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OOKUL Foundation to Apex

Why PETA wants to ban two age-old Assamese traditions

#BuffaloFight #BulbuliFight #MaghBihu #Assam #PETA #AWBI #ArtandCulture #GS1

The Assam government's attempt to revive traditional practices of buffalo and bulbul (songbird) fighting during Magh Bihu has come up against a legal challenge by People for Ethical Treatment of Animals (PETA) in the Gauhati High Court, which admitted petitions by PETA India seeking a ban on both.

An age-old tradition

These fights are part of the folk culture associated with the Assamese winter harvest festival of Magh Bihu, which takes place in January, at the same time as harvest festivals in other parts of the country such as Makar Sankranti, Pongal and Lohri.

Buffalo fights are held in different parts of Assam during Magh Bihu, with Ahatguri in Nagaon district being the biggest centre. There, the fights been conducted for many decades by the Ahatguri Anchalik Moh-jooj aru Bhogali Utsav Udjapan Samiti, drawing huge crowds. **Bulbul fights, on the other hand, are an attraction at the Hayagriv Madhab Mandir in Hajo, around 30 km from Gauhati**. Participants rear birds for around two weeks before Bihu, before they are made to fight until one emerges stronger.

The **practice is very old, we cannot really say when it started. But it was held with great pomp by the Ahom rulers.**

Discontinued after SC ruling

The **fights had been stopped on the heels of the Supreme Court's 2014 judgement, which forbid the use of bulls as performing animals in jallikattu events and bullock-cart races in Tamil Nadu, Maharashtra or anywhere else in the country.**

The Court also directed the Animal Welfare Board of India (AWBI) to ensure that "the person-incharge or care of the animal shall not incite any animal to fight against a human being or another animal." In January 2015, the AWBI wrote to the Assam government seeking an end to animal and bird fights during Bihu celebrations, following which the government directed district administrations to prevent them.

This was not without resistance. Buffalo fights continued to be held in some quarters in defiance of the prohibition, and the management of the Hayagriv Madhab Temple challenged the order in the Gauhati High Court.

After SC clears path, Assam govt releases SOP to conduct fights

The Supreme Court May last year overruled its 2014 judgement, upholding amendments made by Tamil Nadu, Maharashtra and Karnataka governments to the Prevention of Cruelty to Animals Act 1960 to allow jallikattu, kambala and bullock cart racing. Subsequently, in December, the **Assam Cabinet gave a go-ahead for the framing of SOPs for the conduct of buffalo and bulbul fights without "deliberate torture or cruelty" to the animals.**

The SOPs which were subsequently released specified that the **fights will only be permitted in places where they have been "traditionally conducted" for the last 25 years, and that moh juj (buffalo fights) will only be allowed between January 15 and January 25.** The moh juj guidelines prohibit human inflicted injuries, and ban the use of intoxicating or performance enhancing drugs, as well as sharp instruments to instigate the animals. The bulbul fight SOPs require the organisers to ensure that the birds are released in the open "in perfect condition" at the end of the game. **The SOPs state that any organization violating the stipulations will face a ban for the next five years.**

PETA's challenge

PETA India has now filed two linked petitions before the Gauhati High Court seeking the prohibition of both activities, as well an interim stay preventing any such fights from taking place during the course of the proceedings.

In these petitions, they state that they investigated the events in both Ahatguri and Hajo this year. The claimed that in Ahatguri, in order to instigate buffalos to fight, owners slapped, pushed and shoved them; jabbed and struck them with wooden sticks; and pulled them roughly by nose ropes. They stated that many buffalos had injuries on their bodies from the fights, and that the fights lasted util one of the two buffalos "broke away and fled".

With regards to the event in Hajo, they stated that the bulbuls "were illegally captured and incited, against their natural instincts to fight over food."

On Thursday (February 1), the court heard an interlocutory application by the petitioners stating that a buffalo fight event was scheduled to be held in Nagaon district on February 4, which would be outside the stipulated period specified in the government's guidelines.

The **Court observed that organising a buffalo fight beyond January 25 is prima facie in violation of the government's notification.** It stated that the petitioners should inform the relevant district administration of the particulars of the event, following which the latter should take the necessary stops to prevent the event, in line with the SOPs.

-----N---E---X---T-----

The message in the Bharat Ratnas

#BharatRatnas #Awards #ArtandCulture #GS1

Prime Minister Narendra Modi on February 9 announced that former Prime Ministers P V Narasimha Rao (1991-96) and Chaudhary Charan Singh (July 1979-January 1980), and the pioneer of the Green Revolution Dr M S Swaminathan, would be conferred the Bharat Ratna, the country's highest civilian honour.

