

PERFECT 7

WEEKLY

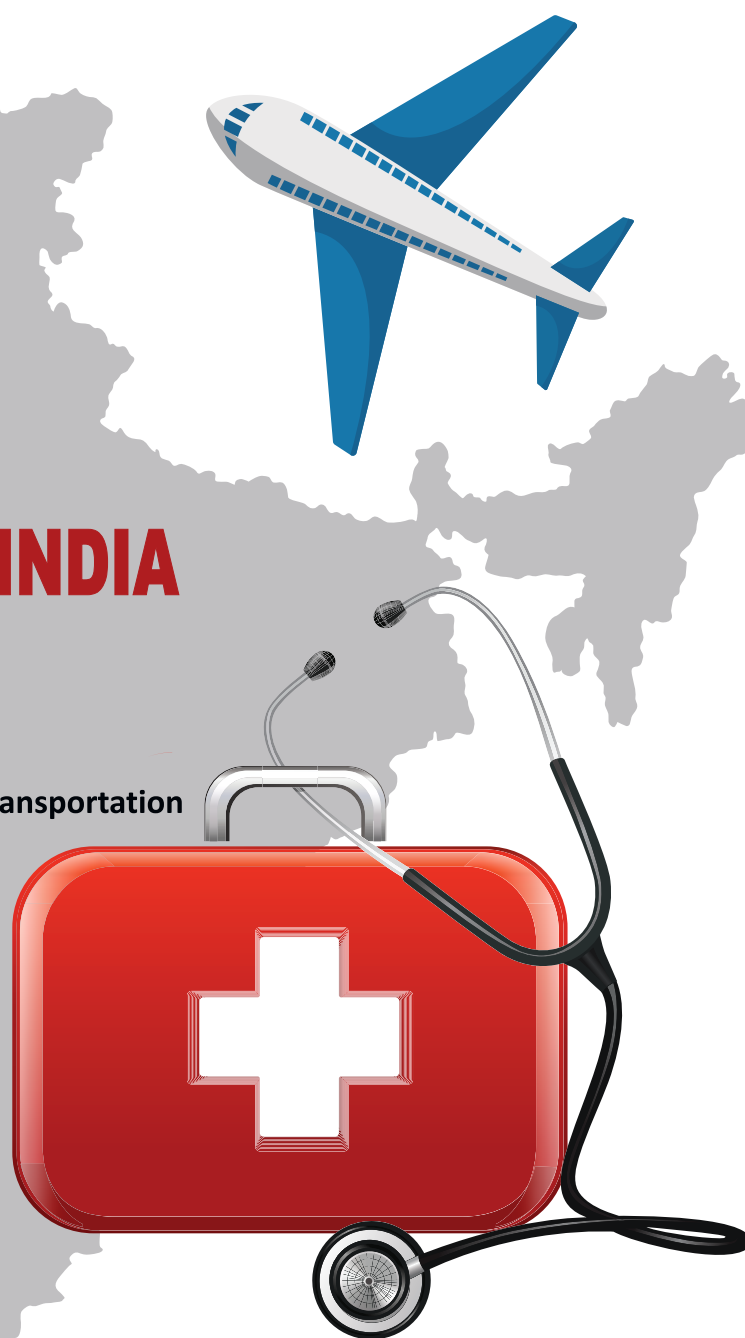
CURRENT AFFAIRS

May: 2019 / Issue-02

MEDICAL TOURISM IN INDIA

Next Growth Driver

- Sikh Extremism and India-Canada Relations
- BS-VI Emission Norms : A Step towards Greener Transportation
- PepsiCo-Farmers' Conflict : An Analysis
- Arab Spring 2.0 : Another Arab Awakening
- The Necessity of Physical Activities in Childhood
- Mt. Everest : World's Highest Garbage Dump



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DHYEYA IAS : AN INTRODUCTION



The guiding philosophy of the institute, throughout, has been creation of knowledge base. Dhyeya IAS inculcates human values and professional ethics in the students, which help them make decisions and create path that are good not only for them, but also for the society, for the nation, and for the world as whole. To fulfill its mission in new and powerful ways, each student is motivated to strive towards achieving excellence in every endeavor. It is done by making continuous improvements in curricula and pedagogical tools.

The rigorous syllabi not only instills in them, a passion for knowledge but also attempts to teach them how to apply that knowledge in real-life situations. The programmes lay emphasis on well-rounded personality development of the students and also in inculcating the values of honesty and integrity in them.

Vinay Kumar Singh
CEO and Founder
Dhyeya IAS



Dhyeya IAS is an institution that aims at the complete development of the student. Our faculty are hand-picked and highly qualified to ensure that the students are given every possible support in all their academic endeavors. It is a multi-disciplinary institution which ensures that the students have ready access to a wide range of academic material.

Our brand of education has broad horizons as we believe in exposure. Our students are encouraged to widen their knowledge base and study beyond the confinements of the syllabus. We aim to lend a gentle guiding hand to make our students recognize their inner potential and grow on their own accord into stalwarts of tomorrow's society.

Q H Khan
Managing Director
Dhyeya IAS

PERFECT 7 : AN INTRODUCTION



With immense pleasure and gratitude I want to inform you that the new version of 'Perfect-7', from the Dhyeya IAS, is coming with more information in a very attractive manner. Heartily congratulations to the editorial team. The 'Perfect-7' invites a wider readership in the Institute. The name and fame of an institute depends on the caliber and achievements of the students and teachers. The role of the teacher is to nurture the skills and talents of the students as a facilitator. This magazine is going to showcase the strength of our Institute. Let this be a forum to exhibit the potential of faculties, eminent writers, authors and students with their literary skills and innovative ideas.

I extend best wishes for the success of this endeavor.

Qurban Ali

Chief Editor

Dhyeya IAS

(Ex Editor- Rajya Sabha TV)



We have not only given the name 'Perfect 7' to our magazine, but also left no stone unturned to keep it 'near to perfect'. We all know that beginning of a task is most challenging as well as most important thing. So we met the same fate.

Publishing 'Perfect 7' provided us various challenges because from the beginning itself we kept our bar too high to ensure the quality. Right from the very first issue we had a daunting task to save aspirants from the 'overdose of information'. Focusing on civil services exams 'Perfect 7' embodies in itself rightful friend and guide in your preparation. This weapon is built to be precise yet comprehensive. It is not about bombardment of mindless facts rather an analysis of various facets of the issues, selected in a systematic manner. We adopted the 'Multi Filter' and 'Six Sigma' approach, in which a subject or an issue is selected after diligent discussion on various levels so that the questions in the examination could be covered with high probability.

Being a weekly magazine there is a constant challenge to provide qualitative study material in a time bound approach. It is our humble achievement that we feel proud to make delivered our promise of quality consistently without missing any issue since its inception.

The new 'avatar' of 'Perfect 7' is a result of your love and affection. We feel inspired to continue our efforts to deliver effective and valuable content in interesting manner. Our promise of quality has reached you in around 100 issues and more are yet to come.

Ashutosh Singh

Managing Editor

Dhyeya IAS



PREFACE

Dhyeya family feels honoured to present you a pandora box 'Perfect 7'. 'Perfect7' is an outstanding compilation of current affairs topics as per the new pattern of Civil Service examination (CSE). It presents weekly analysis of information and issues (national and international) in the form of articles, news analysis, brain boosters, PIB highlights and graphical information, which helps to understand and retain the information comprehensively. Hence, 'Perfect 7' will build in-depth understanding of various issues in different facets.

'Perfect7' is our genuine effort to provide correct, concise and concrete information, which helps students to crack the civil service examination. This magazine is the result of the efforts of the eminent scholars and the experts from different fields.

'Perfect 7' is surely a force multiplier in your effort and plugs the loopholes in the preparation.

We believe in environment of continuous improvement and learning. Your constructive suggestions and comments are always welcome, which could guide us in further revision of this magazine.

Omveer Singh Chaudhary
Editor
Dhyeya IAS

Perfect 7

The Weekly Issue

Perfect 7

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Our other initiative



Hindi & English
Current Affairs
Monthly
News Paper



DHYEYA TV
Current Affairs Programmes hosted
by Mr. Qurban Ali
(Ex. Editor Rajya Sabha, TV) & by Team Dhyeya IAS
(Broadcasted on YouTube & Dhyeya-TV)

SEVEN IMPORTANT ISSUES

1. MEDICAL TOURISM IN INDIA : NEXT GROWTH DRIVER

Why in News?

According to the market study, titled “Discover Global India Medical Tourism Market Upcoming Trends, Growth Drivers and Challenges”, Indian medical tourism market is expected to more than double by 2022 from its current size in 2016. India has emerged as a preferred healthcare and wellness destination for patients across the globe. As medical treatment costs in the developed countries is ballooning, more and more Western countries are finding the prospect of international travel for medical care increasingly appealing.

Introduction

The modern healthcare and wellness industry revolves around accessibility and affordability. In developed countries like the USA, healthcare services are quite expensive. Besides cost, long waiting lists and limited treatment options are major hindrances in most Western countries. Whereas in developing or least developed countries, factors like domestic policy reform, political instability, travel restrictions, availability of modern healthcare infrastructure and medical personnel all contribute to the demand for affordable healthcare. This is where medical tourism as a niche has emerged.

India has always been known for its rich heritage of ‘wellness’ traditions and has enormous possibilities

to offer to ‘wellness’ seekers. The Indian wellness industry is one of the fastest growing segments of the travel and leisure industry. India has the potential to become a leading ‘wellness’ destination for the global

travellers. The Indian healthcare sector, particularly the private entities, boast state-of-the-art infrastructure along with well-qualified practitioners.

This has led to foreign tourists coming in for affordable treatment,

SWOT Analysis of Medical Tourism in India

Strengths	Weakness
➤ Quality hospitals and doctors. ➤ Widely spoken English language. ➤ Lucid information on medical tourism web portals. ➤ International accreditation of hospitals and clinical laboratories (JCI). ➤ Low cost. ➤ Less waiting time. ➤ Post treatment stay in good resorts and easy follow up. ➤ Publicity campaigns ‘Incredible India’, ‘Atithidevobhava’ and ‘Make in India’. ➤ Benefit to travel and hotel industries. ➤ Medical m-Visa on arrival. ➤ Alternative medicine (AYUSH).	➤ Lack of necessary tools to impress patients looking abroad for health care. ➤ Growing inequalities between government and private hospitals. ➤ Patient doctor relationship compromised due to commercialisation. ➤ Quality of post-operative care compromised in procedures requiring long follow-ups. ➤ Effect of long distance travelling on health after surgeries. ➤ Vacation activities interfering with healing process. ➤ Disintegrated package of services covered by insurance. ➤ Inconsistent fee structure, lack of transparent policies. ➤ Inadequate infrastructure, power supply to hospitals. ➤ Increase medical costs of local people. ➤ Medical malpractice- legal remedies.
Opportunities	Threats
➤ Economics of medical tourism. ➤ Financial support for marketing and publicity of industry. ➤ New employment opportunities for labour intensive industry. ➤ Wellness and tourism promotive shows. ➤ Capacity building of key operators. ➤ Redressal of medico legal cases. ➤ Health/Wellness tourism leveraging AYUSH. ➤ Promotion of PPP model.	➤ Introduction of newer exotic infections in the country. ➤ Risk of tourists acquiring locally endemic infections. ➤ Strong competitors like Malaysia, Thailand and Singapore. ➤ Illegal purchase of organs and tissues for transplantation. ➤ Rise in fraud and illegal procedures. ➤ To check credentials of the medical tourists regarding his/her medical history politico-socio-economic background, since India is facing a terrorist threat very often.

while eventually allowing for tourism at other sites of the country. Indian healthcare industry also competes with the best in the world in terms of, infrastructure, technology, specialist doctors and nurses. The country has the finest and one of the largest pools of doctors and paramedics in South Asia, with many of them being of global repute. India's expertise in highly specialized areas of organ transplants, cardiology, oncology, etc. has made India an emerging hotspot for medical value travel.

India has an unmatched heritage represented by its ancient and age-old traditional treatment methods, such as Ayurveda, Yoga, Unani, Siddha and Homoeopathy (AYUSH), which have time and again proved its efficacy for the patients and are now widely accepted as alternative treatment procedures in many geographies. In recent times, more and more patients are coming to India to benefit from the time tested and health-restorative AYUSH treatments in combination.

What is Medical Tourism?

Medical tourism (also called 'Medical Travel', 'Health Tourism' or 'Global Health Care') is a term used to describe the rapidly growing practice of travelling across international borders to seek medical services. Services typically sought by travellers include elective and essential procedures as well as complex surgeries etc. In other words, it may be defined as 'activities related to travel and hosting a foreign

tourist who stays at least one night at the destination region for the purpose of maintaining, improving or restoring health through medical intervention'.

Such medical intervention may be broadly classified into following three categories:

- ◆ **Medical Treatment:** Treatment for curative purpose that may include cardiac surgery, organ transplant, hip and knee replacement etc.
- ◆ **Wellness & Rejuvenation:** Offerings focused on rejuvenation or for aesthetic reasons such as cosmetic surgery, stress relief, spas etc.
- ◆ **Alternative Medicine:** AYUSH would be the major category under it.

Of late, medical tourism is transitioning towards 'Medical Value Travel' (MVT). MVT, as a term, has started to gain currency in order to define visits by overseas patients for availing medical treatment. The reason behind MVT's popularity may be attributed to the fact that it captures patient's healthcare seeking behavior as well as the wider economic impact of such travel on nations hosting them.

Medical Tourism Industry in India

According to the Ministry of Tourism, the provisional estimates of total Foreign Exchange Earnings (FEE) through medical tourism during 2015, 2016 and 2017 were INR 1,35,193 crore, INR 1,54,146 crore and INR 1,77,874

crore, respectively. Furthermore, NITI Aayog in its report has identified MVT as a major source of FEE. India currently has around 18 per cent of the global medical tourism market. According to a report by FICCI and IMS Health, India's MVT was pegged at \$3 billion in 2015 and is estimated to grow at a CAGR of 15%. It has been estimated that by 2020, India's medical tourism industry could be worth \$9 billion and account for 20% of the global market share.

A rare combination of advanced facilities, skilled doctors and low cost of treatment has made India a popular hub of medical tourism, attracting a large number of foreign patients every year. The total number of such visitors in 2017 was 4.95 lakh. This number had stood at around 2.34 lakh in 2015 and 4.27 lakh in 2016.

Bangladesh and Afghanistan continued to be the top countries from where the maximum number foreign tourist arrivals (for medical purpose) were seen. In 2017, about 2.21 lakh tourists from Bangladesh are estimated to have come to India for medical reasons, compared to 1.20 lakh in 2015 and 2.10 lakh in 2016. Likewise, the number of medical tourists from Afghanistan stood at 27,505 in 2015 and 61,231 in 2016. The number declined to 55,681 in 2017.

Other countries from where large numbers of medical tourists came to India include Iraq, Oman, Maldives, Yemen, Uzbekistan and Sudan. The report pointed out that in curative care, India was the preferred destination for cardiology, orthopaedics, transplants, and ophthalmology. India also enjoyed high credibility in wellness, preventive, and alternative medicine (AYUSH).

Dental tourism is another area under medical tourism and accounts for 10% of the medical tourism. The government is keen to promote it.



Factors Driving Health Tourism in India

India holds an advantage as a medical tourism destination due to the following factors:

- ◆ India has over 500+ Accredited Healthcare providers (JCI & NABH) and uses world-class technologies at par with the western world. Indian Doctors are known for their excellence across the globe, one of the studies reveals that over 10 per cent of the doctors practising in the UK and US are Indian.
- ◆ High quality nursing capability providing high or equivalent standards of medical care as in patients home country.
- ◆ The cost of quality of medical procedures and services are low in India when compared to other competitors in the field.
- ◆ Use of modern medical technology, high-quality implants and internationally accepted medical supplies.
- ◆ Diverse geography with numerous tourism destinations to suit the patients schedule.
- ◆ Modern hospital and hotel facilities, good air and surface transport, developed tele-communications network and improving tourism infrastructure.
- ◆ Medical visa norms have been simplified to ensure hassle-free visa for medical patient and attendant.
- ◆ India is known for offering alternative medicines and has certified and accredited wellness and ayurveda centres.

Other Side of the Coin

Approximately 22% of the Indian population lives below the poverty line and many do not have access to healthcare services. Despite being a fundamental right under Article 21, primary healthcare remains in shambles. The under-investment

in the primary healthcare sector is evident from the fact that public health expenditure constitute 1.16 % of GDP whereas, in 2016-17, it was approximately 1.4 %. This is way below the world average of 6%.

Furthermore, healthcare in India is considered the most affordable across the globe, yet for most Indians it is expensive. Additionally, the rate of Indian's out-of-pocket spending on healthcare is one the world's highest since the health insurance penetration rate in India is approximately only 20%. World Bank's 2017 report on 'Tracking Universal Health Coverage' also points out the "catastrophic spending on health" by Indians, illustrating that out-of-pocket medical expenditure exceeds 10 and 25% of household total income or consumption.

Challenges

While the government has taken several progressive steps concerning medical visas, more can be done to ease the travel of medical tourists to India. Additionally, the market continues to be largely unregulated, with several informal agents and intermediaries connecting prospective patients to health facilities. Domestic or international accreditation has been acquired by a relatively small number of health facilities, primarily hospitals.

Most importantly perhaps, there is considerable lack of awareness in target markets about India's capabilities, infrastructure and cost advantage in the health and wellness space. In many countries, there are misconceptions about India's traditional systems of medicine such as Yoga and Ayurveda which are often perceived to be exclusive to Indian culture or even related to religion, instead of means for promoting healthy living.

Government Initiatives

Government is promoting the emergence of India as a medical destination to the world.

The Ministry of Home Affairs (MHA) has taken several steps towards boosting medical tourism such as extending e-Visa to 161 countries. Besides, the MHA has extended the duration of stay on e-Visa from 30 to 60 days and also allowed triple entry in e-Medical Visa cases.

The Ministry of Tourism has recently released revised guidelines for the promotion of wellness and medical as niche tourism product. As per the guidelines, the ministry offers financial support to accredited medical and wellness tourism service providers, Chambers of Commerce and other organisations as marketing development assistance, for publicity, organising workshops/events/seminars and for organising wellness and medical tourism promotion shows.

Way Forward

India has already emerged as one of the major hubs for provision of care to MVT patients. With the given scale of healthcare infrastructure and the projected growth, India can further strengthen its standing among the current popular MVT destinations like Thailand, Singapore, Malaysia, Mexico etc.

In order to strengthen its position on medical tourism, India would need to focus on dual objectives of 'tourism friendliness' and 'patient centricity'. However, achieving the stated vision of being 'The Provider to the World' would necessitate coordinated efforts by all key stakeholders be it government, providers, facilitators, regulators, insurers and soon.

General Studies Paper- III

Topic: Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.

○○○

2. SIKH EXTREMISM AND INDIA-CANADA RELATIONS

Why in News?

Last month, Canada has removed a reference to 'Sikh Extremism' from its "2018 Public Report on the Terrorism Threat to Canada", a move that was welcomed by the Sikh diaspora but criticised by sections of the Indian government. The 2018 report had identified 'Sikh Extremism' and the movement for an independent homeland of Khalistan, in Punjab, as one of five key terror threats facing Canada, along with "Sunni Islamist Extremism", "Right-Wing Extremism", "Shia Extremism" and "Canadian Extremist Travellers". The section pertaining to incidents of terror by members of the Sikh community has now be renamed "Extremists who Support Violent Means to Establish an Independent State Within India".

Introduction

Khalistani extremism in Canada dates back to the post-1984 'Operation Bluestar' period. In 1985, Canada-

based Sikh extremist outfit, 'Babbar Khalsa', plotted and executed the mid-air bombing of an Air India flight, which killed 331 people, the deadliest terrorist attack in the history of aviation until the 9/11 horror. The Sikh expatriates' support for the Khalistanis has since ebbed with only a tiny section still espousing the cause. One of the major factors was a clampdown by successive Canadian governments.

