agreement. It gives U.S. greater access to the dairy markets of Canada and allows extra imports of Canadian cars.



- Now the U.S.A says, USMCA will result in freer markets, fairer trade and robust economic growth.

- Under the new deal, Canada will have to allow American dairy producers to compete against locals, a move that will favour Canadian consumers.

- The U.S. agreed to retain Chapter 19 and Chapter 20 dispute-settlement mechanisms as a compromise, which Canada quite often used to resolve the trade conflicts and to defend against U.S anti-dumping and countervailing duties.

- USMCA includes stronger protections for workers, tough new environmental rules.
- It also provides "ground breaking" intellectual property protections. It adds provisions to prevent "manipulation" of the trade rules, including covering currency values, and controls over outside countries trying to take advantage of the duty-free market.
- In addition, 40% of the car parts of vehicles produced in the three Countries must be made in North America. The minimum wages should be \$16 an hour.
- This is the best anyone could possibly hope for in the midst of the global trade war that began this year.

What's new in the deal, and how big of an impact will it have?

Country of origin rules:

- Under the new deal, cars or trucks must have 75 percent of their components manufactured in Mexico, the US, or Canada to qualify for zero tariffs.
- The goal is to boost auto parts manufacturing in North America by forcing car companies to use parts made here versus cheaper parts from Asia.
- Labour provisions
- The most striking difference from NAFTA involves protections for workers in all three countries.
- The new agreement calls for 40 to 45 percent of automobile content to be made by workers who earn at least \$16 an hour by 2023. This provision specifically targets Mexico and is meant to bring wages there up to US and Canadian standards.
- In addition, Mexico has agreed to pass laws giving workers the right to real union representation, to extend labor protections to migrants workers (who are often from Central America), and to protect women from discrimination.
- These are much-needed reforms, and they address a lot of concerns that US labor unions have long had about NAFTA.

US farmers get more access to the Canadian dairy market

- Canada uses what's called a supply management system for dairy (and eggs and poultry), which closely regulates how much of each product can be produced and places strict tariffs and quotas on those items when they're shipped into the country.
- The US got Canada to open up its dairy market.

Intellectual property protections and digital trade provisions

- This is a win for the United States. The new agreement extends the terms of copyright from 50 years beyond the life of the author to 70 years beyond the life of the author.

- The USMCA aims to fix that by adding new provisions to deal with the digital economy — that is things like e-commerce and data.
- These new digital provisions include things like no duties on products purchased electronically, such as music or e-books, and protections for internet companies so they're not liable for content their users produce.
- Canada preserves the special trade dispute mechanism and Investors can't sue governments

In the original NAFTA, a provision known as Chapter 11 gave investors the ability to sue governments over changes to policies that they claim would harm future profits.

It's been eliminated for the US and Canada and has been restricted in Mexico except for a few sectors, including energy.

Trump gets a win on his trade strategy — but what does it all mean?

- Some changes are substantial, such as the provisions about automobiles, but the core of NAFTA remains intact.
- They have fixed some of the problems with NAFTA, they have brought it up to date, they have expanded the scope of the agreement, but they have in no way fixed what seemed to be the fundamental problems of NAFTA by President Trump.
- Because, USMCA has introduced digital trade protections and other updates, but it perhaps didn't go far enough.
- Many of the more forward-looking agreements, such as digital trade protections, were borrowed from the TPP.

But, the question is how long this strategy can last, and whether it will work on harder trade deals, for instance with Japan and the European Union

USMCA impact on India:

- The biggest impact, according to the US trade officials, is going to be in the auto section that stipulates conditions such as manufacturing of greater portion of vehicles in the three countries and with high-wage labour in the US and Canada.
- Announcing the USMCA, Mr Trump signalled he would now extend his 'all or nothing' approach to resetting trade ties with the European Union, China, Japan and India.
- Terming India "the tariff king", he said it had sought to start negotiations immediately.
- India's trade negotiators will now have their task cut out if they want to protect exporters' access to one of the country's largest markets for its services and merchandise.

Economy

9. Chabahar port

Context:

- India has formally taken over operations of Iran's strategic Chabahar Port.
- Iran formally handed over the port to India during a first meeting of the follow-up committee for the implementation of the Chabahar Agreement between Iran, Afghanistan, and India held recently in the port city Tehran.

Background:

The Chabahar Agreement was signed in June 2015 and approved by Iran's Guardian Council in November 2016. Chabahar is being seen as a gateway for trade by India, Iran and Afghanistan with Central Asian countries.

Where is Chabahar port?

Iran's Chabahar port is located on the Gulf of Oman and is the only oceanic port of the country. The port gives access to the energy-rich Persian Gulf nations' southern coast.

Why Chabahar port is crucial for India?

- The first and foremost significance of the Chabahar port is the fact that India can bypass Pakistan in transporting goods to Afghanistan. Chabahar port will boost India's access to Iran, the key gateway to the International North-South Transport Corridor that has sea, rail and road routes between India, Russia, Iran, Europe and Central Asia.
- Chabahar port will be beneficial to India in countering Chinese presence in the Arabian Sea which China is trying to ensure by helping



Pakistan develop the Gwadar port. Gwadar port is less than 400 km from Chabahar by road and 100 km by sea.

