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SEVEN IMPORTANT ISSUES

1. RAT-HOLE MINING: DEADLY PRACTICE OF MINING

Why in News?

Two miners were reported killed while working inside an illegal so-called “rat-hole” coal mine in East Jaintia Hills in Meghalaya, even as at least 15 workers trapped inside another flooded mine since 13 December are feared to be dead by now due to delayed rescue operations. The mine is located at Ksan in Saipung area of the district and stands next to Lytein river, whose water is said to have gushed into the mine, trapping the workers.

Introduction

It may have been almost four years ago but most people in Meghalaya’s Jaintia

Hills remember the exact date the National Green Tribunal banned rat-hole mining of coal in the state: April 17, 2014. The rat-hole technique entails digging small vertical pits to reach the mineral and carving narrow sideways tunnels to move it underground. It was widely practised in the coal-rich region, until the tribunal, which deals with matters relating to the conservation of the environment and natural resources, deemed the technique unscientific and illegal.

According to government reports, the coal mining industry was among the biggest revenue earners for the state, generating about Rs 700 crore

annually, prior to its ban in 2014. The National Green Tribunal had cited safety of miners as one of the reasons when it clamped down on coal mining in the state. Unlike other parts of the country, land in Meghalaya is owned privately or by a community, under customary laws and protected by the Autonomous District Councils formed under the Sixth Schedule of the Constitution.

But the Coal Mines (Nationalisation) Act, 1973, which vests ownership and control of the mineral with the Indian state, expressly lists Meghalaya’s coal mines as being under its purview. Besides, the Sixth Schedule also confers the right over underground minerals to the Indian state. It explicitly mentions the need for “licences or leases for the purpose of prospecting for, or extraction of, minerals”. According to the Constitution, there is only one way a Sixth Schedule state can be exempted from the coal nationalisation law – by a presidential notification to that effect.

Background

By local accounts, commercial mining of coal in the Jaintia Hills started in the early 1980s. Anyone who owned land could dig for coal, or lease the land to someone else on a mutually agreeable arrangement. If one struck coal, she could sell it to whoever she wished. Back then, the coal usually ended up in Guwahati in neighbouring Assam. Old-timers look back at the simplicity of the whole affair with wistfulness. It is evident that there



were few regulations and the state had little role to play in the entire process. As the scale of mining grew over the next few decades, the state inevitably got involved. The impact of the indiscriminate mining was severe on the area's ecology: large tracts of land were rendered uncultivable, the water became acidic and the air turned toxic. The unregulated nature of the exercise also meant child labour flourished and few safety measures were followed. Workers ventured into mines with little more than their tools and a head-torch.

The most common reading of the National Green Tribunal order of 2014 ascribes the coal mining ban to environmental reasons. That, however, is only partly true, point out legal experts. In addition to calling Meghalaya's mining unscientific, the tribunal also said it was illegal. The National Green Tribunal stated that for mining to resume, the state government would have to come up with a fresh mining policy in accordance with the laws of the land. So far, the state has failed to formulate a policy that would pass muster with the tribunal, activists and miners alike.

Indeed, in a state sensitive about tribal identities and, by extension, private ownership of land, the government's proposal to employ the Meghalaya Mineral Development Corporation, a state undertaking that is eligible to apply for a mining lease under the existing rules, has agitated coal miners even more. Many in Meghalaya are also convinced the government's failure to end the stalemate is wilful. They say the lack of regulation works for politicians and bureaucrats. These assertions emanate from the fact that coal in the Jaintia Hills continues to be mined – illegally. Taking note of “the illegal mining despite specific and complete prohibitory orders”, the tribunal had pulled up the state government in 2015. In their defence, government officials and the police say

the National Green Tribunal is partly to blame for the illegal mining. Since it imposed the ban on coal mining in 2014, it has repeatedly caved in to persistent appeals by miners and allowed the transportation of coal that had already been extracted. The latest extension came in November 2018, allowing the transportation of extracted coal for another four months.

Illegal Coal and Illegal Mining

It is important to differentiate between illegal mining of coal and the illegal marketing and distribution of illegally mined coal. Illegal mining takes place in three main forms in Eastern India: small shallow-dug village mines on private land, mining on re-opened abandoned or orphaned government mines, and scavenging on the leasehold land of official operating mines. This is just based on the source; there may not be any major difference in their production amounts. There are also a few “unregistered” mines: those that somehow escaped enlistment during nationalisation and became illegitimate.

Scavenging from old abandoned mines is another important source of coal. The eastern colliery tracts have a 200 year, poorly documented, history of underground and incline mining. Breakage of sealed underground mines is quite common, the carbon monoxide present in such abandoned underground colliery often kill those entering to scavenge coal. Scavenging can occur in both underground and/or inclines, but assumes great significance in open cast mines. Poor security in mines, storage and transportation area provides opportunities for scavenging.

Rat Hole Mining

Coal is a fossil fuel created by living organisms millions of years ago and buried in sediments. Coal seams can be of 100m thick and can extend across tens of thousands of square kilometers.

Coal is one of the extensively utilized minerals in Meghalaya. Coal deposit in the state is found all along the Southern fringe of Shillong plateau East and West Jaintia Hills District, is the major producer of coal.

Coal extraction is done by primitive mining method commonly known as “rat hole” mining. Rat hole or coyote hole mining refers to inexpensive extractions that are technically simpler. Rat hole mining is an illegally digging method of coal mining. Rat hole mining is done mainly by tribal of North East India. This is so because they dig a hole similar to that of rat holes to mine. Mining operation, undoubtedly has brought wealth and employment opportunity in the area, but simultaneously has led to extensive environmental degradation and disruption of traditional values in the society. The water bodies of the area are the greatest victims of the coal mining.

Advantages

Rat hole mining is of advantageous because of low capital investment unlike organized sectors, low maintenance and operational costs. Large diameter holes can be dug easily. Advantages include benefits due to geographical location and availability of coal on the surface and it is relatively cheaper. The landowners can get cash very easily from their private mines. It also provides employment for people who are unemployed in the mining regions. The coal ash obtained from the mines is used in cement factories. Coal is the easiest forms of energy and is present in abundance in this region and will remain an important source of energy system. Since 1900 coal industry has created jobs and employment to the people of this region. The location of Jaintia Hills in the border of Bangladesh facilitates the easy export of coal to the international market and infiltration of cheaper labor into the coal mines.

Disadvantages

Rat hole mining can cause long term harm to the environment in a number of ways. One type of damage is scarring and disruption of the land surface. Rat hole mining activity, had environmental degradation in the region due to deforestation, biodiversity loss, waste land generation, pollution due to dust and noise. There is immense pressure on local resources. Due to deforestation there is soil erosion. Biodiversity loss is an irreversible process and the state faces a crisis in this aspect. Biodiversity is an important factor for sustainable development. Toxic elements like sulfur, pyrite generated by the process of coal mining causes temporary or permanent harm or death to human and other animals as well as plants. Air pollution caused by coal combustion affect the respiratory system, contributing to serious health effects which include asthma, lung disease and lung cancer. The depth of the rat hole mines ranges between 50 to 200 feet. It is dangerous descending the mine with the help of makeshift wooden ladders which runs along the wet and slippery stone walls. The villages stand on Earth having a network of cavities underneath which increases the village's vulnerability to various natural disasters. There is lack of experienced cable tool drillers. The absence of state enforcement of labor laws has also encouraged local entrepreneurs to exploit the cheapest sources of labor i.e. children. Rat hole mining is dangerous as the mines collapse and the workers are trapped in and killed. The major source of carbon dioxide in the environment is coal mining which is the primary cause of global warming. Particulate matters from the mines causes chronic bronchitis and premature deaths.

Challenges

Mining in Meghalaya is facing significant challenges in its operation factors and economy. As per the

NGT rules the challenges for the Government to continue mining in this region of the country must have safety rules, improved occupational health, safety standards. NGT supports environmental issues as well as human rights issues which have to be taken into consideration for mining operation. Coal contributes largely towards economic development of the state.

Rat hole mining is one of the basic resource generating sectors in Jaintia Hills. Banning of mining has affected thousands of people in the District. Mining has the potential to shape and affect economics directly and indirectly. Mining brings employment, government revenues and opportunities for economic growth. As a result of ban in rat hole mining the state is passing through a very difficult phase in economy. Thousands of workers have lost their jobs and the truck drivers engaged in transportation of coal are idle after the ban.

Environment plays a pivotal role on the welfare of human life and national economy. The functioning of human life and ecological balance is determined by a complex of environmental factors. The toxic pollutants released from these mines have adversely affected the environment destroying both terrestrial and aquatic resources. Lack of safety norms have led to respiratory problems to the miners. Top soils of the region have undergone degeneration; hence regeneration of the soil by planting herbaceous monocots such as lemon grass and citronella can enhance soil fertility in mine spoils.

Rights of Local Citizens

We need to accept local and indigenous communities as equal and integral citizens, to acknowledge their rights over local natural resources, to develop the society also according to their needs and to find ways of decision-making in which they can

take equal part. In India, especially in mining regions, people such as Tribal are somehow tolerated, and planning is done for them, according to what the engineers think is best for them.

It is also important that a wide debate takes place, between social scientists, planners, international agencies and civil society, on the issue of justice in coal mining areas. To find a socially just and forward-looking resolution, and to make sure that an apparently "modern" but equally authoritarian and restrictive "planning" does not get imposed to "control" the "problem", which will also enable the growth of Indian society, is a challenge which has yet to be solved.

Illegal coal mining provides an important entry point to a public debate on rights over mineral resources – one that is of far more significant than that might appear to be the case at first sight. Collectively the debate implicitly involves the lives, livelihoods, and futures of a significant number of people straddling the mineral-rich tracts of all developing countries. This is not only a large population, but is also amongst the poorest and most exploited in the region. Our mainstream society has avoided accepting the poor and disadvantaged as an integral part, isolating them, and flaunting the environmental impacts of illegal mining a major cause of concern. Notions of legitimate and illegitimate (economic) practices are grounded upon a consistent traditional view of social norms and obligations, of the proper economic functions of several parties within the community. As the formal coal industry continues to isolate and exclude local communities from the formal economy, poor peasants and others continue to assert their rights.

Way Forward

Commonly presented as arising from poor policing and corruption, and

as destroying the environmental commons, “illegal” production and marketing of coal is a significant aspect of everyday life in Eastern India. Representations of illegality hide unpleasant social realities of the coal mining tracts: poor environmental performance of the state-owned mining sector, social disruption and displacement of communities, and a general decay in the traditional subsistence base.

Mining has been an age old practice in the State of Meghalaya and thousands of people earn their livelihood through this activity. Mining have a significant impact on the economic, social aspects. Organized mining in this region will provide communities with jobs, economic growth and improvement in people’s life. Although mining activities bring about economic development in the area at the same time there is degradation of the land.

As mining affects the eco-system, it is important to conduct suitable assessment studies to learn the potential adverse impact of mining on the flora and fauna. Environmental management strategies that can be useful in mitigation of the environmental problems and rehabilitation of the degraded ecosystems of the area can be implemented. The rivers and streams of Jaintia Hills, Meghalaya are the greatest victims of the coal mining. Degradation of water quality in the area is evidenced by low pH, high conductivity, high concentration of sulphates, iron and other toxic metals, low dissolved oxygen and high BOD. Mine drainage is affecting aquatic life from elimination of most of the species except few tolerant ones. NGT mining policy would provide scope for the mining of minerals in a scientific and sustainable manner taking into account the interest of the state and its people. Extensive afforestation of the mined

areas with local tolerant plant species will be of great help in Eco restoration of the degraded eco-systems

General Studies Paper- I

Topic: Distribution of key natural resources across the world (including South Asia and the Indian sub-continent); factors responsible for the location of primary, secondary and tertiary sector industries in various parts of the world (including India).

General Studies Paper- II

Topic: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

General Studies Paper- III

Topic: Infrastructure: Energy, Ports, Roads, Airports, Railways etc.

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2. NEW E-COMMERCE RULES: AN OVERVIEW

Why in News?

The government recently announced new e-commerce (e-com) rules restricting players from selling the products of companies in which they have a stake and capping the percentage of inventory that a vendor can sell through a marketplace entity (IT platform of an e-commerce entity) or its group companies. To curb the practice of deep discounts, the government said they cannot directly or indirectly influence the price of goods and services and also brought in a new set of rules that bar the sale of products exclusively in one marketplace.

Introduction

India is one of the biggest and fast growing e-commerce markets in the

world. The total size of the industry was reported to be US\$14.5 billion in 2016 and expected to grow to US\$80 billion by 2020. Indian e-commerce sector registered a growth rate of 24.08% and total sales volume of US\$ 20.05 billion during 2017. The share of e-commerce sector was 4.2% during 2017 out of the total retail trade in India and it is expected to touch 5% by 2020. This promising performance has attracted investment from various quarters. Almost all the major domestic corporate giants like Tata, Reliance and Birla have forayed into this business. World’s biggest online retailers like Amazon and Alibaba have also invested to get a share of the pie. It is definitely the size and growth expectation that led the world’s biggest retailer Walmart to make its biggest acquisition in India through Flipkart.

The remarkable growth rate of this sector is fuelled by growing mobile subscribers, high rate of internet penetration, growing usage of credit cards and India’s large young population. Government initiatives of encouraging digital payments and developing infrastructure to support the digital economy through various schemes are also attributed to this growth.

What Led India to Prepare a National Framework of e-commerce?

All these developments discussed above took place in a milieu where there is no clarity about the policy that governs the sector. Even after touching the mark of US\$ 20 billion in sales and receiving world’s biggest investment of the sector, India still has to finalise

a comprehensive policy for this sector. Currently, this sector is regulated by various individual policies like the Information Technology Act, 2000, Competition Act, 2002, Consolidated Foreign Direct Investment (FDI) policy, etc.

Along with the promising growth, Indian e-commerce sector is also facing a number of challenges. Indian e-commerce firms allegedly violated existing competition policy, FDI norms, the Foreign Exchange Management Act (FEMA), taxation rules etc. A series of cases are registered against most of the major players of this sector. Cases were lodged in Competition Commission of India (CCI) against the firms for alleged “abuse of its dominance” by indulging in unfair and discriminatory practices.

Apart from these domestic challenges, there are a number of challenges that the Indian e-commerce sector faces internationally. During the Ministerial Meeting of World Trade Organization (WTO) held in December 2017, Indian authorities found themselves unprepared to negotiate rules facilitating cross-border e-commerce. India maintained that it was not ready for any such multilateral rules, as the e-commerce space in the country was still evolving; the difference on key issues within various wings of the government, such as data localisation and source code were the key reasons for the reluctance.

Realising the issues from domestic and international perspective, India addressed the concern by setting up a think-tank in April 2018, under the chairmanship of Mr. Suresh Prabhu, Minister of Commerce and Industry, to formulate a comprehensive national framework for e-commerce sector. The think-tank circulated its first draft report to its stakeholders on 30 July 2018.

What is in the Policy?

The draft report was prepared with the objective of enabling the stakeholders to tap the opportunities that would arise from progressive digitalisation of the domestic and global economy. The draft report seeks to identify strategies for strengthening the regulatory regime – for protecting the consumer, and facilitating ‘Digital India’ campaign through e-commerce. The draft also proposes various implementing agencies for the provisions laid down in it. It points out the following provisions:

- ◆ E-commerce companies should stop offering discounts within two years.
- ◆ FDI up to 49% will be allowed in the inventory form of e-commerce.
- ◆ An independent regulator will be set up to deal with various issues related to e-commerce firms.
- ◆ Provisions of the CCI will be amended to investigate mergers and acquisitions in the sector.
- ◆ Bulk purchase of branded goods between the related entities will be prohibited.
- ◆ All data collected by e-commerce firms, social media websites’ search engines, and the internet of things will be mandatorily stored in India. Sri Krishna commission recommendation on data localisation will be implemented.

Analysing Some Important Aspects of Policy

Prohibiting bulk purchase is a much-needed step. Big firms like Amazon, Flipkart have been taking advantage of the loophole in the existing policy for a long time. Flipkart’s arrangement through WS retail and Amazon’s activities with Cloudtail have been reported a long time back. It is because of these practices government had to clarify that total sale through a single vendor cannot exceed 25% of the total sale of an e-commerce firm (DIPP, 2016).

In the same line as prohibiting bulk purchase, it is also important to regulate the deep discounts offered by these online giants. The discounts offered by e-commerce firms have heavily impacted the Kirana and mom and pop stores.

With its big market size and large population, India generates a huge volume of data every day. Many of the data are of a crucial nature. Illegal use of the data of Indian citizens can cost India a lot as it is experienced in the case of Cambridge Analytica. Thus the decision of mandatorily storing data locally is praiseworthy. India has many favourable factors to dictate the game in its own terms. A large and growing market along with many other factors can help India to negotiate with multinational enterprises to store data in India.

Recent Clarifications in Rules

In March 2016, foreign investment up to 100% was allowed under the automatic route for e-com firms engaged in business-to-business transactions using the marketplace model — one where a firm sets up an enabling IT platform to facilitate trade between sellers and buyers. However, FDI was not allowed where the e-com player owned the inventory of goods to be sold, or for business-to-consumer purposes, barring a few exceptions.

What has been happening is that large e-commerce companies such as Amazon and Flipkart, while not owning inventory themselves, have been providing a platform for their group companies such as Cloud Tail and WS Retail respectively. This practice has been seen as skewing the level playing field, especially if these vendors enjoyed special incentives from the e-commerce firm, over others. These controlled or owned vendors may then be able to offer discounts to customers that competitors may not be able to match.

What has been Clarified?

From February 1, 2019, e-commerce companies running marketplace platforms such as Amazon and Flipkart, cannot sell products through companies, and of companies, in which they hold equity stake.

While foreign direct investment is not permitted in the inventory-based model of e-commerce, the clarification put a cap of 25% on the inventory that a marketplace entity or its group companies can buy from a vendor. Inventory of a vendor will be deemed to be controlled by e-commerce marketplace entity if more than 25% of purchases of such vendor are from the marketplace entity or its group companies.

The government has said that e-commerce entities will have to maintain a level playing field and ensure that they do not directly or indirectly influence the sale price of goods and services. The policy mandates that no seller can sell its products exclusively on any marketplace platform, and that all vendors on the e-commerce platform should be provided services in a “fair and non-discriminatory manner”. Services include fulfilment, logistics, warehousing, advertisement, payments and financing among others.

Any specialised back-end support for some sellers must now be extended to all vendors, while discounts, cash-backs and preferential subscription services have been made far trickier to implement. Further an e-commerce marketplace entity will not mandate any seller to offer a product exclusively on its platform under the new rules. But this doesn't explain what to do when a seller voluntarily opts to sell exclusively on one e-commerce portal over another.

How it will impact Various Stakeholders?

The changes will have a significant impact on the business model of

e-commerce majors like Amazon and Flipkart, as most of them source goods from sellers who are related party entities. However, the language of the clarification seems to grant leeway, to a certain extent, to entities which are step-down subsidiaries of the entity in which the e-commerce entity or its group companies hold equity. Nonetheless, these clarifications will definitely have major repercussions on the business model of such e-commerce players. Going forward, the suppliers will not be permitted to sell their products on the platform run by such marketplace entity. This will impact backend operations, as Group entities would have to be removed from the e-commerce value chain.

Also, e-commerce players like Amazon and Flipkart, who have their private labels, will not be able to sell them on their platforms if they hold equity in the company manufacturing them.

Consumers may no longer enjoy the deep discounts offered by retailers that have a close association with marketplace entities. The absence of large retailers will, however, bring relief to small retailers selling on these platforms. Traders running traditional brick-and-mortar stores, who now find it difficult to compete with the large e-commerce retailers with deep pockets, could gain.

Government's attempt to 'clarify' foreign direct investment norms for e-commerce players could end up scuttling investor interest in the sector that has attracted large foreign players and generated thousands of jobs. The fresh restrictions and the clarifications on certain operational aspects could reinforce investor complaints about India being unpredictable in terms of policies.

Way Forward

E-commerce straddles various issues like international trade, domestic

E-Commerce Sector

E-COMMERCE or electronic commerce is the act of buying or selling goods and services over the internet. Today, it is one of the most popular ways for consumers to buy goods and services and it has been predicted that globally eCommerce will account for \$6.7 Trillion by 2020, that's nearly 3 times the size of the UK economy.

Different types of E-Commerce (Sectors):

Business -to- Business (B2B): B2B (Business to Business) means both the seller and buyer are businesses. An example of a B2B eCommerce transaction would be a clothing retailer sourcing materials to then customise and sell on to their own customers.

Business - to - Consumer (B2C): B2C (Business to Consumer) eCommerce is when a business sells directly to a consumer. An example of B2C eCommerce would be an electronics company selling mobile phone accessories over the internet.

Consumer - to - Business (C2B): The internet has increased the choice a consumer thereby placing more power in his/her hands. Before the internet, you would often have one large monopoly who owned a segment of the market and you would have to pay whatever price they set. Now consumers can set their own standards and specifications of what they want and companies can bid for that sale. An example of this would be a customer places a requirement on a job board where companies would then have to bid for the winning project.