Worryingly for India, however, there has been a marked resurgence of Khalistani radicalism in Canada since 2013 when the Liberal Party came to power. This new threat has been fuelled and funded by gurdwaras patronised by Canadian politicians keen to win over the support of the Sikh diaspora, an increasingly influential vote bank in Canada. In 2017, many gurdwaras, controlled by pro-Khalistan elements, banned the entry of Indian diplomats.

In recent years, India-Canada ties have deteriorated, especially given the view that the current Justin Trudeau administration is soft on individuals and organisations that support the

demand for Khalistan, a separate Sikh homeland. Members of Mr. Trudeau's Cabinet, especially Defence Minister Harjit Singh Sajjan, have been accused of having links with Sikh separatists. When Mr. Sajjan visited India in April 2017, Punjab Chief Minister Captain Amarinder Singh refused to meet him for this reason. Similarly, Mr. Trudeau received the cold shoulder during his India visit in February 2018. When Mr. Singh met Mr. Trudeau, their discussion was on the Khalistan issue, rather than on areas of mutual cooperation. Recently, Mr. Trudeau drew the ire of the Indian government when "2018 Public Report on the Terrorism Threat to Canada" avoided the words 'Khalistani Extremism'.

India-Canada Relations: An Overview

India and Canada have longstanding bilateral relations built upon shared traditions of democracy, pluralism and strong interpersonal connections. At the political level, the relations in recent years have been marked by regular high level interactions. Over the years arrays of institutional mechanisms have been put in place to promote bilateral cooperation. Different aspects of bilateral relation between two countries are given below:

Bilateral Trade

Bilateral trade between India and Canada was worth US\$7.23 billion in 2017-18. India's exports to Canada during this period were US\$ 2.51 billion and imports from Canada were US\$ 4.72 billion. Canadian Pension Funds have invested approx. US\$ 12.6 billion in India till now and are increasingly viewing India as an attractive destination for investments. More than 400 Canadian companies

PRO-KHALISTAN OUTFITS

- **BABBAR KHALSA INTERNATIONAL (BKI): LISTED AS A TERRORIST ORGANISATION IN THE EUROPEAN UNION, CANADA, INDIA, AND UK.**

- **KHALISTAN COMMANDO FORCE (KCF)**
- **ALL-INDIA SIKH STUDENTS FEDERATION (AISSF)**
- **BHINDRANWALA TIGERS FORCE OF KHALISTAN (BTFF)**
- **KHALISTAN LIBERATION FRONT (KLF)**
- **KHALISTAN LIBERATION ARMY (KLA)**
- **KHALISTAN ARMED FORCE (KAF)**
- **KHALISTAN LIBERATION ORGANISATION (KLO)**
- **KHALISTAN NATIONAL ARMY (KNA)**
- **KHALISTAN REBEL FEDERATION (KRF)**
- **KHALISTAN FEDERATION FORCE (KFF)**



Babbar Khalsa chief Jagtar Singh Hawara (centre) was arrested by the Delhi police.

- **KHALISTAN ZINDABAD FORCE (KZF): LISTED AS A TERRORIST ORGANISATION BY THE EU.**
- **INTERNATIONAL SIKH YOUTH FEDERATION (ISYF), BASED IN THE UNITED KINGDOM**

have a presence in India and more than 1,000 companies are actively pursuing business in the Indian market. Indian companies in Canada are active in sectors such as Information Technology, steel, natural resources and banking.

However, bilateral trade has been slow to develop too, with India accounting for only 2 percent of Canada's global trade. Free trade negotiations, which began in 2010, are not going anywhere. Yet India remains a critical market for Canadian products such as lentils, peas, lumber, and potash, especially as India remains the world's fastest growing major economy.

Cooperation in Energy Sector

In 2015, India has secured a landmark nuclear energy deal with Canada for the supply of 3.2 million kilograms of uranium over a five-year period, formally ending a long-standing moratorium on Canadian exports of nuclear materials to India. The moratorium is due to the fact that in the 1970s, India used Canadian technology in its nuclear program.

Education Sector

Education is a key area of collaboration between the two countries. The memorandum of understanding (MOU) on cooperation in higher education was signed in June 2010, which covers student and faculty exchanges, research and curriculum development, organization of workshops and seminars, twinning between institutions of higher learning, facilitate mutual recognition of educational qualifications, policy dialogue in areas of mutual interest, among others. Presently, over 124,000 Indian students currently study in Canada.

Cooperation in Security and Defence

India and Canada collaborate closely in international fora, particularly

through the United Nations (UN), Commonwealth and G-20. Defence ties have been expanding with mutual ship visits. There is robust cooperation on counter terrorism issues particularly through the framework of the Joint Working Group (JWG) on Counter Terrorism.

S & T and Space

India and Canada have been cooperating since 1990s in the areas of space science, Earth observation, satellite launch services and ground support for space missions. Indian Space Research Organisation (ISRO) and Canadian Space Agency (CSA) have signed MOUs for cooperation in the field of exploration and utilization of outer space and two implementation arrangements specifically addressing satellite tracking and space astronomy.

Indian Diaspora

Canada hosts one of the largest Indian diasporas in the world, numbering 1.6 million (PIOs and NRIs) which account for more than 3% of its total population. The diaspora, whose main concentration are in the Greater Toronto area, the Greater Vancouver area, Montreal (Quebec), Calgary (Alberta), Ottawa (Ontario) and Winnipeg (Manitoba) has done commendably well in every sector in Canada. In the field of politics, in particular, the present House of Commons (total strength of 338) has 21 Members of Parliament of Indian-origin.

India-Canada Track 1.5 Dialogue

The first Canada-India Track 1.5 dialogue on innovation, growth and prosperity was held in Ottawa in 2018 between Gateway House, Mumbai and Centre for International Governance Innovation (CIGI), Canada. Both sides explored the possibility of future cooperation in the field of cyber

security, geo-engineering, climate leadership, trade in services and traditional & non-traditional forms of energy.

India and Canada: A Multi-Dimensional Relationship

What is it that attracts and holds Canada and India together, two nations so different and geographically so distant from each other? On the one hand, there is Canada, area-wise the second largest country in the world, with a population of 36 million, which is a rich and developed G7 economy. India, on the other hand, is the second largest country population-wise, with a population of 1.3 billion – an emerging economy growing at one of the fastest rates in the world. Nominal Gross Domestic Products (GDPs) of Canada and India are US\$ 1.76 trillion and US\$ 2.65 trillion respectively.

The answer to the above question, undoubtedly, lies in a unique blend of history, commonality of values as liberal democracies, the Commonwealth connection, their economic complementarity, the diaspora factor and the growing perception of shared interests, which resulted in the setting up of a 'Strategic Partnership' between the two countries.

Converging Worldview

Canada views itself as "an essential country" in "the life of the planet". Guided by the political philosophy of the Liberal Party, it promotes a rule-based, liberalism-guided world order, laying much stress on conflict prevention and peace, economic growth and prosperity, protection of human rights, gender equality and women empowerment.

India, on the other hand, is located in a dangerous neighbourhood where it faces the world's worst menace of cross-border terrorism and nuclear danger from two directions – the

West and the North. The geopolitical environment is turning negative, with China's steady rise, overbearing behaviour and determined forays into South Asia through bold strategic moves and predatory economics. New Delhi, therefore, has to concentrate on managing its ties with the major powers – the U.S., China, Russia and a few European Union (EU) member countries – as well as the states located in its immediate and extended neighbourhood. Canada, thus, does not figure among its priorities.

Nevertheless, the global situation is in a flux. Both power and action have largely shifted from Europe to Asia, from the Atlantic to the Pacific. The 'Indo-Pacific' stretching from the Western Pacific to India's shores, if not beyond, has emerged as the most important, complex and active theatre of international power play. This is not lost on Canada, a country with a very long Pacific coastline.

Ottawa is conscious of the value of multi-polarity. It should, therefore, be sympathetic to the Indian view that peace and prosperity in Asia would depend on an effective balance of power rather than a Sino-centric Asia. This may explain several recent developments.

First, despite some reservations, Canada joined the Trans-Pacific Partnership (TPP) which is a reality, although it now stands without the United States (US). Second, as a member of the Asia-Pacific Economic Cooperation (APEC), Canada takes considerable interest in Asian economic affairs. It wants to secure a bigger slice of business opportunities in Asia. Third, it has been forging close cooperation with the Association of South East Asian Nations (ASEAN) that figures high on India's priorities too as part of the latter's 'Act East Policy'. Fourth, Canada is keenly interested to join the East Asia Summit (EAS). It

managed to persuade the Philippines to invite PM Trudeau as the Chair's special guest at the EAS summit, held in Manila in November 2017. India is supportive of this ambition. Finally, Canada, like India, is a strong supporter of "freedom of navigation and over-flight throughout the Indo-Pacific" and it has expressed itself forthrightly on China's unacceptable activities in the South China Sea.

How Should India Respond to Canada's Recent Move on Khalistan?

There is no doubt that some overseas Sikhs support a separate Sikh homeland, and that there is not much appetite for the same in Punjab. However, it is important to not link criticism of India on human rights issues, such as the Sikh pogrom of 1984 and extrajudicial killings in the 1980s and 1990s, with Sikh separatism. The Indian media, the government and even politicians in Punjab need to realise that Sikhs based in Canada, the U.K. and the U.S. may have different political views. Similarly, non-violent support for a cause cannot be labelled as a militant activity.

If there is evidence of support for any violent activity, New Delhi and Canada must work together to tackle the problem. By focusing only on the Khalistan issue, New Delhi risks alienating the Sikh diaspora. India should instead reach out to the Sikh diaspora in a year when Sikhs and all other followers of Guru Nanak will be commemorating his 550th birth anniversary.

While New Delhi may be uncomfortable with the Canadian government's approach towards the activities of certain Sikh hard-liners, it is important to bear in mind that for the year 2017, Indian students received well over 25% (over 80,000) of the available study permits. In 2017, well over 40% of the 86,022 people who received invitations for permanent

residency were Indians. During 2018, this rose by a staggering 13% to 41,000.

Thus, it is important to handle ties with Canada with nuance. First, members of the Sikh diaspora and Sikh politicians who are vocal on human rights issues shouldn't be labelled Khalistani sympathisers. Second, it should be remembered that the New Delhi-Ottawa relationship goes well beyond the Khalistan issue.

Conclusion

The course of India-Canada relations never did run smooth. Ever since they were established, bilateral relations have been buffeted by inimical winds. If at one time it was the nuclear issue, at another time it was Khalistan. This is regrettable considering how much the two countries share - from democratic ideals, to multicultural societies, to membership of the Commonwealth and, most of all to a large Indian Diaspora which, at roughly one million, forms three percent of Canada's population.

But, notwithstanding their chequered history, India-Canada ties are way bigger than individuals or groups, and much too important to be allowed to slip into disrepair. They have encountered speed bumps in the past but have always managed to bounce-back, as bilateral convergences far outweigh divergences. Both sides need to start afresh, build on synergies, and address the irritants.

General Studies Paper- II

Topic: Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

Topic: Effect of policies and politics of developed and developing countries on India's interests, Indian diaspora.



3. BS-VI EMISSION NORMS : A STEP TOWARDS GREENER TRANSPORTATION

Why in News?

Recently, Maruti Suzuki India has confirmed that all its diesel cars that come with the 1.3-litre DDIS 200 and the newly launched 1.5-litre DDIS 225 engine will be phased out by April 2020. The company has stated as the Bharat Stage (BS-VI) norms kicks in from April 2020, Maruti will mainly focus on upgrading its petrol engine line-up.

Background

The first Indian emission regulations were idle emission limits which became effective in 1989. These idle emission regulations were soon replaced by mass emission limits for both gasoline (1991) and diesel (1992) vehicles, which were gradually tightened during the 1990s. Since the year 2000, India started adopting European emission and fuel regulations for four-wheeled light-duty and for heavy-duty vehicles. India's own emission regulations still apply to two- and three-wheeled vehicles.

The foundation for automotive emission standards in India since the early 2000s is contained in two reports from the Indian Planning Commission. The National Auto Fuel Policy, announced on October 6, 2003, envisioned a phased program for introducing Euro 2-4 emission and fuel regulations by 2010. In order to establish limits beyond BS-VI, the Indian Planning Commission established an Expert Committee in 2013 to draft an updated Auto Fuel Policy, Auto Fuel Vision and Policy, 2025, that was published in May 2014. While legislators are not required to adhere strictly to the recommendations contained in these reports, they serve as a starting point for subsequent legislative action to

establish the implementation schedule and other details of automotive emission standards.

What are Bharat Stage Emissions Standards?

Bharat Stage emission standards (BSES), introduced in 2000, are emission standards that have been set up by the Central government to regulate the output of air pollutants from internal combustion engine equipment, including motor vehicles. The different norms are brought into force in accordance with the timeline and standards set up by the Central Pollution Control Board which comes under the Ministry of Environment and Forests and Climate Change. The BS norms are based on European regulations. In 13 major cities, BS-VI emission standards were put in place in April 2010. BS-IV norms were supposed to come into effect nationwide from April 2017.

In 2016, the Indian government announced that the country would bypass the BS-V norms altogether and will adopt BS-VI norms by 2020. In its judgment, the Supreme Court has banned the sale and registration of motor vehicles conforming to the emission standard BS-VI in the entire country from April 1, 2020.

On November 15, 2017 The Petroleum Ministry of India in consultation with public oil marketing companies (OMCs) decided to bring forward the date of BS-VI grade auto fuels in NCT of Delhi with effect from April 1, 2018 instead of April 1, 2020. Thus Delhi became the first to witness these fuel standards. In fact, Petroleum Ministry OMCs were asked to examine the possibility of introducing the BS-VI auto fuels in the whole of NCR area

from April 1, 2019. This huge step was taken due the heavy problem of air pollution faced by Delhi. The decision was met with disarray by the automobile companies as they had planned the development according to roadmap for 2020.

New Guidelines: BS-VI Emission Standards

BS-VI norms gained much popularity after the government decided to skip the BS-V norm and directly jump to this norm. The 'Auto Fuel Policy' suggested the implementation of this norm by 2024. But after the Supreme Court ordered the government to enforce BS-VI standards before the suggested deadline of April 2021, the shift from BS-IV to BS-VI took place. With this, India became the part of the league which consisted of Japan, European Union and the United States of America to implement Euro Stage-VI emission standards.

Difference between BS-IV and BS-VI

The main difference between BS-IV and BS-VI (which is comparable to Euro 6) is in the amount of sulphur in the fuel. BS-VI fuel is estimated to bring around an 80% reduction in sulphur content — from 50 parts per million (ppm) to 10 ppm. Also, NOx emissions from diesel cars are expected to come down by nearly 70% and, from cars with petrol engines, by 25%.

This new emission standard has low sulfur content as compared to the BS-IV fuel. The BS-VI fuel contains 10 parts per million (10PPM) while the content of sulfur in BS-IV fuel is 50 parts per million. Moreover, switching to BS-VI norms will help in reducing concentration of carbon monoxide (CO), unburnt hydrocarbons, nitrous oxide (NOx) and particulate matter. With the use of BS-VI fuel in the diesel vehicles, the emission of particulate matter (PM) and nitrogen oxide will

Mechanics of BS-VI

► Bharat Stage VI (BS-VI) norms will take effect in India from **1 April 2020**

► BS-VI is the **most advanced emission standard** for automobiles and is equivalent to Euro-VI norms

► In order to **reduce vehicular pollution**, the government decided to leapfrog from BS-IV to BS-VI

► The new norms make on-board diagnostics (**OBD**) **mandatory** for all vehicles



► The OBD unit can identify likely **areas of malfunction** by means of default codes stored on a computer

► For two-wheelers, manufacturers will introduce a **fuel injection system**—a first in India

witness a fall of 80 percent and 83 percent respectively.

BS-VI will be applicable to the different category of vehicles having a total weight less than 3,500 kg and which will be manufactured on or after 1st April 2020.

There is an estimation that the public sector undertakings engaged in the oil production may have to make an investment of INR 500 billion to comply with these standards. The vehicle manufacturers also have to invest a good amount to follow the guidelines of these emission standards. It is going to be a tough challenge for them to release BS-VI fuel-efficient vehicles before the suggested deadline. Though, Mercedes-Benz India has launched 'Mercedes S-Class' equipped with BS-VI compliant engines two years before the deadline.

Importance of BS-VI Standards

Upgrading to stricter fuel standards helps tackle air pollution. Global

automakers are betting big on India as vehicle penetration is still low here, when compared to developed countries. At the same time, cities such as Delhi are already being listed among those with the poorest air quality in the world. The national capital's odd-even car experiment and judicial activism against the registration of big diesel cars shows that governments can no longer afford to relax on this front.

With other developing countries such as China having already upgraded to the equivalent of Euro-V emission norms a while ago, India has been lagging behind. While BS-IV compliant fuel currently in use has 50 parts per million (ppm) sulphur, BS-VI stipulates a low 10 ppm. Besides, under BS-VI, particulate matter emission for diesel cars and nitrogen oxide levels are expected to be substantially lower than in BS-IV.

The experience of countries such as China and Malaysia (which is currently grappling with haze) shows

that poor air quality can be bad for business. Therefore, leapfrogging to BS-VI can put India ahead in the race for investments too.

'Health is wealth', goes the old adage. When BS-VI norms are implemented, you can look forward to breathing in cleaner air in cities. New vehicles sold from 2020 will have to be equipped with engines compliant with the new standards. Besides, the government is also thinking about a 'cash-for-clunkers' scheme for scrapping old vehicles.

This will help owners of older and more polluting vehicles to upgrade to newer vehicles which use cleaner fuel, with a subsidy from the government. Upgraded emission norms could also mean less fuel-guzzling vehicles.

BS-VI: Anticipated Changes

◆ Because of the BS-VI emission norms, the cost of the diesel cars is going to rise which will eventually pull down the market share of

diesel cars from 42% to 28% due to higher costs.

- ◆ With BS-VI norms, the pollutant limits will become more stringent. BS-VI compliant diesel vehicles will have to reduce nitrogen oxide (NOx) emission by 68 per cent and particulate matter emission by five times compared to the current BS-IV standards. Moreover, emission-reduction technologies required for controlling emission to this level is expensive.
- ◆ Diesel cars will need new exhaust, diesel-particulate filters and other multiple layers of changes. New components will come in and existing engines will be redesigned, which will increase the price of compatible engines manifold.
- ◆ This will lead to a disproportionate difference in the cost of diesel and petrol cars. The cost addition will depend on the engine size – a diesel car with an engine size of 1.5 litre could become costlier by 50,000 to 60,000.
- ◆ Smaller cars with diesel engines may become unviable and their production may be discontinued due to cost escalation and lack of demand.

BS-VI: Challenges and Opportunities for India's Auto Industry

To achieve a reduction in particulate matter by 82% and oxides of nitrogen

(NOx) by 68%, auto makers need a combination of technologies—one is the diesel particulate filter (DPF), a device designed to remove diesel particulate matter, or soot, from the exhaust gas of a diesel engine. Then there's selective catalytic reduction (SCR) and exhaust gas re-circulation (EGR), which is for NOx reduction. SCR is a process that uses a catalyst to convert NOx in exhaust gases to nitrogen and water, which are then released into the air. In EGR, the engine re-circulates a portion of the exhaust gas back to the engine cylinders depriving it of certain amount of oxygen thereby leading to lower temperature burn. This reduces NOx emissions, but produces more PM, which is reduced using diesel oxidation catalyst (DOC) and particulate filter.