- With Chabahar port being developed and operated by India, Iran also becomes a military ally to India. Chabahar could be used in case China decides to flex its navy muscles by stationing ships in Gwadar port to reckon its upper hand in the Indian Ocean, Persian Gulf and Middle East.
- With Chabahar port becoming functional, there will be a significant boost in the import of iron ore, sugar and rice to India. The import cost of oil to India will also see a considerable decline. India has already increased its crude purchase from Iran since the West imposed ban on Iran was lifted.
- Chabahar port will ensure in the establishment of a politically sustainable connectivity between India and Afghanistan. This will in turn, lead to better economic ties between the two countries.
- From a diplomatic perspective, Chabahar port could be used as a point from where humanitarian operations could be coordinated.

10. Polavaram Multipurpose Project

Context:

Andhra Pradesh government has launched works for erection of the first radial gate – the 41st one – at the Polavaram project site.

Polavaram Project, is an under construction multi-purpose irrigation project on the Godavari River in the West Godavari District and East Godavari District in Andhra Pradesh. The project has been accorded national project status by the Union Government of India and will be the last to be accorded the status. Its reservoir spreads into parts of Chhattisgarh and Odisha States also.

The Polavaram Irrigation Project is a Multipurpose one conferring Irrigation benefits in the upland areas of Visakhapatnam, East Godavari, West Godavari and Krishna Districts. It also envisages drinking water supply to Visakhapatnam Township and other towns and villages enroute and Industrial water supply to the Visakhapatnam coast based Steel Plant and other industries in the vicinity, generation of Hydel Power, affording



Navigation facilities, development of pisciculture and providing recreation and other benefits, besides urbanization.

Purpose:

The central idea behind the project was to transfer the water surplus from godavari to the water deficit krishna basin.

Challanges Faced:

- The Polavaram Project Environmental Impact Appraisal Report of 1985 expected 150,697 people to be displaced in 226 villages.
- The Andhra government has not found a financier for the project. Work on rehabilitation has stopped due to funds crunch.
- The project is estimated to submerge villages along the Sabari river in Konta block of Chhattisgarh's Dantewada district.

Way Forward

- India has many rivers, sub rivers but still many parts of the country are suffering from severe drought conditions, while other parts in the same region see the rivers swell into floods! The irrigation projects help bridge the gap by holding large amounts of water which can be utilized for irrigating the drought ridden areas and controlling the water levels at other areas. The supply and demand equation can be balanced with the interlinking of rivers.

11. Levelling the playing field for online vendors

Context:

The government is clear that the new rules are needed to prevent anti-competitive behaviour—online marketplaces should not have a role in determining prices of products

Important Facts:

- Tighter rules governing e-commerce platforms notified by the government this week are designed to level the playing field for all vendors in an online marketplace.
- These impose restrictions on related-party transactions, preferential treatment to suppliers, and inventory dumping.
- All of these were market imperfections that had crept in since the government had announced the foreign direct investment (FDI) policy for the sector in 2016, during which US retail giants Amazon and Walmart came to occupy a commanding position in India's \$41-billion e-commerce industry.
- Indian brick-and-mortar retailers have grown restive, claiming online marketplaces like Amazon and Flipkart have acquired the power to influence retail prices, in contravention of the policy that restricts FDI in business-to-consumer (B2C) e-commerce, but not in business-to-business (B2B).

- The government appears to have bought this argument and the new set of rules are meant to give effect to the original e-commerce policy even as inter-ministerial consultations are on for drawing up a new one.

Why India is a crucial battleground for online Vendors?

- India is a crucial battleground for Amazon and Walmart—they have committed a combined \$21 billion to this market—and they may now have to review their business operations in the country. A
- Amazon has several joint ventures, including Cloutail and Appario, that may be affected by the restrictions on sales by related parties.
- Flipkart has exclusive partnerships with smartphone brands like Xiaomi and Oppo that could, in turn, face a ban on exclusive deals for products.
- Both offer promotional schemes such as cashbacks and faster delivery, which are now deemed discriminatory.
- The companies will now have to furnish reports to the Reserve Bank of India annually, adding another dimension to compliance and monitoring of the e-commerce industry.
- Flipkart and Amazon can thus be reasonably expected to push back against rules they find too constrictive, given the size of their investments in the ecosystem that fuels e-commerce on this scale.

Way Forward:

- The government, on its part, is clear that the new rules are needed to prevent anti-competitive behaviour in the e-commerce industry—online marketplaces should not have any role in determining the prices of the products sold on their platforms.
- As regulator, it cannot avert its gaze from market distortions, even if the latest rules do not fit snugly into the country's competition law, which proscribes only a select segment of exclusive arrangements that have a demonstrably significant effect on market freedom.
- The focus should be on establishing specific arrangements that create barriers to new entrants. The extra load on auditors is, however, a small price to pay in the larger interest of transforming India's retail sector into a modern industry.
- E-commerce provides India's army of medium and small enterprises one of their least-cost options to sell their wares, and the government's approach of encouraging online marketplaces with due safeguards cannot be faulted. But the regulatory reflex must be tempered by the realization that a ramshackle retail sector is not in the interests of consumers or producers.

Geography and Environment

12. Indonesia Tsunami

Context:

On 22nd December 2018, Indonesia was hit by a Tsunami. As the giant tsunami waves crashed into coastal towns on the islands of Sumatra and Java, at least 281 people were killed and 1,016 were injured.

Why in news?