Consumer - to - Consumer (C2C): The internet infrastructure now allows customers to sell directly to other customers. Popular example of C2C would be ebay, Quikr, Olx etc. where a consumer can list their unwanted items on an online marketplace and sell directly to other consumers.

trade, competition policy, consumer protection, information technology etc. As a growing sector with huge interest from both domestic and international players it becomes pertinent to regulate it keeping in mind the interest of both entrepreneurs and consumers. A conducive environment and a level playing field should be encouraged. Policymakers should also be mindful of shaping a vibrant domestic industry.

A comprehensive policy is of utmost importance to reflect India's position in both domestic and international or multilateral forums.

With its huge population covered under mobile and internet network, India offers a huge market to e-commerce firms. The young population with technological literacy, growing urbanisation, increasing per capita income, expanding financial inclusion and a growing number of credit card users further adds to the potential of e-commerce firms. All these provide a huge opportunity for

the Indian firms to lead the game. But that is difficult to materialise unless they are supported by the government. And a policy is a wonderful instrument to support.

India's retail FDI policy remains muddled with the debate now focussing on online vs offline trade as opposed to big vs small, or a single brand vs multi-brand retail FDI regime. Globally, India has been taking on protectionism and government has maintained its stand that free trade is essential so consumers get the best deal everywhere. The same consumer

focus and non-protectionist tenets must be applied for internal trade too.

General Studies Paper-II

Topic: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

General Studies Paper-III

Topic: Effects of liberalization on the economy, changes in industrial policy and their effects on industrial growth.



3. UMBRELLA SCHEME FOR FAMILY WELFARE

Why in News?

The Cabinet Committee on Economic Affairs has given its approval for continuation of five schemes under the "Umbrella Scheme for Family Welfare and Other Health Interventions" during the Fourteenth Finance Commission period 2017-18 to 2019-20. An overall outlay of Rs. 2381.84 crore for the scheme will be spent during the Fourteenth Finance Commission period 2017-18 to 2019-20 and would be funded 100% by Central Government Budgetary support.

Introduction

Over the last decade, India has made noteworthy strides in health. We built an extensive, sophisticated system to deliver multiple doses of polio vaccine to every child in this vast country, eradicating the disease. Nationwide, our infant and maternal mortality rates have declined by more than one-third. We have learnt to manufacture high quality drugs that are exported to the rest of the globe; an estimated 20% of generic drugs supplied globally are produced in India.

The National Health Policy, 2017 (NHP-2017) developed after extensive consultations with state governments and other stakeholders, aims to shape our health system in all its dimensions – by investment in prevention of diseases and promotion of good health; by access to technologies; developing human resources; encouraging medical pluralism; and by building knowledge for better health, financial protection and regulation. The Policy is aimed at reaching healthcare in an assured manner to all, particularly to the underserved and underprivileged. National Health Policy-2017 aims at providing good quality healthcare services in an assured manner to all by addressing current and emerging challenges arising from the ever changing socio-economic, epidemiological and technological scenarios. Among the key policy principles, equity, affordability, accountability, inclusive partnership and decentralisation are worth mentioning.

Although, we have made significant advances, which puts us in an excellent position to address

the needs the health system, isn't meeting our expectation – starting with strengthening and delivering good quality maternal and child healthcare and ensuring availability of emergency care, and moving on eventually to create robust infrastructure and capabilities to deliver universal health coverage.

The first is our focus on prevention of diseases, promoting good health and assuring quality comprehensive primary care to all. The emphasis, therefore, is to move away from sick care to wellness. Seven areas for inter-sectoral action and peoples' campaign under 'Swasth Nagrik Abhiyan' (SNA) have been identified so that people stay healthy and rely less on hospital care.

The second critical focus of this Policy is strengthening and designing our health systems such that affordable healthcare is made available to all. Chiefly, through free access to universal comprehensive primary healthcare, free drugs, diagnostics and essential emergency services in government hospitals as well as strategic purchasing

through government financed insurance programmes.

Empowering citizens and providing quality patient care is the third critical pillar. Hospitals will undergo periodic measurements and will be certified on level of quality.

The fourth pillar of the Policy is focussed on leveraging the power of India's innovation, technology and ICT capability. The Policy advocates the need to incentivise local manufacturing to promote customised indigenous products such that healthcare is made more accessible and affordable for our citizens, while simultaneously generating employment.

Social Determinants of Health

A medical approach to health as adopted by previous health policies, has invariably restricted the scope of healthcare policy making to the ministries of health. Research from all over the world is increasingly highlighting the big role that a multitude of other factors like public health & sanitation, poverty reduction, gender empowerment, health diets & yoga, risk factors like Tobacco, Obesity, Diabetes & the subsequent behavioral choices play in determining our final health outcomes. This has even led the WHO to adopt the model of "Social Determinants of Health" as a guiding framework for policy implementation worldwide. Hence the new health policy seeks to drive a multi-sectoral approach for health care where "Health for All" is complimented by "Health in All" policy framework. This will translate to the much-needed cross coordination between each of the 7 listed verticals (as given in figure) and various ministries/sectors of Public Health; all culminating to a Swasth Nagrik Abhiyan –a social movement for health.



Thus, a finer reading of the health policy will make it clear that the National Health Policy 2017, justifiably reflects the change in disease trends, prioritizes financial security against healthcare expenditures, signals the coming of an insurance era and prepares us for a nationwide program on progressive Universal Health Coverage. Conversely, instead of taking a short cut and declaring health as a justiciable right without even having the capacity to deliver services, this health policy actually lays out a realistic road map for the strategy to be followed to realize the inclusive dream of "health assurance" for each and every citizen of India.

Family Welfare and Other Health Interventions

The five schemes listed in the proposal are crucial to attaining the goals and objectives laid out in National Health Policy (NHP) 2017, and international commitments in the form of Sustainable Development Goals (SDGs). The SNA scheme has a very ambitious target of improving health seeking behaviour of the population through increased

awareness and enhanced uptake of health services. The other components as HSHR would assist in keeping a tab on the progress of entire set of health programmes/schemes run by Government of India, assisting in timely course corrections. The free and social marketing of contraceptives will enable better child and mother health, besides population stabilisation.

Implementation Strategy and Targets

The target is to support the key goals of the National Health Policy 2017 and the Sustainable Development Goals (SDGs) to which India is a signatory. The attempt through media outreach is to move from care for sickness to the concept of wellness by using 360 degree approach in conventional and social media. The target of the free distribution and social marketing of contraceptives is to improve the Modern Contraceptive Prevalence Rate (mCPR), help family planning and reach population stabilization. The target for National Family Health Survey (NFHS) is to provide reliable data on all health indicators. All the five schemes are

Central Sector Schemes with 100% funding from Central Government. These are as follows:

Swastha Nagrik Abhiyan (SNA)

For dissemination of information on health issues to create awareness among citizens of India of all age/sex/locations and appropriately influence their health seeking behavior to encourage healthy lifestyles and empower the citizens. SNA has been approved, with an estimated outlay of Rs. 1030.15 crore for three years.

Free Supply of Contraceptives

For providing free supply of contraceptives including condoms, oral contraceptive pills, pregnancy test kits, other contraceptives, etc. to States with a view to improve maternal and child health and achieving population stabilization.

MIS Scheme now proposed as Health Surveys and Health Research (HSHR)

For sourcing of data on population, health and nutrition for India and its States including through periodically conducted National Family Health Survey, which is one of the largest surveys of its kind worldwide. The NFHS provides valuable data for policy and programmes right up to the district level.

Social Marketing of Contraceptives

For branding, attractively packaging, marketing and selling of products and services related to family planning for low-income groups at affordable prices.

Population Research Centres (PRCs)

For third party evaluation of the scheme on PRCs and specially of those centres which are being considered for continuation will be carried out.

Public Health Care Delivery System

NHP-2017 faces a challenging task of ensuring affordable, quality medical care to every citizen of the nation. To achieve Universal Health Coverage by 2025, NHP-2017 assures a comprehensive primary care to one and all. Both the quantifiable and measurable goals have been laid down. It has been proposed to set up health and wellness centres which would provide full range of preventive and promotive services to prevent diseases and enhance well-being.

The policy proposes seven key policy shifts in organizing health care services

- ◆ In primary care – from selective care to assured comprehensive care with linkages to referral hospitals.
- ◆ In secondary and tertiary care – from an input oriented to an output based strategic purchasing.
- ◆ In public hospitals – from user fees & cost recovery to assured free drugs, diagnostic and emergency services to all.
- ◆ In infrastructure and human resource development – from normative approach to targeted approach to reach under-served areas.
- ◆ In urban health – from token interventions to on-scale assured interventions, to organize Primary Health Care delivery and referral support for urban poor. Collaboration with other sectors to address wider determinants of urban health is advocated.
- ◆ In National Health Programmes – integration with health systems for programme effectiveness and in turn contributing to strengthening of health systems for efficiency.
- ◆ In Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy (AYUSH) services – from stand-alone to a three dimensional mainstreaming

To address the serious shortage of human resources, the policy has proposed: i) reviving the multipurpose male worker cadre ii) empowerment of Accredited Social Health Activist (ASHA's) to undertake preventive education at the community level and iii) training AYUSH doctors, nurses and para-medics for six months on public health so as to position them in the Health and Wellness centres. From the current spending of 1.15% on public health, the policy envisages raising the spending to 2.5% of GDP by 2025.

Concerns and Challenges

There are several challenges:

- ◆ The first and foremost concern is low public spending and public investment on primary care is barely \$ 17 per capita whereas estimates prepared for Sustainable Developmental Goal 3's target of universal health coverage to essential care by 2030 in about \$ 85 per capita. The low spending on public health has resulted in poorly developed primary healthcare infrastructure and even if available, it largely remains underutilised like providing only 15% of the services to the under-5 children.
- ◆ The non-availability of skilled human resources and essential infrastructure is a serious barrier as more than two-thirds of this deficit is in the 'underserved' areas that have only a fifth of money and three-quarters of the disease burden.
- ◆ Another concern is regarding the primary care services which the policy states would be provided by the Government. NHP- 2017 time and again mentions 'strategic purchasing 'of private services for filling the so called gap to addresses the issue of 'supply side' imbalances. But in reality, this gap is really huge as private sector is providing about 70% Out

Patient Department (OPD) and 60% inpatient care, especially in the sphere of secondary and tertiary care.

- ◆ Next concern is the weak commitment made to building the required infrastructure in urban and rural areas for delivering primary health care services. NHP-2017 affirms the desire to achieve the Indian Public Health Standards (IPHS) but it fails to assess its fiscal implications.
- ◆ Finally, NHP-2017 shows weak commitment towards regulations. It is not just instituting better laws and restructuring of the medical and nursing councils to be more accountable and less corrupt but establishing an independent drug regulator to oversee the licensing of drugs is equally important.

Healthcare Governance in India

Role of Centre & State

One of the most important strengths and at the same time challenges of governance in health is the distribution of responsibility and accountability between the Centre and the States. Besides, better management of fiduciary risks, provision of capacity building, technical assistance to States to develop state-specific strategic

plans, through the active involvement of local self-government and through community based monitoring of health outputs is also recommended. The policy suggests State Directorates to be strengthened by human resource policies, central to which is the issue that those from a public health management cadre must hold senior positions in public health.

Role of Panchayati Raj Institutions

Panchayati Raj Institutions would be strengthened to play an enhanced role at different levels for health governance, including the social determinants of health. There is need to make Community Based Monitoring and Planning (CBMP) mandatory, so as to place people at the centre of the health system and development process for effective monitoring of quality of services and for better accountability in management and delivery of health care services.

The government policy should be to increase both horizontal and vertical accountability of the health system by providing a greater role and participation of local bodies and encouraging community monitoring, programme evaluations along with ensuring grievance redressal systems.

Conclusion

Holding ourselves accountable to meet a clear set of measurable health

sector goals relating to mortality and morbidity on life expectancy and a healthy life, on reducing mortality and disease prevention and incidence, the government of India is committed to a healthy future of all its citizens. By recognising and prioritising the role of the government in shaping and delivering equitable quality health to all, we have announced the National Health Policy 2017, and are committed to implementing it in close cooperation with the state governments, in a time-bound manner with clear deliverables and milestones, so that Indians stay healthy and reach their full potential.

Prevention, promotion and early diagnosis of disease is the only cost-effective option for India on the basis of current spending of 1.15% of GDP on health. Such low resources make hospital based treatment non-affordable and non-feasible. So, assured primary health care to all is the need of the day.

General Studies Paper- II

Topic: Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes; mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections.

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4. INDIA-BANGLADESH TIES: GETTING DEEPER

Why in News?

Prime Minister Sheikh Hasina returned for a third consecutive term with a landslide victory after the election held on 30th December in Bangladesh. In a 300-seat Bangladesh Parliament, Sheikh Hasina's party Awami League and its allies have won 288 seats while its arch-rival Bangladesh Nationalist Party (BNP) was decimated as they managed to win only seven seats.

Introduction

During the last decade of Ms. Hasina's tenure as Prime Minister, high-level Bangladesh-India engagement has been intensified. In Bangladesh too, a growing domestic political consensus, overriding fractious politics, has emerged in favour of close ties with India. There is an irrevocable and irreversible bipartisan political consensus in India for upgrading

relations across a comprehensive interface of ties. India's 'neighbourhood policy' has focussed on Bangladesh, which has emerged as a key interlocutor in India's 'Act East Policy' and sub-regional groupings like Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) and the Bangladesh, Bhutan, India, Nepal (BBIN) Initiative. Along with this, Bangladesh's importance in the

strategic calculations of India and China stems not only from its pivotal geographical location on the Indian Ocean.

Further, Bangladesh is one of the fastest-growing economies in the region and growing at above 6 percent steadily for almost for a decade. This year the country has fulfilled the eligibility criteria set by the United Nations to be recognized as a developing country by 2024, moving out of the list of Least Developed Countries (LDC) and Prime Minister Sheikh Hasina has been credited for this achievement. Development — both physical (large-scale infrastructure and military capabilities) and social (human resources and services) — is likely to remain a central national priority for Bangladesh in the coming decades.

Bilateral Trade

India's border trade with its six neighbouring countries — China, Pakistan, Bangladesh, Nepal, Bhutan and Myanmar — accounts for a little over \$12 billion, which is just 1.56% of India's total global trade of \$769 billion in FY2017-18. Bangladesh is India's largest trading partner in South Asia with an annual turnover of around \$9 billion plus an estimated informal trade of around \$8-9 billion, across the 4,100-km-long porous border.

The adverse balance of trade has been a bilateral issue. The asymmetry in the economies of India and Bangladesh is the major factor. To enable more Bangladeshi exports to flow into India, duty free entry was granted in 2011 under the South Asian Free Trade Area.

Further, an SEZ in Bangladesh for Indian manufacturing companies has been mooted and notified. When operational it will encourage Indian companies to manufacture there and export to India. Indian investment in Bangladesh has reached \$3 billion. In 2017, 13 agreements worth around \$10 billion were signed in the power

and energy sectors. To offset the economic asymmetry, India has granted Bangladesh generous lines of credit (LOCs) and grants, with commitments reaching \$8 billion.

Improvement in bilateral ties has led to newer areas of cooperation such as cyberspace. Bangladesh has provided cyber connectivity between the international gateway at Cox's Bazar to Agartala for faster Internet connectivity in India's northeastern States. India has also become a partner in Bangladesh's nuclear power programme, with the beginning of construction at the Rooppur nuclear power plant. India is poised to export around 1100 MW of power to meet the energy deficit in Bangladesh. Power projects totalling more than 3600 MW are under implementation by Indian companies.

Security Related Developments

Bangladesh under Hasina's leadership has been considered pro-India, and it took measures to meet India's concerns in the Northeastern border areas by effectively tackling militancy operating from its soil. Sheikh Hasina government has arrested and handed over some of the leaders of militant organizations to India, and militancy in the border areas has witnessed a considerable decline during her leadership.

However, not everything has gone in India's favour. There will be setbacks in India-Bangladesh ties, like the current Rohingya issue, which has imposed a huge economic and security burden on Bangladesh. Bilaterally, the issue of the illegal migration has already acquired a high profile in India with the publication of the draft National Register of Citizens in Assam. This will require deft handling of bilateral ties. Sharing of river waters will remain a challenge, but not an insurmountable one. Bangladesh not only provides a strategic link between mainland India

and the Northeastern states given that for these states, being landlocked, it is through Bangladesh that they find a quick outlet to the sea, but it is vital to deal with protracted security problems in some of the restive Northeastern states as well.

Strategic Developments

The issues of development and enhanced connectivity are likely to remain a priority for Bangladesh, Ziaur Rahman, who made the first concrete proposal for establishing a framework for regional cooperation in South Asia, which culminated in the formation of South Asian Association for Regional Cooperation (SAARC) in 1985. Bangladesh expressed its desire to reactivate sub-regional groupings such as Bangladesh, Bhutan, Nepal and India (BBIN) in Eastern South Asia.

The BBIN initiative was formalized in 1997 by Bangladesh, Bhutan, India and Nepal with the objectives of forging cooperation on connectivity of power, transport and infrastructure. Meanwhile Bangladesh, China, India and Myanmar (BCIM), which seeks to establish an economic corridor connecting Bangladesh, China, India and Myanmar, was part of a Track I initiative for Bangladesh even while the largest South Asian country, India, kept it as a Track II initiative until 2013. Bangladesh constructed of the 130-kilometer-long Bangladesh-India Friendship Pipeline. The pipeline was laid down from Siliguri in West Bengal to Parbatipur, Bangladesh, in order to reduce significantly time and transportation costs by diminishing dependence on railways for bilateral trade.

Overview: India-Bangladesh Socio-Economic Development

At the time of independence in 1971, Bangladesh was one of the world's poorest countries. With a population of 67 million, an estimated 71% of whom

lived below the national poverty line, it produced barely 10 million tonnes (mt) of rice and was the second largest food-aid recipient after Egypt from 1975 to 1992. The country's poverty headcount ratio was 56.6% even in 1992, falling only gradually to 48.9% by 2000. But since then, this has declined dramatically to 24.3% in 2016. Also, while Bangladesh's population has risen 2.5 times to 165 million since 1971, its rice production has soared 3.5 times to over 35 mt, enough to feed its people. More impressive is the improvement in social indicators.

In 1971, Bangladesh's total fertility rate — the number of children women bear on an average during their lifetime — was 6.94 while India had a lower rate of 5.52 in 1971. That rate had, by 2016, dropped to 2.1, below the 2.33 for India. Defying the so-called "Muslim" stereotype, the proportion of Bangladeshi women aged 15-49 years using contraceptives has increased from a mere 7.7% to 62.4% between 1976 and 2014. That figure for India was 53.5% in 2016, up from 35.3% in 1980, but indicating less impressive progress.

Parents are likely to produce fewer children, education makes women more aware of the need for family planning, apart from delaying the age of marriage. The success in population control has come alongside a massive fall in infant and under-five years mortality rates, from 147.9 and 221.4 per thousand live births respectively in 1971, to 26.9 and 32.4 in 2017. The same period also recorded a jump in the country's average life expectancy at birth — from 47.14 to 72.49 years (India: 68.56 years), and in the adult female literacy rate from under 10% to 70%-plus (India: 63%).

The reduction in mortality rates has followed three specific interventions.

- ◆ The first is immunisation coverage, which for the four standard vaccines — BCG, DTP, oral polio and measles — was 1%-2% in Bangladesh until 1985. That coverage is now near 100%.
- ◆ The second is open defecation, which Bangladesh practically eradicated by 2015. That was around the time India had launched the Swachh Bharat Mission, with roughly 40% of its population still practising what is a major source of waterborne diseases from cholera and dysentery to hepatitis.
- ◆ The third is oral rehydration solution (ORS), a simple electrolyte blend of salt, sugar and clean water that Bangladeshi women were taught to make and administer to children suffering severe dehydration from diarrhoea, proved much cheaper

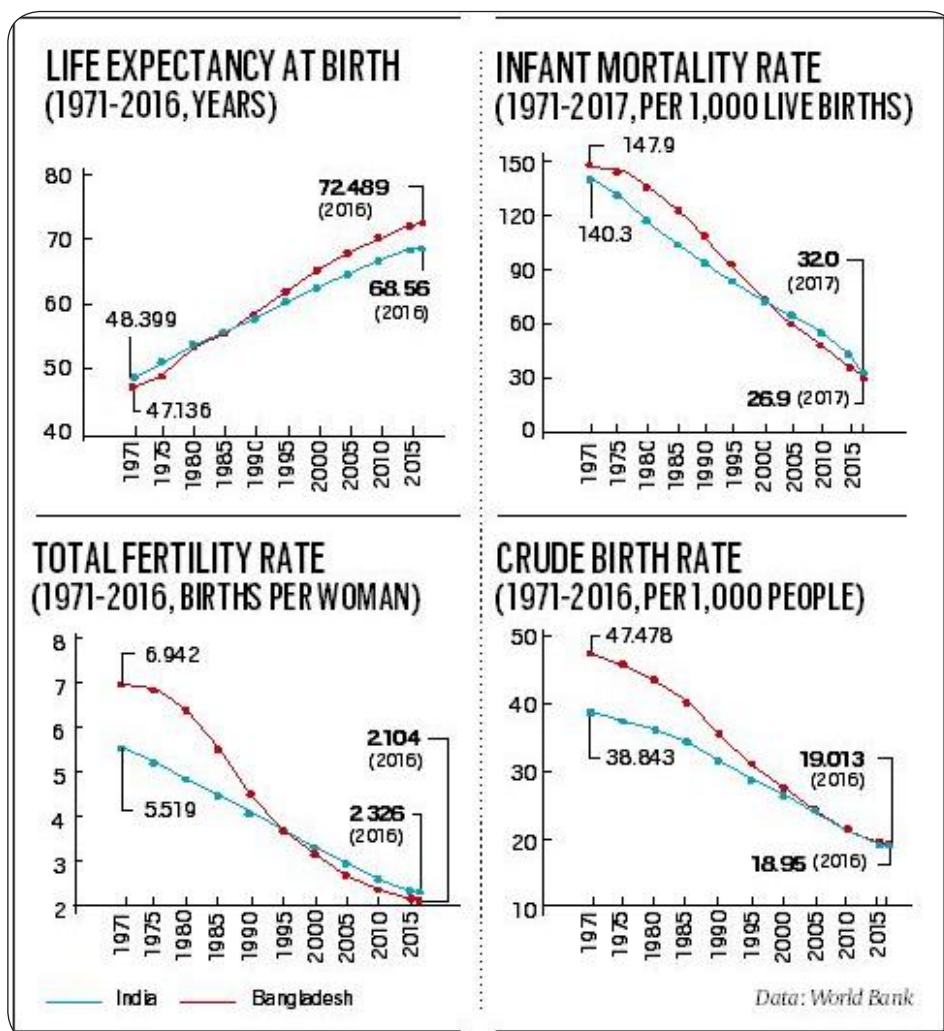
and more effective in rural areas than saline intravenous drips.