By acquiring technologies and capabilities through joint ventures, home-grown companies see this as a chance to move up the value chain. For multinationals it's an opportunity to develop a solution for a market that is unique and create an economy of scale for low-cost emission control systems and technologies that can be used in other emerging markets.

There is also the challenge of packaging them all efficiently in the limited space without compromising on fuel efficiency. The addition of parts and aggregates such as the DPF, a urea tank, dosing unit for NOx (required in SCR) will increase the weight of the vehicle by at least 40-50 kg. The

will need a substantial investment to upgrade. These upgrades will allow the refineries to supply fuel types that can match the BS-V and BS-VI standards. Second is related to the automobile manufacturers who will need to progress gradually. Skipping a step like BS-V might put extra pressure on the manufacturers to produce BS-VI compliant vehicles.

Currently, the vehicles plying on the Indian roads are either equipped with BS-III or BS-IV engines. Using BS-VI fuels in these vehicles will only deliver the partial benefit of the BS-VI fuels. So, there is a dire need of vehicles equipped with engines accommodating to the BS-VI fuels in the market. The automobile industries of India can come into play by opting for vehicles compliant with the new BS-VI fuel in the market.

Conclusion

BS-V standard stage has been passed to bring BS-VI standard into reality. BS-VI was originally proposed to crystallize in 2024 but it has been advanced by 4 years, i.e., to 2020. It is in line with the commitment India made at the Climate Change Conference (COP) in Paris in 2015 as well as keeping in mind the present pollution and sentiments of the public related to the dangerously high levels of air pollution and environment degradation in major Indian cities.

Though the previous implemented emission standards have contributed little or some in reducing the air pollution in India, with BS-VI fuel, there is a possibility that India will witness massive downfall in the air pollution levels.

CLEANER CARS BY 2020

Delhi 1st city in India to run on BS-VI fuels, 2 years ahead of deadline	FUEL FACTS		
	BS-IV	BS-VI	Euro-VI
New fuel will make only marginal difference in emissions when run on BS-III and BS-IV vehicles. Big drop in emissions will be seen in BS-VI vehicles	DIESEL		
	Sulphur 50 Parts per million	10	10
September 2020 is deadline for automakers to start selling BS-VI vehicles across India	PETROL		
	Sulphur 50 Parts per million	10	10
	Lead (g/l) 0.005 Parts per million	0.001	NA

additional weight can impact the fuel efficiency.

Further, there are two major concerns which will be faced by the various industries due to transition to BS-VI norms. First is related to the oil refineries, that

General Studies Paper- III

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



4. PEPSICO-FARMERS' CONFLICT : AN ANALYSIS

Why in News?

After outrage over its decision to sue four farmers in Gujarat over 'patent infringement', PepsiCo Inc. has decided to withdraw the law suits. PepsiCo had sued the farmers for Rs. 1 crore each for cultivating FC-5, a potato variety grown exclusively for its Lay's potato chips. While the lawsuits have been dropped due to government intervention and massive social media backlash, the larger questions around weak Intellectual Property Rights (IPRs), vulnerability of distressed farmers and fuzzy contract farming rules remain unanswered.

Introduction

The American food-and-beverage giant, PepsiCo Inc., enjoys IPR protection in India for FL 2027 (commercial name FC-5), a potato variety with high dry matter and low sugar content that is better suited for making chips (normal

table potatoes have more moisture, which adds to dehydration and energy costs during processing and higher sugar that causes blackening on frying). Such protection is, indeed, required for incentivising agricultural research and development of new plant varieties by breeders, both in the private and public sectors. Under the Protection of Plant Varieties and Farmers' Rights Act, 2001 (PPVFRA), over 3,500 varieties across a range of crops — including those bred or improved by individual farmers — have so far been granted registration certificates for up to 15 years. These certificates confer on the breeders the exclusive rights over commercial production, sale, marketing, distribution, export and import of their protected varieties. PepsiCo has invoked Section 64 of the PPVFRA to claim infringement of its rights. PepsiCo has patented FC-5 until January, 2031 under the PPVFRA.

However, Section 39 of the PPVFRA simultaneously entitles farmers to "save, use, sow, re-sow, exchange, share or sell" the produce and seeds of any variety protected under the Act. Such freedom is conditional only upon no sale of such seeds in branded form — in other words, being "put in a package or any other container and labeled". It is clear from this that the Gujarat farmers had not committed any IPR infringement by merely growing FL 2027 potato, even if without PepsiCo's authorisation. PepsiCo may have developed this processing-grade variety solely for its Lay's chips and for contract cultivation by farmers through a buy-back mechanism at pre-fixed rates. The company claims to be working with some 24,000 farmers across nine states: It's fair to assume they benefit from the arrangement, both on account of being insulated from open market price fluctuations — huge in potatoes — and also

Source- Livemint

A HOT POTATO ISSUE



WHY FC5 MATTERS

THE FC5 variety has lower water content that makes it better suited for use in processed food. It is used in PepsiCo's Lay's potato chips.



Feb 2016	5 April 2019	25 April	26 April	2 May
PEPSICO receives plant variety protection rights to grow the FC5 variety of potato.	THE firm takes Gujarat farmers to court for growing the FC5 variety.	MORE than 190 activists urge the centre to ask Pepsi to withdraw the lawsuits.	THE company says it has offered to settle the dispute out of court.	PEPSICO issues a statement saying it has withdrawn the lawsuits.

receiving quality farm inputs and extension support. PepsiCo may, in turn, have legitimate concerns over farmers independently cultivating its proprietary varieties and possibly even supplying their produce to rival chips/French fries makers. But that still does not constitute an IPR infringement.

Origin of IP Laws in Agriculture

Although Paris Convention of 1883 which is the first multilateral agreement for harmonizing IP laws extended protection to industrial property, the succeeding 50 years witnessed various attempts by different countries in Europe to extent IP protection to the agricultural field. The first attempt to recognize the IPR of a plant breeder was the enactment of the Plant Patent Act by USA in 1930 and it aims at protecting asexually propagated plants by patents. As time passed, the European Patent Convention adopted these exceptions in its Article 53 and the same language was reproduced in the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS), 1995 in Article 27.3(b). Although by 1970s it was settled in developed nations that IP protection will be extended to agriculture, the developing countries agreed to it only by 1995 with the adoption of TRIPS Agreement.

Need for Plant Variety Protection (PVP)

New varieties of plants are developed after contributing number of years to the selective inheritance of traits which provide improved yields, higher quality, and better resistance to such plant varieties. Newer technologies of plant production need to be developed for obtaining high-performing varieties.

The tremendous progress in agricultural productivity in various parts of the world is principally based on these improved high performing plant varieties, which in turn is a critical factor in improving rural income and

overall economic development. Since, the process of plant breeding is long and expensive; it is not possible to have continuous breeding efforts unless there is a chance of reward for the investment in time and labour. It is therefore, important to provide an effective protecting system of PVP, with the aim of encouraging the development of new varieties of plants, for the benefit of society.

Patent versus Plant Variety Protection (PVP)

Patents and PVP are two different forms of IPR, both providing exclusive monopoly rights over the creation of a new plant variety for commercial purposes over a period of time. Whereas, patent is a right granted to an inventor to exclude all others from making, using and/or selling the patented invention for 20 years for those inventions which fulfil the patentability criteria of novelty, non-obviousness and utility; PVP provides rights to plant breeders for protecting genetic makeup of specific plant variety having novelty, distinctiveness, uniformity and stability.

Concerns of Extension of IPR to Agriculture

- ◆ The traditional rights of the farmers to save, share, exchange and sell the farm produce as well as the seeds might be taken away due to the monopoly extended to the plant breeders by granting IPR on plant varieties.
- ◆ Monopoly extended to plant breeders could also raise the price of such commodities.
- ◆ The contribution of the farmers in the conservation and preservation of varieties is considered important for further plant breeding. But, due to extension of IPR to agriculture, this invaluable contribution of farmers might not be recognised.

Farmers' Rights and PPVFRA

Farmer's Rights are currently acknowledged as a global concern, yet consensus on how to implement farmers' rights remains vague. Internationally it is acknowledged to a certain extent

that farmer's are important part of the social and political fabric of society and require support. India is among the first countries in the world to have passed a legislation granting farmers' rights in the form of the Protection of Plant Varieties and Farmer's Rights Act, 2001. India's law is unique as it simultaneously attempts to establish the rights for breeders and farmers and also, it protects their interests.

No other legislation on plant variety protection, enacted anywhere in the world, had such wide-ranging provisions on farmers' rights as the Indian one. While the legislation was enacted in compliance with the provisions of the TRIPS agreement and the guidelines of the World Trade Organisation (WTO), it was also unique for its harmonious integration of the relevant principles from the Convention on Biological Diversity (CBD). The CBD has a number of provisions that deal with farmers' rights, including the principles of 'prior informed consent of farmers' to use their knowledge of plant varieties for research leading to intellectual property rights-protected technology and for sharing the commercial benefits arising from such technology.

Under the Act, farmers' rights are divided into three categories - breeders, conservers and cultivators. As the majority of families of farmers are also involved in cultivation, their major rights under the Act include saving, using, resowing, exchanging, sharing or selling farm produce, including seeds. However, farmers cannot sell branded seeds protected by the Act.

Farmers who develop new strains through selection and breeding have the same rights as of a professional breeder. They can seek protection under the Act, provided the strains satisfy the criteria of "novelty, distinctiveness, uniformity and stability".

Balancing Corporate Breeder's and Farmer's Right

Unlike other realms of IP, the biological realm is self-propagating. The technology of propagation is

not external but internal to the plant system. Therefore, it is never rational for a farmer to pay a second time for something he has already bought and still possesses in the form of his seed crop. This creates a barrier for full commodification and monopoly profits. So, in order to prevent free replication of seeds, IP law creates enclaves of prohibition and protection, making the farmer's natural right to save, re-use and sell seeds illegal in many countries.

Recognising the bias in international law, the Indian PPVFRA entitles not just the breeder but also the farmer. The conjoining of the two rights, it was argued, would facilitate the growth of the seed industry, ensure the availability of high-quality seeds, as well as secure the livelihood and plant varieties of the farmers.

Contract Farming – The Middle Way Out

Because the quality requirements of Lay's for process-grade potatoes are very strict, PepsiCo has set up a network of agronomists and partnerships with other public and private service providers to help smallholder farmers produce potatoes that are suitable for processing. Contract farmers get the FC-5 seed from PepsiCo Inc. for Rs. 20-25 per kg depending upon size. They have to return 11-13 times the quantity at about Rs. 10 a kg. The purchase price is fixed at the time of contract and holds even if open market prices are lower.

Under contract farming, agricultural production can be carried out based on a pre-harvest agreement between buyers and producers. The producer can sell the agricultural produce at a specific price in the future to the buyer as per agreement. Under contract farming, the producer can reduce the risk of fluctuating market price and demand. The buyer can reduce the risk of non-availability of quality produce.

In January 2018, the Ministry of Agriculture released a draft Model Contract Farming Act, 2018. Based on this Model Act, legislatures of states can enact a law on contract farming as contracts fall under the Concurrent list of the constitution.

Under the draft Model Act, the producer can get support from the buyer for improving production through inputs as per agreement. However, the buyer cannot raise a permanent structure on producer's land. Rights or title ownership of the producer's land cannot be transferred to the buyer.

Currently, contract farming requires registration with the Agricultural Produce Marketing Committee (APMC) in many states. The Model APMC Act, 2003 provided for contract farming and was released to the states for them to use this as reference while enacting their respective laws. Consequently, 20 states have amended their APMC Acts to provide for contract farming, while Punjab has a separate law on contract farming.

Contract farming is now allowed by 22 states, but there is no uniformity about the kind of produce that can be included, nor the conditions under which it should be allowed. Moreover, the influence of inefficient and corruption prone local APMCs, which regulate farm produce marketing in their respective areas, remains more or less intact.

Contract farming can also address the problem of low investment in agriculture and ensure a supply of quality inputs, technical guidance and management support for farmers. An assured market and a pre-agreed sale price for produce, along with binding legal contracts with agro-based companies, will make it easier for farmers to access cheaper institutional credit. That, in turn, will reduce the influence of exploitative local money lenders in rural areas.

India's system of minimum support price is not backed by assured government procurement and therefore fails to check price volatility or ensure secure incomes for farmers. Thus, promoting contract farming makes sense.

Conclusion

The relevance of farmers' rights, as provided for under the PPVFRA, becomes more evident when considering the fact that about 660 million people in India are subsisting largely on agriculture for their livelihoods. It is notable that during the early days of IPRs, food security was still one of the top priorities in Europe and the USA, leading to the exemption of food crops from IPRs and the application of farmers' exemption. It has been argued that the Indian PPVFRA, with its extensive farmers' rights, is not conducive to promoting private investment in plant breeding. However, since private investment in Indian plant breeding, including food, horticultural and commercial crops, is rapidly increasing and the use of private-bred seed in Indian agriculture is spreading, such arguments lack evidence.

While the private sector is growing, farmers are also being promoted to maintain their rights to conserve, use and further develop their plant genetic resources. In this way, India is providing the world, emerging economies and developing countries in particular, with a viable alternative that balances the private sector's and farmers' rights.

General Studies Paper- III

Topic: Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.



5. ARAB SPRING 2.0 : ANOTHER ARAB AWAKENING

Why in News?

Recently, in Algeria and Sudan the protest which started against the government has entered a critical phase in which protesters and militaries are at a stand-off. With this, there is a possibility that protests could move to other Arab countries as well, resembling the earlier Arab spring almost a decade ago.

What was Arab Spring?

In 2010 Arab Spring was a series of anti-government protests, uprisings and armed rebellions that spread across the Middle East. Oppressive regimes and a low standard of living was the spark, beginning with protests in Tunisia. Social media played the role of catalyst behind the swift spread of revolution throughout the world, as new protests appear in response to success stories shared from those taking place in other countries globally.

The effects of the 'Tunisian Revolution' spread like fire to five other countries: Libya, Yemen, Egypt, Bahrain and Syria, where either the regime was toppled or major uprisings or social violence occurred, including riots, civil wars, mass murdering or insurgencies. Demonstration took in countries like Morocco, Iraq, Algeria, Iranian Khuzestan, Lebanon, Jordan, Oman, Sudan and Kuwait. Minor protests also occurred in Djibouti, the Palestinian National Authority, Saudi Arabia, Mauritania and the Moroccan-occupied Western Sahara.

The wave of initial revolutions and protests faded by mid-2012, as many Arab Spring demonstrations were met with violent responses from authorities, as well as from pro-government militias, counter-demonstrators and militaries. These attacks were answered with violence from protestors in some cases. Large-scale conflicts resulted into the Syrian

Civil War, the Iraqi insurgency the Egyptian Crisis, the Yemeni Crisis and the Libyan Civil War.

What is Arab Spring 2.0?

The anti-regime convulsions underway in Sudan and Algeria are the latest version of an 'Arab Spring' that erupted in 2011 and that Arab autocrats and their security regimes ultimately crushed. The protests have forced the presidents of both countries – Abdelaziz Bouteflika and Omar al-Bashir – to resign. If the mass protesters succeed in dismantling the security 'deep state' in these countries, the result would be a fitting redemption of the 2011 upheavals.

Algeria, whose economy is heavily dependent on the hydrocarbon sector, took a hit after the post-2014 commodity meltdown. While Gross Domestic Product (GDP) growth slowed from 4% in 2014 to 1.6% in 2017, youth unemployment soared to 29%. This economic downturn was happening at a time when Mr. Bouteflika was missing from public engagement. A stroke had paralysed him in 2013. But when he announced candidacy for this year's presidential election, seeking another five-year term, it infuriated the public. In a matter of days, protests spread across the country, which culminated in his resignation.

Sudan's case is not different. The Northeast African country is also battling a serious economic crisis. Mr. Bashir and his military clique ruled the country through fear for three decades. But the split of South Sudan in 2011, with three-fourths of the undivided country's oil reserves, broke the back of the junta. Post-2014, Sudan fell into a deeper crisis, often seeking aid from richer Arab countries such as Saudi Arabia, the United Arab Emirates (UAE) and even Qatar, the Saudi bloc's regional rival. Inflation is at 73% in the

country. Sudan is also grappling with fuel and cash shortages. Discontent first boiled over in the Northeastern city Atbara in mid-December over the rising price of bread and the protests soon spread into a nationwide movement. Mr. Bashir tried everything he could to calm the streets — from declaring a state of emergency to sacking his entire cabinet — but protesters demanded nothing less than regime change. Finally the army stepped in, removing him from power.

Arab Spring and India

India has longstanding historical and cultural relations with the West Asian region. For India, in particular, West Asia is a significantly important region. People-to-people contacts have existed between India and West Asia for centuries. India has been a supporter of the Palestinian cause and has demanded a comprehensive relationship with the Palestinian state and the people. Any development in the region has direct implications for India. There are nearly 6.5 million Indians living and working in the West Asian region. According to a World Bank report India received more than US \$ 80 billion in remittances during 2018 and a majority of the remittances came from the region. In addition, India's total trade with West Asia in the year 2017-18 exceeds US\$ 210 billion. The region is also vital for India's energy security. Nearly two-thirds of our hydrocarbon imports are from this region.

India has two choices: be passive and reactive as the region takes new shape, or, be proactive and help shape the region keeping its own interests in mind. Most countries in the region want India to play a more proactive role in keeping with its rising global profile. India's substantial interests in the region would compel India

to be proactive and not be a mere bystander. India will have to carve out a well thought out strategy towards the region.

Officials have been understandably modest about India's possible contribution to the Arab awakening. Depending on how the situation develops, India will certainly try to position itself to be of advantage to forces of democracy so dear to India's heart.

India was one of ten founding members of the Community of Democracies and a leading co-founder of the UN Democracy Fund, dedicated to promoting good governance and human rights around the world. India has participated in the multilateral activities of the Center for Democratic Transitions, the Partnership for Democratic Governance, and the Asia-Pacific Democracy Partnership.

New Delhi hasn't just a moral stake, but also a national interest in building on this record in the new Middle East. Egypt, Tunisia, Libya, Yemen, Syria, and the Gulf states will need to establish the institutions of good governance, from strong political parties to independent judiciaries. New Delhi's advice and assistance would make these countries better homes for Indian workers, better allies in stabilizing a region of great strategic importance to India's development, more reliable energy suppliers, and more prosperous trade and investment partners.

The crisis of governance in the Arab world also presents an opportunity to strengthen US-India ties. Whether working together with India or independently toward similar ends, the world's two largest democracies bring complementary strengths to the hard task of building a culture of democracy across the Arab world.

International Reaction on Arab Spring 2.0

From an external perspective, key international actors are carefully

observing and monitoring the changes and developments caused by the fall of Bouteflika and al-Bashir regimes. France and Italy are concerned that the exit of Bouteflika might generate instability in the whole region of North Africa. A key reason for their anxiety is the fear that a prolonged political instability in Algeria might bring a rise in the "cross-Mediterranean" migration to Europe. The ouster of al-Bashir could engender some instability in "Horn of Africa". This is true in the sense that Sudan is part of region which is equally important for Egypt, Saudi Arabia, Turkey and also for Iran and Israel.

Russia is also keeping a close eye on what is happening in Algeria and Sudan as it might have some short-term geopolitical consequences for Moscow which is very keen to develop military and political ties with both countries. During Putin's visit Russia signed major arms deal with Algeria. In July 2018, Russian ambassador to Algeria revealed that Algeria purchases almost 50 per cent of Russia's total arms sales to Africa. On March 19, 2019, Russia's Foreign Minister Sergei Lavrov expressed Russia's concerns over the mass protests in Algeria, declaring the situation as an attempt to undermine the political stability of Algeria. Further Russia has strong desire to strengthen its economic, political and military ties with Sudan.