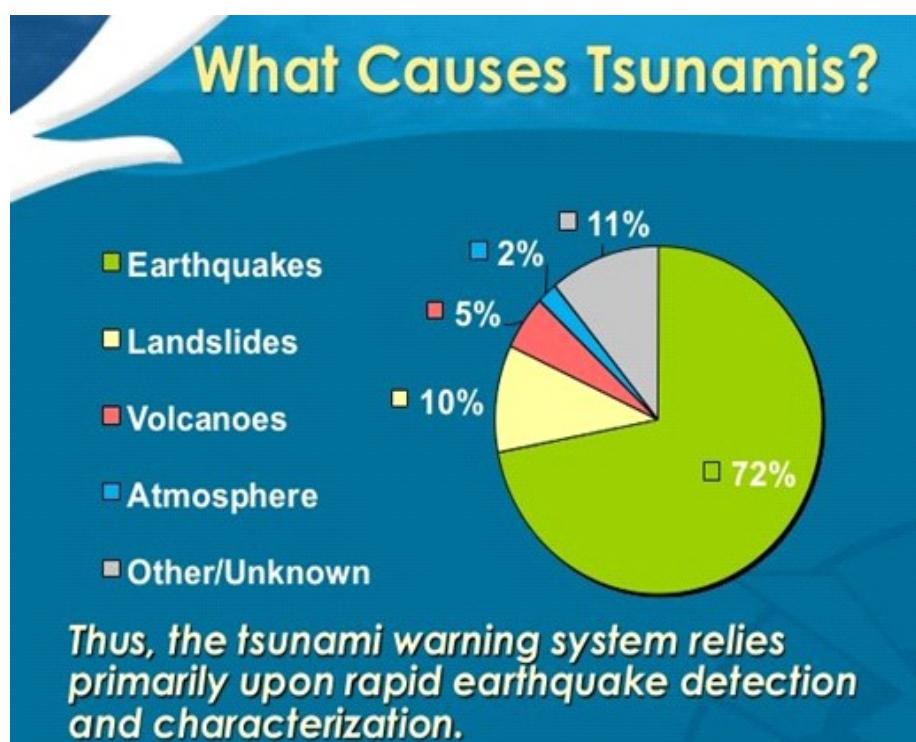
Recently, a major 7.5-magnitude earthquake, tsunami hit Palu, a city in the Indonesian island of Sulawesi.

Tsunami:

Tsunami meaning “harbour wave” in literal translation comes from the Japanese characters for harbour (tsu) and wave (name). A tsunami also called seismic sea waves, is one of the most powerful and destructive natural forces. It is a series of extremely long waves caused by a large and sudden displacement of the ocean due to earthquake, volcanic eruptions etc. When they reach the coast, they can cause dangerous coastal flooding and powerful currents that can last for several hours or days.

Causes of Tsunami:

A tsunami is caused by a large and sudden displacement of the ocean.



Large earthquakes below or near the ocean floor are the most common cause. But landslides, volcanic activity, near earth objects (e.g., asteroids, comets), certain meteorological conditions and nuclear tests can also cause tsunamis.

Earthquake - Tsunami can be generated when the sea floor ruptures abruptly due to tectonic earthquakes, causing vertical displacement of the

overlying water. Most of the earthquakes which generate tsunamis occur on thrust faults. These earthquakes occur mainly in the areas where tectonic plates move toward each other in subduction zones.

- As per data, ten to fifteen percent of the most damaging tsunamis are generated by strike-slip earthquakes involving a horizontal movement of the earth.
- Example - 2004 Indian Ocean Tsunami was an earthquake-induced Tsunami, caused by an earthquake (Mw 9.2) in the Indian Ocean.

Landslides - landslide is a general term that involves the ground movement of different types, including rock slide, block slide, debris flows, avalanches, and glacial calving (referring to the breaking off of large pieces of ice from a glacier).

- Tsunamis can be generated when a landslide enters the water and displaces it. Such generation of Tsunami depends on the amount of rock material that displaces the water, the speed with which it is moving, and the depth it moves to.
- Landslide-generated tsunamis may be larger than seismic tsunamis near their source, but they usually lose energy quickly and rarely affect distant coastlines. A landslide big enough to cause a transoceanic tsunami has not occurred in the recorded history.
- Example - 1998 Papua New Guinea Tsunami was generated by a landslide cause by an earthquake.

Volcanoes - volcanoes generated Tsunamis are very infrequent, both above and below water. However, different types of volcanic activity can displace enough water to generate tsunamis e.g. submarine explosions, caldera formations etc.

- Like other non-seismic tsunamis, such as those generated by landslides, volcanic tsunamis usually lose energy quickly and rarely affect distant coastlines.
- Example - 1883 Indonesia Tsunami was caused by the explosion of Krakatau volcano.
- Near Earth Objects It is very rare for a near earth object like an asteroid or comet to reach the earth and its potential to generate Tsunami is still uncertain, as there are no records of a Tsunami caused by near earth objects, in recent human history. However, scientists are of the opinion there are two ways near earth objects could generate a tsunami.
- Large objects (more than 1,000 meters in diameter) that make it through Earth's atmosphere without burning up could hit the ocean, displacing water and generating an impact tsunami.
- If this happens above the ocean, the explosion could release energy into the ocean and generate an airburst tsunami.

Meteotsunamis - Some meteorological conditions, for example, air pressure disturbances often associated with fast moving weather systems, can displace bodies of water enough to generate Tsunamis. These meteotsunamis are similar to tsunamis generated by earthquakes, but usually with lower energies.