The **Prime Minister had announced the Bharat Ratna for veteran BJP leader L K Advani on February 3, and for OBC reservations pioneer and former Bihar Chief Minister Karpoori Thakur last month.**

The guidelines of the Ministry of Home Affairs on the Bharat Ratna say the number of awards must be "restricted to a maximum of three in a particular year". This ceiling has been breached once earlier – in 1999 when Atal Bihari Vajpayee was Prime Minister.

A history of astute choices

Along with recognising the contribution of the recipient, the Padma and Bharat Ratna awards have always been tools for political messaging — and the Narendra Modi government has been particularly astute in making its choices.

Before the announcement of these five Bharat Ratnas, the Modi government has conferred the honour on five others over its two terms in power.

They are educationist, freedom fighter, and once-Congress president Pandit Madan Mohan Malviya, former Prime Minister Atal Bihari Vajpayee, former President and Congress leader Pranab Mukherjee, the legendary Assamese musician Bhupen Hazarika, and RSS leader Nanaji Deshmukh.

The honour for Malviya and Vajpayee came in 2015, within a year of the Modi government coming to power.

In 2019, the Modi government picked Mukherjee, one of the Congress's most senior leaders, for the Bharat Ratna.

Bhupen Hazarika, who was honoured in 2019, was one of the foremost cultural icons of the Northeast, and the award fulfilled a long-standing demand from his fans and the region as a whole.

Chandikadas Amritrao Deshmukh, better known as Nanaji Deshmukh, who also received the Ratna in 2019, worked in the fields of education, health, and rural self-reliance, but his greatest contribution was seen as building the Bharatiya Jana Sangh, the precursor of the BJP, into a formidable force.

Ratna before Modi era

Under Congress governments, the choices for Bharat Ratna were more conventional — and included sitting Prime Ministers

Jawaharlal Nehru (1955) and Indira Gandhi (1971, after the Bangladesh War), and Lal Bahadur Shastri (1966) after his sudden death.

In 1988, the government of Rajiv Gandhi conferred the Ratna on former Tamil Nadu Chief Minister M G Ramachandran ahead of Assembly elections in that state.

In 1990, the Janata Dal government headed by V P Singh and supported by the BJP picked Dr B R Ambedkar for the honour. That same year, the Ratna was awarded to Nelson Mandela.

In 1991, the Narasimha Rao government gave the award to former Prime Ministers Rajiv Gandhi (who had been assassinated recently) and Morarji Desai, and Sardar Vallabhbhai Patel.

In 1992, Maulana Abul Kalam Azad, stalwart of the freedom movement, and industrialist JRD Tata were honoured.

Under the short-lived coalition governments after 1996, Gulzarilal Nanda, who served as acting PM twice, freedom fighter Aruna Asaf Ali, and scientist Dr A P J Abdul Kalam (who would later become President) were among those who were honoured.

The **Vajpayee government gave the Ratna to socialist icon and social reformer Jayaprakash Narayan, economist Amartya Sen, and musicians Ravi Shankar and Bismillah Khan.**

Under the Manmohan Singh government from 2004 to 2014, only three Bharat Ratnas were conferred: to Hindustani classical musician Bhimsen Joshi, cricketer Sachin Tendulkar, and scientist CNR Rao.

-----N---E---X---T-----

BAPS temple inaugurated by PM Modi in Abu Dhabi: features, significance

#BAPStemple #BAPSSwaminarayanTemple #HinduTempleInAbuDhabi #ArtandCulture #GS1

Prime Minister Narendra Modi inaugurated the BAPS Swaminarayan temple in Abu Dhabi, the first Hindu temple to be built in the United Arab Emirates (UAE).

Denomination runs 1,550 temples globally

The **temple has been built by the Bochasanwasi Akshar Purushottam Swaminarayan Sanstha (BAPS), a denomination of the Swaminarayan Sampradaya, a Vaishnav sect of Hinduism.**

BAPS has a network of around 1,550 temples across the world, including the Akshardham temples in New Delhi and Gandhinagar, and Swaminarayan temples in London, Houston, Chicago, Atlanta, Toronto, Los Angeles, and Nairobi.

It also runs 3,850 centres and 17,000 weekly assemblies globally.

Bringing together countries, communities, and culture

The **Indian diaspora is almost 3.3-million strong in UAE, and accounting for more than 35 per cent of the Gulf country's population.** Some 150 to 200 families are BAPS Swaminarayan devotees.

Pramukh Swami Maharaj, the tenth spiritual guru and head of the sect, on April 5, 1997 had envisioned a Hindu temple in the desert sands of Abu Dhabi which could bring countries, communities and cultures together.

A **Muslim king donated land for a Hindu Mandir, where the lead architect is a Catholic Christian, the project manager a Sikh, the foundational designer a Buddhist, the construction company a Parsi group, and the director comes from the Jain tradition.**

The temple can also be seen as a significant milestone in the bilateral relationship between India and UAE – a relationship which has been growing in recent years.