Although the longstanding regimes have been removed from Algeria and Sudan but the situation in both countries is still critical and precarious. The protestors are still out in the streets of Algiers and Khartoum fearing that the people in the new administrations are longtime allies of both Bouteflika and al-Bashir. The interim administration in both countries insists that they do not wish to stay in power for long time and the future of the countries will be decided by the people. But at the same time,

the military leaders of both countries have warned the people that they will not allow anyone to undermine the national security. This shows that the real power is still in the hands of the influential military leadership of both countries and they still holds the key to break any agreement that will decide the future political setup in Algeria and Sudan.

Conclusion

So far, developments in Sudan and Algeria have gone in the right direction, but there is also a lot that can still go wrong, considering the road to democracy is full of traps and pitfalls. If recent "Arab Spring" experiences are anything to go by, the worst is yet to come, especially, as the generals continue to vie for control.

But the long silenced Sudanese and Algerians majorities and their invisible elites have defied all the scare campaigns that warned of a descent into chaos. They have rejected all forms of domestic and foreign intervention, especially military intervention, to avoid the destruction seen in Libya, Syria and Yemen. In short, they prefer to be self-reliant, buoyantly industrious and innovative revolutionaries. Surely' it takes innovation to confront violence with non-violence, to protest loudly and negotiate calmly, to raise the stakes and reduce the risks, to elevate the aspirations and limit the expectations. Thus, Arab Spring 2.0 will take more creativities to continue to use accessible means to realize inaccessible ends. The art of revolution entails deep societal transformation to ensure the sustainability and durability of political transformation.

General Studies Paper- II

Topic: Effect of policies and politics of developed and developing countries on India's interests, Indian diaspora.



6. THE NECESSITY OF PHYSICAL ACTIVITIES IN CHILDHOOD

Why in News?

The World Health Organisation (WHO) has issued guidelines on physical activity, sedentary behaviour and sleep for children under 5 years of age. The guidelines varied by age group: infants younger than 1, children 1 to 2 and those 3 to 4.

Introduction

Physical inactivity has been identified as a leading risk factor for global mortality and a contributor to the rise in overweight and obesity. Early childhood is a period of rapid physical and cognitive development and a time during which a child's habits are formed and family lifestyle habits are open to changes and adaptations.

The overall goals of guidelines issued by WHO are to provide recommendations on the amount of time in a 24-hour day that young children, under 5 years of age, should

spend being physically active or sleeping for their health and wellbeing, and the maximum recommended time these children should spend on screen-based sedentary activities or time restrained. These new guidelines were developed by a WHO panel of experts. They assessed the effects on young children of inadequate sleep, and time spent sitting watching screens or restrained in chairs and prams. They also reviewed evidence around the benefits of increased activity levels.

The primary audiences for these guidelines are policy makers in ministries of health, education and / or social welfare, working in high- as well as low- and middle income countries, persons working in non-governmental organizations and early childhood development services and those providing advice and guidance to caregivers, such as community or family nurses or doctors, paediatricians or occupational therapists.

What are the Guidelines?

Infants (less than 1 year) should

- ◆ Be physically active several times a day in a variety of ways, particularly through interactive floor-based play; more is better. For those not yet mobile, this includes at least 30 minutes in prone position (tummy time) spread throughout the day while awake.
- ◆ Not be restrained for more than 1 hour at a time (e.g. prams/strollers, high chairs, or strapped on a caregiver's back). Screen time is not recommended.
- ◆ When sedentary, engaging in reading and storytelling with a caregiver is encouraged.
- ◆ Have 14–17h (0–3 months of age) or 12–16h (4–11 months of age) of good quality sleep, including naps.

Children 1-2 years of age should

- ◆ Spend at least 180 minutes in a variety of types of physical activities at any intensity, including moderate-to-vigorous-intensity physical activity, spread throughout the day; more is better.
- ◆ Not be restrained for more than 1 hour at a time (e.g., prams/strollers, high chairs, or strapped on a caregiver's back) or sit for extended periods of time. For 1-year-olds, sedentary screen time (such as watching TV or videos, playing computer games) is not recommended. For those aged 2 years, sedentary screen time should be no more than 1 hour; less is better. When sedentary, engaging in reading and storytelling with a caregiver is encouraged.
- ◆ Have 11-14 hours of good quality sleep, including naps, with regular sleep and wake-up times.



Children 3-4 years of age should

- ◆ Spend at least 180 minutes in a variety of types of physical activities at any intensity, of which at least 60 minutes is moderate- to vigorous intensity physical activity, spread throughout the day; more is better.
- ◆ Not be restrained for more than 1 hour at a time (e.g., prams/strollers) or sit for extended periods of time. Sedentary screen time should be no more than 1 hour; less is better. When sedentary, engaging in reading and storytelling with a caregiver is encouraged.
- ◆ Have 10–13h of good quality sleep, which may include a nap, with regular sleep and wake-up times.

Importance of Guidelines

- ◆ These guidelines are intended to assist officials as they develop national plans to increase physical activity, reduce sedentary time and improve time spent sleeping in young children through guidance documents and define critical elements of childcare services and pre-service training for health care and early childhood development professionals.
- ◆ These guidelines also contribute to the broader nurturing care for early childhood development framework. Nurturing care encompasses health, nutrition and safety needs, as well as early learning opportunities.
- ◆ These guidelines do not specifically address the physical activity, sedentary and sleep needs of children with disabilities or chronic disease. The recommendations may be appropriate for children with disabilities or chronic disease, but parents and caregivers should seek additional advice from health professionals, or those involved in providing early intervention services for a child.

- ◆ Improving the physical activity, sedentary and sleep time behaviours of young children will contribute to their physical health, reduce the risk of developing obesity in childhood and the associated non-communicable diseases (NCDs) in later life and improve mental health and wellbeing. These health outcomes will contribute to the attainment of the Sustainable Development Goal (SDGs) targets 2.2 (to end all forms of malnutrition) and 3.4 (to reduce by one-third premature mortality from NCDs).
- ◆ Physical activity in children under 5 years of age is favourably associated with health indicators such as adiposity, bone and skeletal health, cardio metabolic health, cognitive and motor skills development. It is increasingly recognized that too much sedentary time can have detrimental effects on health and there are recommendations to limit the exposure to screens in young children in a number of countries such as Australia, Canada, United States of America and New Zealand.
- ◆ Sleep is essential for cognitive, physical and psychosocial development, particularly in young children and is a common cause for concern amongst parents. There is however, no global guidance on specific frequency, intensity and duration of physical activity, appropriate amount of screen time and optimal duration of sleep required for health in this age group.

Why these Guidelines?

By providing these guidance, the recommendations fill a gap in the WHO recommendations on physical activity, as children under 5 years of age were not included in the global recommendations on physical activity for health in 2010 and will also contribute to the implementation of the

recommendations of the Commission on Ending Childhood Obesity and the Global Action Plan on Physical Activity 2018-2030.

Balance between e-Learning and Health of Children

The new guidelines on physical activity, sedentary behaviour and sleep for children under 5 years of age were developed by a WHO panel of experts. They assessed the effects on young children of inadequate sleep, and time spent sitting watching screens or restrained in chairs and prams. They also reviewed evidence around the benefits of increased activity levels. Although the guidelines are not sufficient enough to be necessary because there is a need for a detailed direction on the quantity of machines used in pre-primary, secondary and higher secondary education. With the help of psychologists, educationists, psychologists, philosophers, sociologists etc., there is a need of extensive research on this subject that how much use of the machine or machine-driven technology in education system and human life is favorable or harmful for the development of physical, mental, emotional and human qualities.

Like the developed nations, India is also trying to digitize education system at all levels including pre-primary. For this, government is implementing several programme such as replacement of blackboard by 'digitalboards', STEM schools, e-basta scheme, Vidyanjali yojana, etc. Apart from the given schemes, other initiatives namely Skill India, Campus-Connect, National Digital Library, National Academic Depository, e-Learning, Video-Waste Learning, Open Educational Resource, Virtual Reality and Augmented Reality, Adaptive Learning etc. are making Indian education system digitally powered. Hence, it is necessary to maintain the balance between early childhood development and use of technology in everyday life, especially in learning process.

In 2010 WHO published global recommendations on physical activity for health which detailed interventions for the primary prevention of NCDs through physical activity at population level. Estimates from 2012 indicate that not meeting current physical activity recommendations are responsible for more than 5 million deaths globally

each year. Although, over 23% of adults and 80% of adolescents are not sufficiently physical active and there are currently no comparable data for younger children.

- ◆ Recommendations have been established for three population-age groups (5-17, 18-64 and over 65 years), but up until this point did not include children under the age of 5 years. The recommended physical activity for children 5–17 years old to improve cardiorespiratory and muscular fitness, bone health, cardiovascular and metabolic health biomarkers and reduce symptoms of anxiety and depression is an accumulation of at least 60 minutes of moderate-to vigorous-intensity physical activity each day, through play, games, sports, transportation, recreation and physical education, in the context of family, school and community activities. Amounts greater than 60 minutes would provide additional health benefits and vigorous-intensity activities, including those that strengthen muscle and bone, should be incorporated at least three times per week.

Further, early childhood (under 5 years of age) is a period of rapid physical and cognitive development and a time during which a child's habits are formed and family lifestyle routines are open to changes and adaptations. Lifestyle behaviours developed in early life can influence physical activity levels and patterns throughout the life course. Active play and opportunities for structured and unstructured physical activity can contribute to the development of motor skills and exploration of the physical environment.

To meet daily physical activity time recommendations, particularly in children, the pattern of overall 24-hour activity needs to be considered, since the day is made up of sleep time, sedentary time and light and moderate and vigorous - intensity physical activity. Sedentary behaviours, whether riding motorized transport rather than walking or cycling, sitting at a desk in school, watching TV or playing inactive screen-based games are increasingly prevalent and associated with poor health outcomes. Sleep time is also known to influence health outcomes and short sleep duration is associated with overweight and obesity in childhood and adolescence, as well as mental health issues amongst

adolescents. Chronic insufficient sleep up to 7 years of age has been associated with increased adiposity in later childhood and adolescence.

Way Forward

Recent guidelines by WHO for children under 5 years of age do not aim to address all aspects of early childhood development, but rather contribute to this broader context through recommendations specifically on physical activity, sedentary screen-time and time spent restrained or sitting and sleep.

These guidelines are intended to assist officials as they develop national plans to increase physical activity, reduce sedentary time and improve sleep patterns in young children. The recommendations of these guidelines should be included in pre-service training for health care and early childhood education and care and child development professionals.

General Studies Paper- II

Topic: Issues relating to development and management of Social Sector/ Services relating to Health, Education, Human Resources.



7. MT. EVEREST : WORLD'S HIGHEST GARBAGE DUMP

Why in News?

Recently, chief of Nepal's mountaineering association has expressed concern over the human waste left behind by climbers on their way to the world's highest mountain peak, Mount Everest. Nepal government has started 45-day 'Everest Cleaning Campaign', on April 14 with the beginning of Nepali New Year and aims to collect nearly 10,000 kgs of garbage from Mt. Everest.

Unrest of Mt Everest

Mount Everest which is also known as Sagarmathain in Nepali language and Chomolungma in Tibetan language, is Earth's highest mountain above sea level, located in the Mahalangur Himal sub-range of the Himalayas. The current official elevation of 8,848 meter, was established by 1955 Indian survey and subsequently confirmed by a Chinese survey in 1975. In 1865, Everest was given its official English

name by the Royal Geographical Society, upon a recommendation by Andrew Waugh, the British Surveyor General of India. As there appeared to be several different local names, Waugh chose to name the mountain after his predecessor in the post, Sir George Everest, despite Everest's objections.

Every year, hundreds of climbers, Sherpa's and high altitude porters make their way to Everest, leaving

behind tons of both bio-degradable and non-biodegradable waste in which plastic, empty oxygen canisters, kitchen waste, beer bottles and faecal matter occupy majority on the highest peak, which has lately acquired notoriety as the “world’s highest garbage dump”.

According to United Nations, in recent decades, mountain litter has emerged as a growing environmental threat, affecting both high altitude communities and the people living below them. Waste disposal in isolated mountain communities has always been an issue, but this problem has been exacerbated by the introduction of plastics, metals and other non-biodegradable products.

The rise of mountain tourism, specifically activities such as treks and mountaineering expeditions, has created new streams of waste that are often dumped on the sides of trails, camps, or in glacier crevasses. Plastic food packaging, broken gear and

even bodies are left in hard-to-reach mountain areas.

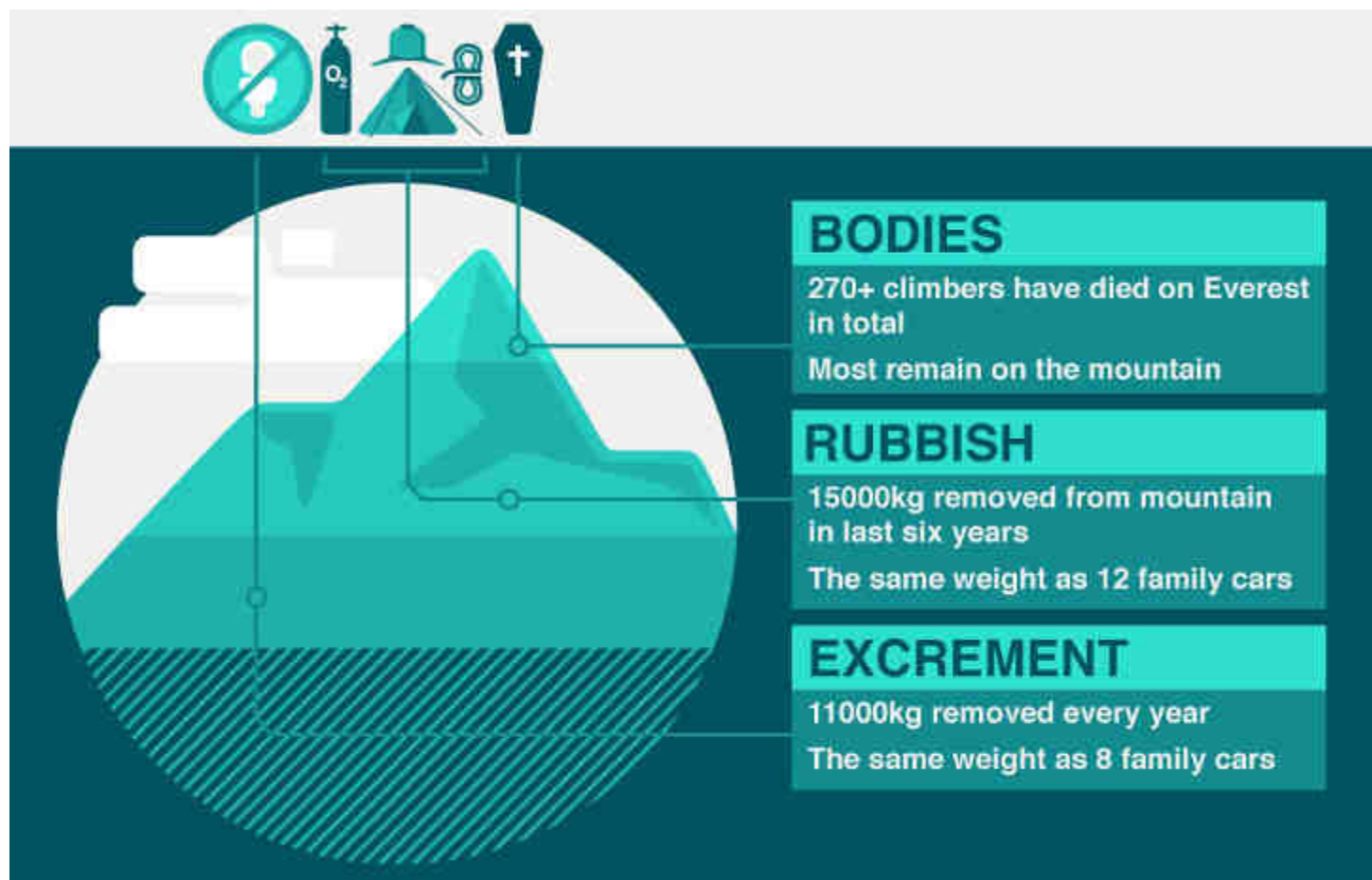
The impact of garbage on Everest is especially noteworthy. The number of visitors to the Khumbu region, where Everest is located, has risen from 20 in 1964, to around 36,000 in 2012. This influx of people has also brought an increasing amount of trash; after 60 years of expeditions, it is estimated that up to 140,000 kg of solid waste remain in the area. Some progress has been made recently and local groups have set an ambitious goal of removing 90,000 kg of trash in 2018, but much remains to be done.

Deteriorating Ecological Environment

The Himalaya - Karakoram - Hindu - Kush chain contains some of the largest glacier masses found outside of polar regions. From a hydrological perspective, these glacial masses play a fundamental role in the environmental

system of the entire Asian continent, as they constitute a water resource which assures the survival of millions of people. The retreat of these glaciers could reduce the availability of water. Due to climate change, a study reveals that an overall decrease in glacier area (by 5 %) in himalyan region, a result which is in line with the area reductions found by other studies of Asian glaciers. In many cases, the retreat of glaciers is most visibly evinced by the rapid growth in the number and size of glacial lakes. Such changes can result in catastrophic glacier lake outburst floods (GLOFs), which in the region constitute the strongest manifestation of the deglaciation process and its attendant risks.

The park around the Mount Everest experienced a very large increase in lake surface cover of 26% from the end of the ‘1950s to 2008. These variations are huge considering the short time period and suggest to go on in the future years. Research for



development of Mount Everest area in the wake of the climate change debate are mainly concerned with high altitude ecosystems - atmospheric and cryospheric phenomena and environmental issues. The thematic areas for research programs in the Everest Region were identified by the stakeholders as water pollution, energy management, wildlife, solid waste management, indoor air pollution, forest ecology and tourism.

Moreover, given the lack of an efficient solid waste management system, for decades expedition members emptied their bowels wherever they could when they had the urge. As a result, human feces have accumulated in the snow and streams of excrement are periodically regurgitated by the glaciers up in the mountain. Perhaps most disturbing is the view of corpses that could not be safely removed, a silent reminder of the perils involved in attempting to reach such extreme heights. Some of the bodies have been lying in the same spot for decades, becoming part of the route's landscape.

In addition to the above-mentioned issues, mountain tourism also adds strain to Everest's deteriorating ecological environment. Besides mountain climbing expeditions, throngs of trekkers flock to the Himalayas every year. Trekking causes trampling and it causes to widen the trail, create multiple trails and also increase soil erosion. It is advised to stay on the single trail when on trek and not to take short cuts on a new route. Trampling spoils the plantation and reduces regeneration. It damages the stems and results in no growth, making it a new trail. On the other hand, trampling also damages the soil quality and water permeability.

Wild animals are shy and love to be on their own. Human intrusion into their territory disturbs them. It affects their mating cycle and also psychology

affects their mental health for which they might need to face consequences. They might lose the fear of human which can bring them closer to the humans building, a platform for a clash.

Steps Taken in Mitigation

In absence of a concrete rules and regulations as for the disposal of garbage generated by tourists, there had been a serious concern over solid waste management issues in late 1980's. This led to the formation of a local environmental organization named 'Sagarmatha Pollution Control Committee' (SPCC) – a non-profit and non-governmental organization established in 1991 by the people of Khumbu with support from World Wide Fund for Nature (WWF) Nepal and Ministry of Tourism, Culture and Civil Aviation. SPCC is the lead organization working to manage waste in Khumbu Region, which form the Sagarmatha National Park and its Buffer Zone and also encompass the core Everest trekking area.

The Stations at High Altitude for Research on the Environment (SHARE) was launched for improving environmental research and policies for adaptation to the effects of climate changes. In the last 4 years an important contribution to the study of the climate change effects has given by SHARE.

Similarly, Namche Youth Club has also been active in waste management. All non-biodegradable wastes generated by daily consumption of thousands of tourists and locals are collected and safely incinerated in a purpose-built pit.