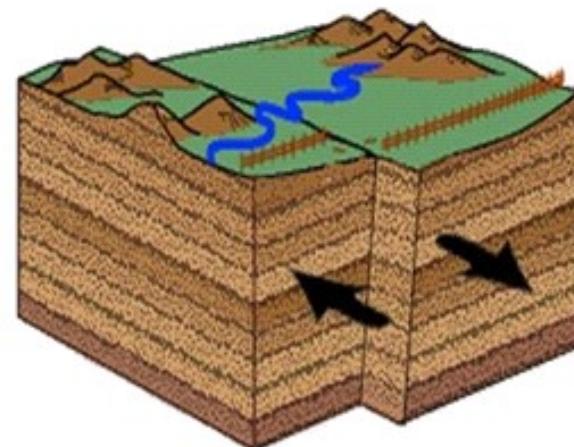
- The development of these Meteotsunamis depends largely on the direction, intensity of air pressure and ocean depth. Meteotsunamis are regional, and it is found in some part of the world frequently due to regional factors such as topography of earth's surface both below and above the ocean.
- Example 2013 New Jersey, USA Tsunami caused by a high-speed windstorm associated with thunderstorms.
- Nuclear Weapon or tests it is an example of man-made disaster. Massive explosions created by a nuclear weapon or nuclear tests have the potential to cause Tsunami. There have been dangers of using this as a tectonic weapon.
- There has been considerable speculation on the possibility of using nuclear weapons to cause tsunamis near an enemy coastline. In fact, In World War II, the New Zealand Military Forces, in a failed attempt, tried to create small tsunamis with explosives.

Present Indonesia case:

- ‘Horizontal’ earthquakes - The recent 7.5-magnitude quake in Indonesia was triggered by what is called a ‘strike-slip fault’.
- In this type of quake, the earth’s movement is largely horizontal which would not normally trigger a tsunami.
- However, it is possible for a strike-slip fault to also have some amount of vertical motion that could displace water.
- Or the fault’s rupture zone may pass through an area where the seafloor rises or drops off.

Strike-Slip Faults

- Blocks of rock move sideways or horizontally on either side of the fault plane.
- Stresses that push blocks of rock horizontally cause earthquakes along strike-slip faults.
- The San Andreas Fault is a strike-slip fault.



- In such cases, when the fault moves during the quake, it pushes seawater in front of it.
- Notably, in Indonesia's case, the fault's rupture zone was estimated to be about 70 miles long, suggesting a large possibility for the above.
- Landslide - Another possibility is that there could have been a mudslide on the ocean floor.
- This could have displaced a lot of water and created waves, causing a cataclysmic effect on the bay.
- Topography - The tsunami could have been impacted by Palu's location at the end of a narrow bay.
- The coastline and the shape of the bottom of the bay could have focused the wave energy and guided it up the bay.
- This could have increased the wave height as it approached the shore.

India's preparedness:

- The Deep Ocean Assessment and Reporting System (DOARS) was set up in the Indian Ocean post 2014.
- The Indian government plans to set up a network with Indonesia, Myanmar and Thailand etc..
- A National Tsunami Early Warning Centre, which has the capability to detect earthquakes of more than 6 magnitude in the Indian Ocean, was inaugurated in 2007 in India.
- Set up by the Ministry of Earth Sciences in the Indian National Centre for Ocean Information Services (INCOIS), Hyderabad, the tsunami warning system would take 10-30 minutes to analyze the seismic data following an earthquake.

What Made Predicting the Indonesian Tsunami Difficult?

- In most of the cases, tsunamis occur as a result of massive earthquakes beneath the sea bed. The earthquake can disrupt the sea bed abruptly and displace water from the equilibrium position. The displaced water hit the shores with enormous energy, swaying whatever comes its way.
- But the recent tsunami in Indonesia was not caused by undersea earthquake; it was an outcome of a volcanic eruption. The Anak Krakatau volcano caused molten rocks to create massive underwater landslides that pushed water up and caused a wave that grew as high as 10 feet.
- The Anak Krakatau lies in the Sunda Strait which is equidistant from Java and Sumatra. The underwater landslides here hit the shores of both Java and Sumatra with almost equal intensity causing similar devastation.
- Indonesia's existing tsunami prediction systems are not up to date for

the prediction of non-seismic tsunamis like that caused by volcanoes, but are made for early warning about earthquake activities.

- Most of the tsunami detection systems contain a pressure recorder anchored to the sea bed and a buoy on the surface. The system detects and records the changes in water pressure on the onset of a tsunami and transmits that information to the surface buoy which is eventually relayed to the wider network in the tsunami detection system.
- The National Oceanic and Atmospheric Administration (NOAA) says that earthquake is the first sign of any potential tsunami. They also concede that forecasting non-seismic tsunamis are far more difficult. These kinds of tsunami can erupt with little or no warning.