The results of these interventions are also manifested in nutrition indicators relating to prevalence of stunting (low height-for-age), wasting (low weight-for-height), and underweight (low weight-for-age) amongst children under 5. Between 1997 and 2017, these ratios for Bangladesh have dipped from 59.7%, 20.6% and 52.5% to 31%, 8%, and 22% respectively.

Lessons from Bangladesh

The Bangladeshi development experience reveals two things about the country's policymaking.

- ◆ First, clarity with regard to setting goals and a quiet pragmatism in meeting these. For the political leadership cutting across parties



— Bangladesh's large-scale immunisation programme was, in fact, launched during the mid-eighties under the military dictatorship of H M Ershad — population control was an imperative for development. With it also came recognition of the need to focus on maternal and child health.

- ◆ The second is, of course, religion. The clerics could do nothing to stop family-planning efforts in Bangladesh, unlike in Pakistan, where the total fertility rate is still 3.5 and contraceptive prevalence among women of reproductive age is just 35.4%.
- ◆ The same pragmatism, perhaps, explains Bangladesh going ahead with commercial cultivation of genetically modified Bt brinjal, a technology that India has rejected despite being developed by an Indian company.

The biggest lesson both India and Pakistan can learn from Bangladesh today is to keep religious fundamentalism at bay and not allow so-called defenders of faith to dictate policy.

China-India Rivalry

As the strategic rivalry between India and China intensifies, Bangladesh increasingly finds itself embroiled in a great game along the Indian Ocean region. China's foray into South Asia, generally considered to be India's diplomatic backyard, is relatively new. Apart from long-lasting ties with Pakistan, China's economic engagement with South Asian countries only began in the last two decades. In this short period of time, China has emerged as a top trade partner in the region.

During President Xi's historic visit to Bangladesh in 2016, China

offered a gargantuan US\$24.45 billion to Dhaka in bilateral assistance for infrastructure projects. This amount, along with an earlier US\$13.6 billion investment in joint ventures, brings Chinese investment in Bangladesh to a total of US\$38 billion, the largest sum ever pledged to Bangladesh by a single country. All this is bad news for India, which has already formally opposed the Belt and Road Initiatives (BRI). India's fear of Chinese encirclement — both in the Indian Ocean through the 'string of pearls' ports and overland through the BRI economic corridors in Pakistan and Myanmar — has prompted India to establish its own connectivity initiatives such as the Kaladan project with Myanmar and the North-South Transport Corridor with Russia.

China's security and economic footprint has grown in South Asia and managing this will remain a challenge for both countries. While Bangladesh is overwhelmingly dependent on military hardware from China, India has provided a \$500 million LOC for procurement of defence-related goods from India. This momentum must be maintained and intensified. More important, as the Chinese foray into the South Asia and the Indian Ocean region is extending its sway, an improvement in Indo-Bangladeshi ties would help assuage India's concerns of strategic encirclement by China. Therefore, India has forged close security ties with Bangladesh in the forms of joint border patrols and joint military and naval exercises and by concluding agreements on fighting terrorism, organized crime and drug trafficking.

Way Forward

Bangladesh is important for India's security, connectivity to its Northeast region, and implementing its 'Act East Policy'. India and Bangladesh

must seize the opportunity to further enhance connectivity and trade ties. Bangladesh-India relations have reached a stage of maturity and with further upgrading and integration of infrastructure, bilateral ties can be expected to grow stronger in the future.

For Bangladesh, India's weakened position in the region could bring unexpected boons. Hasina has successfully snubbed domestic critics accusing her of giving in to India's infringements on Bangladesh — a popular anxiety that runs deep through Bangladeshi society. She has done so by representing China as one of several infrastructure development partners along with Japan and South Korea, and simultaneously maintaining India as a silent international backer.

With the rise of religious radicalism and terrorism, defence and security issues will require greater cooperation. Bangladesh has taken strong and effective steps against those who have been inspired by the Islamic State and involved in terrorist strikes.

To make a positive beginning, it will be pragmatic for India to fulfill the promises made to Bangladesh. The early conclusion of the Teesta treaty will be one of the steps. The water-sharing treaty is pending since 2011 due to the objection raised by West Bengal. India should also lay emphasis on connectivity between the two countries and lend support to various infrastructure projects planned in Bangladesh.

General Studies Paper- II

Topic: India and its neighborhood-relations.



5. IWC: CONSERVATION OF WHALES

Why in News?

Japan announced that it is withdrawing from the International Whaling Commission (IWC) and will resume commercial whale hunting next year, sparking swift condemnation from other governments and conservation groups.

Introduction

During the 20th century, 2.9 million whales were killed by the whaling industry, likely the largest removal of any animal in terms of total biomass in human history. Whale populations were devastated, with sperm whales reduced to about 30 per cent of their pre-whaling population and blue whales by up to 90 per cent. In a huge blow to wildlife conservation endeavours to save endangered species, Japan confirmed its withdrawal from the International Whaling Commission (IWC) after 51 years of membership.

Tokyo argues that the IWC has failed to live up to its initial dual mandate in 1946 to find a balance between preserving whale stocks and allowing the “orderly development” of the whaling industry. After failing to reach an agreement at a global conference in Brazil in September to resume commercial whaling, Japan is now following through on a threat to withdraw from the global body entirely.

Despite the success of the moratorium, Japan, Norway and Iceland have continued commercial whaling and international trade in whale products and continue to mount pressure to overturn the whaling ban at the IWC. About 37,000 whales have been killed by these three countries since 1986.

In October, the Convention on International Trade in Endangered Species also struck a blow against

Japan’s whaling industry, deciding that Japan had broken its rules by taking sei whale meat from international waters again under the guise of research — and selling it commercially in Japan.

Historical Background

Coastal countries like Japan, Norway and Iceland have indulged in the hunting of whales for centuries, although consumption in the Asian country increased after the Second World War, when whales were the primary source of meat.

Japan’s role in killing whales to conduct scientific experiments and trade the meat had been condemned by the international community and conservation groups for a long time. Many critics have claimed that the scientific purpose acts a cover, implying that whales taken for scientific studies are later sold for meat consumption.

The Whaling in Antarctic case (Australia v. Japan, New Zealand Intervening)

One of the most incendiary questions under the International Convention for the Regulation of Whaling (ICRW) has become Japanese scientific whaling, which led to the Whaling in Antarctic Judgment of the International Court of Justice (ICJ) in 2014. Both Australia and New Zealand alleged that Japanese scientific whaling (so called JARPA II) was in fact not ‘in purpose of scientific whaling’. In October 2015 Japan modified its Optional Declaration or compulsory jurisdiction of the International Court of Justice excluding disputes relating to living marine resources from the Court’s jurisdiction, thus preventing all further disputes regarding whaling from being submitted to the ICJ. As of the 31st March 2014, Japanese Antarctic whaling programme was declared illegal by the International Court of Justice in The Hague.

While the IWC lamented Japan’s failure to commit to conserving whales, Tokyo complained in a statement that the IWC had not lived up to its pledge of supporting sustainable commercial

whaling. It accused the IWC of being focused only on the aim of conserving numbers.

Wildlife Groups and Global Community Response

Australia expressed extreme disappointment with Japan’s decision. Australia remains resolutely opposed to all forms of commercial and so-called ‘scientific’ whaling. It further warned Japan “of operating completely outside the bounds of international law.”

‘Greenpeace’ Japan urged the government to reconsider, lest this move attract criticism ahead of the G20 summit in June which Japan is set to host. It urged government of Japan that it must urgently act to conserve marine ecosystems, rather

About Whales

Whales roam throughout all of the world’s oceans, communicating with complex and mysterious sounds. Their sheer size amazes us: the blue whale can reach lengths of more than 100 feet and weigh up to 200 tons—as much as 33 elephants. Despite living in the water, whales breathe air. And like humans, they are warm-blooded mammals who nurse their young. A thick layer of fat called blubber insulates them from cold ocean waters. Some whales are known as baleen whales including blue, right, bowhead, sei and gray whales. This refers to the fact that they have special bristle-like structures in their mouths (called baleen) that strains food from the water. Other whales, such as beluga or sperm whales, have teeth. Whales are at the top of the food chain and have an important role in the overall health of the marine environment. Unfortunately their large size and mythical aura does not protect them even after decades of protection. The International Union for Conservation of Nature (IUCN) recognized 86 cetacean species, 40 of which are considered whales. Six are considered at risk, as they are ranked Critically Endangered (the North Atlantic right whale), “Endangered” (blue whale, fin whale, North Pacific right whale, and sei whale), and “Vulnerable” (sperm whale).

than resume commercial whaling and further accusing Japan of timing of the announcement before the New Year's eve to avoid media criticism. UK's environment secretary Michael Gove also tweeted in dismay, "The UK is strongly opposed to commercial whaling and will continue to fight for the protection and welfare of these majestic mammals."

Threats to Whale

Despite a moratorium on commercial whaling and a ban on international trade of whale products, Over 1000 whales a year are killed for such commercial purposes. Warming oceans and loss of sea ice in the Arctic and Antarctic can affect the habitats and food of whales. These changes can mean whales such as humpbacks and blues may have to migrate much further to reach feeding grounds, leaving them with less time to forage for food. The shift in food availability due to climate fluctuations has already hurt the reproductive rates of the endangered North Atlantic right whale.

Collisions with ships, entanglement in fishing gear (known as bycatch), and pollution injure and kill whales. Shipping activity and oil and gas development cause noise that can disrupt or even damage whales' hearing. Such disturbance can exclude whales from critical feeding and breeding grounds, and disrupt their migratory paths.

International Whaling Commission

The International Whaling Commission (IWC) was set up in 1946. Initially a whalers' club, it continued to sanction the growing and unsustainable commercial whaling industry for several decades. Population after population was depleted, some completely eradicated. All efforts to sustainably manage commercial whaling failed and in 1982, as global pressure to end the mass slaughter mounted, the IWC enforced a moratorium on commercial whaling from 1986. Undoubtedly, the moratorium saved several whale species from extinction and has allowed some populations to recover. But more than three decades later, the great whales and their cousins –

dolphins and porpoises – are still facing grave and growing threats from a range of human activities.

However, the IWC has increasingly turned its attention to these threats and now addresses a variety of conservation and welfare issues, from bycatch, marine plastic and noise pollution to responsible whale-watching.

Whaling Regulation

The IWC recognises three different types of whaling. The first of these is 'aboriginal subsistence whaling' to support the needs of indigenous communities. This is regulated by the IWC which sets catch limits every six years.

The second type of whaling is 'commercial'. This is also regulated by the IWC but has been subject to a pause or 'moratorium' since 1986. Aside from non-IWC member countries, only commercial whaling conducted at present is by a small number of countries exercising an objection or reservation to the moratorium. Although these countries share catch and related data with the Commission and its Scientific Committee, this whaling is not regulated by the IWC.

The third category is 'special permit' (or scientific) whaling. International law on whaling separates this from IWC-regulated whaling. Countries are asked to submit special permit research proposals to the IWC for scientific scrutiny, but the permits are issued by individual countries and the role of the IWC is advisory only.

Commercialization of Whale

In 2003 Japan awarded the Institute of Cetacean Research (ICR) in Tokyo special permits to collect 440 minke whales in the Southern Ocean and 150 in the North Pacific, as well as 50 Bryde's, 50 sei and 10 sperm whales. Whalemeat derived from scientific whaling is sold to the public. Similarly,

after a 14-year absence from whaling, Iceland submitted to the IWC in 2003 a scientific whaling programme to hunt 500 whales over two years. The proposal comprised 200 fin, 100 sei, and 200 minke whales. Some Japanese and Norwegian groups can make a strong claim that they, merit aboriginal hunting rights, although their traditions involve the sale of meat and blubber to the commercial trade.

Scientific whalers say that they need to kill whales to determine age, reproductive status, diet and effects of environmental changes – information they claim is needed for future management of whale stocks. Non-lethal methods such as biopsy sampling are deemed "inefficient and impractical". Scientific whaling is ultimately a case of large-scale animal experimentation, as the animals are killed allegedly to further some scientific research. In some instances, animal experimentation may be legitimate. However, it should be in accordance with international best practice. Several countries including New Zealand considers that the current practice of scientific whaling is a clear anomaly in the 21st century and would not be acceptable in any comparable new international treaty.

Issue and Challenges

Technological advances for catching whales in the late 19th century and the expansion of processing capabilities created an industry that could catch and quickly render virtually any whale in any ocean. As well as commercial hunting, whales face unprecedented and increasing impacts on the marine environment caused by human activities. Entanglement and bycatch in fisheries gear is the primary direct risk to whales, dolphins and porpoises, killing more than 300,000 each year.

Climate change poses one of the greatest threats through ocean acidification, melting ice sheets,

changes in ocean temperatures and food chain disruption. Marine debris, particularly plastic pollution, is now widely recognised as another pressing threat to marine biodiversity. Other deadly forms of pollution include chemical, noise and that associated with oil production. Several whale species remain highly endangered and extremely vulnerable to non-hunting threats such as ship strikes and entanglement, including the North Atlantic right whale, which faces possible extinction. These issues present an enormous conservation challenge and the moratorium plays a critical role in minimising additional pressure on whale populations through hunting.

Way Forward

The IWC had banned commercial whaling in 1986 following alarming reports of certain species being driven to near-extinction. Japan had been utilising a loophole to continue hunting whales for the last 30 years, under a scientific programme earmarked as an exception under the IWC ban. In its long history, Japan has used whales not only as a source of protein but also for a variety of other purposes. Although Japan is no longer bound by IWC's rules, it remains to be seen if the country will be held culpable under the UN Convention on the Law of the Sea, that binds all members to cooperate on the conservation of whales. Good conservation and management

requires and understanding of the status of whales populations. A key component of this is, of course, an estimate of present abundance against which possible threats can be evaluated. Targeted management actions taken to secure protections for these whales and their habitat.

General Studies Paper- II

Topic: Important International institutions, agencies and fora- their structure, mandate.

General Studies Paper- III

Topic: Conservation, environmental pollution and degradation, environmental impact assessment.



6. GETTING THE CONNECTIVITY AND ACCESSIBILITY IN NORTH EAST

Why in News?

On December 25, 2018, Assam got India's longest rail-cum-road bridge over the mighty Brahmaputra. Built at an estimated cost of Rs 5,900 crore, the 4.94 km long bridge will facilitate connectivity between Assam and Arunachal Pradesh besides playing a crucial role in defence movement along the India-China border in Arunachal Pradesh.

Introduction

North Eastern Region of India, commonly known as North East, consists of eight states namely Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura and its geographical area is 2,62,179 square kilometers. This area is smaller than the geographical area of some big states of India like Rajasthan, Madhya Pradesh and Maharashtra. North East is connected to the rest of the country through a narrow corridor, generally called the chicken neck, near

Siliguri region. North East is surrounded by five foreign countries. These are Bangladesh, Bhutan, China, Nepal and Myanmar. Only about thirty to thirty five percent of the area of North East is plain land, mostly in three valleys namely the Brahmaputra, the Barak and the Imphal Valleys. The rest of the area is hilly land. About three- fourth of the area of North East are yet to be brought under cadastral survey. For the vast unsurveyed areas no proper and authenticated land records are available to show individual title over land.

The prosperity of a country depends on the development of infrastructure. The development

 Arunachal Pradesh and Meghalaya put on the rail map of India	 Agartala in Tripura connected with broad gauge	 Foundation stone of Imphal railway station laid in 2016
 Longest railway tunnel in India coming up on Jiribam-Tupul-Imphal new broad-gauge line	 15 new projects of 1,385 km at a cost of Rs. 47,000 crore in progress	 In last 3 years, Rs. 5,300 crore spent p.a. for rail development in North-East
 Agartala-Akhaura broad gauge line work started in 2016 15.06 km line between Agartala and Bangladesh's Akhaura is part of the Trans-Asian Railway Network Will greatly shorten the connectivity distance between Agartala and Kolkata		

of infrastructure contributes to agricultural development, induces industrialization, and encourages trade and mobility of labour. Physical infrastructure like transportation, power and communication through its backward and forward linkages facilitates growth; and social infrastructure including water supply, sanitation, sewage disposal, education and health has a direct impact on

the quality of life. The infrastructure development in the North-East India reflects a different picture. The Indian planners have for a long time neglected the development of infrastructure in these regions and it was only in recent years that serious efforts have been made for their development. Infrastructure development entails long gestation period, hence even the recent efforts made by government through the North Eastern Council or Ministry of Development of North Eastern Region (NEC or DoNER), etc, could not have the positive economic impact. The problem that ensues is that the existing infrastructure of the North-East could not sustain the various economic reforms measures adopted by the Central government. The World Bank rightly describes conditions in the region as, 'a low-level equilibrium of poverty, non-development, civil conflict and lack of faith in political leadership'.

At present, the Central government has taken several initiatives for all-round inclusive development of the region. The Centre's renewed emphasis on translating the 'Act East Policy' into reality has brought great hopes to the people of the North East. To make North East the hub for opening this part of the country to South East Asian nations like Bangladesh, Nepal and Bhutan the region has to be made economically more active and prosperous. Connecting the aforesaid countries with North East through roads, rail lines, riverways and airways will automatically increase the flow of men, materials, technology and ideas from and to the North East.

Strategy for Development in North East region

- ◆ Empowerment of the people by maximizing self-governance and participatory development through grass-roots planning. Such planning will help to evolve

development strategy based on the resources, needs and aspirations of the people.

- ◆ Rural development with a focus on improving agricultural productivity and the creation of non-farm avocations and employment.
- ◆ Development of sectors with comparative advantage agro-processing industries, modernization and development of sericulture, investment in manufacturing units based on the resources available in the region, harnessing the large hydroelectric power generation potential and focus on developing services such as tourism that will help to accelerate development and create productive employment opportunities.
- ◆ Maximising self-governance, introduction of participatory planning, rural development and development of sectors with comparative advantage call for significant augmentation of capacity of the people and institutions both in the government and private sectors.
- ◆ Augmenting infrastructure, including rail, road, inland water and air transportation to facilitate a two-way movement of people and goods within the region and outside, communication networks including broadband and wireless connectivity and harnessing of the vast power generation potential, all of which will open up markets for produce from the region, attract private investment, create greater employment opportunities and expand choices for people of the region.
- ◆ Ensuring adequate flow of resources for public investments in infrastructure, implementing a framework for private participation in augmenting infrastructure and creating an enabling environment

for the flow of investments to harness the physical resources of the region for the welfare of the people.

North East Vision 2020

A six-fold strategy for the comprehensive development of the region has been proposed-

- Empowering people by maximizing self-governance and participatory development through grass-root planning to promote inclusive development.
- Creation of development opportunities for the rural areas through enhancing productivity in agriculture and allied activities such as animal husbandry, horticulture, floriculture, fisheries and generation of livelihood options through rural non-farm employment.
- To develop sectors in the region having a comparative advantage such as agro-processing, hydro-power generation.
- Enhancing the skills and competencies of the people and building the capacities for institutions within the Government and outside.
- Creating a hospitable investment climate to encourage investment by the private sector particularly for infrastructure.
- Harnessing the resources of the Government and the private sector to realize the objectives of the Vision.

Government Initiative for North East Development

North-East India, which comprises of eight states, is geographically connected to the rest of the country, by a narrow corridor of land, flanked by Nepal and Bangladesh. For decades, poor infrastructure and limited connectivity have acted as roadblocks hindering the socio-economic development of these states.

Airports

The North-Eastern Council (NEC) is a nodal agency for economic and social development of the North-East. The NEC, whose key members include governors and chief ministers of these

eight states, is funding upgradation of infrastructure in 12 operational airports.