Architecture symbolising harmony, peace

The rule change, however, is not applicable for widowed or divorced women. It reads: **"Single woman (widow or divorcee) undergoing surrogacy must use self eggs and donor sperms to avail surrogacy procedure."**

------E---N---D------

GS 1 – GEOGRAPHY

What is the 'Atmospheric River' bringing heavy rain to California

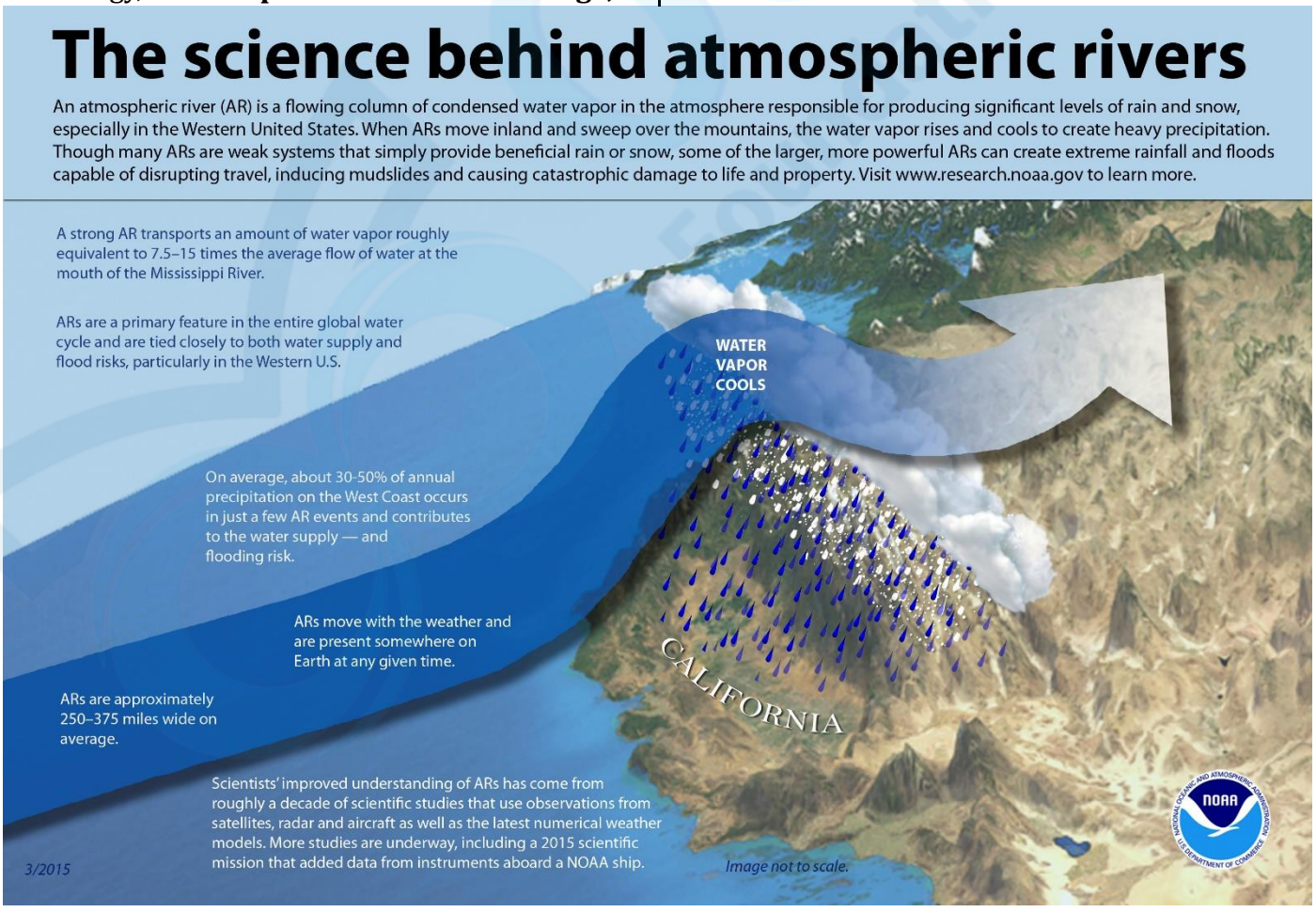
#AtmosphericRiver #PineappleExpress #Climatology #Geography #GS1

Southern California has been inundated with massive rainfall, with the risk of landslides rising on the soaked ground. The rainfall has been caused by an 'atmospheric river', and is likely to bring in both positives and negatives for the region.

What is an atmospheric river?