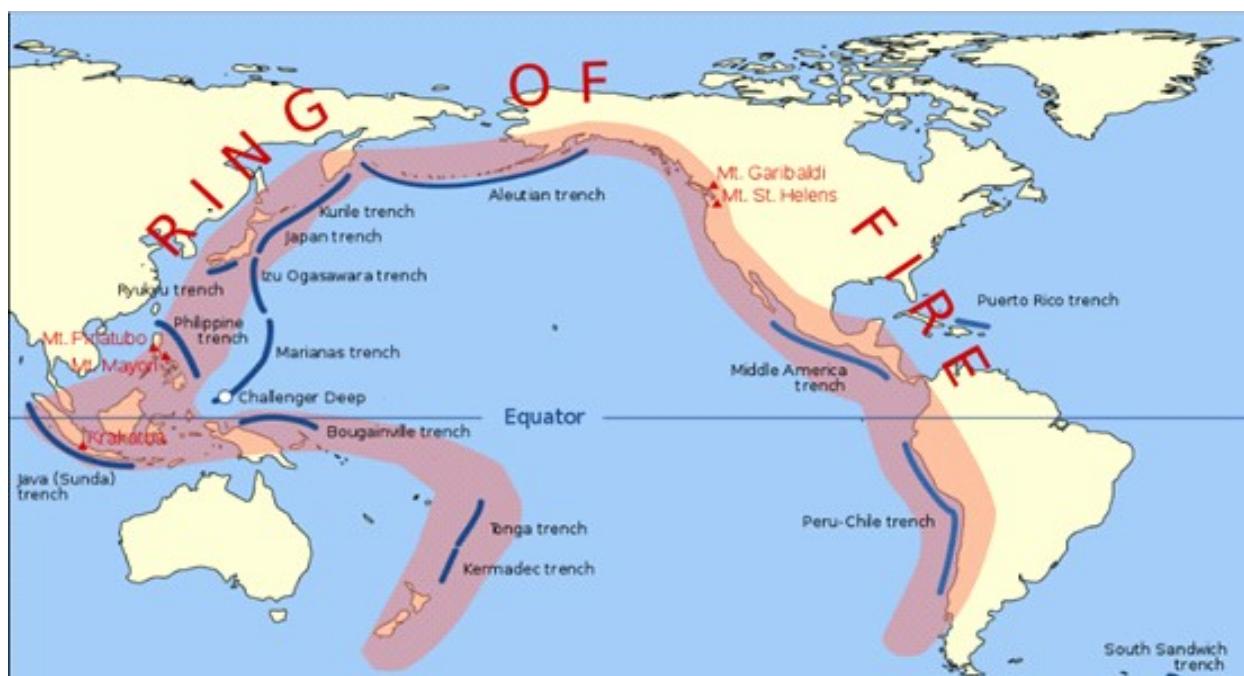
Ring of Fire

The Anak Krakatau volcano is situated at the Ring of Fire—the area in the Pacific Ocean that is home to many earthquakes and volcanic eruptions. The 40,000 km horseshoe shaped area has 452 volcanoes and is associated with high tectonic activity.

Volcanoes along the ring are formed by the process called subduction—when one plate gets shoved under another into the mantle. Mantle is the rocky solid body that lies between Earth's crust and the molten iron core. Tsunami-causing large earthquakes can also occur in the subduction zones and Indonesia is formed in part by the volcanoes in this very Ring of Fire.

Conclusion:

Tsunami is one of the most hazardous and unpredictable natural force. Tsunamis have no seasons and they can occur at anytime and anywhere. We certainly cannot prevent Tsunami. But what we can do is take necessary steps to minimize the damage caused by it. Tsunami is a global and transnational event. Hence, it is important that all countries across the world should join hands to evolve new scientific ways to predict Tsunamis and to design mitigation strategies to cope with this disastrous force.



13. A dry running river

Context:

- Today, several hydropower projects are mushrooming at the source of the river Ganga, which is the Garhwal range of the Himalayas. Unlike other ranges, the Garhwal is narrow.
- It is from here that many rivers and tributaries of the Ganga basin emerge. These spring or glacier-fed rivers join one another at different points to form an intricate riverine ecosystem in the Himalayas.
- The entire basin falls in the seismic zone 4-5, and is highly prone to landslides and land subsidence.

How Hydropower Projects in River Basin will results in Destruction:

- The understanding that hydropower projects mean development needs to change. To construct a hydropower project, large sections of land are cleared of forests.
- What happens when such deforestation takes place in an already fragile mountain area?
- Many studies have been conducted near the existing dams along the course of the Ganga.
- The immediate impacts of these projects have been loss of agriculture, drying of water sources, and landslips.
- As construction in such projects progresses, there is also dumping of muck, which can pose severe threats.
- Muck dumping during construction of the Alaknanda hydropower project caused devastation downstream in Srinagar in the 2013 flash floods.
- After all the massive deforestation, muck dumping, blasting and tunnelling, the hydropower projects thus constructed eventually dry up the river bed as the water is diverted into tunnels.
- This causes severe distress to aquatic life, and the river bed is no longer even wet in certain stretches. This is a far cry from the promise of development.

Is Hydro projects in this region are Fruitful?

- The irony is that even after all this devastation, electricity is not generated as per the intended capacity.
- For example, the installed capacity of the Maneri dam is 90 MW but it only works at below 40% of its capacity.
- This is because there is too much silt during the monsoon and reduced flow of water in winters.
- As glaciers continue to retreat, the silt in the rivers is only going to
- As the reason for diminished output is natural and not technical, and

therefore cannot be remedied, this is only going to cause more problems for future projects.

- For example, the flow of debris was stopped by barrages in the Alaknanda hydropower project. This escalated the impact of the 2013 disaster, according to the expert committee of the Supreme Court.
- In the case of the Ganga, these projects also prevent sediments from going downstream.
- This affects the fertility of the delta downstream and also destroys the unique self-purifying properties of the Ganga.

Approach to clean ganga:

While the government has promised to reduce pollution in the Ganga by 70% by March 2019, environmentalists say that this relies on setting up sewage plants rather than ensuring that the natural flow of the river isn't blocked and thereby hobbling its propensity to clean itself.

Among the sharpest critics of the government's approach led by the National Mission for Clean Ganga was the late G.D. Agrawal, a seer and formerly a scientist, who'd undertaken a fast since June.