- ◆ The Pakyong Airport in Sikkim was inaugurated by Prime Minister Narendra Modi on September 24. Situated around 30 kilometres from Gangtok, the airport is built over an area of over 200 acres, atop a hill at 4,500 feet above sea level making it one of the five highest airports in the country.
- ◆ The construction of Tezu Airport is nearing completion and will be operational within the current financial year. Connectivity to neighbouring districts like Lower Dibang Valley, Anjaw, Namsai and Dibang Valley, is expected to improve greatly.
- ◆ Runway extension works will be taken up by the NEC in Umroi (Shillong) Airport, to enable bigger aircrafts to land. Similarly, work is underway to allocate hangars at LGBI Airport in Guwahati.

Road Projects

The NEC has set its focus on building roads spanning 10,500 kilometres, which will include inter-state and roads of economic importance. A new scheme called the 'North East Road Sector Development Scheme', has been launched that will drive strategic projects for roads and bridges.

These projects include Doimukh-Harmuti; Tura - Mankachar and Wokha - Merapani - Golaghat. Arunachal Pradesh has the least road density.

The Union Ministry of Road and Transport, is planning to expedite the Trans-Arunachal Highway project. The ministry will be driving the Special Accelerated Road Development Program of Roads and Highways covering 2,319 kilometres. Construction plans for the Arunachal Frontier Highway and East West Corridor, has also been proposed.

North East Special Infrastructure Development Scheme

- In December 2017, government of India approved North East Special Infrastructure Development Scheme (NESIDS) with an outlay of Rs.1600.00 crore for the period of 2017-18 to 2019-20.
- The funds under the scheme, will be distributed among eight North Eastern States on the basis of well-defined criteria on certain parameters e.g. Area, Population, Human Development Index, Road density, etc.
- The scheme, inter alia, aims to cover the social sectors namely health and education in North Eastern Region.

Rail Projects

To strengthen connectivity, Prime Minister Narendra Modi inaugurated the Bogibeel Bridge, India's largest railroad bridge, on December 25. The five-km structure, constructed over the Brahmaputra river, will connect Dibrugarh in Assam and Dhemaji district bordering Arunachal Pradesh. This bridge will cut the travel time between the two points by four hours.

- ◆ There are plans to provide a railway link for the NE states through 20 major railway projects, encompassing 13 new lines, two gauge conversions and five doublings with a length of nearly 2,624 kilometres.
- ◆ Construction of a broad gauge railway line connecting Bairabi and Sairang (Mizoram), is in progress that will connect cities of the North-Eastern states by 2020.
- ◆ The 51-kilometre long rail link is expected to be operational by next year. The project will also be accompanied by the construction of 23 tunnels spanning nine kilometres, along with 36 major bridges and 147 minor bridges. The railway line will include three stations viz. Hortoki, Kawnpui and Mualkhang, which will be equipped with contemporary facilities like escalators, foot over-bridge, etc.

- ◆ An express highway project along the Brahmaputra River, costing Rs 40,000 crores and spanning 1,300 kilometres, will come up and that is expected to resolve connectivity issues in Assam.
- ◆ The government is braving challenges of availability of funds, land acquisition issues, forestry clearances, etc., and actively working towards the successful completion of these projects. Improved road, rail and air connectivity will help north-east India take a big leap towards progress.

Power Sector

Rs 1,292 crore has been set aside for ongoing power projects in the North East and capital outlay for the power sector has been increased to Rs 267.45 crore. This is in addition to the roughly Rs 54,000 crore that has been invested in various hydro-power projects in the region, especially in Sikkim and Arunachal Pradesh. Another Rs 234 crore has been allotted for developing solar power plants in the region over the past two years.

Shipping/Inland Waterways

Development of Barak river is taken up in two phases for shipping and navigation purposes. In Phase-I, development of Bhanga-Silchar (71 km) stretch with up gradation of existing terminals at Karimganj and Badarpur is to be taken up. Dredging of river Barak in 1st Phase has commenced in November, 2017. In Phase-II, development of Silchar – Lakhimpur (50 km) stretch with setting up of new terminals at Silchar and Lakhimpur is proposed.

Challenges in North East Development

The challenges to ensuring peace and progress in the region are formidable. The gap between the region and the rest of the country in terms of

various developmental outcomes, productivities and capacities of people and institutions is large and growing, and has to be bridged. Even within the region, there are vast differences, particularly between populations living in the hills and in the plains and between those living in the towns and villages. Given the vast disparities within the region, a development strategy will have to be evolved depending upon prevailing resources, conditions and people's needs and priorities. Further, the development strategy for the various tribes in the region will have to be participatory and should be calibrated in their own setting. Given the complexity of the task, augmenting investment to accelerate growth in the region is only a part of the story. The successful transformation of investments into developmental outcomes requires a variety of strategic initiatives. The reasons behind the tardy progress of NER are attributable to the following factors-

Geographical Factors

The hills account for about 70 per cent area of NER and accommodate about 30 per cent of the population and the plains constituting the remaining 30 per cent of area hold about 70 per cent of its population. The region's accessibility has always remained weak due to geographical reasons and underdeveloped transport links with the rest of India.

Infrastructural Factors

One of the reasons for the economic backwardness of the North-Eastern states is the poor state of basic infrastructural facilities like roadways, waterways, energy and so on as well as social infrastructure like educational institutions, health facilities etc.

Constraints on Industrial Growth

At the time of Independence, there was a small but significant industrial sector in Assam which was

mostly dominated by the colonial capitalists. Post-Independence, due to the partition of India, the industrial sector in Assam received a serious set-back as its trade routes were cut-off from the rest of India. This, in turn, hindered economic integration with other parts and also reduced the attractiveness of the region as a destination of investment. Besides, dearth of local capital, marketing and transport bottlenecks hinder the industrial development of this region.

Agriculture

Despite agriculture being the major subsistence occupation of the tribal population here, the pattern of agricultural growth has been uneven across states and between crops. Rice is the major crop of the region (kharif). Other crops (rabi) grown in the region are wheat, potato, sugarcane, pulses and oilseeds. One of the most common agricultural practices in the North-East is shifting or "Jhum" cultivation. Approximately 1.7 million hectares of land is under it which leads to a large scale deforestation resulting in soil erosion and loss of soil fertility.

Natural Resource Base

In spite of having a reservoir of natural resources- soil, water, vegetation and hydrocarbons, the NER is underdeveloped because the resources are being indiscriminately exploited and mismanaged, thereby leading to depletion of the very assets that are usually highlighted as triggering the greatest potential for growth and development of the NER.

Transport and communication

The road development in the region has been very slow due to various geographical and socio-economic reasons. As a result of the partition, the region suffered not only economically in the form of relatively high prices of consumer goods but also by a sense of isolation from the rest of the country.

Moreover, the railway network is only 4 per cent of India's rail network.

- ◆ Another gigantic challenge of NER today is globalization. With India's 'Act East' policy which heralded the tectonic shift of India's West oriented stance towards East-oriented posture, it is extremely difficult for the NER to successfully compete with the Multinational Companies (MNCs) and foreign entrepreneurs in business and trade.

Way Forward

Setting up of Department for North Eastern Region and the North Eastern Council by Government of India has been instrumental in forging a concerted effort to look into developmental issues of the North East. The current focus of the government to upgrade infrastructure in the region through various projects for improvement of roads, rail, and inland waterways and air connectivity and communication network is a welcome change. Besides, government is implementing various schemes for development, upgradation and promotion of micro, small and medium enterprises in the region. The 'Look East policy' of the government has a huge potential to transform the development landscape by providing the growth engine and ensure that the states fully partake as growth centres and not merely participate as a conduit for flow of trade from other parts of the country.

Implementing a people based development strategy, infrastructure development, building capacity, and responsive administration and governance will attract significant investment and open up avenues for the development of the region.

General Studies Paper- III

Topic: Infrastructure: Energy, Ports, Roads, Airports, Railways etc.

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7. SIXTH NATIONAL REPORT TO CBD

Why in News?

India has submitted its Sixth National Report (NR6) to the Convention on Biological Diversity (CBD). The report was submitted online to the CBD Secretariat during the inaugural session of the 13th National Meeting of the State Biodiversity Boards (SBBs) organized by the National Biodiversity Authority (NBA) in the Ministry of Environment, Forest and Climate Change (MoEFCC), New Delhi.

Introduction

India is among the first five countries in the world, the first in Asia and the first among the biodiversity rich mega diverse countries to have submitted NR6 to the CBD Secretariat. While globally, biodiversity is facing increasing pressure on account of habitat fragmentation and destruction, invasive alien species, pollution, climate change and overuse of resources, India is one of the few countries where forest cover is on the rise, with its forests teeming with wildlife. India is on track to achieve the biodiversity targets at the national level and is also contributing significantly towards achievement of the global biodiversity targets.

As a Party to the Convention on Biological Diversity (CBD) that mandates parties to prepare a national biodiversity strategy and action plan for implementing the Convention at the national level, India developed a National Policy and Macrolevel Action Strategy on Biodiversity in 1999. Subsequent to the adoption of the National Environment Policy (NEP) in 2006, a National Biodiversity Action Plan (NBAP) was developed through a comprehensive inter-ministerial process in 2008. India's NBAP is

broadly aligned to the global Strategic Plan for Biodiversity 2011- 2020 adopted under the aegis of CBD in 2010. India's updated NBAP addresses the major issues and concerns raised by CBD12. The addendum to NBAP uses the overall framework provided by the Strategic Plan for Biodiversity 2010–2020 and the Aichi Biodiversity Targets (ABTs) to incorporate National Biodiversity Targets (NBTs), their associated indicators and monitoring framework as well as an assessment of funding support for biodiversity conservation in India.

India's Biodiversity Profile

With mere 2.4 per cent of the area of the world India hosts nearly 8 % of the globally known floral and faunal species. It is an acknowledged centre of crop diversity and crop wild relatives (CWRs). People of India, including its nearly 4635 ethnic communities spread all across the country have protected and maintained its rich cultural and spiritual heritage of living in harmony with nature over centuries. Livelihoods of millions of people depend on biodiversity and conservation of biodiversity is a national priority.

- ◆ India has sixteen type of forest. Of these nearly 38.2 % constitute tropical dry deciduous forests and another 30.3 % are tropical moist deciduous forests.
- ◆ India ranks 10 among the 12 mangrove-rich countries in the world with about 4921 km geographical area under mangrove cover that constitutes over 2 % of the global total. India State of Forest Report (ISFR) (2017) shows net increase in very dense forest (VDF), mangroves, growing stock and in carbon stock.

- ◆ Trees outside Forests (TOF) are important for reaching the national goal of bringing 33 % of India's geographical area under tree cover. TOF in ISFR 2017 has been estimated to be 93,815 km an increase of 1,243 km over 2015.
- ◆ The freshwater ecosystems cover nearly four per cent of India's geographical area. These hosts 9.46 % (9,456 species) of the total faunal diversity of India. Nearly 60 % of these wetlands fall in protected forests. Their area has increased by 2,647 km² during 2005-2015 (ISFR 2017).
- ◆ India's coastal and marine habitats encompass 7517 km long coastline, Island ecosystems and a wide continental shelf. These ecosystems host nearly 20,444 faunal species communities. Of these 1180 species have been listed under different categories of threat for immediate conservation measures.
- ◆ India has fifteen different agroclimatic zones. Different farming practices have evolved over centuries in different regions suited to their local climatic, edaphic and landscape features. India is the centre of origin of rice. It is fourth globally in coarse warm-weather annual cereal production of short duration crops such as sorghum, pearl millet, maize, and finger millet in rain-fed agroclimatic regions. It is the first in the world in the production of millets.
- ◆ Nearly, 437, 000 accessions of plant germplasm of major crops were registered and preserved in the National Gene Bank during 2014 to 2018. National Animal Gene Bank has conserved 1,29,174 deep frozen semen doses of 311

breeding males (Bulls/Rams/Bucks/Stallions) from 44 breeds representing Cattle, Buffalo, Sheep, Goat, Camel, Yak and Equine.

- ◆ The Protection of Plant Varieties and Farmers' Rights Authority (PPVFRA) constituted under the Protection of Plant Varieties and Farmers' Rights Act, 2001 has identified 22 agrobiodiversity hotspots in India.
- ◆ National Bureau of Animal Genetic Research (NBAGR) has registered 169 indigenous breeds of livestock and poultry till mid 2018.
- ◆ Nearly, 8000 medicinal plants are used for health and other purposes. Nearly 110 Medicinal Plant Conservation Areas (MPCAs) inside protected forests secure in situ conservation in natural habitats. Ex-situ cultivation and conservation outside forests meets nearly 40 % of the medicinal plants' demand on volume basis.
- ◆ Four out of 35 biodiversity hotspots of the world are represented in India viz. (i) the Western Ghats as part of the Western Ghats-Sri Lanka global hotspot, (ii) the Nicobar Islands as part of the Sundarland hotspot, (iii) parts of Assam and Meghalaya in the North-eastern region as part of Indo-Burma hotspot, and (iv) the Eastern Himalaya comprising North-eastern Himalayas of India, Bhutan and Nepal. Initiatives by government and non-government sectors have been taken for maintaining the integrity of the ecosystems of these.
- ◆ India constitute 11.2 % of floral and 6.7 % of the known faunal species of the world. Nearly 28.2 % of the floral species and 28.7 % of the faunal species of these are endemic to India.

As a megadiverse country harbouring nearly 7-8% of globally recorded species while supporting 18%

of the global human population on a mere 2.4% of the world's land area, India's quest for inclusive economic development while maintaining integrity of its natural capital is being pursued through various programmes and strategies. Globally over 0.3 per cent of total recorded species are critically endangered, in India only 0.08 per cent of the species recorded are in this category. India is committed to protecting its rich heritage of biodiversity which are so vital to our economic and social development.

Sixth National Report

Submission of national reports is a mandatory obligation on Parties to CBD. As a responsible nation, India has never reneged on its international commitments and has earlier submitted on time five National Reports to the CBD. Parties are required to submit their NR6 by 31 December 2018. In COP 13 adopted guidelines, including reporting templates, for the sixth national report due 31 December 2018. The sixth national reports should provide a final review of progress in the implementation of the Strategic Plan for Biodiversity 2011-2020 and towards the 'Aichi Biodiversity Targets', including relevant national targets, based on information concerning the implementation of national biodiversity strategies and action plans and other actions taken to implement the Convention.

Highlights of the Report

- ◆ With well over 20 percent of its total geographical area under biodiversity conservation, India has exceeded the terrestrial component of 17 percent of Aichi target 11, and 20 percent of corresponding NBT relating to areas under biodiversity management.
- ◆ India has also made noteworthy achievement towards NBT relating to access and benefit sharing (ABS)

by operationalising the 'Nagoya Protocol' on ABS.

- ◆ The NR6 provides an update of progress in achievement of 12 NBTs developed under the Convention process in line with the 20 global Aichi biodiversity targets. Briefly, the report highlights that while India has exceeded/overachieved two NBTs, it is on track to achieve eight NBTs and in respect of the remaining two NBTs also, India is striving to meet the targets by the stipulated time of 2020.
- ◆ India has been investing a huge amount on biodiversity directly or indirectly through several development schemes of the Central and state governments, to the tune of Rs 70,000 crores per annum as against the estimated annual requirement of nearly Rs 1,09,000 crores.
- ◆ India has done well on raising awareness about biodiversity, which is an important thrust area in several programmes of the government.
- ◆ Measures have been adopted for sustainable management of agriculture, fisheries and forests, with a view to provide food and nutritional security to all without destroying the natural resource base while ensuring intergenerational environmental equity.
- ◆ Programmes are in place to maintain genetic diversity of cultivated plants, farms livestock and their wild relatives, towards minimising genetic erosion and safeguarding their genetic diversity.
- ◆ Mechanisms and enabling environment are being created for recognising and protecting the vast heritage of coded and oral traditional knowledge relating to biodiversity for larger human welfare while safeguarding the

interests and rights of the local communities as creators and holders of this knowledge.

India has nearly two third of the population of wild tigers in the world. The population of lion has risen from 177 in 1968 to over 520 in 2015, and elephants from 12,000 in 1970s to 30,000 in 2015. One-horned Indian Rhino which was on the brink of extinction during the early 20th century, now number 2400.

National Biodiversity Targets

The 12 NBTs of India are:

1. By 2020, a significant proportion of the country's population, especially youth, is aware of the values of biodiversity and its conservation and the steps they can take to conserve and use it sustainably.
2. By 2020, values of biodiversity conservation are integrated in national and state planning processes, development programmes and poverty alleviation strategies.
3. Strategies for reducing rate of degradation, fragmentation and loss of all natural habitats finalized and actions put in place by 2020 for environmental amelioration and human well-being.
4. By 2020, invasive alien species and pathways are identified and strategies to manage them developed, so that populations of prioritized invasive alien species are managed.
5. By 2020, measures are adopted for sustainable management of agriculture, forestry and fisheries.
6. Ecologically representative areas under terrestrial and inland water and also coastal and marine zones, especially those of particular importance for species, biodiversity and ecosystem services are conserved effectively and equitably based on protected area designation and management

and other area-based conservation measures, and integrated into the wider landscapes and seascapes covering over 20% of the geographic area of the country by 2020.

7. By 2020, genetic diversity of cultivated plants, farm livestock, and also of their wild relatives, including other socio-economically as well as culturally valuable species, is maintained and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.
8. By 2020, ecosystems services especially those relating to water, human health, livelihoods and well-being, are enumerated and measures to safeguard them are identified, taking into account the needs of women and local communities, particularly the poor and vulnerable sections.
9. By 2015, access to genetic resources and the fair and equitable sharing of benefits arising from their utilization as per 'Nagoya Protocol' are operational, consistent with national legislations.
10. By 2020, an effective, participatory and updated national biodiversity action plan is made operational at different levels of governance.
11. By 2020, national initiatives using communities' traditional knowledge relating to biodiversity are strengthened, with the view to protect this knowledge in accordance with the national legislations and international obligations.
12. By 2020, opportunities to increase the availability of financial, human and technical resources to facilitate the effective implementation of the Strategic Plan for Biodiversity 2011–2020 and the national targets are identified and strategy for resource mobilization is adopted by 2020.

Convention on Biological Diversity

The Convention was opened for signature on 5 June 1992 at the United Nations Conference on Environment and Development (the Rio "Earth Summit"). The Convention on Biological Diversity (CBD) entered into force on 29 December 1993. It has 3 main objectives:

- The conservation of biological diversity (Aichi Biodiversity Targets)
- The sustainable use of the components of biological diversity (Cartagena Protocol)
- The fair and equitable sharing of the benefits arising out of the utilization of genetic resources (Nagoya Protocol)

The CBD's governing body is the Conference of the Parties (COP). This ultimate authority of all governments (or Parties) that have ratified the treaty meets every two years to review progress, set priorities and commit to work plans. The Secretariat of the Convention on Biological Diversity (SCBD) is based in Montreal, Canada.

The Convention on Biological Diversity (CBD) promotes biodiversity conservation with an inclusive approach involving sustainable use, equitable benefit sharing and access to biological and genetic resources across all stakeholders. It urges the parties to the Convention to prepare a national biodiversity strategy or an equivalent instrument, and to mainstream biodiversity conservation across all sectors that have a direct or indirect impact on biodiversity. The contracting parties to the Convention, as required by the Article 6 of the Convention, must prepare these strategies as instruments for the mainstreaming of biodiversity conservation into national development policies and cross-sectoral planning, while including the private sector and civil society into the decision-making process. In the tenth Conference of Parties (CoP-10) to the CBD, held at Nagoya, Japan in 2010, the parties adopted the 'Aichi Biodiversity Targets (ABTs)' which require each signatory to develop an effective, participatory and updated National Biodiversity Strategy and Action Plan (NBSAP).

Aichi Biodiversity Targets

The 'Aichi Target' was adopted by the CBD at its Aagoya Conference. These are set of 20 targets. The goals and targets comprise both aspirations for achievement at the global level, and a flexible framework for the

establishment of national or regional targets.

- ◆ **Strategic Goal A:** Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society.
- ◆ **Strategic Goal B:** Reduce the direct pressures on biodiversity and promote sustainable use.
- ◆ **Strategic Goal C:** To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity.
- ◆ **Strategic Goal D:** Enhance the benefits to all from biodiversity and ecosystem services.
- ◆ **Strategic Goal E:** Enhance implementation through participatory planning, knowledge management and capacity building.

Main Pressures and Drivers of Change in Biodiversity

Balancing the development and livelihoods needs of the growing population and enhancing conservation of biodiversity is a serious challenge. Historically fragmentation and change in habitat use, over exploitation and technological change to meet the development needs have been the

major drivers of change in biodiversity status. Climate change, invasive alien species and pollution have also emerged as the major threats now. Coherent policy, legislative and administrative measures have been developed for biodiversity conservation. Implementation at times proves a challenge because of multi-disciplinary nature of biodiversity and pressure of development needs.

The main threats to biodiversity include: habitat fragmentation, degradation and loss; over-exploitation of resources; shrinking genetic diversity; invasive alien species; declining forest resource base; climate change and desertification; impact of development projects; impact of pollution. In the backdrop of the varying socio-cultural milieu and often conflicting demands of various stakeholders, there is an urgent need for augmenting and accelerating the efforts for conservation and sustainable use of biodiversity, and for the fair and equitable sharing of benefits arising from the utilisation of genetic resources.