According to the US government's Department of Energy, **"atmospheric rivers are large, narrow sections of the Earth's atmosphere that carry moisture from the Earth's tropics near the equator to the poles. On average, the Earth has four to five active atmospheric rivers at any time. Each moves the equivalent of the liquid water that flows through the mouth of the Amazon River. When they reach land, atmospheric rivers release this moisture, producing heavy snow and rain."**

The **rain that has hit California is part of a weather system called the Pineapple Express, which is an atmospheric river that originates in the subtropical waters around Hawaii.**



The science behind atmospheric rivers (NOAA)

How will it help the region?

Before two consecutive wet years including the present one, California had experienced drought

conditions for decades. California's water year is measured from October to September. The rainfall, thus, is welcome, but could have chosen its location better.

The **current storm is mostly affecting Southern California, which lacks the storage capacity of the northern part of the state and the resources to capture storm water before it drains into the Pacific Ocean. So, while all the state's reservoirs are virtually at or above historic average levels, they are not topping off like they did last year when a parade of atmospheric rivers landed mostly in Northern California.**

The **rainfall is also good news for aquatic life, such as the Chinook salmon, which had suffered during the dry years.**

What risk could it bring?

The **additional moisture is generally good for wildfire resistance, but the rain also promotes growth of grasses and bush that will become fuel for future fires** when the weather turns dry again.

-----N---E---X---T-----

La Nina impacted air quality in India in the winter of 2022

#LaNina #AirQuality #Climate #Climatology #Geography #GS1

Monsoon rainfall over India is known to be strongly influenced by El Nino and La Nina events, the alternating warming and cooling of the eastern Pacific Ocean that impacts weather across the world. **A new study by Indian researchers has now suggested that even air quality in the country could be influenced by the two weather events.**

The study, by researchers at the Bengaluru-based National Institute of Advanced Studies and Pune-based Indian Institute of Tropical Meteorology, has argued that the **unusual air quality in some Indian cities in the winter of 2022 could be attributed to the record-breaking spell of La Nina prevailing at that time.**

This is the first time that air quality in Indian cities has been linked to a La Nina event — and indirectly to climate change, which is making El Nino and La Nina more severe.

What is the link between pollution and winter months in India?

During October to January, northern Indian cities, particularly Delhi, experience very high concentrations of PM2.5. A variety of meteorological factors — temperature, moisture, heaviness in air, wind speed and direction — play a role in trapping pollutants in the lower levels of the atmosphere. These factors are also responsible for transporting pollutants from other regions, particularly those generated by agriculture waste burning in Punjab and Haryana, to Delhi and adjoining areas.

The **western and southern parts of the country have always had relatively lower levels of pollution, because of their proximity to oceans.**

The winter of 2022, however, showed a significant deviation from this normal. Northern Indian cities, including Delhi, were cleaner than usual, while cities in the west and the south, like Mumbai, Bengaluru and Chennai, experienced worse-than-usual air quality.

The study said PM2.5 concentrations in Ghaziabad that winter saw a reduction of about 33% from normal, while in Noida, the concentration was 28% below normal. Delhi saw a reduction of about 10%. Simultaneously, the concentrations in Mumbai rose by 30%, while Bengaluru registered a 20% rise.

Wind direction

The most crucial factor in explaining the anomaly of winter 2022 was a change in the normal wind direction. During this time, wind usually blows in the northwesterly direction: for example, from Punjab towards Delhi and further into the Gangetic plains. This is one of the main reasons why agricultural waste pollutants in Punjab and Haryana flow into Delhi.

In the winter of 2022, however, the wind circulation was in the north-south direction.

FULL COURSE PDF NOTES FULL COURSE PDF NOTES

GS 2 – POLITY

How the post of deputy CM emerged, what powers it comes with

#DeputyCM #DeputyPM #StateCouncilofMinisters #Executive #Polity #GS2

The appointment of a deputy CM, which has been a long-standing feature of Indian politics, represents a political compromise that often follows the formation of a coalition government, or when no single leader commands unchallenged authority in the party in power or loyalty across all the key interest groups in the state.

The post of Deputy CM

Article 163(1) of the Constitution says "there shall be a Council of Ministers with the Chief Minister at the head to aid and advise the Governor in the exercise of his functions".

Neither Article 163 nor Article 164 ("Other provisions as to Ministers"), sub clause (1) of which says "the Chief Minister shall be appointed by the Governor and the other Ministers shall be appointed by the Governor on the advice of the Chief Minister", mentions a Deputy Chief Minister.

The post of Deputy CM is understood as being equivalent in rank to that of Cabinet Minister (in the state). The Deputy CM enjoys the same pay and perks as a Cabinet Minister.

A brief history of the Deputy CM post

Perhaps the **first Deputy CM in India was Anugrah Narayan Sinha**, an upper caste Rajput leader from Aurangabad, who was the most important leader of the Congress in Bihar after the first Chief Minister of the state, Dr Srikrishna Singh (Sinha).

Deputy CMs were seen in more states, especially after the reduction of the Congress's near-total dominance on national politics after 1967.