Key demands:

To stop all under-construction dams in the upper reaches of the Ganga, and modify the design of existing ones to ensure that flow in the lower reaches of the river was at least 50% of the monthly average flow.

Reports of various committees in recent past:

- Twenty government committees and reports warn about the anthropogenic activities in these fragile areas and recommend conservation of these areas for food and water security.
- When the late G.D. Agarwal, crusader of the Ganga, fasted to invoke the government to act against these projects.
- The government proposed an e-flow notification for the Upper Ganga River Basin.
- It specified that during the dry season (November-March), 20% of monthly average flow has to be maintained, and during the monsoon season, 30% has to be maintained.
- The notification stated that existing hydel projects that do not meet e-flow norms must comply within three years.
- The 20% recommendation is less than the scientific recommendation of 50% (only for existing projects).
- If the government intended to rejuvenate the river, it would have specified that e-flows are only for existing projects.
- Instead it has opened the floodgates for several such projects as long as the compromised e-flows are maintained.
- The result of such a relentless push for hydropower projects is that

only 80 km of a 2,500 km-long river now remains in the Aviral-Nirmal state. Unless we question these projects now, we will not be able to save the Ganga, the lifeline of millions of people.

Conclusion:

- As the Ganga is diverted into long tunnels, de-silted, and directed to powerhouses to churn turbines and generate power, the barren landscape, dried water sources and the obscene muck slopes narrate a story of destruction.
- From aiming for Aviral Dhara (uninterrupted flow) of the Ganga to Nirmal Dhara (unpolluted flow), the government is now simply focussing on a Swachh Ganga (Clean Ganga).
- While the whole focus of the Clean Ganga project has been on setting up sewage treatments plants and cleaning ghats and banks, the main issue, which is that the river does not have adequate flow of water, has been ignored.
- With severe pollution destroying the river, and developmental projects critically affecting its flow, the Ganga is in a dire strait.

For Pollution abatement and cleaning exercise in river Ganga, the policy making authorities at higher level have emphasized the need of close monitoring, focus on minimizing waste generation and disposal of waste in eco-friendly manner and publicizing the use of electric crematoria for enhancing its acceptability among the masses. Uploading the monitoring reports in public domain has been recommended.

14. Another olive ridley nesting site soon

Context:

The Odisha forest department is all set to add another olive ridley mass nesting site to its **wildlife** map.

Important Facts:

- Odisha Government started preparing the beach at the Bahuda river mouth in Ganjam district to lure the endangered turtles to come over for mass nesting next year.
- Around 3-km stretch of the beach from Sunapur to Anantpur at Bahuda rookery is being developed as a possible olive ridley mass nesting site.
- The Bahuda rookery is located around 20 km to the south of Rushikulya rookery coast, a major mass nesting site of olive ridleys on the Indian coastline.

Olive Ridley Turtles

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

- The name for this sea turtle is tied to the **color of its shell**. They are carnivores in nature.
- Olive Ridley Turtles are best known for their behavior of synchronized nesting in mass numbers called ‘Arribada’

Nesting period: From October to early summer

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

Conservation status:

- Vulnerable according to the (IUCN) and is listed in Appendix I of **CITES**.
- Protection under the Convention on Migratory Species (**CMS**) and the Inter-American Convention for the Protection and Conservation of Sea Turtles

Threats: Incidental take, particularly in shrimp trawl nets and near shore gill nets, direct harvest of eggs and adults for their meat and skin, Marine pollution (including oil spills) and debris.

To reduce accidental killing in India, the Orissa government has made it mandatory for trawls to use Turtle Excluder Devices (TEDs), a net specially designed with an exit cover which allows the turtles to escape while retaining the catch.

However, this has been strongly opposed by the fishing communities as they believe TEDs result in loss of considerable amount of the catch along with the turtle. WWF-India, along with its partners, disproved this theory by conducting a study to measure the loss of catch through TEDs, revealing the loss to be a very small percentage of the total catch. This result, along with regular meetings with the fishing communities, is slowly helping to change their mindset and encourage use of TEDs, thereby aiding the conservation of Olive ridley turtles.

15. Japan to resume commercial whaling from July 2019

Context:

Japan announced its withdrawal from the International Whaling Commission(IWC)conservation body and said it will resume commercial whale hunting from July 2019, a move that is likely to draw international criticism.

Important Facts:

- Japan, an IWC member since 1951, will cease whaling activities in the Antarctic Ocean or other parts of the Southern Hemisphere, the statement said, adding that it will hunt species with so-called “healthy” population numbers.
- Commercial whaling was banned by the IWC in 1986 after some species were almost driven to extinction.

- But, for many years Japan has hunted whales for what it calls “scientific research” and to sell the meat, a programme widely slammed by conservationists.
- In its long history, Japan has used whales not only as a source of protein but also for a variety of other purposes
- Engagement in whaling has been supporting local communities, and thereby developed the life and culture of using whales.
- With this move, Japan will be able to freely hunt species currently protected by the IWC, like minke whales
- The move to resume commercial whaling drew criticism from conservation groups and governments.
- The government of Japan must urgently act to conserve marine ecosystems, rather than resume commercial whaling

International Response to Japan's move:

- Australia called Japan's decision to withdraw from the IWC “regrettable” and urged Japan to return to the convention as a “matter of priority”.
- Iceland and Norway had also objected to the IWC's moratorium and continue to hunt whales commercially without relying on science as an excuse.
- While the Japanese political class has sought the resumption of commercial whaling activities, campaigners say eating whale was becoming “less and less popular”.