Fortunately, managing waste and controlling pollution have now crept up to be a high priority issue and solutions are being genuinely sought. Many good ideas are now being attempted besides the old self-evident ones. "Saving Mount Everest 2011–2012", a

project aimed at "restoring dignity to the mountain" was launched.

In addition to it, 'Eco Everest Expeditions' is one of few good examples of efforts made by private tourism companies who have active, long-term and vested interest in keeping Everest region clean besides making profit. Besides, if cleaning up can somehow be made into a part of a profit making venture, that would be the most effective, self-managed and sustainable solution to the problem. The annual event, Eco Everest Expedition has managed to encourage paid-climbers to bring garbage down to basecamp.

Everest Summit Association has been working for cleaning the Mount Everest. Apa Sherpa, who holds the world record of scaling the highest peak in the world for the 21st time, has also begun working on the project of cleaning Mount Everest. Other such efforts include Everest Climb Clean & Run (ECCR) by Tenzing-Hillary Everest Marathon. ECCR requests all participants to carry a little bag of garbage from starting point to finishing point. Bags are provided by the marathon team and the response has been positive.

Mount Everest Biogas Project (MEBP) proposes to use an anaerobic biogas digester to treat the human waste, and outlines the project management solution to do so. The biogas digester will eliminate dumping of solid human waste and destroy pathogenic fecal coliforms that threaten the health of the local communities – lessening the impact of the tourism industry on a mountain that is sacred to the Nepalese.

Further, bio-degradable hemp plastic bags to collect excretion are one of the merchandise being considered by many relevant companies. The bags are meant to be carried down to Everest base camp from where local disposal team takes over the collected waste material and remains.

The efforts discussed above are highly encouraging and the momentum generated could very well lead to a perfect solution eventually. When private profit-seeking companies are gaining confidence to ask their paying clients to carry their own excrements, it's a good sign of things to come.

Conclusion

The mountains are the vital part of our environment which is the resource base that sustains both economic and social development. While pollution

affects all of us, it has a particularly negative impacts on women, children, the elderly, workers, the sick and people living in low-income areas. As a consequence, pollution constitutes a significant impediment to achieving sustainable development and ensuring that no one is left behind. A pollution-free planet would protect and restore the ecosystems that we rely on for our food, water, air and livelihoods, thus helping to improve human well-being and prosperity, especially for the poor and the disadvantaged. Transitioning

to a pollution-free planet is not only possible; it is an imperative. Eliminating pollution would be the best insurance policy for future generations, as it would improve the integrity of the ecosystems they will need to survive.

General Studies Paper-III

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

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SEVEN SUBJECTIVE QUESTIONS WITH MODEL ANSWERS

Medical Tourism in India : Next Growth Driver

Q1. India has the potential to become a leading medical tourism destination for the global travellers. Discuss its opportunities and challenges.

Hints:

- ◆ The Indian 'Wellness industry is one of the fastest growing segments of the travel and leisure industry. India has the potential to become a leading 'Wellness' destination for the global travellers. The Indian healthcare sector, particularly the private entities, boast state-of-the-art infrastructure along with well-qualified practitioners.
- ◆ India has over 500+ Accredited Healthcare providers JCI & NABH and uses world-class technologies at par with the western world. Indian Doctors are known for their excellence across the globe, one of the studies reveals that over 10 per cent of the doctors practicing in the UK and US are Indian.
- ◆ The healthcare in India is considered the most affordable across the globe, yet for most Indians it is expensive. Additionally, the rate of Indian's out-of-pocket spending on healthcare is one of the world's highest since the health insurance penetration rate in India is approximately only 20%.
- ◆ While the government has taken several progressive steps concerning medical visas, more can be done to ease the travel of medical tourists to India. Additionally, the market continues to be largely unregulated, with several informal agents and intermediaries connecting prospective patients to health facilities. Domestic or international accreditation has been acquired by a relatively small number of health facilities, primarily hospitals.
- ◆ In order to strengthen its position, India would need to focus on dual objectives of 'tourism friendliness' and 'patient centricity'.

Sikh Extremism and India-Canada Relations

Q2. "The course of India-Canada relations never did run smooth. Ever since they were established, bilateral relations have been buffeted by inimical winds." Critically analyse.

Hints:

- ◆ Last month, Canada has removed a reference to Sikh extremism from its "2018 Public Report on the Terrorism Threat to Canada", a move that was welcomed by the Sikh diaspora but criticised by sections of the Indian government.
- ◆ India and Canada have longstanding bilateral relations built upon shared traditions of democracy, pluralism and strong interpersonal connections.
- ◆ However, the course of India-Canada relations never did run smooth. Ever since they were established, bilateral relations have been buffeted by inimical winds. If at one time it was the nuclear issue, at another time it was Khalistan. This is regrettable considering how much the two countries share - from democratic ideals, to multicultural societies, to membership of the Commonwealth and, most of all to a large Indian Diaspora which, at roughly one million, forms three percent of Canada's population.
- ◆ But, notwithstanding their chequered history, India-Canada ties are way bigger than individuals or groups, and much too important to be allowed to slip into disrepair. They have encountered speed bumps in the past but have always managed to bounce-back, as bilateral convergences far outweigh divergences. Both sides need to start afresh, build on synergies, and address the irritants.

BS-VI Emission Norms : A Step towards Greener Transportation

Q3. What are Bharat Stage Emission Standards (BSES)? What is the difference between BS- IV and BS- VI? Also discuss the implications of shifting from BS- IV to BS-VI on the automotive sector.

Hints:

- ◆ Bharat Stage emission standards, introduced in 2000, are emission standards that have been set up by the Central government to regulate the output of air pollutants from internal combustion engine equipment, including motor vehicles. The different norms are brought into force in accordance with the timeline and standards set up by the Central Pollution Control Board which comes under the Ministry of Environment and Forests and Climate Change.
- ◆ The main difference between BS-IV and BS-VI (which is comparable to Euro 6) is in the amount of sulphur in the fuel. BS-VI fuel is estimated to bring around an 80% reduction in sulphur content — from 50 parts per million (ppm) to 10 ppm. Also, NOx emissions from diesel cars are expected to come down by nearly 70% and, from cars with petrol engines, by 25%.
- ◆ To achieve a reduction in particulate matter by 82% and oxides of nitrogen (NOx) by 68%, auto makers need a combination of technologies—one is the diesel particulate filter (DPF), a device designed to remove diesel particulate matter, or soot, from the exhaust gas of a diesel engine. Then there's selective catalytic reduction (SCR) and exhaust gas re-circulation (EGR), which is for NOx reduction. SCR is a process that uses a catalyst to convert NOx in exhaust gases to nitrogen and water, which are then released into the air. Skipping a step like BS-V might put extra pressure on the manufacturers to produce BS-VI compliant vehicles.
- ◆ BS-VI was originally proposed to crystalize in 2024 but it has been advanced by 4 years i.e, to 2020. It is in line with the commitment India made at the Climate Change Conference (COP) in Paris in 2015 as well as keeping in mind the present air pollution and environment degradation in major Indian cities.
- varieties by breeders, both in the private and public sectors.
- ◆ Farmer's Rights are currently acknowledged as a global concern, yet consensus on how to implement Farmer's Rights remains vague. India is among the first countries in the world to have passed a legislation granting Farmer's Rights in the form of the Protection of Plant Varieties and Farmer's Rights Act, 2001 (PPVFR). India's law is unique as it simultaneously attempts to establish the rights for breeders and farmers and also, it protects their interests.
- ◆ Under the Act, farmers' rights are divided into three categories - breeders, conservers and cultivators. As the majority of families of farmers are also involved in cultivation, their major rights under the Act include saving, using, resowing, exchanging, sharing or selling farm produce, including seeds. However, farmers cannot sell branded seeds protected by the Act.
- ◆ It has been argued that the Indian PPVFR, with its extensive farmers' rights, is not conducive to promoting private investment in plant breeding. However, since private investment in Indian plant breeding, including food, horticultural and commercial crops, is rapidly increasing, and the use of private-bred seed in Indian agriculture is spreading, such arguments lack evidence.
- ◆ While the private sector is growing, farmers are also being promoted to maintain their rights to conserve, use and further develop their plant genetic resources. In this way, India is providing the world, emerging economies and developing countries in particular, with a viable alternative that balances the private sector's and farmers' rights.

PepsiCo-Farmers' Conflict : An Analysis

Q4. India recently landed in the midst of one such controversy after PepsiCo India sued at least four farmers for using its proprietary FC5 variety without the company's consent. Critically examine the impact of such conflict in Indian context.

Hints:

- ◆ The American food-and-beverage giant, PepsiCo Inc., enjoys IPR protection in India for FL 2027 (commercial name FC-5), a potato variety with high dry matter and low sugar content that is better suited for making chips. Such protection is, indeed, required for incentivising agricultural research and development of new plant
- The anti-regime convulsions underway in Sudan and Algeria are the latest version of an "Arab Spring" that erupted in 2011 and those Arab autocrats and their security regimes ultimately crushed. The protests have forced the presidents of both countries – Abdelaziz Bouteflika and Omar al-Bashir – to resign. If the mass protesters succeed in dismantling the security "deep state" in these countries, the result would be a fitting redemption of the 2011 upheavals.

Arab Spring 2.0 : Another Arab Awakening

Q5. The anti-regime convulsions underway in Sudan and Algeria are the latest version of an Arab Spring. It is known as 'Arab Spring 2.0'. Discuss its future implications.

Hints:

- ◆ The anti-regime convulsions underway in Sudan and Algeria are the latest version of an "Arab Spring" that erupted in 2011 and those Arab autocrats and their security regimes ultimately crushed. The protests have forced the presidents of both countries – Abdelaziz Bouteflika and Omar al-Bashir – to resign. If the mass protesters succeed in dismantling the security "deep state" in these countries, the result would be a fitting redemption of the 2011 upheavals.

- ◆ So far developments in Sudan and Algeria have gone in the right direction, but there is also a lot that can still go wrong, considering the road to democracy is full of traps and pitfalls. If recent "Arab Spring" experiences are anything to go by, the worst is yet to come, especially, as the generals continue to vie for control.
- ◆ But the long silenced Sudanese and Algerians majorities and their invisible elites have defied all the scare campaigns that warned of a descent into chaos. They have rejected all forms of domestic and foreign intervention, especially military intervention, to avoid the destruction seen in Libya, Syria and Yemen.
- ◆ In short, they prefer to be self-reliant, buoyantly industrious and innovative revolutionaries. And it sure takes innovation to confront violence with non-violence, to protest loudly and negotiate calmly, to raise the stakes and reduce the risks, to elevate the aspirations and limit the expectations. It will also take more creativity to continue to use accessible means to realize inaccessible ends. The art of revolution entails deep societal transformation to ensure the sustainability and durability of political transformation.

The Necessity of Physical Activities in Childhood

Q6. Early childhood is a period of rapid physical and cognitive development and a time during which a child's habits are formed and family lifestyle habits are open to changes and adaptations. Discuss it in the context of recently released WHO guidelines on physical activity, sedentary behaviour and sleep for children under 5 years of age.

Hints:

- ◆ Physical inactivity has been identified as a leading risk factor for global mortality and a contributor to the rise in overweight and obesity. Early childhood is a period of rapid physical and cognitive development and a time during which a child's habits are formed and family lifestyle habits are open to changes and adaptations.
- ◆ The overall goals of these guidelines are to provide recommendations on the amount of time in a 24-hour day that young children, under 5 years of age, should spend being physically active or sleeping for their health and wellbeing, and the maximum recommended time these children should spend on screen-based sedentary activities or time restrained.
- ◆ Improving the physical activity, sedentary and sleep time behaviours of young children will contribute to their

physical health, reduce the risk of developing obesity in childhood and the associated non-communicable diseases (NCDs) in later life and improve mental health and wellbeing. These health outcomes will contribute to the attainment of the Sustainable Development Goal (SDGs) targets 2.2 (to end all forms of malnutrition) and 3.4 (to reduce by one-third premature mortality from NCDs).

Mt. Everest : World's Highest Garbage Dump

Q7. The rise of mountain tourism, specifically activities such as treks and mountaineering expeditions, has created new streams of waste that are often dumped on the sides of trails, camps, or in glacier crevasses. Discuss it in the context of Mt. Everest, which is facing the huge problem of human waste.

Hints:

- ◆ Every year, hundreds of climbers, Sherpa's and high altitude porters make their way to Everest, leaving behind tons of both biodegradable and non-biodegradable waste in which plastic, empty oxygen canisters, kitchen waste, beer bottles and faecal matter occupy majority on the highest peak, which has lately acquired notoriety as the "world's highest garbage dump".
- ◆ The influx of people has brought an increasing amount of trash; after 60 years of expeditions, it is estimated that up to 140,000 kg of solid waste remain in the area. Some progress has been made recently and local groups have set an ambitious goal of removing 90,000 kg of trash in 2018, but much remains to be done.
- ◆ Mount Everest Biogas Project (MEBP) proposes to use an anaerobic biogas digester to treat the human waste and outlines the project management solution to do so. The biogas digester will eliminate dumping of solid human waste and destroy pathogenic fecal coliforms that threaten the health of the local communities.
- ◆ Eliminating pollution would be the best insurance policy for future generations, as it would improve the integrity of the ecosystems they will need to survive. There is a place above all others, where dreams are realized in the clouds, the place where only the strong and lucky survive, where it is almost impossible for the human body to battle with fierce winds and sub-zero temperatures.



SEVEN IMPORTANT NEWS

1. World Press Freedom Day - 2019

World Press Freedom Day is celebrated on May 3 each year to mark the importance of press in a democratic nation. The day was proclaimed as such by the UN General Assembly in 1993 acting on a recommendation from UNESCO. The day is used to “celebrate the fundamental principles of press freedom; assess the state of press freedom throughout the world; defend the media from attacks on their independence, and pay tribute to journalists who have lost their lives in the line of duty.”

Key Highlights

The theme for this year's World Press Freedom Day was “Media for Democracy: Journalism and Elections in Times of Disinformation”.

The theme of the day aligns with the Sustainable Development Goals (SDG) set by the UN General Assembly in 2015. SDG 16, for example, concerns issues of peace and democracy as preconditions for equitable and sustainable development.

Ensuring the safety of journalists is the primary way by which we can foster the independence and freedom of the press, as crucial for democracy. Such a goal is also vital to ensure public access to information.

At the core of UNESCO's mandate is freedom of the press and freedom of expression. UNESCO believes that these freedoms allow for mutual understanding to build a sustainable peace. It serves as an occasion to inform citizens of violations of press freedom -

a reminder that in dozens of countries around the world, publications are censored, fined, suspended and closed down, while journalists, editors and publishers are harassed, attacked, detained and even murdered.

India's Position

Recently, India dropped two places to be ranked 140th out of 180 countries in the global press freedom index analysis released by Reporters Without Borders.

Violence against journalists – including police violence, attacks by Maoist fighters and reprisals by criminal groups or corrupt politicians – is one of the most striking characteristics of the current state of press freedom in India.

For instance, at least six Indian journalists were killed in connection with their work in 2018. ■

2. Excavation of 4,000-year-old Burial Sites in Uttar Pradesh

The Archaeological Survey of India's (ASI) ongoing excavation of 4,000-year-old burial sites in Uttar Pradesh's (U.P) Sanauli has unearthed underground 'sacred chambers', decorated 'legged coffins' as well as rice and dal in pots and animal bones buried with the bodies. The excavation in the Baghpat district of U.P. was first started in 2018 and resumed in January this year.

Key Findings

Three chariots, some coffins, shields, swords and helmets had been unearthed, pointing towards the existence of a 'warrior class in the area around 2,000 BCE'.

According to the experts, it is different from Harappan culture. It is contemporary to the last phase of the mature Harappan culture. These findings are important to understand the culture pattern of the Upper Ganga-Yamuna doab.

The excavators have found rice and urad dal in pots, cattle bones, wild pig and mongoose buried along with bodies. These may have been offered to the departed souls. After the procession, they put the body in the chamber for some treatment or rituals.

Sanauli is located on the left bank of the River Yamuna, 68 km North-east

of Delhi which brought to light the largest necropolis of the late Harappan period datable to around early part of second millennium BCE.

In one of the burial pits, the excavators found a wooden legged coffin that was decorated with steatite inlays with a female skeleton. The pit also contained an armlet of semiprecious stones, pottery and an antenna sword placed near the head.

Another area of the site included remains of four furnaces with three working levels and the overall ceramic assemblage has late Harappan characters. ■

3. SIPRI Report- 2018

According to the report from the Stockholm International Peace Research Institute (SIPRI), world's military expenditure increased by 2.6 per cent, reaching \$1822 billion in 2018.

Key Findings

The five biggest spenders in 2018 were the United States, China, Saudi Arabia, India and France, which together accounted for 60 per cent of global military spending.

Military spending by the US increased for the first time since 2010, while spending by China grew for the 24th consecutive year.

India increased its defence spending by 3.1 per cent to USD 66.5 billion in 2018 while Pakistan hiked it by a hefty 11 per cent to touch USD 11.4 billion.

Total global military spending rose for the second consecutive year in 2018, to the highest level since 1988-the first year for which consistent global data is available. World spending is now 76 per cent higher than the post-cold war low in 1998.

The US remained by far the largest spender in the world, and spent almost as much on its military in 2018 as the next eight largest-spending countries combined.

China, the second-largest spender in the world, increased its military expenditure by 5.0 per cent to USD 250 billion in 2018. China has allocated 1.9 per cent of its GDP to the military every year since 2013.

About SIPRI

It was established in 1966 as an independent international institute dedicated to research into conflict, armaments, arms control and disarmament.

It provides data, analysis and recommendations, based on open sources, to policymakers, researchers, media and the interested public. ■

4. JeM Chief Masood Azhar Designated as Global Terrorist

In a major diplomatic win for India, the United Nations has designated Jaish-e-Mohammed (JeM) chief Masood Azhar a global terrorist after China lifted its technical hold on his listing under the UNSC 1267 sanctions committee. The development came a month after China had put a hold on a fresh proposal by the US, UK and France to impose a ban on the chief of the JeM, which claimed responsibility for the deadly Pulwama terror attack where 40 CRPF personnel were killed.

The proposal was the fourth such bid at the UN in the last 10 years to list

Azhar as a global terrorist. China had blocked Azhar's listing in 2009, 2016 and 2017.

Impact

The designation will subject Azhar to an assets freeze, travel ban and an arms embargo. The JeM has already been designated as a terror outfit by the United Nations.

An assets freeze under the Sanctions Committee requires that all states freeze without delay the funds and other financial assets or economic resources of designated individuals

and entities. The travel ban entails preventing the entry into or transit by all states through their territories by designated individuals.

Under the arms embargo, all states are required to prevent the direct or indirect supply, sale and transfer from their territories or by their nationals outside their territories, or using their flag vessels or aircraft, of arms and related material of all types, spare parts and technical advice, assistance, or training related to military activities, to designated individuals and entities. ■

5. SpaceX has Launched Cargo Mission for NASA

SpaceX has successfully launched a cargo mission (Dragon spacecraft) for NASA to the International Space Station (ISS). The 17th contracted commercial resupply mission from SpaceX delivered more than 5,500 pounds of research, crew supplies and hardware to the orbiting laboratory. After Dragon spends approximately

one month attached to the space station, the spacecraft will return to Earth with about 4,200 pounds of cargo and research.

About SpaceX

SpaceX designs, manufactures and launches advanced rockets and spacecraft. The company was founded

in 2002 to revolutionize space technology, with the ultimate goal of enabling people to live on other planets.

It is the only private company capable of returning a spacecraft from low Earth orbit, which it first accomplished in 2010.