Deputy Prime Ministers

India has also seen several Deputy Prime Ministers — a post that was first held by Sardar Vallabhbhai Patel when Jawaharlal Nehru was Prime Minister. Nehru and Patel were the two tallest leaders of the Congress at the time, and were also seen as representing two different streams of thinking within the party.

Among those who held the position subsequently were Morarji Desai, Charan Singh, Chaudhary Devi Lal, and Lal Krishna Advani.

Devi Lal's appointment as Deputy PM in VP Singh's government in 1989 was challenged

in court on the ground that "the oath administered to him as such was not...in accordance with the prescription of the Constitution".

In **K M Sharma vs Devi Lal and Ors (1990), the Supreme Court upheld Devi Lal's appointment** "in view of the clear statement made by the learned Attorney General that Respondent No. 1 **(Lal) is just a Minister like other members of the Council of Ministers, though he has been described as Deputy Prime Minister... The description of him as Deputy Prime Minister does not confer on him any powers of the Prime Minister".**

-----N---E---X---T-----

What's in the new Public Examinations Bill, aimed at stopping cheating in exams?

#AntiCheatingBill #UnfairMeans #PublicExamination #Polity #GS2

The **Public Examinations (Prevention of Unfair Means) Bill, 2024**, was introduced in Lok Sabha on Monday (February 5). The **Bill aims to prevent "unfair means" in order to "bring greater transparency, fairness and credibility to the public examinations system".**

What is meant by the use of "unfair means" in an examination?

Section 3 of the Bill lists at least 15 actions that amount to using unfair means in public examinations "for monetary or wrongful gain".

These acts include: **"leakage of question paper or answer key or part thereof" and colluding in such leakage; "accessing or taking possession of question paper or an Optical Mark Recognition response sheet without authority"; "tampering with answer sheets including Optical Mark Recognition response sheets"; "providing solution to one or more questions by any unauthorised person during a public examination", and "directly or indirectly assisting the candidate" in a public examination.**

The **section also lists "tampering with any document necessary for short-listing of candidates or finalising the merit or rank of a candidate"; "tampering with the computer network or a computer resource or a computer system"; "creation of fake website" and "conduct of fake examination, issuance of fake admit cards or offer letters to cheat or for monetary gain" as illegal acts.**

Which exams are "public examinations" as defined in the Bill?

Under Section 2(k), a "public examination" is defined as any examination conducted by a "public examination authority" listed in the Schedule of the Bill, or any "such other authority as may be notified by the Central Government".

The **schedule lists five public examination authorities**: (i) **the Union Public Service Commission (UPSC), which conducts the Civil Services Examination, Combined Defence Services Examinations, Combined Medical Services Examination, Engineering Services Examination, etc.; (ii) the Staff Selection Commission (SSC), which recruits for Group C (non-technical) and Group B (non-gazetted) jobs in the central government; (iii) the Railway Recruitment Boards (RRBs), which recruit Groups C and D staff in the Indian Railways; (iv) the Institute of Banking Personnel Selection (IBPS), which hires at all levels for nationalised banks and regional rural banks (RRBs); and (v) National Testing Agency (NTA), which conducts the JEE (Main), NEET-UG, UGC-NET, the Common University Entrance Test (CUET), etc.**

Apart from these designated public examination authorities, **all "Ministries or Departments of the Central Government and their attached and subordinate offices for recruitment of staff" will also come under the purview of the new law.**

The **central government can add new authorities in the schedule through a notification as and when required.**

What punishment does the proposed law provide for violations?

Section 9 of the Bill states that all offences shall be cognizable, non-bailable, and non-compoundable — which means that an arrest can be made without a warrant and bail will not be a matter of right; rather, a magistrate will determine whether the accused is fit to be released on bail. A non-compoundable offence is one in which the case cannot be withdrawn by the complainant even when the complainant and the accused have reached a compromise, and a trial must necessarily follow.

Punishment for "any person or persons resorting to unfair means and offences" can be three to five years in prison, and a fine up to Rs 10 lakh. If the convict fails to pay the fine, "an additional punishment of imprisonment shall be imposed, as per the provisions of the Bharatiya Nyaya Sanhita, 2023," Section 10(1) of the Bill says.