Way Forward

India has done well on raising awareness about biodiversity, which

is an important thrust area in several programmes of the Government. India has updated NBAP and addresses the major issues and concerns raised by CBD. Now it is imperative to mobilize all stakeholders including the concerned scientific community, policy planners, decision-makers and local communities and forge partnerships across sectors so as to meet the challenges in the implementation of the NBAP. There is also a need to introspect and understand the causes of failures to conserve biodiversity despite so many acts, regulations, committee reports, research documents, and so on. Strengthening of government institutions on the ground requires serious thinking to achieve the desired goals through appropriate fund allocation and utilization, manpower, and accountability at every level.

General Studies Paper- III

Topic: Conservation, environmental pollution and degradation, environmental impact assessment.

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SEVEN SUBJECTIVE QUESTIONS WITH MODEL ANSWERS

Rat-hole Mining: Deadly Practice of Mining

Q1. What do you understand by rat-hole mining? Despite National Green Tribunal's ban, rat-hole coal mining in Meghalaya is continuing. Discuss its implications.

Hints:

- ◆ Two miners were reported killed while working inside an illegal so-called "rat-hole" coal mine in East Jaintia Hills in Meghalaya, even as at least 15 workers trapped inside another flooded mine since 13 December are feared to be dead by now due to delayed rescue operations. The mine is located at Ksan in Saipung area of the district and stands next to Lytein River, whose water is said to have gushed into the mine, trapping the workers.
- ◆ The National Green Tribunal had cited safety of miners as one of the reasons when it clamped down on coal mining in the state. Unlike other parts of the country, land in Meghalaya is owned privately or by a community, under customary laws and protected by the Autonomous District Councils formed under the Sixth Schedule of the Constitution.
- ◆ Rat hole mining is an illegally digging method of coal mining. Mining is done by family members or community people and not government undertaken.
- ◆ Rat hole mining can cause long term harm to the environment in a number of ways. One type of damage is scarring and disruption of the land surface. Rat hole mining activity, had environmental degradation in the region due to deforestation, biodiversity loss, waste land generation, pollution due to dust and noise.
- ◆ The absence of state enforcement of labor laws has also encouraged local entrepreneurs to exploit the cheapest sources of labor i.e. children. Rat-hole mining is dangerous as the mines collapse and the workers are trapped in and killed.
- ◆ Coal contributes to one of the most important energy source. Mining in Meghalaya is facing significant

challenges in its operation factors and economy. As per the NGT rules the challenges for the government to continue mining in this region of the country must have safety rules, improved occupational health, safety standards. NGT supports environmental issues as well as human rights issues which have to be taken into consideration for mining operation. Coal contributes largely towards economic development of the state.

- ◆ Commonly presented as arising from poor policing and corruption, and as destroying the environmental commons, "illegal" production and marketing of coal is a significant aspect of everyday life in Eastern India.

New e-commerce Rules: An Overview

Q2. Indian e-commerce sector is facing a number of challenges because there is no clarity about the policy that governs the sector. Critically evaluate how recently announced new e-commerce rules will fill this gap.

Hints:

- ◆ The government recently announced new e-commerce rules restricting players from selling the products of companies in which they have a stake, and capping the percentage of inventory that a vendor can sell through a marketplace entity (IT platform of an e-commerce entity) or its group companies. To curb the practice of deep discounts, the government said they cannot directly or indirectly influence the price of goods and services, and also brought in a new set of rules that bar the sale of products exclusively in one marketplace.
- ◆ India is one of the biggest and fast growing e-commerce markets in the world. The total size of the industry was reported to be US\$14.5 billion in 2016 and expected to grow to US\$80 billion by 2020. Indian e-commerce sector registered a growth rate of 24.08% and total sales volume of US\$ 20.05 million during 2017. The remarkable growth rate of this sector is fuelled by growing mobile subscribers, high rate of internet penetration, growing usage of credit cards, and India's large young population.

- ◆ All these developments discussed above took place in a milieu where there is no clarity about the policy that governs the sector. Even after touching the mark of US\$ 20 million in sales, and receiving world's biggest investment of the sector, India still has to finalise a comprehensive policy for this sector. Currently, this sector is regulated by various individual policies like the Information Technology Act, 2000, Competition Act, 2002, Consolidated Foreign Direct Investment (FDI) policy, etc.
- ◆ The draft also proposes various implementing agencies for the provisions laid down in it. It points out the following provisions:
 - ◆ E-commerce companies should stop offering discounts within two years.
 - ◆ FDI up to 49% will be allowed in the inventory form of e-commerce.
 - ◆ An independent regulator will be set up to deal with various issues related to e-commerce firms.
 - ◆ Provisions of the CCI will be amended to investigate mergers and acquisitions in the sector.
 - ◆ Bulk purchase of branded goods between the related entities will be prohibited.
 - ◆ All data collected by e-commerce firms, social media websites' search engines, and the internet of things will be mandatorily stored in India. Sri Krishna commission recommendation on data localisation will be implemented.
- ◆ The changes will have a significant impact on the business model of e-commerce majors like Amazon and Flipkart, as most of them source goods from sellers who are related party entities. The absence of large retailers will, however, bring relief to small retailers selling on these platforms.
- ◆ E-commerce straddles various issues like international trade, domestic trade, competition policy, consumer protection, information technology etc. As a growing sector with huge interest from both domestic and international players it becomes pertinent to regulate it keeping in mind the interest of both entrepreneurs and consumers. A conducive environment and a level playing field should be encouraged. Policymakers should also be mindful of shaping a vibrant domestic industry. A comprehensive policy is of utmost importance to reflect India's position in both domestic and international or multilateral forums.

Umbrella Scheme for Family Welfare

Q3. The Swastha Nagrik Abhiyan has a very ambitious target of improving health seeking behaviour of the population through increased awareness and enhanced uptake of health services. Examine.

Hints:

- ◆ The National Health Policy, developed after extensive consultations with state governments and other stakeholders, aims to shape our health system in all its dimensions – by investment in prevention of diseases and promotion of good health; by access to technologies; developing human resources; encouraging medical pluralism; and by building knowledge for better health, financial protection and regulation.
- ◆ Although, we have made significant advances, which puts us in an excellent position to address the needs the health system isn't meeting yet. Seven areas for inter-sectoral action and peoples' campaign under 'Swastha Nagrik Abhiyan' have been identified so that people stay healthy and rely less on hospital care. Research from all over the world is increasingly highlighting the big role that a multitude of other factors like public health & sanitation, poverty reduction, gender empowerment, health diets & yoga, risk factors like Tobacco, Obesity, Diabetes & the subsequent behavioral choices play in determining our final health outcomes.
- ◆ The target is to support the key goals of the National Health Policy 2017 and the Sustainable Development Goals (SDGs) to which India is a signatory. The attempt through media outreach is to move from care for sickness to the concept of wellness by using 360 degree approach in conventional and social media. The target of the free distribution and social marketing of contraceptives is to improve the Modern Contraceptive Prevalence Rate (mCPR), help family planning and reach population stabilization.
- ◆ Holding ourselves accountable to meet a clear set of measurable health sector goals relating to mortality and morbidity on life expectancy and a healthy life, on reducing mortality and disease prevention and incidence, the government of India is committed to a healthy future of all its citizens. By recognising and prioritising the role of the government in shaping and delivering equitable quality health to all, government has announced the National Health Policy 2017. The government is also committed to implementing it in close cooperation with the state governments, in a time-bound manner with clear deliverables and milestones, so that Indians stay healthy and reach their full potential.

India-Bangladesh Ties: Getting Deeper

Q4. India's 'neighbourhood policy' has focussed on Bangladesh. In India, Bangladesh finds its biggest geographic and economic neighbour. India has a responsibility to promote and develop cooperation with Bangladesh based on mutual interest of economic growth and for peace and stability in the region. Examine.

Hints:

- ◆ In the last four decades, the two countries have continued to consolidate their political, economic, trade and cultural relations and have built a comprehensive institutional framework to promote bilateral cooperation. Bilateral ties between the two countries in the past have been uneven, but since the early 1990s, India has focused on creating strong economic and commercial ties, exploring investment opportunities, building strategic alliances, and strengthening cultural and historic ties with Bangladesh
- ◆ The geographical location India and Bangladesh complements each other and present an opportunity for both nations to strengthen their connectivity. The two countries share a nearly 4,000-kilometre border and this is significant in many ways. Sharing a border places primacy on India's "Neighbourhood First" foreign policy. India and Bangladesh are engaged in regional cooperation through multilateral forums such as SAARC, BIMSTEC and IOR-ARC. In pursuance of the direction given by the prime ministers of India and Bangladesh, both sides have also commenced implementation of sub-regional cooperation initiatives along with Nepal and Bhutan.
- ◆ Bangladesh is considered an important country within India's sphere of influence, and successive Indian governments have stepped up partnership with Bangladesh. An important avenue of partnership between the two countries is that of development cooperation. India's increased development assistance to and commercial engagement with Bangladesh is driven by three overarching considerations: the need to access energy supplies and commercial markets for its growing economy, domestic security considerations, and its rising importance as a regional and global power.
- ◆ For India, a closer relationship with Bangladesh is key to building greater linkages with India's Eastern neighbours and beyond. India's Development Cooperation with Bangladesh though is not disconnected from the

growing Chinese influence in South Asia; Bangladeshi-Chinese relations are now robust and comprehensive. Bangladesh is a strategic factor on China's geopolitical agenda and the latter has offered development aid and project loans with the objective of securing better and more accessible sources of energy for itself, and has an interest on the natural gas reserves that Bangladesh can offer.

- ◆ During the last decade of Ms. Hasina's tenure as Prime Minister, high-level Bangladesh-India engagement has intensified. In Bangladesh too, a growing domestic political consensus, overriding fractious politics, has emerged in favour of close ties with India. There is an irrevocable and irreversible bipartisan political consensus in India for upgrading relations across a comprehensive interface of ties. The Sheikh Hasina government's positive response to India's security concerns, among other measures, sets the stage for further cooperation. Over time, this can set the wheels in motion for sub-regional ideas, such as cooperation between India, Bangladesh, Thailand and Myanmar on the security of the Bay of Bengal.

IWC: Conservation of Whales

Q5. Whales are at the top of the food chain and have an important role in the overall health of the marine environment. Critically examine, why despite a moratorium on commercial whaling and a ban on international trade of whale products, whales were killed by the whaling industry.

Hints:

- ◆ Japan announced that it is withdrawing from the International Whaling Commission (IWC) and will resume commercial whale hunting next year, sparking swift condemnation from other governments and conservation groups.
- ◆ During the 20th century, 2.9 million whales were killed by the whaling industry, likely the largest removal of any animal in terms of total biomass in human history. Whale populations were devastated, with sperm whales reduced to about 30 per cent of their pre-whaling population and blue whales by up to 90 per cent. In a huge blow to wildlife conservation endeavours to save endangered species, Japan confirmed its withdrawal from the International Whaling Commission (IWC) after 51 years of membership.
- ◆ In addition, the moratorium has been consistently undermined by three countries – Japan, Norway and Iceland – that have continued commercial whaling

despite the global ban. About 37,000 whales have been killed by these three countries since 1986. Despite the success of the moratorium, Japan, Norway and Iceland have continued commercial whaling and international trade in whale products and continue to mount pressure to overturn the whaling ban at the IWC.

- ◆ Scientific whaling is ultimately a case of large-scale animal experimentation, as the animals are killed allegedly to further some scientific research. In some instances, animal experimentation may be legitimate. However, it should be in accordance with international best practice. Several countries including New Zealand consider that the current practice of scientific whaling is a clear anomaly in the 21st century and would not be acceptable in any comparable new international treaty.
- ◆ Climate change poses one of the greatest threats through ocean acidification, melting ice sheets, changes in ocean temperatures and food chain disruption. Several whale species remain highly endangered and extremely vulnerable to non-hunting threats such as ship strikes and entanglement, including the North Atlantic right whale, which faces possible extinction. These issues present an enormous conservation challenge and the moratorium plays a critical role in minimising additional pressure on whale populations through hunting.
- ◆ The IWC had banned commercial whaling in 1986 following alarming reports of certain species being driven to near-extinction. Japan had been utilising a loophole to continue hunting whales for the last 30 years, under a scientific programme earmarked as an exception under the IWC ban. In its long history, Japan has used whales not only as a source of protein but also for a variety of other purposes.

Getting the Connectivity and Accessibility in North East

Q6. The infrastructure development in the North-East India reflects a different picture. The Indian planners have for a long time neglected the development of infrastructure in these regions. Critically Examine.

Hints:

- ◆ On December 25, 2018, Assam got India's longest rail-cum-road bridge over the mighty Brahmaputra. Built at an estimated cost of Rs 5,900 crore, the 4.94 km long bridge will facilitate connectivity between Assam and Arunachal Pradesh besides playing a crucial role in defence movement along the India-China border in Arunachal Pradesh.

- ◆ North East is connected to the rest of the country through a narrow corridor, generally called the chicken neck, near Siliguri region. North East is surrounded by five foreign countries. These are Bangladesh, Bhutan, China, Nepal and Myanmar. Only about thirty to thirty five percent of the area of North East is plain land, mostly in three valleys namely the Brahmaputra, the Barak and the Imphal Valleys. The rest of the area is hilly land.
- ◆ The infrastructure development in the North-East India reflects a different picture. The Indian planners have for a long time neglected the development of infrastructure in these regions and it was only in recent years that serious efforts have been made for their development.
- ◆ The North-Eastern Council (NEC) is a nodal agency for economic and social development of the North-East. The NEC has set its focus on building roads spanning 10,500 kilometres, which will include inter-state and roads of economic importance. A new scheme called the 'North East Road Sector Development Scheme', has been launched that will drive strategic projects for roads and bridges.
- ◆ Arunachal Pradesh has the least road density. The Union Ministry of Road and Transport, is planning to expedite the 'trans-Arunachal Highway project'. The ministry will be driving the Special Accelerated Road Development Program of Roads and Highways covering 2,319 kilometres. Construction plans for the Arunachal Frontier Highway and East West Corridor, has also been proposed.
- ◆ In spite of having a reservoir of natural resources—soil, water, vegetation and hydrocarbons, the NEER is underdeveloped because the resources are being indiscriminately exploited and mismanaged, thereby leading to depletion of the very assets that are usually highlighted as triggering the greatest potential for growth and development of the NEER.
- ◆ The current focus of the government to upgrade infrastructure in the region through various projects for improvement of roads, rail, and inland waterways and air connectivity and communication network is a welcome change. The Look East policy of the government has a huge potential to transform the development landscape by providing the growth engine and ensure that the states fully partake as growth centres and not merely participate as a conduit for flow of trade from other parts of the country.

Sixth National Report to CBD

Q7. While globally, biodiversity is facing increasing pressure on account of habitat fragmentation and destruction, India is one of the few countries where forest cover is on the rise. Discuss India's contribution to achieve the biodiversity targets at the national level and towards achievement of the global biodiversity targets.

Hints:

- ◆ India is among the first five countries in the world, the first in Asia and the first among the biodiversity rich mega diverse countries to have submitted Sixth National Report (NR6) to the CBD Secretariat. While globally, biodiversity is facing increasing pressure on account of habitat fragmentation and destruction, invasive alien species, pollution, climate change and overuse of resources, India is one of the few countries where forest cover is on the rise, with its forests teeming with wildlife. India is on track to achieve the biodiversity targets at the national level and is also contributing significantly towards achievement of the global biodiversity targets.
- ◆ With well over 20 percent of its total geographical area under biodiversity conservation, India has exceeded the terrestrial component of 17 percent of Aichi target 11, and 20 percent of corresponding National Biodiversity Target (NBT) relating to areas under biodiversity management.
- ◆ India has also made noteworthy achievement towards National Biodiversity Target (NBT) relating to access and benefit sharing (ABS) by operationalising the

Nagoya Protocol on ABS. India has been investing a huge amount on biodiversity directly or indirectly through several development schemes of the Central and state governments. India has done well on raising awareness about biodiversity, which is an important thrust area in several programmes of the Government.

- ◆ Balancing the development and livelihoods needs of the growing population and enhancing conservation of biodiversity is a serious challenge. Historically fragmentation and change in habitat use, over exploitation and technological change to meet the development needs have been the major drivers of change in biodiversity status.
- ◆ India has done well on raising awareness about biodiversity, which is an important thrust area in several programmes of the government. India has updated National Biodiversity Action Plan (NBAP) and addresses the major issues and concerns raised by CBD. Now it is imperative to mobilize all stakeholders including the concerned scientific community, policy planners, decision-makers and local communities and forge partnerships across sectors so as to meet the challenges in the implementation of the National Biodiversity Action Plan (NBAP). There is also a need to introspect and understand the causes of failures to conserve biodiversity despite so many acts, regulations, committee reports, research documents, and so on. Strengthening of government institutions on the ground requires serious thinking to achieve the desired goals through appropriate fund allocation and utilization, manpower, and accountability at every level.



SEVEN IMPORTANT NATIONAL & INTERNATIONAL NEWS

NATIONAL

1. Mahila Police Volunteers

The Ministry of Women and Child Development (WCD) in collaboration with the Ministry of Home Affairs has envisaged engagement of Mahila Police Volunteers (MPVs) in the States and Union Territories. All Chief Secretaries of States/UTs have been requested to adopt this initiative in their respective States.

Need

The WCD Ministry has been prioritizing issues related to the safety of women at the highest level with a holistic approach with a view to balance both preventive & curative aspects, proper & effective implementation of

various laws and provisions available for safety of girls/women. However, it is a matter of common knowledge that women who are victims of violence or harassment may not find it easy to approach the police or other authorities for getting help or support. It was, therefore, desirable to provide an effective alternative for getting help and support.

About Scheme

The Mahila Police Volunteers scheme envisages creation of a link between the police authorities and the local communities in villages through police

volunteers who will be women specially trained for this purpose. At least one such volunteer in every village whose primary job will be to keep an eye on situations where women in the village are harassed or their rights and entitlements are denied or their development is prevented.

MPV must be at least 21 years old and class 12th passed. They will be selected through a laid out procedure from among the empowered, responsible, socially aware women who will facilitate police outreach on gender concerns. ■

2. Rajya Sabha has passed two Bills

The Rajya Sabha has passed the National Council for Teacher Education (Amendment) Bill, 2019 and Right of Children to Free and Compulsory Education (Amendment) Bill, 2019.

National Council for Teacher Education (Amendment) Bill, 2019

- ◆ The Bill amends the National Council for Teacher Education Act, 1993.
- ◆ The Bill grants retrospective recognition to institutions which offered teacher education courses after the establishment of the National Council for Teacher Education (NCTE) until the academic year 2017-18.
- ◆ The Bill also seeks to grant retrospective permission to start a

new course or training in teacher education to institutions which satisfy certain conditions and which have offered teacher education courses after the establishment of the NCTE until the academic year 2017-2018.

Right of Children to Free and Compulsory Education (Amendment) Bill, 2019

- ◆ It seeks to amend the Right of children to free and compulsory Education Act, 2009.
- ◆ The existing policy prohibits schools from detaining students till they complete elementary education. The no-detention policy banned the practice of making under-performing children repeat

classes in elementary school to ensure they do not drop out.

- ◆ Now, states can choose to hold a regular examination either at the end of Classes 5 and 8, or both. Students who fail this test will receive additional instructions and the opportunity to appear for a re-examination within two months of the declaration of the result. If the students still do not pass the exam, the state government may decide to detain them.
- ◆ However, if states choose, they can continue the no-detention policy till Class 8. No child can be expelled from school before they complete elementary education, the amendment bill states. ■

3. PM Modi Renamed 3 Islands of Andaman and Nicobar

On December 30, 2018, Prime Minister Narendra Modi has announced renaming of three islands of the Andaman and Nicobar archipelago as a tribute to Netaji Subhas Chandra Bose. The three islands — Ross Island, Neil Island and Havelock Island — will now be called Netaji Subhash Chandra Bose Island, Shaheed Dweep and Swaraj Dweep, respectively.

- ◆ He also hoisted a 150-foot-high national flag at Port Blair to mark the 75th anniversary of freedom fighter Subhash Chandra Bose's

declaration of the formation of the Azad Hind government in 1943.

- ◆ The Prime Minister announced a number of development projects including a sub-marine optical fibre cable between Chennai and Port Blair, a 7-MW solar power plant and a model solar village, and a State Wide Area Network (SWAN) project connecting 12 major islands.
- ◆ A 50-bed AYUSH hospital, a 50-MW LNG power plant would also be set up in Andaman & Nicobar.

Importance of December 30

- ◆ On December 30, 1943, Subhash Chandra Bose had suggested that Andaman and Nicobar Islands be renamed as Shahid and Swaraj Dweep respectively.
- ◆ During World War II, the Japanese had captured the Andaman and Nicobar Islands and Netaji came here as the Azad Hind Fauz led by him was an ally of the Japanese force.