- ◆ NASA's Orbiting Carbon Observatory-3 (OCO-3) examines the complex dynamics of Earth's atmospheric carbon cycle by collecting measurements to track variations in a specific type of atmospheric carbon dioxide. Understanding carbon sources can aid in forecasting increased atmospheric heat retention and reduce its long-term risks.
- ◆ The Photobioreactor investigation aims to demonstrate how microalgae can be used together with existing life support systems on the space station to improve recycling of resources. The cultivation of microalgae for food and as part of a life support system to generate oxygen and consume carbon dioxide, could be helpful in future long-duration exploration missions, as it could reduce the amount of consumables required from Earth. ■

6. Shops and Establishments can now stay open 24x7 in Gujarat

The Gujarat government on the state's foundation day, has formally notified the Gujarat Shops and Establishments (Regulation of Employment and Conditions of Service) Act, 2019. It enabled shops and commercial establishments to remain open round the clock. Retail shops and markets, along with malls and food outlets are expected to be the biggest beneficiaries of the amendments in the existing law, which comes into force.

Key Highlights

Under the new provisions, shops and establishments employing less than ten

persons will not require registration. After the amendments, shops and establishments will be spared from annual renewal of registrations as well.

It allowed women to work in night hours with their consent and with condition that the place of employment has certain basic infrastructure with provisions for safety and security.

It further states that any shop or establishment in municipal corporation area, national highway, railway platform, state roadways bus station premises, hospital premises, petrol pumps can remain open 24

hours on any day of the week. However, shops located in the municipality area or along state highways may remain open except from 2 am to 6 am. In other areas, shops located within the district or along minor roads may remain open except from 11 pm to 6 am.

Limiting the working hours to nine, the Act stated that, no worker shall be required or allowed to work in any shop or establishment for more than nine hours in any day and 48 hours a week. No worker shall be compelled to work continuously for more than five hours unless he has been given a break of not less than half-an-hour. ■

7. Zero Pendency Courts Project

A pilot project report by Delhi High Court on backlog of cases has found that the national capital required 43 more judges above the current 143 to clear all pending cases in one year.

Key Highlights

With lesser number of judges, the workload of an individual judge would increase. It is therefore important to arrive at an optimal judge strength to handle the cases pending in the system.

The sessions judges dealing with murder cases took on an average 16 hours to dispose cases within 6.5 months, while fast track courts dealing with rape cases took an average 4.4 hours to dispose cases within 90 days.

The evidence stage forms the most important phase of a case, absence of witnesses during the evidence stage causes a serious impediment to the progress of the case. Also, there was delay in the servicing of summons, especially to outstation parties.

The highest amount of time per hearing on average was spent on the final arguments stage followed by the final order or judgment. A significant amount of time was spent on dictation, researching on case laws etc. before pronouncing the final judgment. Thus, a lot of time is spent on each of the hearings.

As on March 20, 2019, there were 5.5 lakh criminal cases and 1.8 lakh civil cases pending in subordinate courts in Delhi.

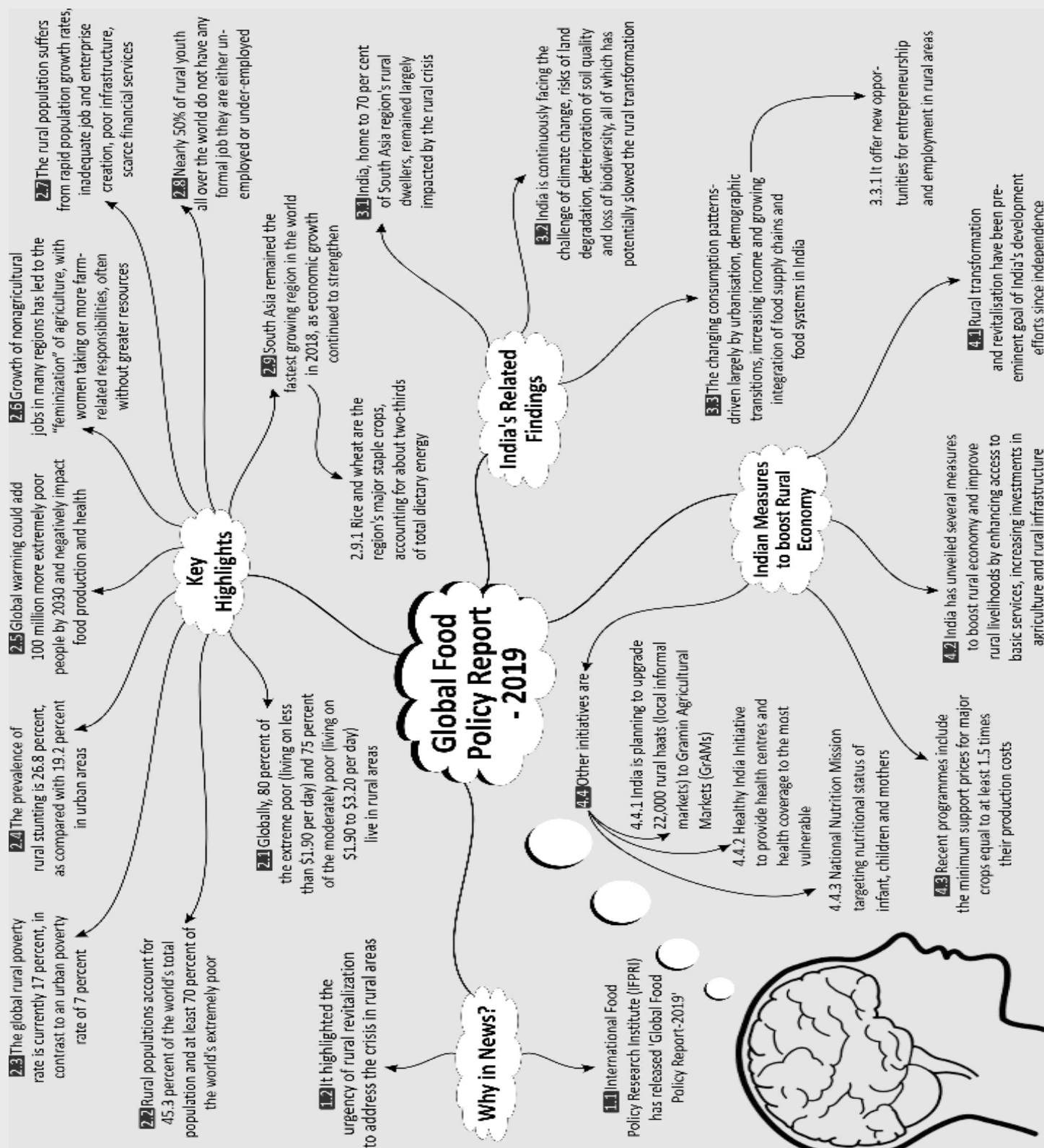
About Zero Pendency Courts Project

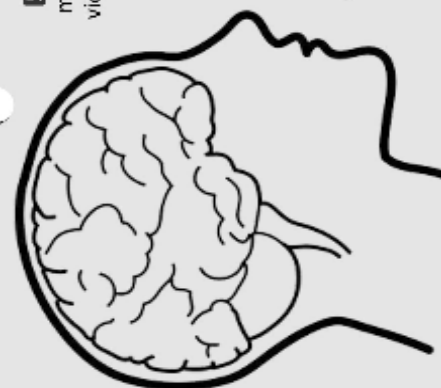
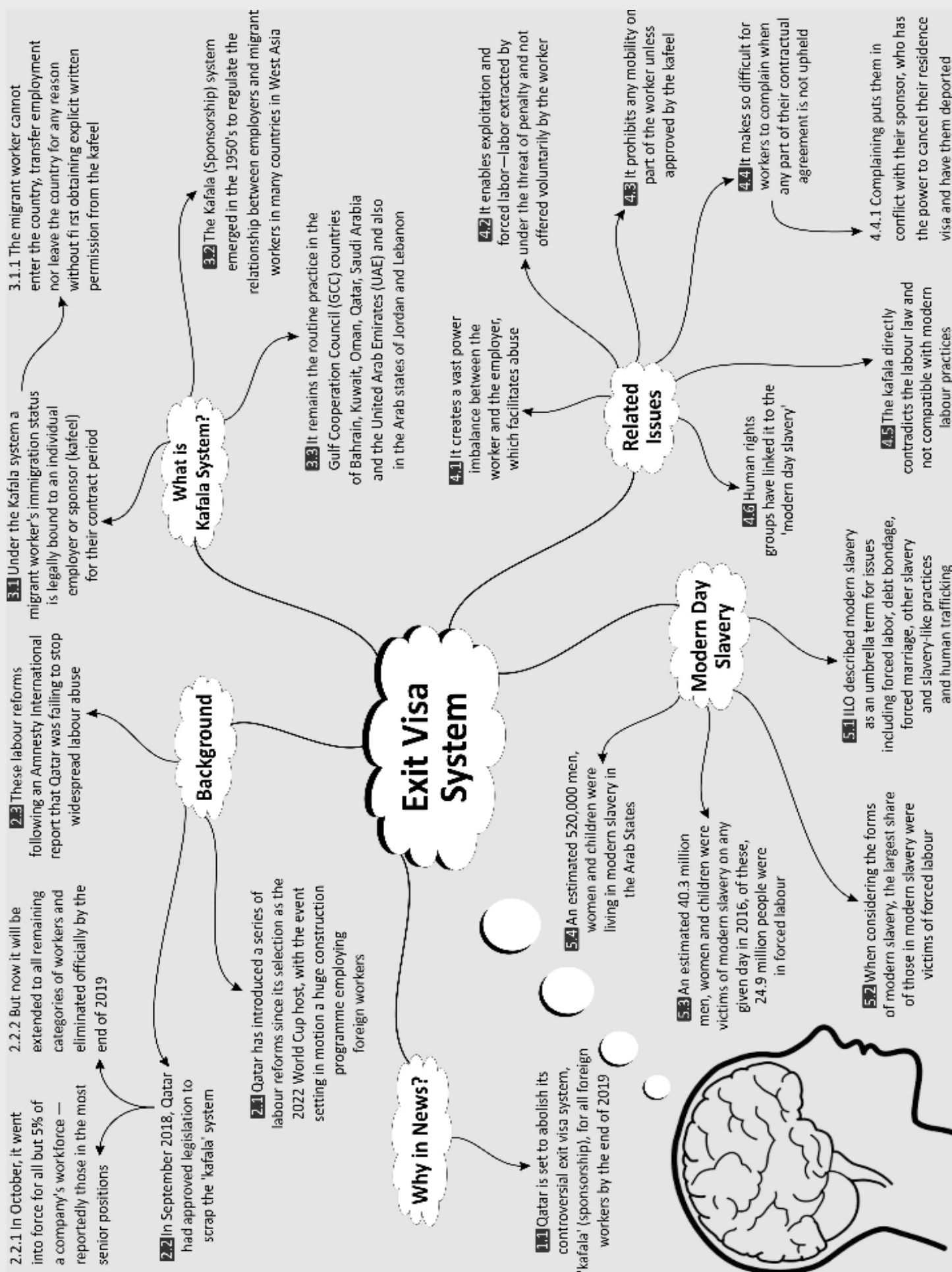
It is one-of-its-kind project in India aimed at studying the life cycle of cases and to come up with ideal timelines for disposal of the cases.

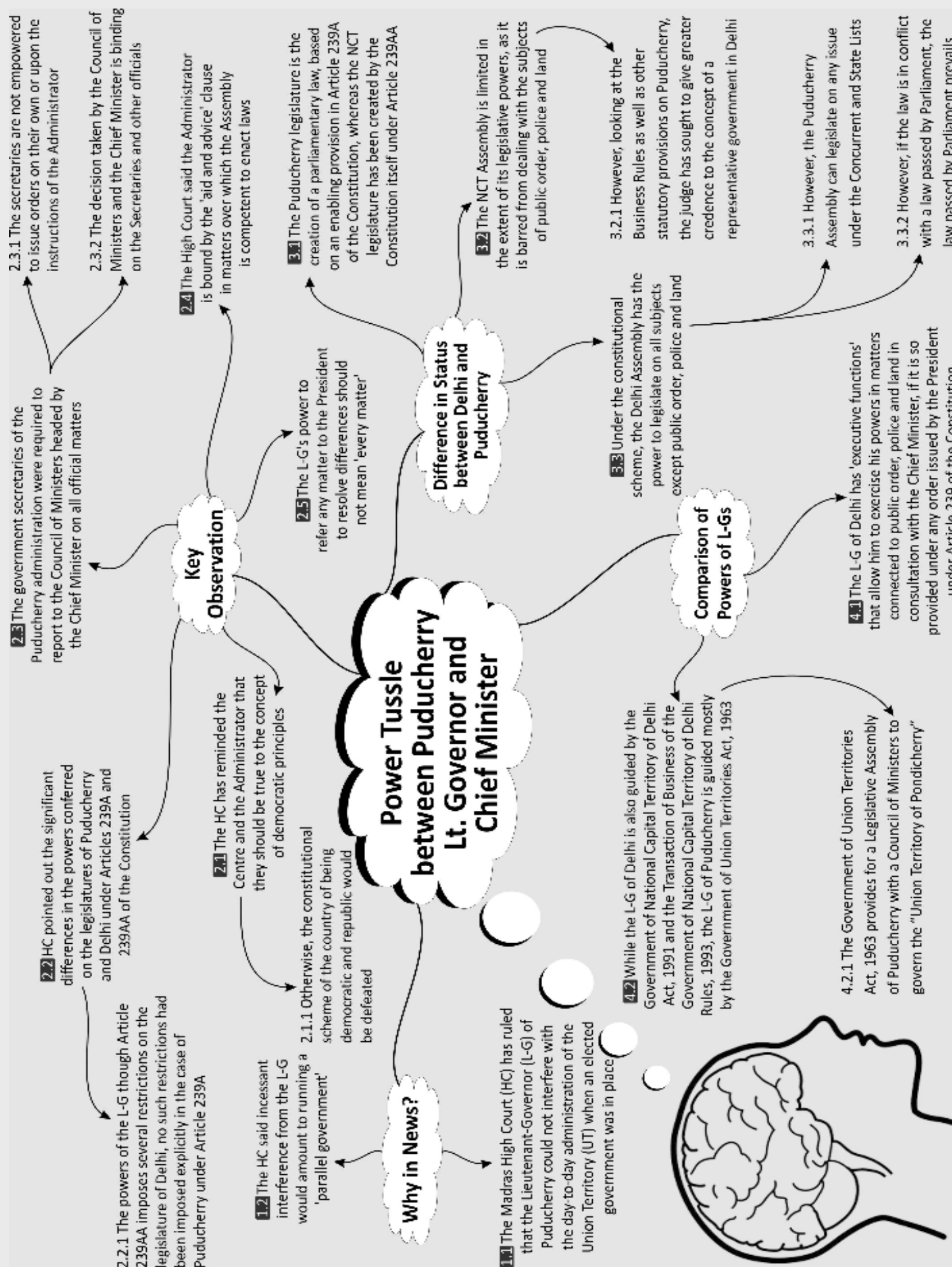
The aim of project is to provide information on the judicial time required to dispose of a case together with the gathering stage wise details in each case.

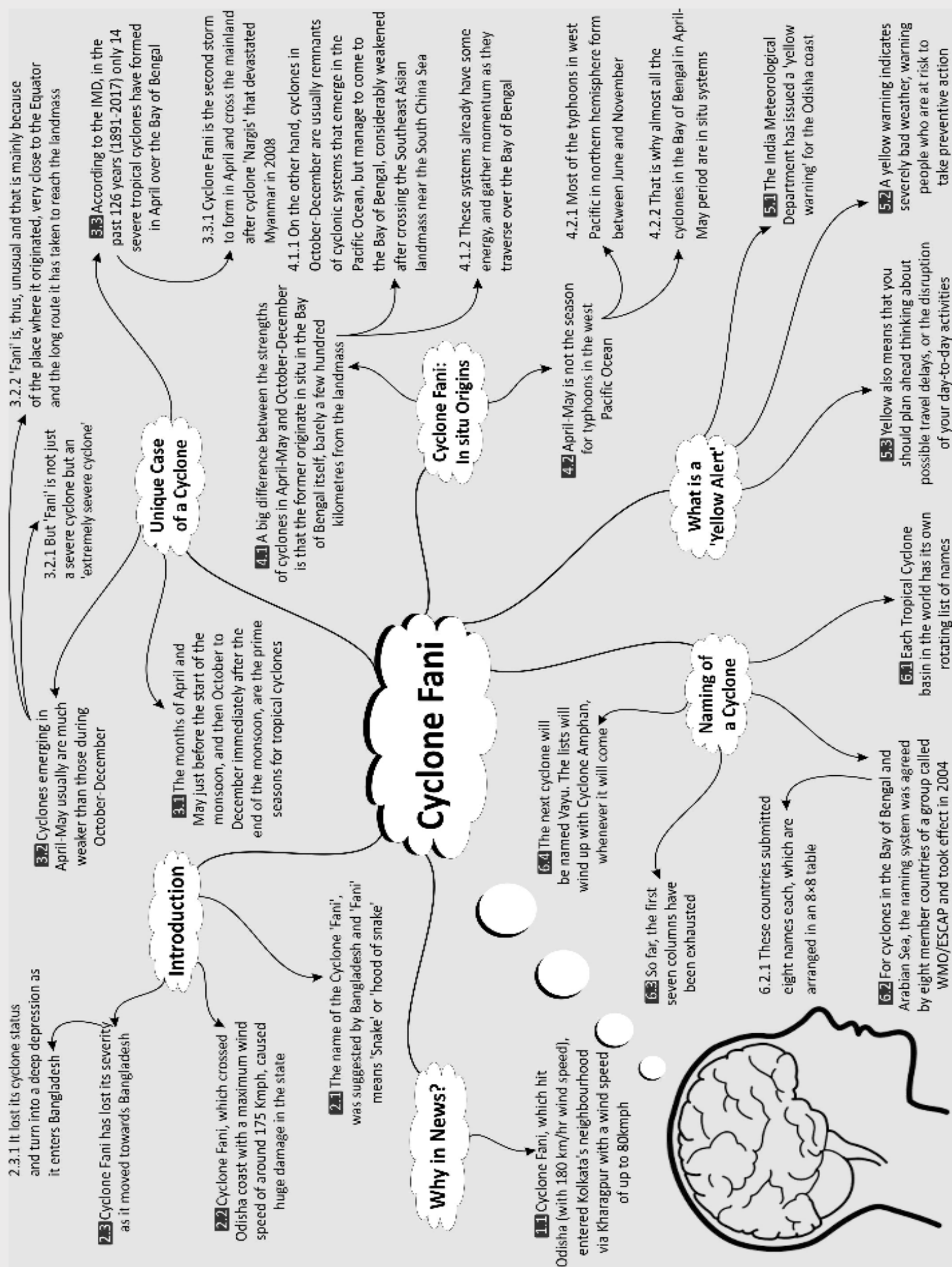
It was undertaken in certain subordinate courts of Delhi to identify benchmarks for different types of cases timelines, number of judges required, case flow management rules and a host of other relevant factors. ■