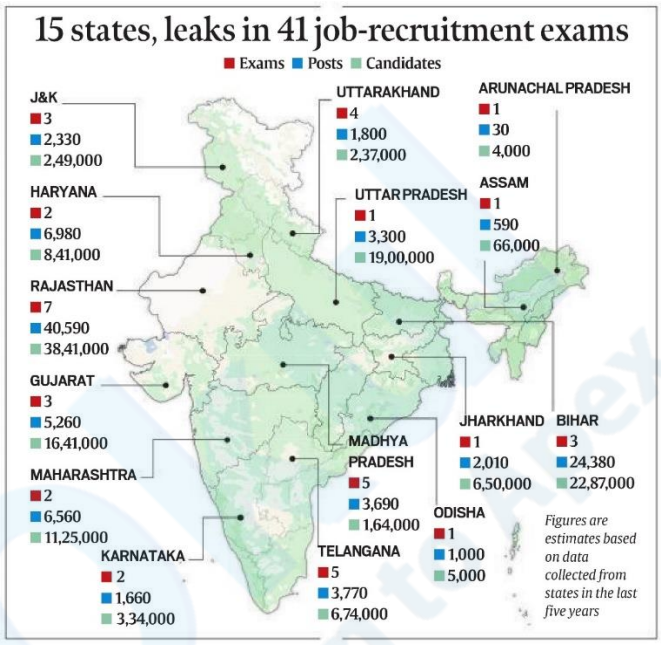
Under Section 10(2), **a service provider who is engaged to provide "support of any computer resource or any material, by whatever name it may be called" for the conduct of the examination can be fined up to Rs 1 crore, along with other penalties.**

The **Bill provides for harsher punishment in cases of organised paper leaks, where "organised crime" is defined as unlawful activity by a group of persons colluding in a conspiracy "to pursue or promote a shared interest for wrongful gain in respect of a public examination".**

Section 11(1) says the **punishment for organised crime will be "imprisonment for a term not less than five years but which may extend to ten years" and a fine "which shall not be less than one crore rupees".**

Why has the government brought this Bill?

There have been a very large number of cases of question paper leaks in recruitment exams across the country in recent years. At least 48 instances of paper leaks in 16 states over the last five years, in which the process of hiring for government jobs was disrupted. The leaks touched the lives of at least 1.51 crore applicants for about 1.2 lakh posts.



The Statement of Objects and Reasons of the Bill says: "Malpractices in public examinations lead to delays and cancellation of examinations, adversely impacting the prospects of millions of youth. At present, there is no specific substantive law to deal with unfair means adopted or offences committed... It is imperative that elements that exploit vulnerabilities of examination system are identified and effectively dealt with by a comprehensive Central legislation."

The Statement adds: "**The objective of the Bill is to bring greater transparency, fairness and credibility to the public examination systems and to reassure the youth that their sincere and genuine efforts will be fairly rewarded and their future is safe.**"

"The Bill is aimed at effectively and legally deterring persons, organised groups or institutions that indulge in various unfair means and adversely impact the public examination systems for monetary or wrongful gains."

It clarifies that "Candidate as defined in the Bill shall not be liable for action within the purview of the Bill and shall continue to be covered under the extant administrative provisions of the concerned public examination authority."

The Bill, once it becomes law, will also serve the important function of being "a model draft for States to adopt at their discretion". This, the Statement says, "would aid States in preventing the criminal elements from disrupting conduct of their State level public examinations".

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Uttarakhand civil code: The key changes for Hindus and Muslims in marriage, inheritance

#UttarakhandCivilCode #UniformCivilCode #Marriage #Succession #Inheritance #Polygamy #Polity #GS2

The Uttarakhand government tabled the Uniform Civil Code (UCC) 2024 Bill in the Assembly on Tuesday. It makes important changes in areas such as marriage, divorce, and succession.

What changes for Muslims after Uttarakhand civil code?

First, the proposed **UCC brings the minimum age of marriage to 18 and 21 for Muslim women and men, in line with the Hindu Marriage Act, 1955 and the Special Marriage Act, 1954**.

This issue has been debated in courts since Muslim law allows puberty (presumed at 13 years) as the age of marriage for girls. Since Protection of Children from Sexual Offences (POCSO) criminalised sexual activity between minors and the Prevention of Child Marriage Act prohibited marriage between minors, the Muslim age of marriage was at odds with these laws.

In December 2022, the National Commission for Women challenged in the Supreme Court the practice of allowing minors to get married. The case is pending before a bench led by Chief Justice of India D Y Chandrachud.

On succession, the nature of testamentary succession (through a will) and intestate succession (in the absence of a will) for Muslims will change drastically. Currently, Muslims may bequeath up to one-third of their property to anyone of their choosing through a will. The remaining property, or the entire property when there is no will, must then be divided in the manner provided in the Quran and the Hadith. This would ensure that the legal heirs are not entirely dispossessed. However, **under the proposed UCC, in situations where the deceased person does leave a will behind, there is no restriction on how much of their property they can bequeath, or to whom.**

The **UCC draws heavily from the Indian Succession Act, 1925**, retaining a majority of the provisions. **In cases of intestate succession, the property will pass on to Class-1 heirs, who include the children, the widow and parents among a long list of others. In the absence of Class-1 heirs, the property will pass on to Class-2 heirs, who include siblings, nieces, nephews and grandparents, among others. If no such heir exists, anyone most closely related to the deceased person may receive the property**.