4. Telangana, Andhra Pradesh to get separate High Courts

President Ramnath Kovind has issued orders constituting a separate High Court (HC) for Andhra Pradesh with effect from January 1, 2019. The High Court of Judicature at Hyderabad will now become the High Court for Telangana. At present, Hyderabad high court has been serving as the common high court for both states, though according to Andhra Pradesh Reorganisation Act, both states formed

on June 2, 2014, should have separate high courts at the earliest. With the creation of the new high court, the country now has 25 high courts.

Constitutional Provisions

- ◆ **Article 214** - It 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.

- ◆ **Article 216** - It 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** - It relates to appointment of HC judges.

5. Merger of Dena Bank, Vijaya Bank with BoB

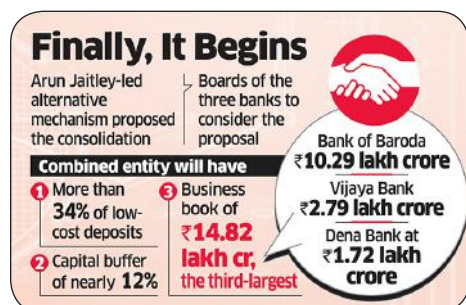
The government has approved the merger of Dena Bank and Vijaya Bank with Bank of Baroda (BoB) to make it a globally competitive lender. With the merger, BoB will become the third largest bank after State Bank of India and ICICI Bank.

Key Points

- ◆ BoB also set the share swap ratio for the merger of Vijaya Bank and Dena Bank with itself. Shareholders of Vijaya Bank will get 402 equity shares of BoB for every 1,000 shares held. In case of Dena Bank, its shareholders will get 110 shares for every 1,000 shares of BoB.
- ◆ There will be no impact on the service conditions of the employees and there will be no retrenchment following the merger.
- ◆ The amalgamation will be the first-ever three - way consolidation of

banks in India. As per the Centre's plan, all the businesses, assets, rights, titles, claims, licences, approvals and other privileges and all properties, borrowings, liabilities and obligations of Dena and Vijaya Bank will be transferred to BoB.

- ◆ Dena Bank, which is presently under the Reserve Bank of India's (RBI) prompt corrective action (PCA) framework, is also expected to function as a regular bank after the merger.



6. Nagaland Declared Disturbed Area for Six Months Under AFSPA

The government has extended the Armed Forces Special Powers Act (AFSPA) in Nagaland for six more months, till July, contending that the whole state is in such “disturbed and dangerous condition” that the use of armed forces in aid of civil power is necessary. Under AFSPA, security forces have the powers to conduct operations anywhere and arrest anyone without any prior notice. The extension comes despite demands from various activists and organisations in the Northeast as well as in Jammu and Kashmir for repealing AFSPA.

The AFSPA has been in force in Nagaland for several decades. It has not been withdrawn even after a framework agreement was signed on August 3, 2015 by Naga insurgent group NSCN-

IM general secretary Thuingaleng Muivah and government of India. The framework agreement came after over 80 rounds of negotiations spanning 18 years with the first breakthrough in 1997 when the ceasefire agreement was sealed after decades of insurgency in Nagaland.

What is AFSPA?

In simple terms, AFSPA gives armed forces the power to maintain public order in “disturbed areas”. They have the authority to prohibit a gathering of five or more persons in an area, can use force or even open fire after giving due warning if they feel a person is in contravention of the law. If reasonable suspicion exists, the army can also arrest a person without a warrant; enter or search a premises without a

warrant; and ban the possession of firearms. Any person arrested or taken into custody may be handed over to the officer in charge of the nearest police station along with a report detailing the circumstances that led to the arrest.

A disturbed area is one which is declared by notification under Section 3 of the AFSPA. An area can be disturbed due to differences or disputes between members of different religious, racial, language or regional groups or castes or communities. The Central government or the Governor of the State or administrator of the Union Territory can declare the whole or part of the State or Union Territory as a disturbed area.

7. FSSAI Issued Food Packing Rules

In order to curb the contaminants menace, the Food Safety and Standards Authority of India (FSSAI) has prohibited the use of packaging material made of recycled plastics including carry-bags for packaging, storing, carrying or dispensing food articles. The authority has set a deadline of July 1, 2019, for food businesses to comply with the new regulations that now replace all provisions with respect to packaging requirements prescribed in the Food Safety and Standards (Packaging and Labelling) Regulations, 2011.



- ◆ As per these regulations, the packaging materials used for packing or storing the food products shall conform to the Indian Standards provided in the schedules.
- ◆ The new regulations are based on two studies conducted by the authority through the Indian Institute of Packaging (IIP), Mumbai and the National Test House (NTH), Kolkata.
- ◆ The new regulations also prohibit the use of newspaper and such other materials for packing or wrapping of food articles and include respective Indian standards for printing inks food packages.

Need

- ◆ Loose packaging such as coloured and black carry bags, disposable

containers with aluminium coating and sweet boxes have emerged as major contaminants of packaged food, prompting the food regulator to come up with new regulation on food packaging.

- ◆ According to the national survey, around 80% of food samples packed in coloured carry bags, 59% in black carrybags and over 24% in aluminium coated disposable containers and 21% in sweet boxes were found chemically contaminated.
- ◆ The packaging material used by the organised sector is largely safe but there are concerns about the use of packaging material by the unorganised/informal sector.

INTERNATIONAL

1. New Non-permanent Members of UN Security Council

Belgium, Dominican Republic, Germany, Indonesia and South Africa have begun to assume responsibilities as non-permanent members of the UN Security Council. The five countries hold a two-year term while Bolivia, Ethiopia, Kazakhstan, Netherlands

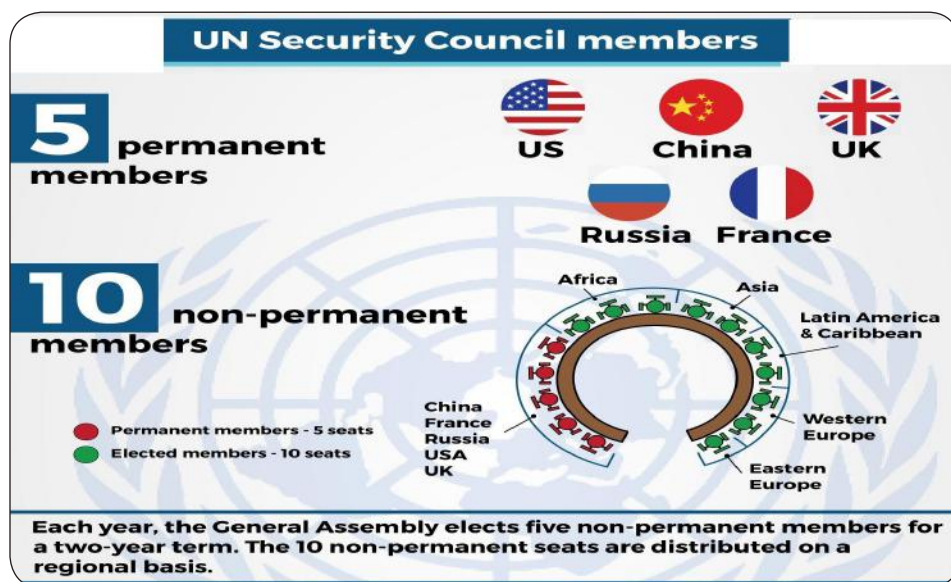
and Sweden have just left the Security Council.

About Security Council

The Security Council has primary responsibility for the maintenance of international peace and security. It

has 15 Members and each Member has one vote. The 15-member Security Council has five permanent members -- Britain, China, France, Russia and the United States and 10 non-permanent members elected for two-year terms by the UN General Assembly. Under the Charter of the United Nations, all Member States are obligated to comply with Council decisions.

The Security Council takes the lead in determining the existence of a threat to the peace or act of aggression. It calls upon the parties to a dispute to settle it by peaceful means and recommends methods of adjustment or terms of settlement. In some cases, the Security Council can resort to imposing sanctions or even authorize the use of force to maintain or restore international peace and security.



2. USA and Israel Officially Quit UNESCO

The United States and Israel officially quit the U.N.'s educational, scientific and cultural agency. The culmination of a process triggered more than a year ago amid concerns that the organization fosters anti-Israel bias. The Trump administration filed its notice to withdraw in October 2017 and Israeli Prime Minister Benjamin Netanyahu followed suit.

The organization has been denounced by its critics as a crucible for anti-Israel bias: blasted for criticizing Israel's occupation of East Jerusalem, naming ancient Jewish

sites as Palestinian heritage sites and granting full membership to Palestine in 2011.

The U.S. has demanded "fundamental reform" in the agency that is best known for its World Heritage program to protect cultural sites and traditions. UNESCO also works to improve education for girls, promote understanding of the Holocaust's horrors, and to defend media freedom. The United States has pulled out of UNESCO before. The Reagan administration did so in 1984 because it viewed the agency

as mismanaged, corrupt and used to advance Soviet interests. The U.S. rejoined in 2003.

Background

Since 2011 both Israel and the U.S. stopped paying dues after Palestine was voted in as a member state. Since then officials estimate that the U.S. — which accounted for around 22 percent of the total budget has accrued \$600 million in unpaid dues, which was one of the reasons for President Donald Trump's decision to withdraw. Israel owes an estimated \$10 million.

3. World Braille Day - 2018

The world Braille Day was celebrated on January 4. The day is marked remembering the birth anniversary of Louis Braille, the inventor of Braille - for the people with visual disabilities. United Nations observed the first official World Braille Day on January 4, 2018 to raise awareness on the importance of Braille for approximately 1.3 billion people living with some form of distance or near vision impairment.

World Braille Day is marked annually on January 4 after the day was proclaimed by the General Assembly last November, as a means of realising fully the human rights of visually-impaired and partially-sighted people, and bringing written language to the forefront as a critical prerequisite for

promoting fundamental freedoms. Around the world, 39 million people are blind, and another 253 million have some sort of vision impairment. For both these, Braille is a tactical representation of alphabetic and numerical symbols that help the blind and partially sighted people to read books.

What is Braille?

Braille is a code in which alphabets are represented with dots. There are six dots in each letter, number, symbol or even the musical note. By reading the dotted pattern, a visually-impaired person can access the written information.

About Marrakesh Treaty

- ◆ The Marrakesh Treaty was adopted on June 27, 2013 in Marrakesh and it forms part of the body of international copyright treaties administered by World Intellectual Property Organization (WIPO).
- ◆ It came into force on September 30, 2016.
- ◆ It has a clear humanitarian and social development dimension and its main goal is to create a set of mandatory limitations and exceptions for the benefit of the blind, visually impaired, and otherwise print disabled (VIPs).

4. Exchange of List of Prisoners between India and Pakistan

India and Pakistan exchanged, through diplomatic channels simultaneously at New Delhi and Islamabad, the lists of civilian prisoners and fishermen in their custody. This is in keeping with the provisions of the 2008 Agreement (Consular Access Agreement) under which such lists are exchanged on 1st January and 1st July, every year. India handed over lists of 249 Pakistan civilian prisoners and 98 fishermen in India's custody to Pakistan. Pakistan has shared lists of 54 civilian prisoners and 483 fishermen in its custody, who

are Indians or believed-to-be-Indians.

- ◆ India has also asked Pakistan to expedite response in the case of 80 Pakistan prisoners who have completed their sentences and await repatriation for want of nationality confirmation by Pakistan.
- ◆ Pakistan has also been requested to expedite the visit of a group of fishermen representatives to facilitate the repatriation of Indian fishing boats, presently held in Pakistan's custody at the earliest.

the Agreement on the Prohibition of Attack against Nuclear installations between India and Pakistan. This exchange was the 28th consecutive exchange between the two countries since 1992.

- ◆ The agreement, which was signed on Dec. 31, 1988 and entered into force on Jan. 27, 1991, provides, inter alia, that the two countries inform each other of nuclear installations and facilities to be covered under the agreement on the first day of January of every calendar year.
- ◆ The need for the agreement had been felt against the backdrop of Israel's 1981 bombing of Iraq's Osirak reactor near Baghdad. The strike, carried out by Israeli fighter jets over hostile airspace, had set back Iraq's nuclear weapons programme significantly.



The two countries also exchanged a list of their nuclear installations. The list of nuclear installations and facilities was exchanged under

5. Regulatory Indicators for Sustainable Energy (RISE) - 2018

World Bank has released its report — Regulatory Indicators for Sustainable Energy (RISE) 2018 - charting global progress on sustainable energy policies.

Key Points

- ◆ Many of the world's largest energy-consuming countries significantly improved their renewable energy regulations since 2010.
- ◆ Progress was even more marked in energy efficiency, with the percentage of countries establishing advanced policy frameworks growing more than 10-fold between 2010 and 2017.
- ◆ From 2010-2017, the number of countries with strong policy frameworks for sustainable energy more than tripled – from 17 to 59.
- ◆ Among countries with large populations living without electricity, 75 per cent had by 2017 put in place the policies and regulations needed to expand energy access. But there were still significant barriers to global progress on sustainable energy.
- ◆ Among the countries, only 37 per cent had a national renewable energy target in 2010. By 2017, that had grown to 93 per cent.
- ◆ By last year, 84 per cent of countries had a legal framework in place to support renewable energy deployment, while 95 per cent allowed the private sector to own and operate renewable energy projects.
- ◆ Among the four SDG7 target areas -- renewable energy, energy efficiency, electricity access and access to clean cooking -- the last one continued to be the most overlooked and underfunded by policymakers.
- ◆ There has been little progress on standard-setting for cookstoves or on consumer and producer incentives to stimulate adoption of clean technologies.

India's Scenario

India has gained a great success in renewable energy auctions that delivered record-setting low prices for solar power. However, India need urgent action to address critical gaps, such as failing utilities, clean cooking and the slow progress on decarbonizing heating and transport.

6. Green-Ag Project

The government of India launched a Global Environment Facility- (GEF) assisted project, namely Green-Ag: Transforming Indian agriculture for global environment benefits and the conservation of critical biodiversity and forest landscapes. It will be implemented with the collaboration of the Food and Agriculture Organization (FAO) in high-conservation-value landscapes of five states, namely Madhya Pradesh (Chambal landscape), Mizoram (Dampa landscape), Odisha (Similipal landscape), Rajasthan (Desert National Park landscape) and Uttarakhand (Corbett-Rajaji landscape) in September 2018.

The project seeks to mainstream biodiversity, climate change and sustainable land management objectives and practices into Indian

agriculture. The overall objective of the project is to catalyse the transformative change of India's agricultural sector to support achievement of national and global environmental benefits and conservation of critical biodiversity and forest landscapes.

About GEF

It was established on the eve of the 1992 Rio Earth Summit to help tackle our planet's most pressing environmental problems. Since then, the GEF has provided over \$17.9 billion in grants and mobilized an additional \$93.2 billion in co-financing for more than 4500 projects in 170 countries. Today, the GEF is an international partnership of 183 countries, international institutions, civil society organizations and the private sector that addresses global environmental issues.



About FAO

The Food and Agriculture Organization (FAO) is specialized agency of the United Nations that leads international efforts to defeat hunger. It aims to achieve food security for all and make sure that people have regular access to enough high-quality food to lead active, healthy lives. With over 194 member states, FAO works in over 130 countries worldwide.

7. The X-Calibur Instrument

The X-Calibur instrument was launched by Washington University from the McMurdo Station in Antarctica. It carried aloft on a helium balloon intended to reach an altitude of 130,000 feet to analyse the X-rays arriving from distant neutron stars, black holes and other exotic celestial bodies.

- ◆ At this height, X-Calibur will travel at nearly four times the cruising altitude of commercial airliners, and above 99 per cent of the Earth's atmosphere.
- ◆ X-Calibur is designed to measure the polarisation — or, roughly, the orientation of the electric field — of incoming X-rays from binary systems.
- ◆ Its prime observation target will be Vela X-1, a neutron star in binary orbit with a supergiant star.
- ◆ The launch hopes to gain new insights into how neutron stars and black holes in a binary orbit with stars grow by gobbling up stellar matter.
- ◆ The observations furthermore will test two of the most important theories in modern physics under extreme conditions: quantum electrodynamics and general relativity.
- ◆ Quantum electrodynamics predicts that the quantum vacuum close to magnetised neutron stars exhibits birefringent properties—that is, it affects X-rays in a similar way as birefringent crystals such as

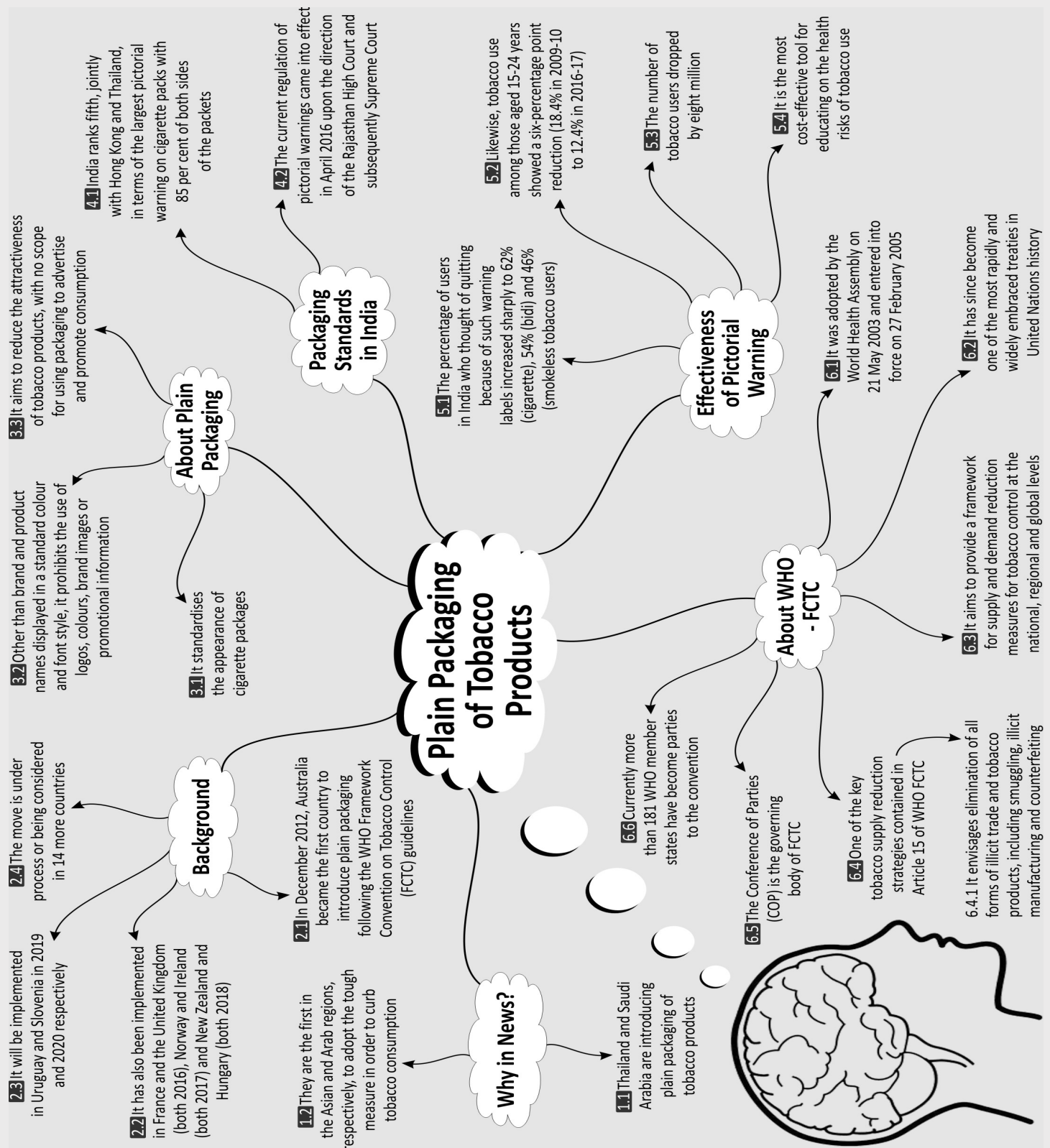
sapphires or quartz affect optical light.