The International Whaling Commission – decision-making body for International Convention for the Regulation of Whaling (ICRW)

- The International Whaling Commission (IWC) was established as its decision-making body, originally with 15 member states.
- The IWC meets annually and adopts regulations on catch limits, whaling methods and protected areas, on the basis of a three-quarters majority vote.
- In recent years the IWC, recognizing new threats to whales, has moved towards a broader conservation agenda which includes incidental catches in fishing gear and concerns related to global environmental change.
- The IWC also regulates aboriginal subsistence whaling (for purposes of local aboriginal consumption, carried out by or on behalf of aborigines, indigenous or native peoples)
- The Commission is comprised of 88 member governments including whaling countries, ex-whaling countries, and countries that have never had whaling industries but joined either to have a voice in the conservation of whales or to support whaling interests.

Science and Technology

16. ‘Super-Earth’ in constellation Cassiopeia

Context:

Researchers have discovered a new exotic planet outside our solar system in the constellation Cassiopeia. Located 21 light years away from us, this planet, dubbed HD219134 b, has a mass almost five times that of Earth, which is considered a so-called “super-Earth”. Unlike the Earth, however, it most likely does not have a massive core of iron, but is rich in calcium and aluminium alongside magnesium and silicon.

About Super- Earth:

A super-Earth is an extrasolar planet with a mass higher than Earth’s, but substantially below those of the Solar System’s ice giants, Uranus and Neptune, which are 15 and 17 times Earth’s, respectively.

The term “super-Earth” refers only to the mass of the planet, and so does not imply anything about the surface conditions or habitability.

17. Hongyun project

Context:

- China has launched its first communication satellite to provide broadband internet services worldwide. The satellite is the first in the Hongyun project planned by China Aerospace Science and Industry Corp (CASIC).
- The spacecraft is tasked with verifying basic designs of Hongyun satellite and demonstrating low-orbit broadband communications technologies.

About Hongyun project:

The Hongyun project, started in September 2016, aims to build a space-based communications network to provide broadband internet connectivity to users around the world, especially those in the underserved regions.

When the Hongyun project is complete, it will cover the whole world and offer round-the-clock communication services to users in polar regions, who now have difficulties accessing telecommunication and internet services, even from on board an aircraft or a ship or in a remote area.

The Hongyun system will feature lower production and operational costs and fewer occurrences of data transmission delays compared with existing communication satellite networks.

18. Bullet Train

Context:

The latest information obtained by an activist under the Right to Information (RTI) has revealed that Mumbai-Ahmedabad bullet train project may turn

out to be a loss-making proposition and burden Maharashtra's already dwindling finances.

Concerns over the project:

- Several objections have been raised by various departments over the economic viability of the Shinkansen train, which could result in losses in the form of wasted Floor Space Index (FSI) and delayed loan repayment in the absence of proper frameworks.
- Some part of the FSI at the station proposed at Bandra Kurla Complex (BKC) in Mumbai could "remain unutilised because of the height restrictions, leading to revenue losses".

Criticisms:

The government is being criticised for clearing a project which has no practical benefit for the State and would add financial stress. Moreover, the ministerial committee headed by Chief Minister Devendra Fadnavis has not met to discuss the project since being incorporated in February 2017. The committee was tasked with carrying out an in-depth study of the Japan International Cooperation Agency report and the project's feasibility.

Need of the hour:

Both Planning and Finance departments have called for a thorough study of bullet train economics in other countries before a decision is taken on its feasibility in India. Additionally, the departments said the Centre must clarify the formula for sharing the loan burden if the project remains loss-making for a long period of time. Since the State is coping with serious loss in income and further burden of loans, the impact of this project on government finances needs to be considered.

About the project:

The train, with a capacity of 750 passengers, will travel at speeds between 320 km/hr and 350km/hr and is expected to reduce travel time between Ahmedabad and Mumbai to three-and-a-half hours or less from the present eight. The project is expected to be completed in seven years.

How India benefits from bullet train?

- High-speed connectivity – This will facilitate economic growth. Smaller cities along the way can also be connected with high-speed transit facility to these economic Centres through the bullet train network.
- The bullet train project is expected to create 4,000 direct job opportunities, along with 20,000 indirect jobs. 20,000 construction workers will also be employed during the set up period of Ahmedabad-Mumbai bullet train.
- Urban expansion – New bullet train stations set to come up along the route will attract urban growth. This will again shift the pressure of urbanisation from the existing urban Centres.
- Open new avenues – When completed, the Ahmedabad-Mumbai bullet

train project will present as a favorable destination for high-speed train technologies, attracting other parties working in the field.

The geostrategic importance of Bullet trains:

- The bullet train is symbol of strong trust between the India and Japan as it involves the technology transfer at the core of this deal.
- The bullet train will create substantial positive impact on Indian economy thus building the economic influence of country in Asia and thus all over the world. In longer duration of time, this technology will reduce the dependence of India on Middle East countries for oil and other fuel products.
- Being the clean technology India will set an example for cleaner methods for mass transportation, especially for other developing countries. For Japan too, this deal has geostrategic meaning. Earlier Japan has lost with China in export of Bullet trains in Thailand and Indonesia. This deal is diplomatic win for Japan.

Miscellaneous

19. Dwijing Festival

Context:

Dwijing Festival, an annual river festival, has begun on the bank of River Aie in Assam.