The **practices of bigamy or polygamy are outlawed in the UCC Bill**. This is done by placing a condition for marriage under Section 4 of the Bill that neither party can have a living spouse at the time of their marriage. The **proposed Code also criminalises certain Muslim marriage practices such as Iddat and Nikah Halala, without explicitly naming them.**

Section 30 deals with the right of a person to remarry following a divorce. Here, the UCC provides that the right can be exercised without any other condition, such as marrying a third person before such marriage. This is a reference to the practice of halala under Muslim personal law. **Section 32 then provides the punishment for anyone who "compels, abets or induces" someone to meet such conditions. Anyone convicted under Section 32 can be punished with imprisonment up to three years and also be liable to fine of Rs 1 lakh.**

What changes for Hindus after Uttarakhand civil code?

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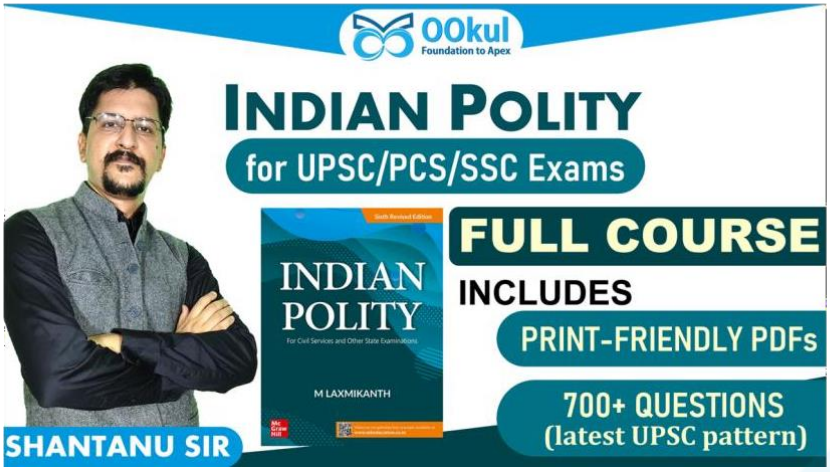

FULL COURSE PDF NOTES

GS 2 – GOVERNANCE

MHA merges four medals into one – Kendriya Grihmantri Dakshata Padak

#KendriyaGrihmantriDakshataPadak #HomeMinistry #Governance #GS2

The **Union Ministry of Home Affairs (MHA) has introduced a new medal, Kendriya Grihmantri Dakshata Padak, after merging four existing medals – Union Home Minister's Special Operation Medal, Union Home Minister's Medal for Excellence in Investigation, Asadharan Aasuchana Kushalata Padak and Union Home Minister's Awards for Meritorious Service in Forensic Science**.

In 2018, the Union Home Minister's Special Operation Medal was constituted to recognise those operations that have a high degree of planning and significance for the security of the country. The Union Home Minister's Medal for Excellence in Investigation was also instituted in 2018 for excellence in investigation. The Asadharan Aasuchana Kushalata Padak was instituted in the same year for exceptional performance and indomitable and daring intelligence service. The Union Home Minister's Awards for Meritorious Service in Forensic Science was introduced in 2010.

Union home minister is pleased to institute the **Kendriya Grihmantri Dakshata Padak to be conferred on members of the police forces, security organisations and intelligence wing/branch/special branch of states/Union Territories, Central Police Organisations (CPOs), Central Armed Police Forces (CAPFs), National Security Guard/Assam Rifles, and Forensic Science (Central/State/Union Territories) throughout the Indian Union in consideration for excellence in operations in areas such as counter-terrorism, border action, arms control, Left Wing Extremism, prevention of narcotics smuggling and rescue operation.**

"**Personnel of Central Board of Indirect Taxes and Customs (CBIC) may also be considered for award under the area of prevention of 'Narcotics Smuggling', outstanding service in investigation, exceptional performance, indomitable and daring intelligence service, and meritorious work done by serving government scientists in the field of forensic science**," the notification said.

The award will be in the form of a medal, styled and designated as the Kendriya Grihmantri Dakshata Padak. "**The medal will be circular in shape, made of silver gold gilt, and will have embossed on the obverse the symbol of 'face of Sardar Patel' in the centre with the words of 'Jai Bharat' inscribed below and will have engraved on the upper edge, the words 'Rashtra Prahari' (in Hindi) and the words 'Sentinel of the Nation' (in English) inscribed**

on the lower edge. On the reverse, it will have embossed the Ashoka Chakra in the centre with the words 'Satya Seva Suraksha' inscribed below," the notification said.

It added that the **Union home minister can withdraw the medal if the awardee is punished with dismissal, removal, major penalty or is found involved in a criminal offence or is found indulging in conduct unbecoming of an officer in the opinion of the government of the state/Union Territory or the Union. "It will, however, be competent for the Union Home Minister to restore this medal which may have been so forfeited**," it further said.