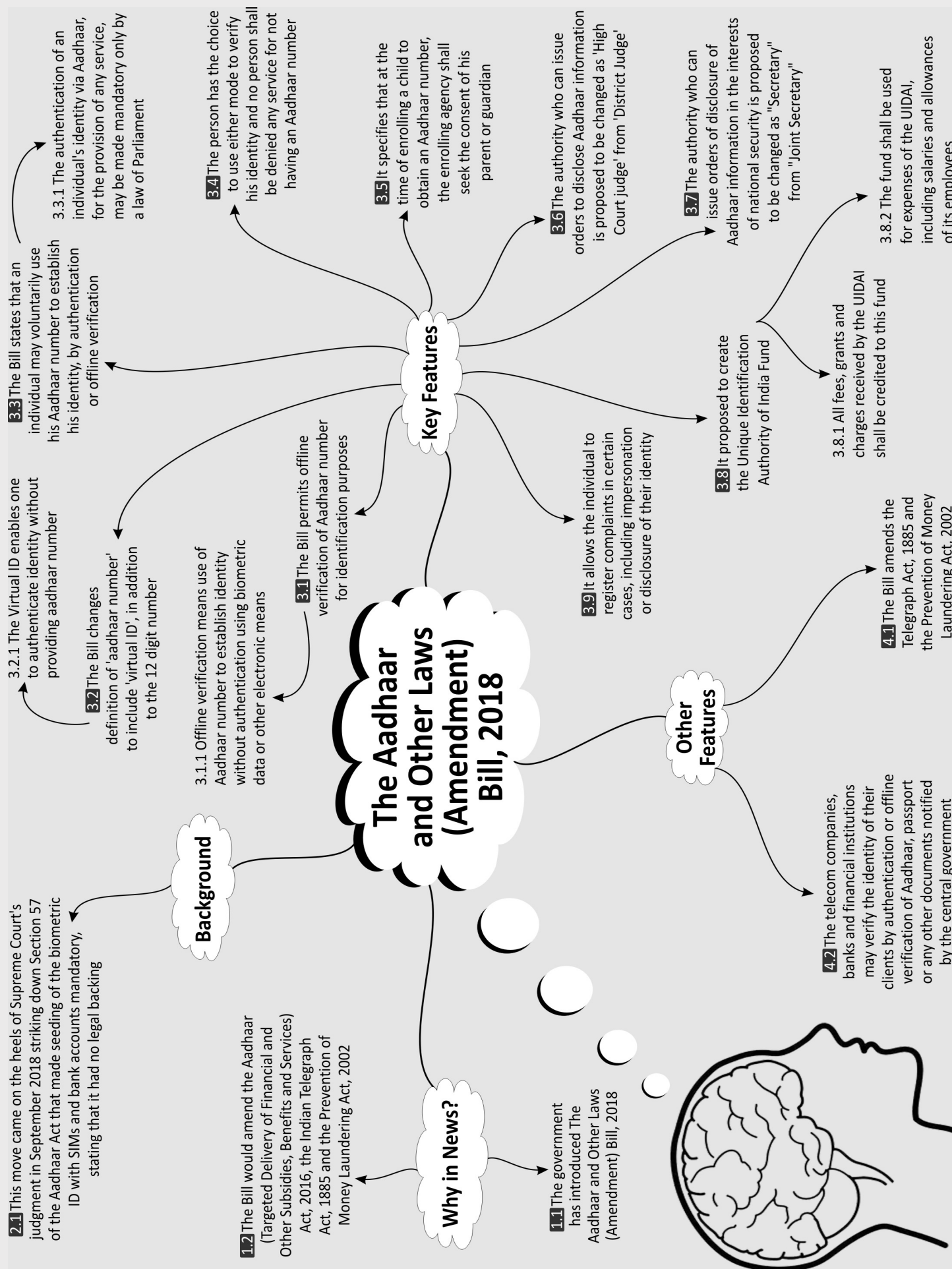
- ◆ The theory of general relativity describes the trajectories of the X-rays close to the neutron stars where the extreme mass of the neutron stars almost curves spacetime into a knot.

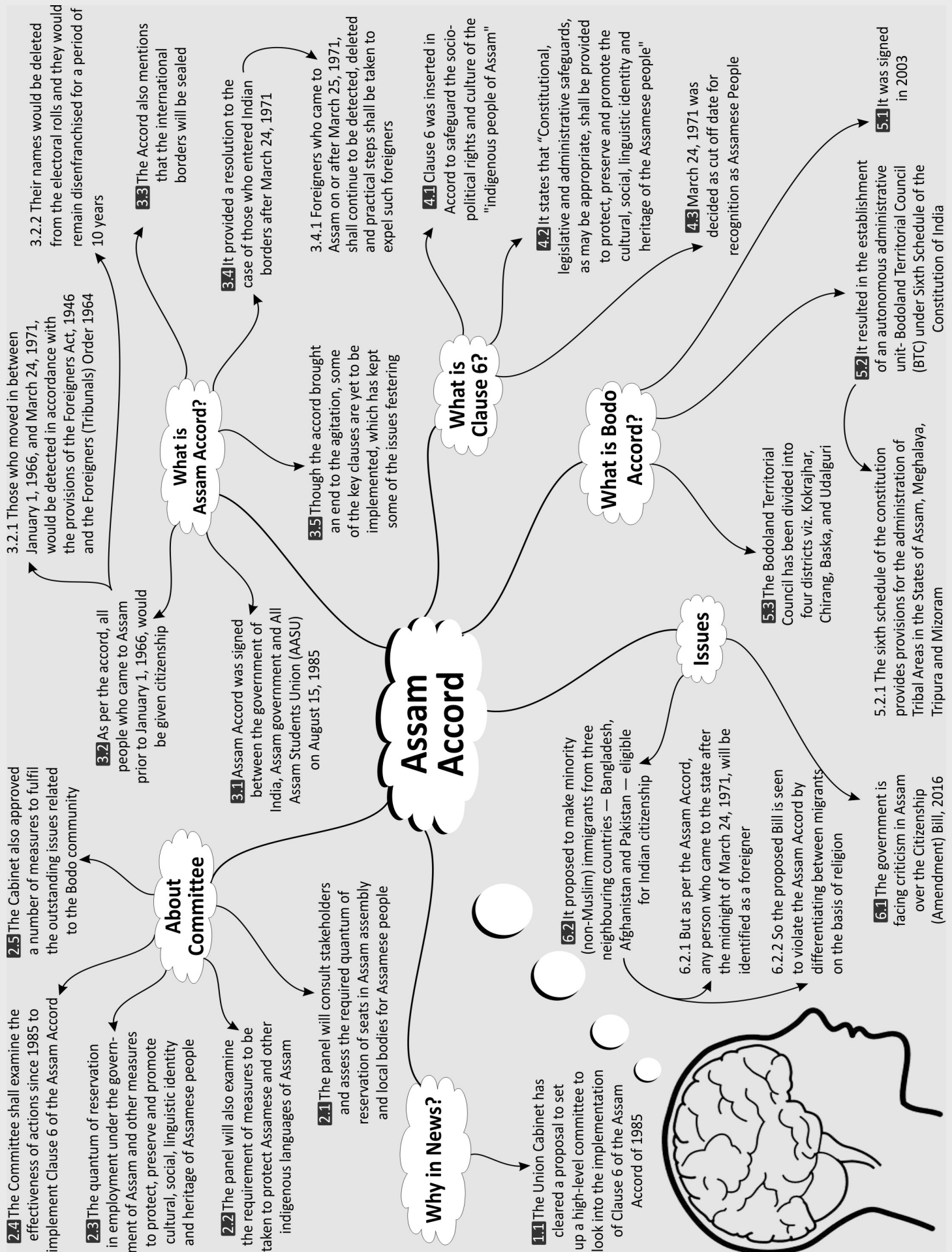
About Neutron Stars

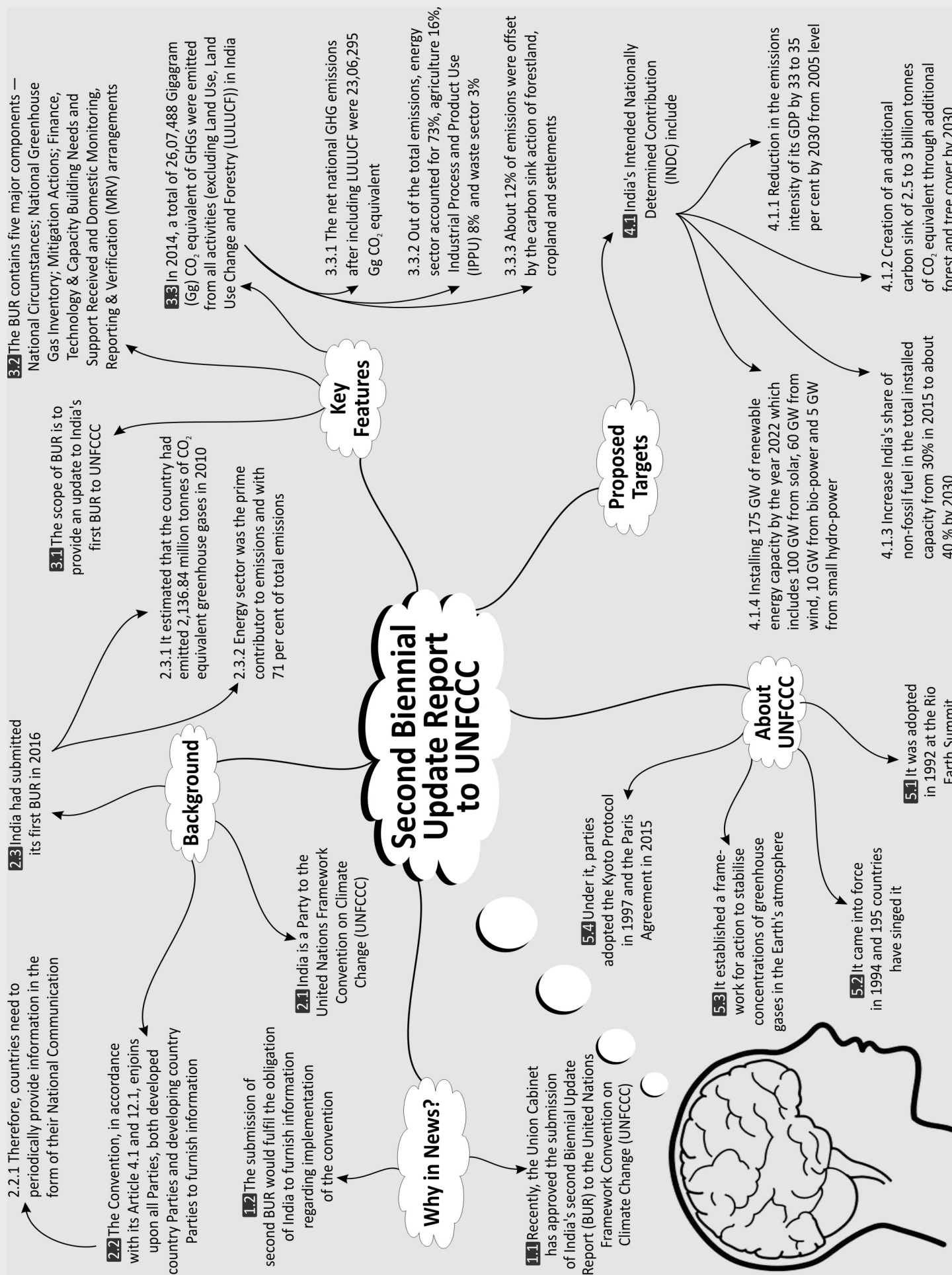
Neutron stars are objects of very small radius (typically 30 km) and very high density, composed predominantly of closely packed neutrons. Neutron stars are thought to form by the gravitational collapse of the remnant of a massive star after a supernova explosion, provided that the star is insufficiently massive to produce a black hole. ■

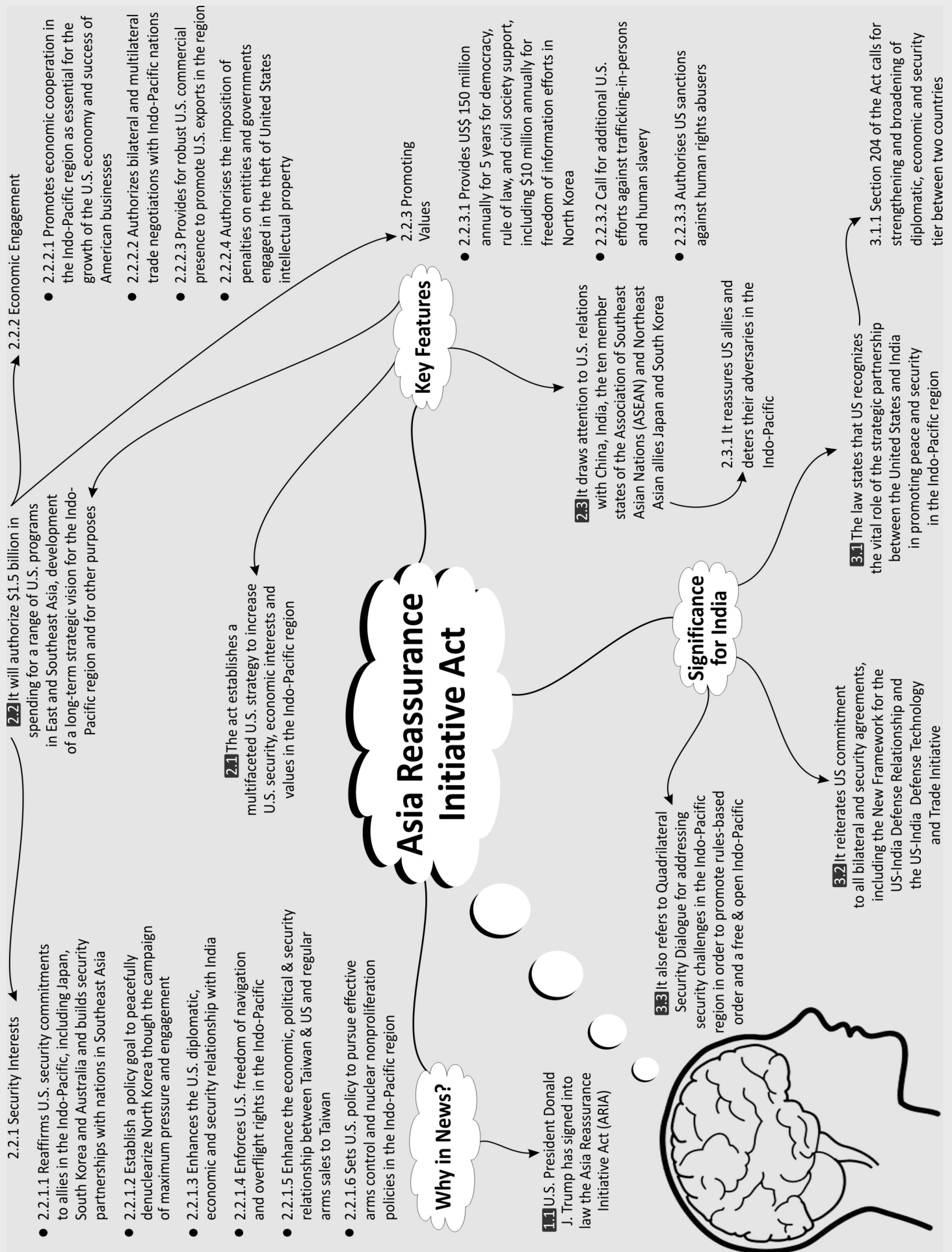
SEVEN BRAIN BOOSTERS

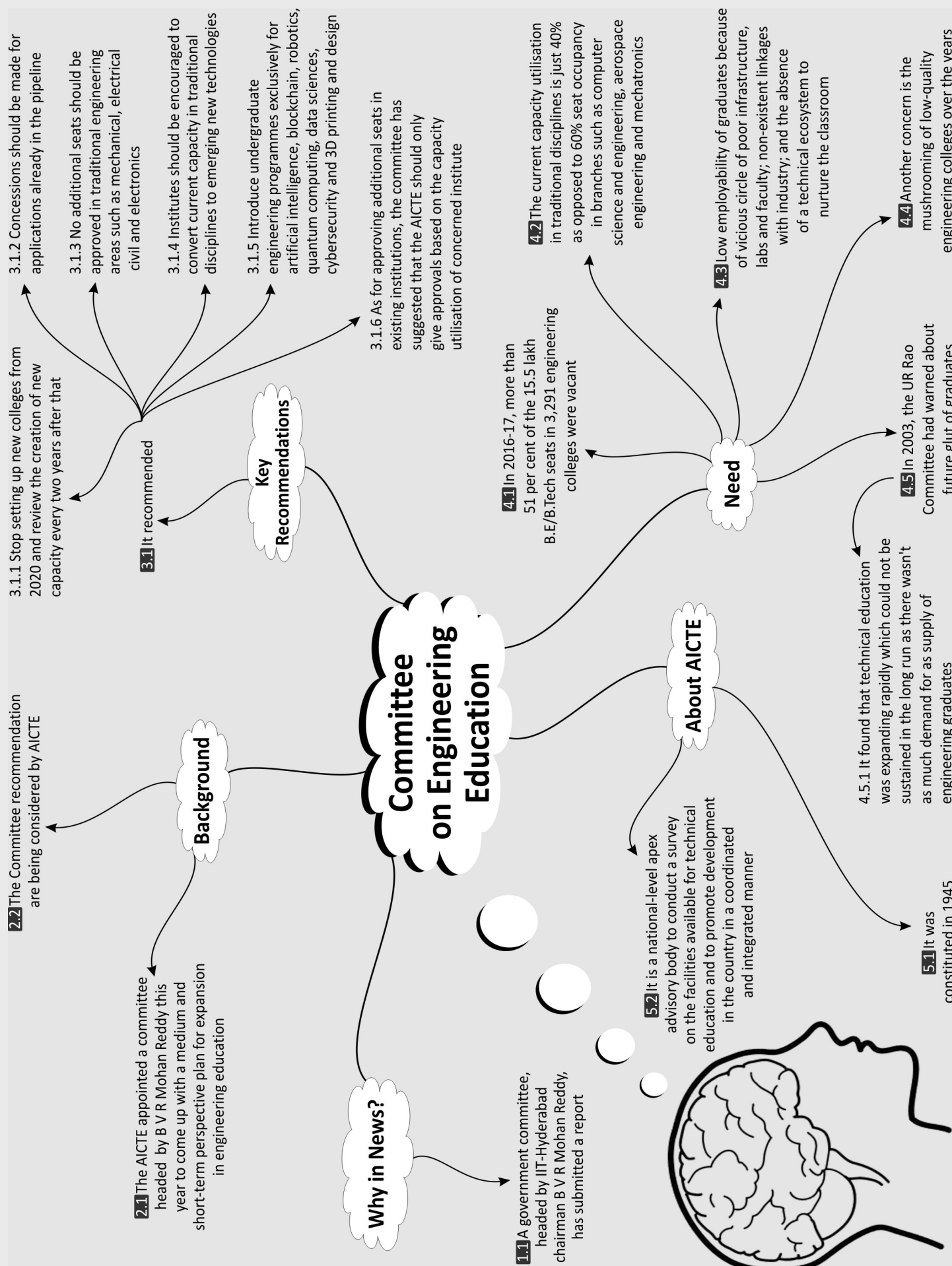


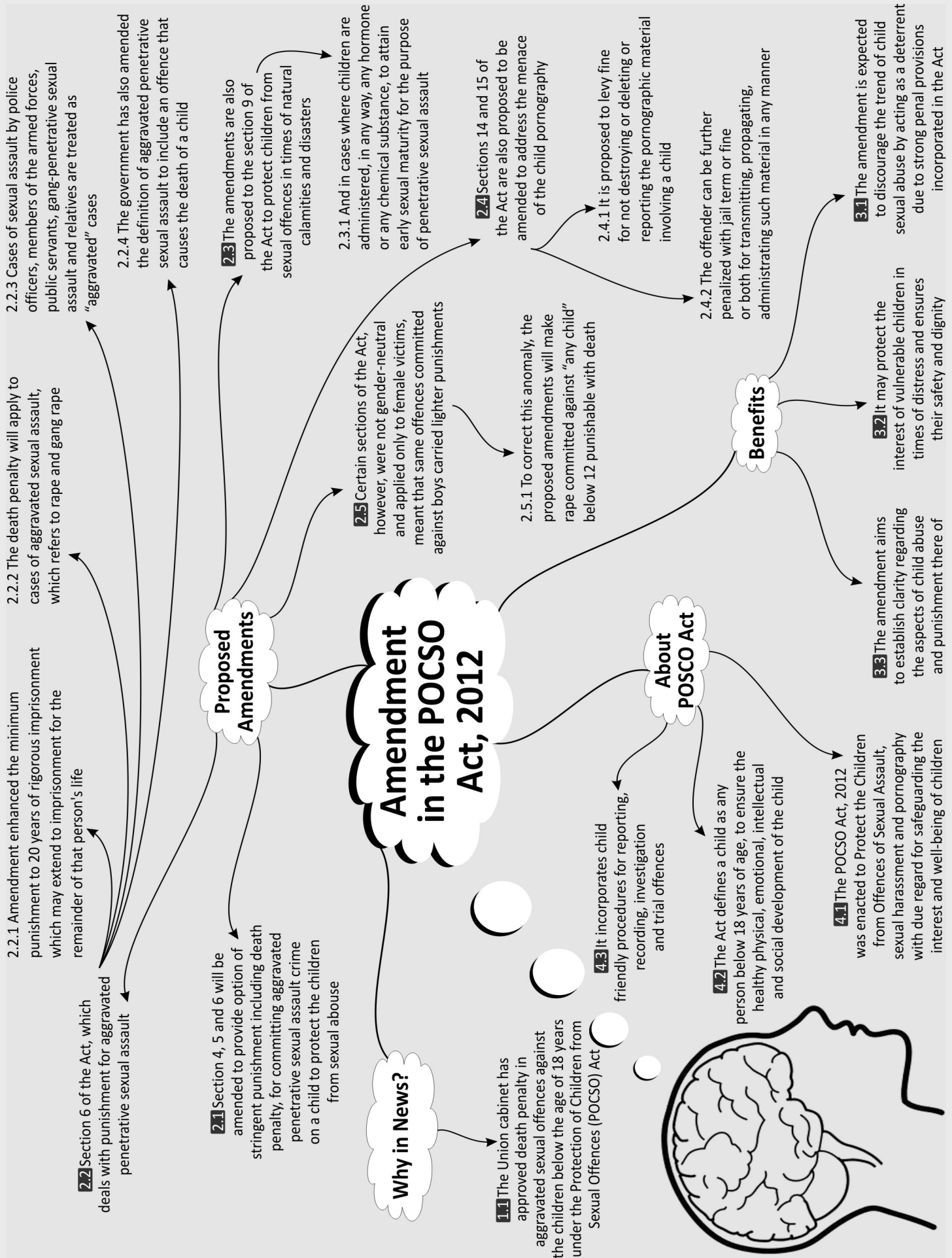












SEVEN MCQ's WITH EXPLANATORY ANSWERS (Based on Brain Boosters)

Plain Packaging of Tobacco Products

Q1. Consider the following statements in respect of 'plain packaging of tobacco products':

1. After successful implementation of 85% pictorial warnings, India will be the first country in Asia to introduce plain packaging following the WHO Framework Convention on Tobacco Control (FCTC) guidelines.
2. The current regulation of pictorial warnings in India came into effect in 2015.