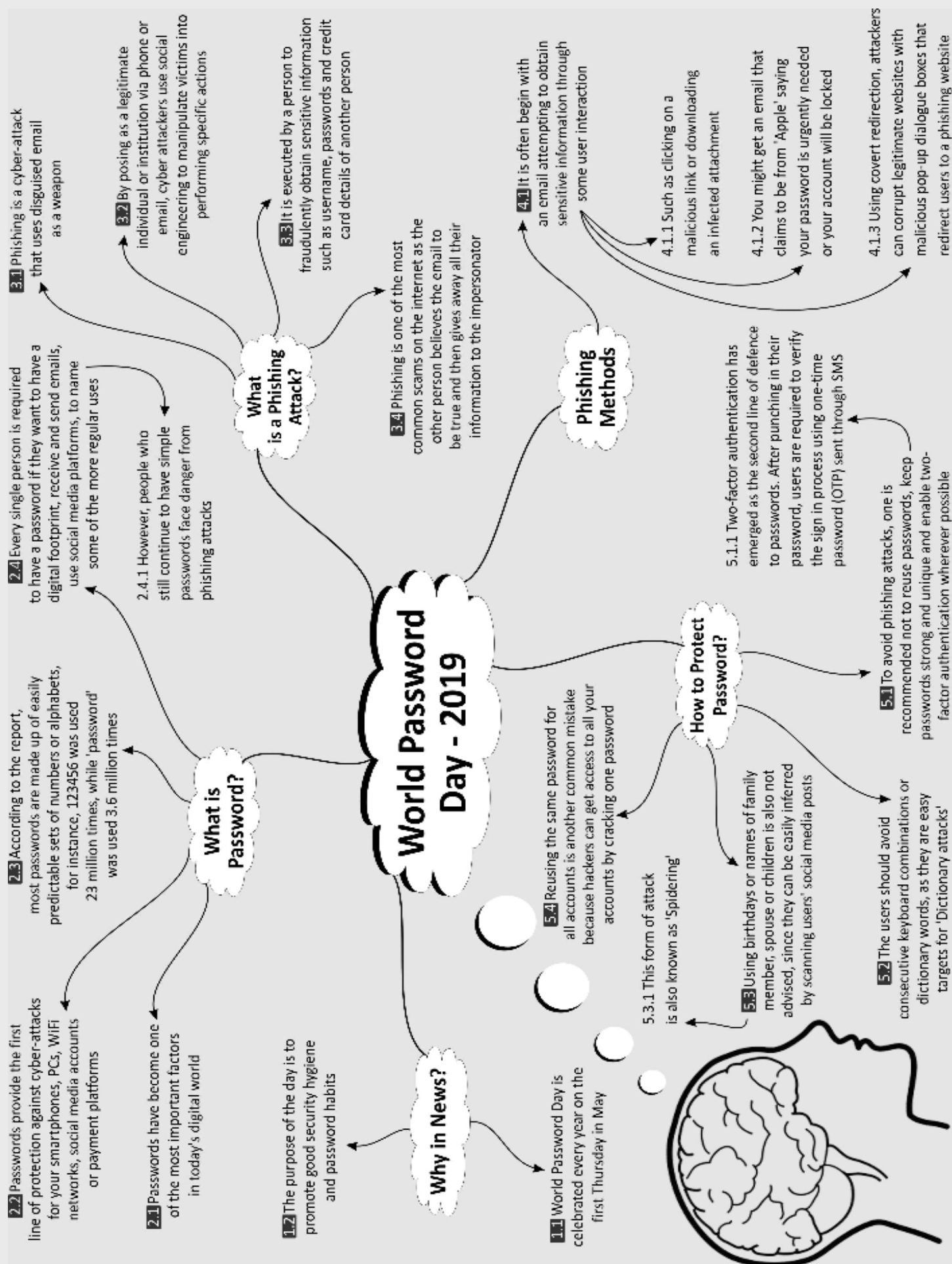
SEVEN BRAIN BOOSTERS

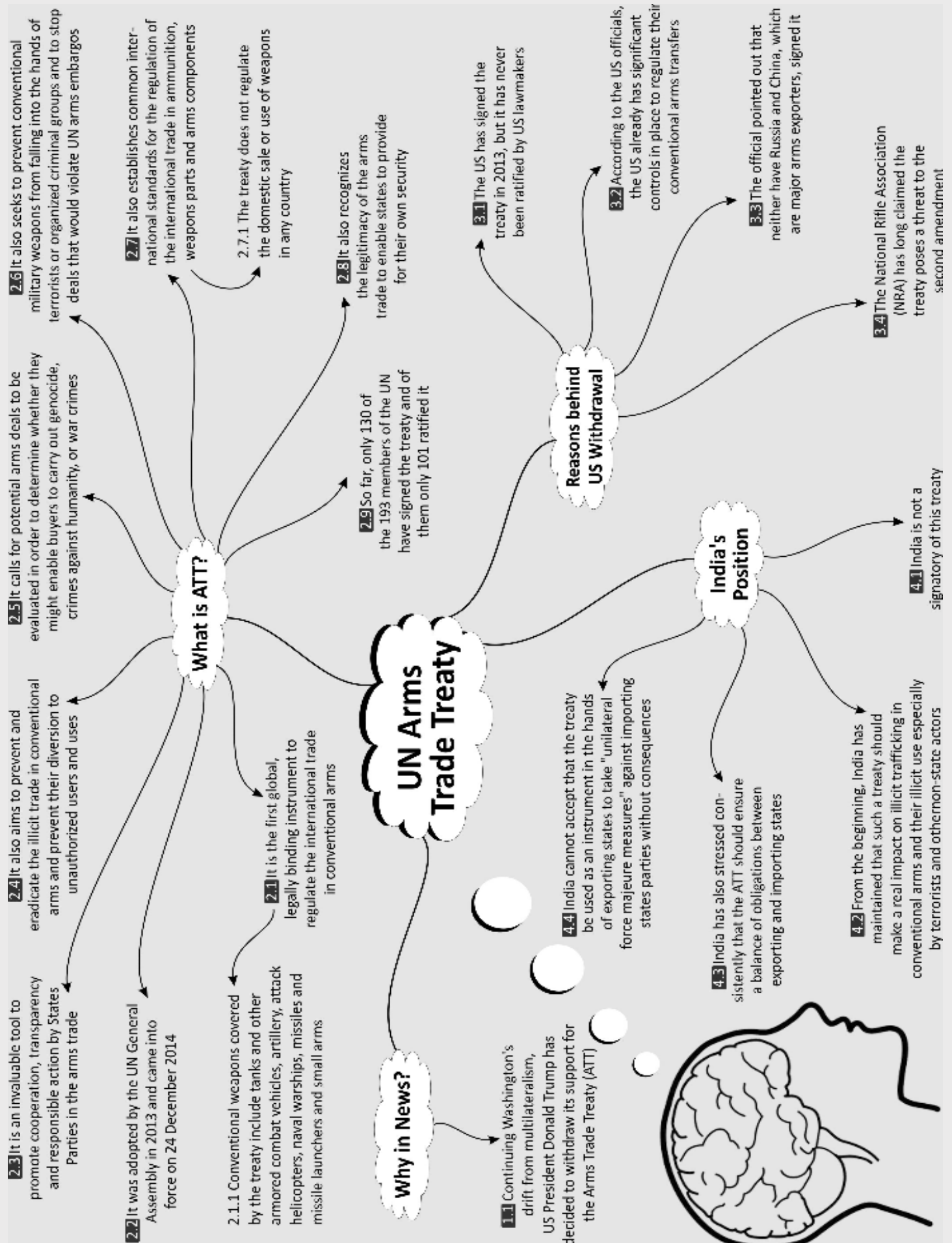


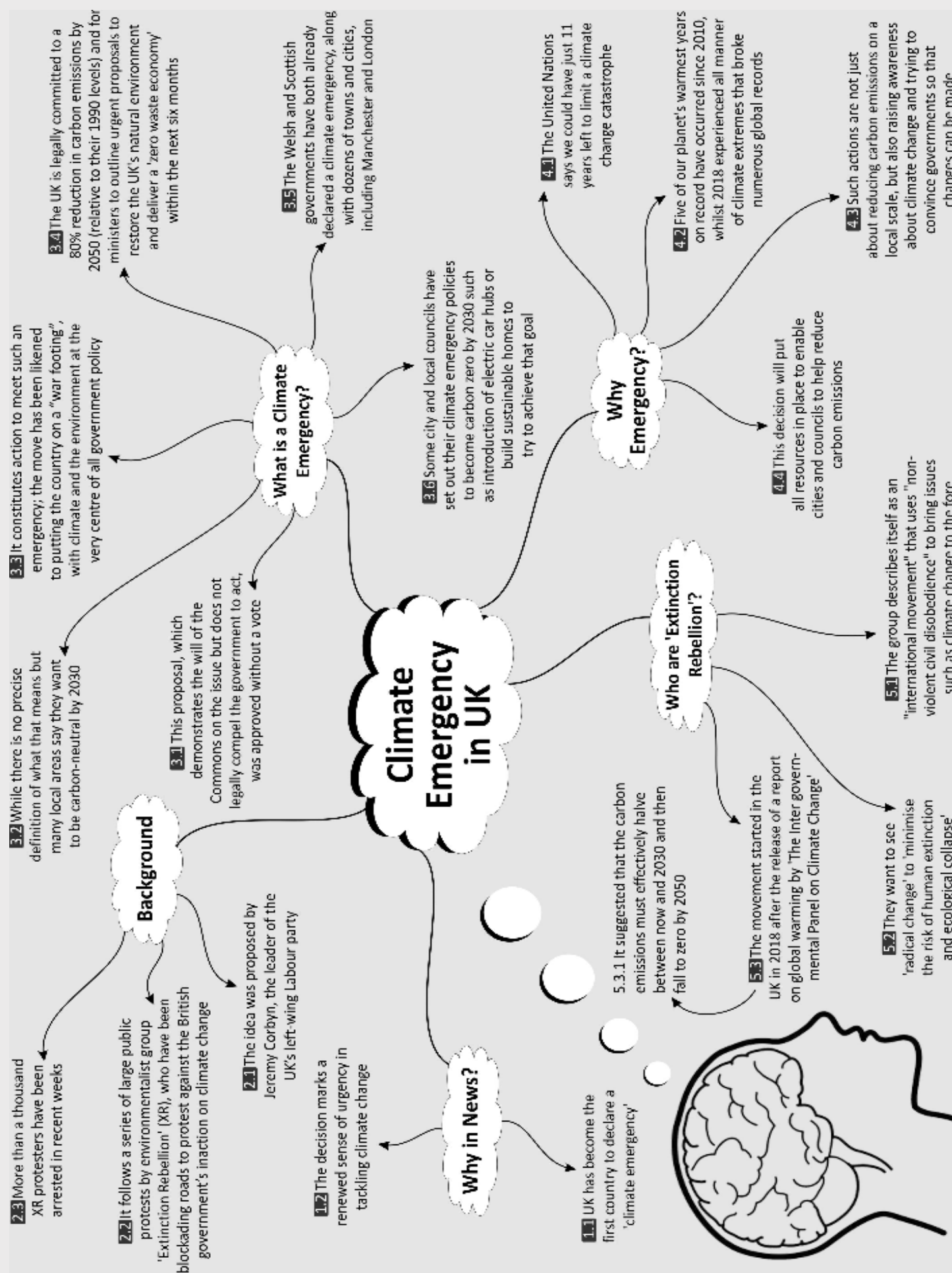












SEVEN MCQ's WITH EXPLANATORY ANSWERS

(Based on Brain Boosters)

Global Food Policy Report - 2019

Q1. Consider the following statements in respect 'Global Food Policy Report - 2019':

1. It has been jointly released by International Food Policy Research Institute and Food and Agriculture Organization.
2. This year edition has highlighted the urgency of rural revitalization to address the crisis in rural areas.

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. International Food Policy Research Institute (IFPRI) has released 'Global Food Policy Report-2019'.

Statement 2 is correct. IFPRI's flagship report reviews the major food policy issues, developments, and decisions of 2018 and considers challenges and opportunities for 2019. It highlighted the urgency of rural revitalization to address a growing crisis in rural areas.

Exit Visa System

Q2. Qatar is set to abolish its controversial exit visa system, 'kafala' (sponsorship). Consider the following statements in this regard:

1. Under the Kafala system a migrant worker's immigration status is legally bound to an individual employer or sponsor (kafeel) for their contract period.
2. Qatar is set to abolish this system for all foreign workers by the end of 2020.

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 Kafala (Sponsorship) system emerged in the 1950's to regulate the relationship between employers and migrant workers in many countries in West Asia. Under the Kafala system a migrant worker's immigration status is legally bound to an individual employer or sponsor(kafeel) for their contract period.

Statement 2 is not correct. Qatar is set to abolish its controversial exit visa system, 'kafala' (sponsorship) for all foreign workers by the end of 2019.

Power Tussle between Puducherry Lt. Governor and Chief Minister

Q3. Consider the following statements:

1. The Puducherry legislature is the creation of a parliamentary law, based on the provision in Article 239A of the Constitution, whereas the NCT Delhi legislature has been created by the Constitution itself under Article 239AA.
2. Under the constitutional scheme, the Delhi Assembly has the power to legislate on all subjects except public order, police and land, however, the Puducherry Assembly can legislate on any issue under the Concurrent and State Lists.

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 Puducherry legislature is the creation of a parliamentary law, based on the provision in Article 239A of the Constitution, whereas the NCT legislature has been created by the Constitution itself under Article 239AA.

Under the constitutional scheme, the Delhi Assembly has the power to legislate on all subjects except public order, police and land, however, the Puducherry Assembly can legislate on any issue under the Concurrent and State Lists.

Cyclone Fani

Q4. Consider the following statements in respect of 'cyclone Fani':

1. Cyclone Fani was an 'extremely severe cyclone'.
2. The months of April and May and then October to December are the prime seasons for tropical cyclones.
3. Cyclones emerging in April-May usually are more powerful than those during October-December.

Which of the statements given above is/are correct?

- | | |
|-----------------|-----------------|
| a) 1 only | b) 2 and 3 only |
| c) 1 and 2 only | d) 1, 2 and 3 |

Answer: (c)

Explanation: Statement 1 is correct. Cyclone Fani has intensified into an extremely severe cyclonic storm. Cyclone Fani, which hit Odisha with 180 km/hr wind speed, entered Kolkata's neighbourhood via Kharagpur with a wind speed of up to 80 km/hr.

Statement 2 is also correct. The months of April and May just before the start of the monsoon, and then October to December immediately after the end of the monsoon, are the prime seasons for tropical cyclones.

Statement 3 is not correct. Cyclones emerging in April-May usually are much weaker than those during October-December.

World Password Day - 2019

Q5. Consider the following statements in respect of 'World Password Day - 2019':

1. World Password Day is celebrated every year on the first Thursday in May.
2. The purpose of the day is to promote good security hygiene and password habits.

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. World Password Day is celebrated every year on the first Thursday in May. The purpose of the day is to promote good security hygiene and password habits. Passwords provide the first line of protection against cyber-attacks for your smartphones, PCs, WiFi networks, social media accounts or payment platforms.

UN Arms Trade Treaty

Q6. Consider the following statements in respect of 'UN Arms Trade Treaty':

1. It is the first global, legally binding instrument to regulate the international trade in conventional arms.
2. Conventional weapons covered by the treaty include tanks and other armored combat vehicles, artillery, attack helicopters, naval warships, missiles and missile launchers and small arms.

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. It was adopted by the UN General Assembly in 2013 and came into force on 24 December 2014. It is the first global, legally binding instrument to regulate the international trade in conventional arms. Conventional weapons covered by the treaty include tanks and other armored combat vehicles, artillery, attack helicopters, naval warships, missiles and missile launchers and small arms.

Climate Emergency in UK

Q7. Consider the following statements in respect of 'climate emergency in UK':

1. The United States of America has become the first country to declare a 'climate emergency'.
2. The move has been likened to putting the country on a "war footing", with climate and the environment at the very centre of all government policy.

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 UK is the first national government to declare such an emergency. The decision marks a renewed sense of urgency in tackling climate change.

Statement 2 is correct. While there is no precise definition of what constitutes action to meet such an emergency, the move has been likened to putting the country on a "war footing", with climate and the environment at the very centre of all government policy, rather than being on the fringe of political decisions.

○○○

SEVEN IMPORTANT FACTS FOR PRELIMS

1. In which state, nearly 1700 years old rare stucco Buddhist sculpture is excavated?
- Telangana
2. Which country was the India's top supplier of crude oil in 2018-19?
- Iraq
3. Who has been awarded the 'Rabindranath Tagore Literary Prize-2019'?
- Rana Dasgupta for his 2010 novel "Solo"
4. Which Indian bank has launched the country's first 'Green Car Loan Scheme' (Electric Vehicle) to encourage customers to buy electric vehicles?
- State Bank of India
5. Which country has placed India on the 'priority watch list' for its alleged poor enforcement of intellectual property (IP) regulations?
- United States of America
6. What is the rank of India in 'Global Talent Competitiveness Index-2019'?
- 80th
7. Which space agency is planning to send a probe to study the Sun in 2020?
- ISRO (Aditya Mission)



SEVEN IMPORTANT HIGHLIGHTS FROM PIB

1. India-Africa Trade Ties

A two-day interaction was organised by the Commerce Ministry and Indian High Commissions and embassies of eleven African countries to strengthen the India-Africa trade ties. African countries present immense opportunities for India with the world's largest land mass, 54 countries, a population growing to be almost equivalent to that of India, huge mineral resources, oil wealth, a youthful population, falling poverty levels and increasing consumption patterns. Thus, Africa has a huge demand for new business models for market entry, stable market access, entrepreneurship and investments in transport, telecom, tourism, financial services, real estate and construction.

This initiative of the Commerce Ministry emphasizes the need for a multipronged strategy for further enhancing trade and investment ties between the two regions. Commerce Ministry recognized that for formulating an effective export strategy it is imperative to engage the Indian business community in Africa for mutual gain for both sides as trade

relations between the people of same origin instill greater confidence amongst trade partners.

Indian Diaspora in the African countries

The Indian community in Africa is playing a vital role in all fields like politics, business and education. As per the latest available estimates the current strength of the Indian Diaspora in the African countries is 2.8 million out of those 2.5 million are PIOs and rest 220967 are NRIs. Total overseas Indians are 30.83 million of which 17.83 million are PIOs and 13 million are NRIs. Indian Diaspora in Africa constitutes 9.11% of the total Diaspora of India.

India- Africa Trade Relation

India's total trade with the African region during 2017-18 was USD 62.69 billion (8.15% of India's total trade with the World). India's share of exports to African countries as a percentage of India's total exports to the world was of the order of 8.21% in 2017-18. Africa region's share in India's total imports from the World accounted for 8.12% in 2017-18.

2. INS Ranjit

INS Ranjit, a Rajput class destroyer was decommissioned at Naval Dockyard, Visakhapatnam culminating a glorious era on 06 May 19. The ship commissioned on 15 September 1983 in erstwhile USSR has rendered yeoman service to the nation for 36 years. The ship since her commissioning has sailed for 2190 days covering a distance of over 7,43,000 nautical miles which is equivalent to navigating around the world 35 times and 3.5 times the distance from Earth to Moon.

The ship has been at the forefront of major naval operations and has the distinction of serving on both Eastern and Western seaboard. Apart from various naval operations like 'Operation Talwar' and various multinational exercises, the ship has also been a flag bearer of the Indian Navy's benign role by participating in relief operations post Tsunami in 2004 and Hud-hud on 2014. In recognition of the service rendered by the ship to the nation, the ship was awarded Unit Citations by the Chief of Naval Staff in 2003-04 and in 2009-10.

About Destroyer Ships

These ships are packed with an array of state-of-the-art weapons and sensors, including multi-functional surveillance radars and vertically launched missile system for long distance engagement of shore, sea-based and air targets. Recently, Indian Navy has launched the third ship of 'Project 15B', a guided missile destroyer 'INS Imphal'.

Eleven destroyers from three classes are in active service. A total of three Kolkata-class ships are currently in service with the Indian Navy. The Kolkata-class destroyers were preceded by the Delhi-class destroyer which entered service with the 1997 of its lead ship, INS Delhi. The Delhi class were the first destroyers built in India. The Rajput-class destroyers, which preceded the Delhi class, consists of five ships built in the Soviet Union and were commissioned from 1980 to 1990.