About Dwijing Festival: Dwijing Festival is an annual river festival celebrated in the Bodoland Territorial Area Districts (BTAD) region of Assam. The festival provides a platform of earning for the people in the region by putting in to focus the business activities for the better economy generation through rural tourism. The festival also aims to provide help to the flood victim families through charity generation and distribution.

About River Aie: River Aie originates from the Himalayan Mountains of Bhutan and flows through the Chirang and Bongaigaon districts of Assam before joining the river Brahmaputra.

20. Dal lake

Context:

The famous dal lake in Srinagar is frozen. The city recently witnessed the lowest temperature ever in 11 years at minus 7.6 degree.

About Dal:

Also known as the summer capital of Jammu and Kashmir, dal lake, which is the second largest in the state, is integral to tourism and recreation in Kashmir and is named the “Jewel in the crown of Kashmir” or “Srinagar’s Jewel”. The lake is also an important source for commercial operations in fishing and water plant harvesting.

The lake is part of a natural wetland, including its floating gardens. The floating gardens, known as “Rad” in Kashmiri, blossom with lotus flowers during July and August.

The lake is located in the Zabarwan mountain valley, in the foothills of the Shankracharya hills, which surrounds it on three sides.

The lake has four main interconnected basins namely, Hazratbal, Bod dal, Gagribal and Nagin.

21. Avangard system

Context:

Starting from next year, in 2019, a new intercontinental strategic system Avangard will enter service in the Russian army and the first regiment in the Strategic Missile Troops will be deployed.

About Avangard system:

Avangard, also known as “Objekt 4202,” is a hypersonic boost-glide missile

system that is supposed to combine a high-performance ballistic missile with an unmanned glider vehicle for significant improvements in maneuverability and sustained top speed.

22. Bahuda rookery

Context:

The Odisha forest department is all set to add another olive ridley mass nesting site to its wildlife map- at Bahuda rookery. Around 3-km stretch of the beach from Sunapur to Anantpur at Bahuda rookery is being developed as a possible olive ridley mass nesting site.

Location: The Bahuda rookery is located around 20 km to the south of Rushikulya rookery coast, a major mass nesting site of olive ridleys on the Indian coastline.

Key facts:

- Also known as the Pacific ridley sea turtle, Olive turtles are a medium-sized species of sea turtle found in warm and tropical waters, primarily in the Pacific and Indian Oceans.
- They are best known for their behavior of synchronized nesting in mass numbers.
- The Convention on Migratory Species and the Inter-American Convention for the Protection and Conservation of Sea Turtles have also provided olive ridleys with protection, leading to increased conservation and management for this marine turtle.
- It is included in Vulnerable category by the IUCN Red list.

23. Mount Etna

Context:

Italy's Mount Etna volcano has erupted again resulting in more than 130 earthquakes of up to 4.3 in magnitude.

About Mt. Etna:

- Mount Etna is the largest active volcano in Europe and one of the world's most frequently erupting volcanoes. It is also the volcano with the longest record of continuous eruption.
- Located near the east coast of the island of Sicily in Italy, Mount Etna is 10,900 feet tall.
- The mountain's largest feature is the Valle del Bove (Valley of the Ox), a large horseshoe-shaped caldera on the eastern slope.
- Etna sits on the active fault between the African plate and the Ionian microplate, which are both being subducted together beneath the Eurasian plate.
- In June 2013, it was added to the list of UNESCO World Heritage Sites.

- Due to its history of recent activity and nearby population, Mount Etna has been designated a Decade Volcano by the United Nations.

24. National Mathematics Day

Context:

- National Mathematics Day is celebrated every year on December 22.
- It is observed to honor the birth anniversary of the famous mathematician Srinivasa Ramanujan who greatly contributed towards mathematical analysis, number theory, infinite series and continued fractions.

National Mathematics Day:

In 2011, on the 125th anniversary of his birth, the Indian Government declared that 22 December will be celebrated every year as National Mathematics Day.

Highlights of Srinivasa Ramanujan's life:

- In 1911, Ramanujan published the first of his papers in the Journal of the Indian Mathematical Society.
- Ramanujan traveled to England in 1914, where Hardy tutored him and collaborated with him in some research.
- He worked out the Riemann series, the elliptic integrals, hypergeometric series, the functional equations of the zeta function, and his own theory of divergent series.
- The number 1729 is known as the Hardy-Ramanujan number after a famous visit by Hardy to see Ramanujan at a hospital.
- Hardy observed Ramanujan's work primarily involved fields less known even amongst other pure mathematicians.
- Ramanujan's home state of Tamil Nadu celebrates 22 December as 'State IT Day', memorialising both the man and his achievements, as a native of Tamil Nadu.



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Abhyasa Program Structure

| | Multiple Choice Questions (PRELIMS) | Descriptive Questions (MAINS) | Total Marks |
|-------------------------|--|----------------------------------|-------------|
| Daily Test | 10 (10*1 = 10 marks) | 1 (1*10= 10 Marks) | 20 |
| Weekly Test | 20 (20*1 = 20 marks) | 2 (2*10= 20 Marks) | 40 |
| Fortnightly Test | 30 (30*1 = 30 marks) | 3 (3*10= 30 Marks) | 60 |
| Monthly Test | 50 (50*1 = 50 marks) | 5 (5*10= 50 Marks) | 100 |
| 3 Months Test | 100 (100*1 = 100 marks) | 10 (10*10= 100 Marks) | 200 |
| Total Questions | 4250+ | 500+ | |

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