Which of the statements given above is/are correct?

- a) 1 only b) 2 only
c) Both 1 and 2 d) Neither 1 nor 2

Answer: (d)

Explanation: Both statements are incorrect. Thailand and Saudi Arabia are introducing plain packaging of tobacco products to become the first in the Asian and Arab regions, respectively, to introduce plain packaging following the WHO Framework Convention on Tobacco Control (FCTC) guidelines.

India ranks fifth, jointly with Hong Kong and Thailand, in terms of the largest pictorial warning on cigarette packs. The current regulation of pictorial warnings came into effect in April 2016 upon the direction of the Rajasthan High Court and subsequently Supreme Court.

The Aadhaar and Other Laws (Amendment) Bill, 2018

Q2. Consider the following statements in respect of 'The Aadhaar and Other Laws (Amendment) Bill, 2018':

1. It proposed offline verification of Aadhaar number for identification purposes.
2. It also proposed to create the Unique Identification Authority of India Fund under Consolidated Fund of India.

Which of the statements given above is/are correct?

- a) 1 only b) 2 only
c) Both 1 and 2 d) Neither 1 nor 2

Answer: (a)

Explanation: Statement 1 is correct. The Bill permits offline verification of Aadhaar number for identification purposes.

Statement 2 is not correct. Under the Act, all fees and revenue collected by the UIDAI shall be credited to the Consolidated Fund of India. The Bill removes this provision and creates the Unique Identification Authority of India Fund. All fees, grants and charges received by the UIDAI shall be credited to this fund.

Assam Accord

Q3. Consider the following statements:

1. Assam Accord was signed between the government of India, Assam government and All Assam Students Union (AASU) on August 15, 1985.
2. Clause 6 was inserted in Accord to safeguard the socio-political rights and culture, linguistic identity and heritage of the Assamese people.

Which of the statements given above is/are correct?

- a) 1 only b) 2 only
c) Both 1 and 2 d) Neither 1 nor 2

Answer: (c)

Explanation: Both statements are correct. Assam Accord was signed between the government of India, Assam government and All Assam Students Union (AASU) on August 15, 1985. As per the Accord, those Bangladeshis who came between 1966 and 1971 will be barred from voting for ten years.

Clause 6 was inserted in Accord to safeguard the socio-political rights and culture, linguistic identity and heritage of the Assamese people.

Second Biennial Update Report to UNFCCC

Q4. With reference to the 'India's second Biennial Update Report to UNFCCC', consider the following statements:

1. India emitted around 2.607 billion tonnes of carbon dioxide equivalent of Green House Gases (GHGs) in 2014.

2. Out of the total emissions, the industrial process has accounted for 73 per cent.

Which of the statements given above is/are correct?

- a) 1 only b) 2 only
c) Both 1 and 2 d) Neither 1 nor 2

Answer: (a)

Explanation: **Statement 1 is correct.** According to the report, in 2014, a total of 26,07,488 Gigagram (Gg) CO₂ equivalent of GHGs were emitted from all activities (excluding Land Use, Land Use Change and Forestry (LULUCF) in India.

Statement 2 is not correct. Out of the total emissions, the energy sector accounted for 73 per cent, agriculture 16 per cent Industrial Process and Product Use (IPPU) 8 per cent and waste sector 3 per cent.

Asia Reassurance Initiative Act

Q5. Consider the following statements in respect of 'Asia Reassurance Initiative Act':

1. It establishes a multifaceted U.S. strategy to increase U.S. security, economic interests and values in the Indo-Pacific region.
2. It draws attention to U.S. relations with China, India, the ten member states of the Association of Southeast Asian Nations (ASEAN) and Northeast Asian allies Japan and South Korea.

Which of the statements given above is/are correct?

- a) 1 only b) 2 only
c) Both 1 and 2 d) Neither 1 nor 2

Answer: (c)

Explanation: **Both statements are correct.** Recently, U.S. President Donald J. Trump has signed into law the Asia Reassurance Initiative Act (ARIA). The act establishes a multifaceted U.S. strategy to increase U.S. security, economic interests and values in the Indo-Pacific region.

ARIA also draws attention to U.S. relations with China, India, the ten member states of the Association of Southeast Asian Nations (ASEAN), and Northeast Asian allies Japan and South Korea.

Committee on Engineering Education

Q6. Recently, a government committee, headed by V R Mohan Reddy has submitted a report, consider the following statements in this regard:

1. It advised the All India Council for Technical Education (AICTE) to stop setting up new colleges from 2025.

2. It also suggested that no additional seats should be approved in traditional engineering areas such as mechanical, electrical, civil and electronics.

Which of the statements given above is/are correct?

- a) 1 only b) 2 only
c) Both 1 and 2 d) Neither 1 nor 2

Answer: (b)

Explanation: **Statement 1 is not correct.** The committee has advised the All India Council for Technical Education (AICTE) to stop setting up new colleges from 2020 and review the creation of new capacity every two years after that.

Statement 2 is correct. The committee has suggested that no additional seats should be approved in traditional engineering areas such as mechanical, electrical, civil and electronics and that institutes should be encouraged to convert current capacity in traditional disciplines to emerging new technologies.

Amendment in the POCSO Act, 2012

Q7. Recently, the government has approved certain amendments to the Protection of Children from Sexual Offences (POCSO) Act, consider the following statements in this regard:

1. The government has amended the definition of aggravated penetrative sexual assault to include an offence that causes the death of a child.
2. It includes the provision of death penalty when the child is under 12 years and when a penetrative sexual assault is committed by a relative.

Which of the statements given above is/are correct?

- a) 1 only b) 2 only
c) Both 1 and 2 d) Neither 1 nor 2

Answer: (c)

Explanation: **Both statements are correct.** The government has approved amendments to the Protection of Children from Sexual Offences (POCSO) Act, 2012, to bring punishments for sexual assaults on boys on a par with those against girls. These include the provision of death penalty when the child is under 12 years and when a penetrative sexual assault is committed by a relative.

Section 6 of the Act deals with punishment for aggravated penetrative sexual assault. The government has also amended the definition of aggravated penetrative sexual assault to include an offence that causes the death of a child.



SEVEN IMPORTANT FACTS FOR PRELIMS

1. Which country has declared Hindu religious site 'Panj Tirath' as national heritage?

–Pakistan

2. According to the World Health Organisation, which Indian state has reported an 80% decline in malaria cases and deaths in 2017?

–Odisha

3. Which film has won best picture (drama) Golden Globes- 2019?

–Bohemian Rhapsody

4. Which state has approved 11 projects for Sarasvati river revival?

–Haryana

5. Which city hosted 106th Indian Science Congress?

–Phagwara, Punjab

6. Which famous Indian temple has been opened for the 21 day-long 'Makaravilakku festival'?

–Sabarimala temple

7. Prime Minister of India has recently unveiled the plaque to mark the inauguration of Dolaithabi Barrage project in which state?

–Manipur



SEVEN IMPORTANT PROTECTED AREAS

1. Kaziranga National Park

Why in News?

- ♦ The population of the one-horned rhino in Assam's Kaziranga National Park has risen to 2,413, a 2018 census has found.
- ♦ Census data showed that 1,641 adult rhinos were spotted, of which 642 were male, 793 female and 206 of undetermined sex.

About Kaziranga National Park

- ♦ It was formed in 1908 on the recommendation of Mary Curzon.
- ♦ It is situated in the North Eastern part of the country in the district of Golaghat and Nagoan in the state of Assam.
- ♦ It has been declared as a forest reserve in the year of 1908 and wildlife sanctuary in the year of 1950.
- ♦ In the year 1985, the park was declared as a World Heritage Site by UNESCO.
- ♦ It is the host for two third of world's population of endangered Indian one-horned rhinoceros and also declared as a tiger reserve in 2006.
- ♦ The park is also a domicile for large breeding inhabitants of Elephants, wild water buffaloes and Swamp Deer.
- ♦ In the North it is situated on the banks of river Brahmaputra and the Karbi Anglong mounts in the South.
- ♦ Along with Brahmaputra it is crisscrossed by other three rivers— Diphlu, Mora Diphlu and Mora Dhansiri.
- ♦ The park has also been demarcated as an important bird area by the Birdlife International in order to promote the conservation of endangered species.

- ♦ Birds like lesser white-fronted goose, ferruginous duck, Baer's pochard duck and lesser adjutant, greater adjutant, black-necked stork and Asian Openbill stork specially migrate from the Central Asia during the winter season.

2. Kuno Palpur Wildlife Sanctuary

Why in News?

- ♦ Kuno Palpur Wildlife Sanctuary recently got National Park status. Madhya Pradesh government has declared Kuno National Park with inclusion of an area spread along 404.0758 sq.km in addition to the earlier notified area of 344.686 sq km making a total of 748.7618 sq km area.
- ♦ The move is expected to pave way for translocation of lions from Gir in Gujarat to Kuno.

About Kuno Wildlife Sanctuary

- ♦ It was established in 1981 as a wildlife sanctuary in the Sheopur and Morena districts. It was also known as Kuno-Palpur and Palpur-Kuno Wildlife Sanctuary.
- ♦ It is part of the Kathiawar-Gir dry deciduous forests ecoregion.
- ♦ It is in news since last few years due to lion & Cheetah rehabilitation project which is underway and close to completion.
- ♦ It is located in the Vindhyan hills adjoining Rajasthan.
- ♦ The sanctuary is drained by a number of streams which join the river Kuno, which almost bisects the sanctuary. The major stream like, Kerkhoh, Lankakhoh, Durreddi and Bandia on the left bank and Basantpura,

Khajuri and Patron on the right bank of Kuno criss-cross the tract.

- ◆ The river Kuno is the life-line and the main source of water in the sanctuary.
- ◆ It has been shortlisted by Wildlife Institute of India (WII) and Wildlife Trust of India (WTI) as one of the last remaining habitats of the cheetah in India and is proposed as one of the sites for the reintroduction of the species in India.

3. Katarniaghat Wildlife Sanctuary

Why in News?

- ◆ Ace golfer Jyoti Randhawa was arrested on charges of poaching in the Katarniaghat Wildlife Sanctuary, part of Dudhwa Tiger Reserve's protected area in Uttar Pradesh

About Katarniaghat Wildlife Sanctuary

- ◆ It was established in 1975.
- ◆ It is a protected area in the Upper Gangetic plain in the Bahraich district of Uttar Pradesh.
- ◆ In 1987, it was brought under the purview of the 'Project Tiger' and together with the Kishanpur Wildlife Sanctuary and the Dudhwa National Park it forms the Dudhwa Tiger Reserve.
- ◆ The Katarniaghat Forests provide strategic connectivity between tiger habitats of Dudhwa and Kishanpur in India and the Bardia National Park in Nepal.
- ◆ Its fragile Terai ecosystem comprises a mosaic of sal and teak forests, lush grasslands, numerous swamps and wetlands. It is home to a number of endangered species including gharial, tiger, rhino, Gangetic dolphin, swamp deer, hispid hare, Bengal florican and the white-backed and long-billed vultures.
- ◆ The Gairwa River which flows in the sanctuary area is declared as a sanctuary for Mugger and Gharial.

- ◆ It is among the few places in India where fresh water dolphins, also known as Gangetic dolphins, are found in their natural habitat.

4. Wayanad Wildlife Sanctuary

Why in News?

- ◆ The Forest and Wildlife Department of Kerala government is planning to implement various projects to the tune of Rs. 15.57 crore to mitigate man-animal conflict on the fringes of the Wayanad Wildlife Sanctuary (WWS).
- ◆ As part of this, a 10-km stretch of rail fencing will be erected on the forest border from Moodakkolly to Sathramkunnu under the sanctuary.

About Wayanad Wildlife Sanctuary

- ◆ It was established in 1973 in Kerala.
- ◆ It has an extent of 344.44 km² with four ranges namely Sulthan Bathery, Muthanga, Kurichiat and Tholpetty.
- ◆ It is part of the Deccan Plateau and the vegetation is predominantly of the South Indian moist deciduous teak forests.
- ◆ The wildlife sanctuary comes under 'Project Elephant'.
- ◆ It is bounded by protected area network of Nagarhole and Bandipur of Karnataka in the Northeast and on the Southeast by Mudumalai of Tamil Nadu.
- ◆ It is an integral part of the Nilgiri Biosphere Reserve.
- ◆ A rare blue beard bee-eater a rare bird has been sighted in Wayanad.
- ◆ Out of the 24 species of bee-eaters seen in the world, six have been spotted in India. Bee-eaters play a major role in controlling insect pests, especially wasps, which are poisonous.
- ◆ Wayanad district has the largest population of Adivasi in Kerala. Scheduled tribes here include Paniyas, Kurumas, Adiyans, Kurichiyas, Ooralis and Kattunaikkans.

5. Dibang Wildlife Sanctuary

Why in News?

- ◆ A three-year camera trap study has reported the presence of tigers in the snow-clad Dibang Valley of Arunachal Pradesh at the height of 3,630 metres.

About Dibang Wildlife Sanctuary

- ◆ The Dibang Wildlife Sanctuary is one of the eight wildlife sanctuaries of Arunachal Pradesh.
- ◆ Being a part of Dibang Valley it is designated as Dibang Wildlife Sanctuary (DWS) but has not yet been named a tiger reserve.
- ◆ Dibang valley district has been named after the Dibang River, a tributary of Brahmaputra River.
- ◆ Adjacent to the Mouling National Park, it was established in 1980s. Later in 1988, as per the guidelines of UNESCO, together these areas became part of Dibang Biosphere Reserve, one of the major bio-diversity hotspots of the world.
- ◆ It is protected by the Department of Environment and Forest of Arunachal Pradesh.
- ◆ The surrounding area of the sanctuary inhabits by the Idu Mishmi tribes.
- ◆ It houses rare mammals such as Mishmi takin, red goral, musk deer (at least two species), red panda, Asiatic black bear, occasional tiger and Gongshan muntjac while among birds there are the rare Sclater's monal and Blyth's tragopan.

6. Chinnar Wildlife Sanctuary

Why in News?

- ◆ The forest department in association with the Travancore nature history society has

conducted a butterfly survey in Chinnar wildlife sanctuary in Idukki.

- ◆ The area that also includes rain shadow region is home to over 240 species of butterflies, including the rare Palanibush brown and Nilgiri tit.
- ◆ The migration of butterflies from Palani plains to the Chinnar area of Western Ghats is a common phenomenon after the South-West monsoon.
- ◆ In another event, a Sri Lankan Frogmouth (MakkachiKada) was spotted inside the Chinnar Wildlife Sanctuary (CWS). This is the first sighting of the bird from the Eastern part of Western Ghats in Kerala.

About Chinnar Wildlife Sanctuary

- ◆ It is a unique protected area located in the rain shadow region in the Eastern slope of Western Ghats, adjoining Tamil Nadu.
- ◆ On the North and East, it shares a 30 km common boundary with the Anamalai Tiger Reserve of Tamil Nadu.
- ◆ On the West, it is bordered by the Eravikulam National Park. On the southern side, it is bordered by the Reserve Forests of Marayoor Sandal Division, part of Kurinjimala Sanctuary.
- ◆ The Park provides ecological connectivity between the Anamalai Tiger Reserve and Eravikulam National Park.
- ◆ This sanctuary is one among the 12 protected areas of Kerala.
- ◆ Chinnar Wildlife Sanctuary in Idukki is home to the Great Grizzled Squirrel of India.
- ◆ It houses various types of habitat like deciduous forests, dry thorn scrub, riparian forest, shoals and grasslands. There is an extensive sandalwood forest nearby the sanctuary, which is an added attraction.
- ◆ It has earned the name for only rehabilitation centre for star tortoise in India.

7. Ranthambore National Park

Why in News?

- ◆ The four new cubs have been spotted at the Ranthambore National Park.
- ◆ Tigress T-84 and T-69 were captured on camera with their cubs.
- ◆ The total number of tigers at Ranthambore has gone up to 72. Of them, 25 are tigresses, 20 are tigers and 25 are cubs.

About Ranthambore National Park

- ◆ Ranthambore was established as the Sawai Madhopur Game Sanctuary in 1955 by the government of India.
- ◆ It was declared one of the 'Project Tiger' reserves in 1974. Ranthambore became a National Park in 1981.

- ◆ In 1984, the adjacent forests were declared the Sawai Man Singh Sanctuary and Keladevi Sanctuary and in 1991 the tiger reserve was enlarged to include the Sawai Man Singh and Keladevi sanctuaries.
- ◆ It is located at the junction of the Aravalli and Vindhya hill range.
- ◆ It flanked by the Banas River to the North and the Chambal River to the South.
- ◆ It is recognised as one of the best places in the country to spot tigers.
- ◆ The sanctuary is home to a wide variety of trees, plants, birds and reptiles, as well as one of the largest banyan trees in India.
- ◆ Other fauna include the Indian leopard, nilgai, wild boar, sambar, striped hyena, sloth bear, southern plains gray langur, rhesus macaque, mugger crocodile and chital.



SEVEN PRACTICE QUESTIONS FOR MAIN EXAM

Answer each of the following questions in 200 words:

- Q1. 'In India, large part of 'jobs crisis' is because of demand for government jobs.' Analyse.
- Q2. 'India must be prepared for the potential consequences of withdrawal of American troops from Afghanistan.' Discuss it in the context of India's role in Afghanistan.
- Q3. What are freebies? Critically discuss why Election Commission of India must issue guidelines banning parties from doling out freebies.
- Q4. Discuss how China's successful mission (Chang'e-4) will greatly advance knowledge of Earth's satellite, Moon.
- Q5. Ujjwala scheme is a novel initiative but critics argue that those availing the domestic cooking gas scheme are staying away from going in for refills. Is it implementation issue? Critically discuss.
- Q6. Recently, Ministry of Power has issued a set the rules for the flow of electricity across South Asian borders. This is first step towards creating a true regional market for electricity in South Asia. Comment.
- Q7. Getting rid of the minimum education criteria for contesting panchayat polls is a welcome decision, especially in India which is home to 35% of the world's illiterate population. Critically analyse.

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**02
Dec.**

Test-1 - (12:00Noon-3:00pm)

Modern India, India After Independence,
World History, History of Uttar Pradesh

**09
Dec.**

Test-2 - (12:00Noon-3:00pm)

Social Issues, Art & Culture ,
Uttar Pradesh (Social Issues, Art & Culture)

**16
Dec.**

Test-3 - (12:00Noon-3:00pm)

World Geography, Indian Geography,
Geography of Uttar Pradesh

**23
Dec.**

Test-4 - (12:00Noon-3:00pm)

Indian Polity, Constitution,
In special reference of Uttar Pradesh

**30
Dec.**

Test-5 - (12:00Noon-3:00pm)

Governance and Public Policy,
International Relation
In Special Reference of Uttar Pradesh

**06
Jan.**

Test-6 - (12:00Noon-3:00pm)

Indian Economy, Internal Security
in Special Reference of Uttar Pradesh

**13
Jan.**

Test-7 - (12:00Noon-3:00pm)

Science & Tech., Disaster Management,
Ecology & Environment

**20
Jan.**

Test-8 - (12:00Noon-3:00pm)

Ethics (Paper-I)
Ethics and Human Interface, Attitude,
E.I. and Thinkers with Case Study

**27
Jan.**

Test-9 - (12:00Noon-3:00pm)

Ethics (Paper-II)
Aptitude and Value of Civil Services, Ethics
in P.A., Probity in Govt. with Case Study

**03
Feb.**

Test-10 - (12:00Noon-3:00pm)

General Studies (Paper-I) Full Test

Test-11 - (3:30pm-6:30pm)

Hindi Full Test

**10
Feb.**

Test-12 - (12:00Noon-3:00pm)

General Studies (Paper-II) Full Test

Test-13 - (3:30pm-6:30pm)

Essay

**17
Feb.**

Test-14 - (12:00Noon-3:00pm)

General Studies (Paper-III) Full Test

Test-15 - (3:30pm-6:30pm)

Hindi Full Test

**24
Feb.**

Test-16 - (12:00Noon-3:00pm)

General Studies (Paper-IV) Full Test

Test-17 - (3:30pm-6:30pm)

Essay

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