3. People in Public Life must Live up to the Aspirations of People

The Vice President, Shri M. Venkaiah Naidu has called upon public representatives to always strive for fulfilling the aspirations of the people and uphold the dignity of institutions they represent. Public representatives shall fulfill the responsibility bestowed upon them by people and make optimum use of their tenure as MPs, MLAs and members of local bodies in nation-building.

Key Highlights

- ◆ All those in public life to raise matters of crucial importance such as agriculture, education, rural development, healthcare and effective implementation of schemes.
- ◆ All political parties, members of parliament and legislators need to reorient their approach towards making a constructive role and there is every need to raise the level of debate in legislatures. It is the sacred duty of public representatives to maintain the sanctity of institutions such as Parliament and state legislatures.
- ◆ On the concern over the increasing disruptions of proceedings of parliament and assemblies, all political parties to evolve a code of conduct for their members ensure that meaningful debates take place in legislatures.
- ◆ Media should highlight constructive debate on crucial issues concerning the people, especially those living in remote areas.

4. 750th Birth Anniversary of Sri Vedanta Desikan

The Vice President, Shri. M. Venkaiah Naidu has released a postage stamp to commemorate the 750th birth anniversary of Sri Vedanta Desikan. Initiatives like bringing out commemorative postage stamps were not only meant to pay tribute to the great contributions of visionaries like Sri Vedanta Desikan but also aimed at inspiring our younger generation to follow in their footsteps.

About Sri Vedanta Desikan

- ◆ Sri Vedanta Desikan is one of the most prominent preceptors in the Srivaishnava tradition and one of the most effulgent luminaries to have graced this land.
- ◆ He had authored brilliant poems, prose, drama, epics, commentaries, scientific texts and philosophical treatises in Sanskrit, Tamil, Prakrit and Manipravalam.
- ◆ Vedanta Desikan was much more than a spiritual teacher. He was a multi-faceted personality-- a scientist, a logician, a mathematician, a sculptor, a civil engineer, a poet, a literary genius, a linguist, a geologist, a dietician, a behavioural scientist, a military strategist and much more.
- ◆ He was awarded many titles for his astonishingly vast range of achievements. He was celebrated as 'sarva-tantra-svatantra' or master of all arts and crafts; awarded the title 'kavi tarkika-kesari', the lion amongst poets and logicians; and glorified as 'ramanuja-daya-patram', the recipient of Ramanuja's blessings.
- ◆ Vedanta Desikan rejected the offer of joining the court of the King of Vijayanagara and considered that the greatest treasure he had was the grace of the Lord.
- ◆ His magnum opus, the Rahasya Traya Sara, is a masterly treatise on Prapatti or surrendering oneself to the divine.
- ◆ His masterpiece, Paduka Sahasram, reveals his poetic eloquence and his mathematical ingenuity. In two verses in this collection, Sri Vedanta Desikan gave a solution to a mathematical problem that was solved five centuries later by another mathematician, Leonard Euler.

◆ Desikan showed his knowledge of the arts and sciences through other works such as Silpartha-saram, a treatise on sculpture, and Bhugola-nirnayam – a research text on geography.

◆ Taking cues from the Vedic scriptures, Vedanta Desikan authored Aahaara Niyamam that detailed how different food items help in maintaining a healthy mind and a disease-free life.

◆ His 'Subhashita Neevi' contains a fund of moral and ethical advice which is relevant and practical.



5. Centre of Excellence for Waste to Wealth Technologies

To commemorate the 150th birth anniversary of Mahatma Gandhi, the Office of the Principal Scientific Adviser (PSA) to the government of India and Indian Institute of Technology Delhi (IIT Delhi) have come together to bring the best of science and technology to implement waste management in India.

Key Highlights

The immediate objective is to implement technologies that are available with various national and international academies, industries, research laboratories and other agencies by way of setting up pilot projects on-site effectively and successfully, and demonstrating the proof of concept of the technology under Indian condition.

The long-term goal is to create circular economic models for waste management, by leveraging big data analytics and frontier technologies to streamline waste in India.

The overall outcomes would involve treating waste and generating different forms of energy, thereby making India a waste free nation, with zero greenhouse gas emission and no health hazard. Under the initiative, a waste to wealth programme management centre will also be set up at IIT Delhi.

About Waste to Wealth Mission

The waste to wealth mission project has been approved under the recently constituted Prime Minister's Science Technology and Innovation Advisory Council (PM-STIAC), which is an overarching body for assessment, creation and implementation of major scientific, technology and innovation interventions for India. The partnership will provide an effective platform for stakeholders to bring together integrated approaches for effective recycle, reuse and resource recovery of waste.

The Office of the PSA

The office of the PSA acts as a 'think-tank' and 'action-tank' for science, technology and innovation activities. The office plays a catalytic and synergistic role to strongly connect government ministry, academia and industry, to evolve relevant policies, make recommendations for the relevant scientific departments and ministries and implement scientific interventions in various sectors of national priority.

6. ICAT - A World Class Automotive Testing Centre

Creation of new automotive test centres in the country under NATRiP project, is an important step forward by the government to support the need of the automotive industry in the backdrop of tightening regulatory framework and technology shift driven by market forces. The International Centre for Automotive Technology (ICAT) is an important element of the automotive sector, with its world-class infrastructure and domain expertise providing services in development, testing, validation and homologation.

About ICAT

ICAT, Manesar, located in the northern automotive hub of India, is a leading world class automotive testing, certification and R&D service provider under the aegis of National Automotive Testing and R&D Infrastructure Project (NATRiP). ICAT continues its



endeavour towards knowledge sharing and dissemination, through seminars and events, on important topics

like Power Train, Emission, HEV and EV technology, NVH, Crash, Lighting, Inspection & Certification and Fatigue.

As India moves towards adopting complete electric mobility by 2030, ICAT's Power Train lab/ COE, EMC lab and Automotive Electrical and Electronics labs have started rendering testing and developmental services in this domain. With Centres of Excellence (CoE) in Component, Powertrain, NVH and Tyre, ICAT intends to eventually transform it into an automotive product development centre.

About NATRiP

It is the largest and one of the most significant initiatives in automotive sector so far, represents a unique joining of hands between the government of India, a number of state governments and Indian automotive industry to create a state of the art testing, validation and R&D infrastructure in the country.

It aims at creating core global competencies in automotive sector in India and facilitate seamless integration of Indian automotive industry with the world as also to position the country prominently on the global automotive map.

The automotive industry is the sunshine industry in India contributing to over 7.5% to country's GDP.

7. Modules of Chandrayaan-2 Mission

All modules of India's second moon mission 'Chandrayaan-2', namely Orbiter, Lander (Vikram) & Rover (Pragyan) are getting ready for the launch during the window of July 09 to July 16, 2019, with an expected Moon landing on September 06, 2019.

The Orbiter and Lander modules will be interfaced mechanically and stacked together as an integrated module and accommodated inside the GSLV MK-III launch vehicle.

The Rover is housed inside the Lander. After launch into Earth bound orbit by GSLV MK-III, the integrated module will reach Moon orbit using Orbiter propulsion module. Subsequently, Lander will separate from the Orbiter and soft

land at the predetermined site close to lunar South Pole. Further, the Rover will roll out for carrying out scientific experiments on the lunar surface. Instruments are also mounted on Lander and Orbiter for carrying out scientific experiments.

Unlike the first lunar mission in October 2008, which was launched using PSLV rocket and involved only orbiting the moon, Chandrayaan 2 would attempt a soft landing the lunar surface.

The wheeled rover would roll out for carrying out scientific experiments on the lunar surface. Instruments are also mounted on Lander and Orbiter for carrying out scientific experiments. The data would be relayed to earth.



Significance

The mission would land on the southern pole of the moon, which has not been explored much before by any of the countries. The landing of the craft near the lunar south pole would be historically significant as it would give ISRO the opportunity to name that site on the moon.

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SEVEN IMPORTANT CONCEPTS THROUGH GRAPHICS

1. Tea and Coffee



Key Facts

Tea

- Tea is the dried leaf of a bush and most important beverage crop of India.
- Tea bush is a tropical and sub-tropical plant and thrives well in hot and humid climate.
- There is a very close relation between climate, the yield and the quality of tea. The ideal temperature for its growth is 20°-30°C and temperatures above 35°C and below 10°C are harmful for the bush.
- It requires 150-300 cm annual rainfall which should be well distributed throughout the year.
- While prolonged dry spell is harmful for tea; high humidity, heavy dew and morning fog favour rapid development of young leaves.
- Tea bush grows well in well drained, deep, friable loams. However, virgin forest soils rich in humus and iron content are considered to be the best soils for tea plantations. Relatively large proportion of phosphorus and potash in the soil gives special flavour to tea.
- Major tea producing states are Assam, West Bengal (hills of Darjeeling and Jalpaiguri districts), Tamil Nadu and Kerala. Apart from these, Himachal Pradesh, Uttarakhand, Meghalaya, Andhra Pradesh and Tripura are also tea-producing states in the country.

Coffee

- Coffee is the second most important beverage crop of India next only to tea.
- Coffee plant requires hot and humid climate with temperature varying between 15°C and 28 °C and rainfall from 150 to 250 cm.
- Stagnant water is harmful and this crop is grown on hill slopes at elevations from 600 to 1,600 metres above sea level.
- Well drained, rich friable loams containing good deal of humus and minerals like iron and calcium are ideal for coffee cultivation.
- The soil must be properly manured to retain and replenish fertility and to increase productivity.
- 'Coffee Arabica' and 'Coffee Robusta' are the two main varieties of coffee grown in India.
- Initially its cultivation was introduced on the Baba Budan Hills and even today its cultivation is confined to the Nilgiris in Karnataka, Kerala and Tamil Nadu.

2. Rice



Key Facts

- It is a kharif crop.
- It is grown under varying conditions in India from 8° to 25° N latitude and from sea level to about 2,500 metre altitude.
- It is a tropical plant and requires high heat and high humidity for its successful growth.
- The temperature should be fairly high at mean monthly of 24°C.
- The average annual rainfall required by rice is 100-150 cm.
- Rice can be grown on a variety of soils including silts, loams and gravels and can tolerate acidic as well as alkaline soils. However, deep fertile clayey or loamy soils which can be easily puddled into mud and develop cracks on drying are considered ideal for raising this crop.
- Such soil requirements make it dominantly a crop of river valleys, flood plains, deltas and coastal plains and a dominant crop there. High-level loams and lighter soils can be used for quick maturing varieties of rice. Black lava soil is also useful for rice cultivation.
- Rice is grown in varying degrees in almost all parts of the country except in higher parts of the Himalayan ranges exceeding 2500 metres in altitude, desert region of Rajasthan, Kuchchh-Saurashtra, Malwa and Marathwada regions due to various geographical constraints.
- It is grown in the plains of North and North-eastern India, coastal areas, the deltaic regions and parts of Peninsular plateau.

3. Wheat

Key Facts

- It is a rabi crop.
- It is the main food crop, in North and North-western part of the country.
- It is sown in the beginning of winter and is harvested in the beginning of summer. The time of sowing and harvesting differs in different regions due to climatic variations.
- Wheat is primarily a crop of mid-latitude grasslands and requires a cool climate with moderate rainfall. The ideal wheat climate has winter temperature varying from 10° to 15°C and summer temperature varying from 21°C to 26°C.
- It requires a cool growing season and a bright sunshine at the time of ripening.
- It requires 50 to 75 cm of annual rainfall evenly distributed over the growing season.
- It can be grown in a variety of soils. Well drained fertile, friable loams and clay loams are the best suited soils for wheat cultivation. It also grows well in the black soil of the Deccan plateau.
- There are two important wheat-growing zones in the country – the Ganga-Satluj plains in the North-west and black soil region of the Deccan.
- The major wheat-producing states are Punjab, Haryana, Uttar Pradesh, Bihar, Rajasthan and parts of Madhya Pradesh.



4. Bajra



Key Facts

- It is a kharif crop which is sown between May and September and harvested between October and February/March.
- It is sown either as a pure or mixed crop with cotton, jowar and ragi.
- Bajra is the Second most important millet which is used as food in drier parts of the country. It is also widely used as fodder as its stalks are fed to cattle.
- It is sown either as a pure or mixed crop with cotton, jowar and ragi.
- It is a rainfed crop and is seldom irrigated.
- Bajra is a crop of dry and warm climate and is grown in areas of 40-50 cm of annual rainfall. It seldom grows in those areas where the annual rainfall exceeds 100 cm.
- The ideal temperature for its growth is 25°-30°C. Bright sunshine after light showers is very useful in early stages of its growth.
- Bajra can be grown on poor light sandy soils, black and red soils and on upland gravelly soils.
- Major Bajra producing States are Rajasthan, Uttar Pradesh, Maharashtra, Gujarat and Haryana.

5. Jowar and Ragi



Key Facts

Jowar

- Jowar is grown both as kharif as well as a rabi crop. As a kharif crop, it grows well in areas having mean monthly temperature of 26°C to 33°C. However, the rabi crop can be grown in areas where the mean monthly temperature does not fall below 16°C.
- It requires more than 30 cm rainfall during the growing period and does not grow where the rainfall exceeds 100 cm.
- Jowar is par excellence a rainfed crop of dry farming areas where irrigation is not used.
- Though it can be grown in a variety of soils including loamy and sandy soils, clayey deep regur and alluvium are the best suited soils for jowar.
- Major jowar producing states are Maharashtra, Karnataka, Andhra Pradesh and Madhya Pradesh.

Ragi

- Ragi is another important millet mainly grown in drier parts of South India and of North India.
- It is rainfed kharif crop which is sown between May and August and harvested between September and January.
- Ragi is very rich in iron, calcium, other micro nutrients and roughage.
- It requires 20°-30°C temperature and 50-100 cm rainfall.
- It is raised on red, light black and sandy loams as well as on well drained alluvial loams.

6. Maize and Barley

Key Facts

Maize

- Maize provides food and is used for obtaining starch and glucose.
- It is mainly a rainfed kharif crop which is sown just before the onset of monsoon and is harvested after retreat of the monsoon.
- In some states like Bihar maize is grown in rabi season also.
- It requires 50-100 cm of rainfall and it cannot be grown in areas of more than 100 cm rainfall.
- Long dry spell during the rainy season is harmful for maize. Sunshine after showers is very useful for maize. Cool and dry weather helps in ripening of the grain.
- This crop usually grows well under temperatures varying from 21°C to 27°C, although it can tolerate temperatures as high as 35°C.
- Fertile well-drained alluvial or red loams free from coarse materials and rich in nitrogen are the best soils for its successful growth.
- Major maize-producing states are Karnataka, Uttar Pradesh, Bihar, Andhra Pradesh, Telangana and Madhya Pradesh.

Barley

- Barley does not tolerate high heat and high humidity and thrives well in areas where the temperature is 10°-15°C for about three months in a year.
- It requires 75 to 100 cm of rainfall.
- Light clay and alluvial soils are best suited for its cultivation.
- It is grown as a rabi crop in great plains and valleys of the Western Himalayas.



7. Pulses

Key Facts

- India is the largest producer as well as the consumer of pulses in the world.
- These are the major source of protein in a vegetarian diet.
- Pulses have the capacity to fix atmospheric nitrogen in the soil and are normally rotated with other crops to maintain or restore soil fertility.
- Major pulses that are grown in India are tur (arhar), urad, moong, masur, peas and gram.
- Pulses need less moisture and survive even in dry conditions.
- For example gram prefers mild cool and comparatively dry climate with 20°-25° C temperature and 40-50 cm rainfall and grows well in loamy soils.
- Another example of pulses is tur, chiefly grown as kharif crop but in the areas of mild winters it is grown as a rabi crop also.
 - It is grown as dry crop mixed with other kharif crops like jowar, bajra, ragi, etc. and seldom grown as single crop.
 - Its conditions of growth are more or less similar to those of other pulses and millets.
- Major pulse producing states in India are Madhya Pradesh, Uttar Pradesh, Rajasthan, Maharashtra, Gujarat and Karnataka.





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**19
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Test-1- (9:30 am to 11:30 am)

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**16
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**30
JUNE**

Test-4 - (9:30 am to 11:30 am)

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**14
JULY**

Test-5- (9:30 am to 11:30 am)

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**21
JULY**

Test-7- (9:30 am to 11:30 am)

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**28
JULY**

Test-8- (9:30 am to 11:30 am)

सामान्य अध्ययन-I/General Studies-I

**4
AUG.**

Test-9 - (9:30 am to 11:30 am)

सामान्य अध्ययन-I/General Studies-I

**11
AUG.**

Test-10- (9:30 am to 11:30 am)

सामान्य अध्ययन-I/General Studies-I

**18
AUG.**

Test-11- (9:30 am to 11:30 am)

सामान्य अध्ययन-I/General Studies-I

Test-12- (12:00 noon to 2:00 am)

सामान्य अध्ययन-II/General Studies-II

**25
AUG.**

Test-13- (9:30 am to 11:30 am)

सामान्य अध्ययन-I/General Studies-I

**01
SEP.**

Test-14- (9:30 am to 11:30 am)

सामान्य अध्ययन-I/General Studies-I

**08
SEP.**

Test-15 - (9:30 am to 11:30 am)

सामान्य अध्ययन-I/General Studies-I

**15
SEP.**

Test-16- (9:30 am to 11:30 am)

सामान्य अध्ययन-I/General Studies-I

**22
SEP.**

Test-17- (9:30 am to 11:30 am)

सामान्य अध्ययन-I/General Studies-I

Test-18- (12:00 noon to 2:00 am)

सामान्य अध्ययन-II/General Studies-II

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AN INTRODUCTION

Dhyeya IAS, a decade old institution, was founded by Mr. Vinay Singh and Mr. Q.H. Khan. Ever since its emergence it has unparalleled track record of success. Today, it stands tall among the reputed institutes providing coaching for Civil Services Examination (CSE). The institute has been very successful in making potential realize their dreams which is evident from success stories of the previous years.

Quite a large number of students desirous of building a career for themselves are absolutely less equipped for the fairly tough competitive tests they have to appear in. Several others, who have a brilliant academic career, do not know that competitive exams are vastly different from academic examination and call for a systematic and scientifically planned guidance by a team of experts. Here one single move invariably put one ahead of many others who lag behind. Dhyeya IAS is manned with qualified & experienced faculties besides especially designed study material that helps the students in achieving the desired goal.

Civil Services Exam requires knowledge base of specified subjects. These subjects though taught in schools and colleges are not necessarily oriented towards the exam approach. Coaching classes at Dhyeya IAS are different from classes conducted in schools and colleges with respect to their orientation. Classes are targeted towards the particular exam. Classroom guidance at Dhyeya IAS is about improving the individual's capacity to focus, learn and innovate as we are comfortably aware of the fact that you can't teach a person anything you can only help him find it within himself.

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Distance learning Programme, DSDL, primarily caters the need for those who are unable to come to metros for economic or family reason but have ardent desire to become a civil servant. Simultaneously, it also suits to the need of working professionals, who are unable to join regular classes due to increase in work load or places of their posting. The principal characteristic of our distance learning is that the student does not need to be present in a classroom in order to participate in the instruction. It aims to create and provide access to learning when the source of information and the learners are separated by time and distance. Realizing the difficulties faced by aspirants of distant areas, especially working candidates, in making use of the institute's classroom guidance programme, distance learning system is being provided in General Studies. The distance learning material is comprehensive, concise and exam-oriented in nature. Its aim is to make available almost all the relevant material on a subject at one place. Materials on all topics of General Studies have been prepared in such a way that, not even a single point will be missing. In other words, you will get all points, which are otherwise to be taken from 6-10 books available in the market / library. That means, DSDL study material is undoubtedly the most comprehensive and that will definitely give you added advantage in your Preliminary as well as Main Examination. These materials are not available in any book store or library. These materials have been prepared exclusively for the use of our students. We believe in our quality and commitment towards making these notes indispensable for any student preparing for Civil Services Examination. We adhere all pillars of Distance education.

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