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Rs 4,797 cr PRITHVI to boost atmosphere, polar and ocean research

#PRITHVI #EarthSciences #GovernmentInitiative #Governance #GS2

The **Union Cabinet has approved Rs 4,797 crore research scheme to boost and maintain research momentum in the fields of ocean, atmospheric and polar sciences**, Earth Sciences Minister Kiren Rijiju said.

The **PRITHvi VIgyan (PRITHVI) will be an umbrella scheme spearheaded by the Ministry of Earth Sciences (MoES) to help continue many of the ongoing research projects and efforts in the areas of atmosphere, hydrosphere, cryosphere, geosphere and biosphere till 2026.**

With climate change and its adverse impacts affecting globally, be it in the form of extreme weather events like heavy rainfall, floods, rising sea levels, depleting glaciers, cyclones of higher intensities or prolonged dry spells — the need for improving understanding the roles of atmosphere-ocean-poles has become increasingly necessary.

It is a continuing programme. While **earlier, research in all these key areas were being carried out under different sub-heads for which different budget allocations were to be made, but now all these have been amalgamated. In case funds from one research sub-head remains under utilised, it can be used to support any other research area.**

Some of the **ongoing research that will now come under PRITHVI include Atmosphere and Climate Research-Modelling Observing Systems and Services (ACROSS), Ocean Services, Modelling Application, Resources and Technology (O-SMART), Polar Science and Cryosphere Research (PACER), Seismology and Geosciences (SAGE) and Research, Education, Training and Outreach (REACHOUT).**

Importantly, **for the first time, PRITHVI will open doors for Indian scientists to join hands with international experts.**

Updating on Rs 4,077 crore Deep Ocean Mission launched by MoES in 2021, Rijiju, in another reply, said that an **extensive survey and exploration for metals like cobalt, copper, nickel, and manganese have been carried out in the central Indian Ocean basin.** In addition, **explorations along south western and central ridges have identified potential locations for carrying out hydrothermal activities and zones suitable for sulphide mineralisation.**

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New guidelines to make cinema halls accessible to those with disabilities

#CinemaHallsAccessible #PersonsWithDisabilities #Governance #GS2

Last month, the **Ministry of Information & Broadcasting came out with Accessibility Standards in the Public Exhibition of Feature Films in Cinema Theatres for Persons with Hearing and Visual Impairment**, and invited stakeholder comments on the draft till February 15.

These guidelines are **applicable for those feature films that are certified by the Central Board of Film Certification (CBFC) for public exhibition in cinema halls/movie theatres for commercial purposes.** Once notified, the

guidelines will require production houses and movie theatres to either run dedicated shows for the impaired, and ensure special provisions in theatres so they can enjoy the cinema experience like anyone else.

Why the guidelines?

The proposal quotes **Sections 29 and 42 of the Rights of Persons with Disabilities Act, 2016, which mandate the government to take measures to promote universal access in the information and communication sector, including access to films for persons with hearing and visual disabilities. As per the Census 2011, 2.21% of the total population in India has been marked as 'disabled', of which 19 percent are with disability in seeing, and another 19 percent are with disability in hearing.**

What do the guidelines propose?

The **producer would be required to deliver two sets of the films for certification to CBFC: the original one for the public view, and the second one with accessibility features — audio description, open/closed captioning and Indian Sign Language Interpretation.**

Cinemas have to ensure that feature films being delivered for theatrical releases mandatorily have both the versions being certified by CBFC. There are two options for the cinema halls to implement this. **Either to have dedicated days and timings of screenings with accessible services, or using certain equipment in theatres during the normal show, which facilitates the impaired segment.**

Theatres have to offer accessibility features in a regular show by making available at least two equipment per 200 seats. This equipment could be in the form of:

- Smart glasses for displaying captions;
- Installing closed caption stands near their seats;
- A separate small screen below the big screen to display captions/subtitles;
- Headphones/ earphones for audio description attached to seats for visually impaired, and
- Using mobile apps during the normal show and other technologies.

How will the guidelines be implemented?

The **licensing authorities will monitor the places under their jurisdiction to ensure provision of accessible seats. This shall be made mandatory after three years from the date of notification of the guidelines.** The I&B Ministry will also set up a committee to monitor the implementation of these rules. It **will comprise 50 percent members who are persons with hearing/visual impairment and representatives from the film industry.**

In case of a grievance, a person can file a complaint with the licensee of the cinema theatre. In case of unsatisfactory response or lack of response from the licensee, the complainant may file the complaint before the licensing authority after a period of 45 days. Annually, the CBFC will also collect and publish information about different accessible services provided in the certified feature films.

When do these guidelines come into effect?

Films dubbed in more than one language would be required to provide at least one accessibility feature each for the hearing impaired and visually impaired, within six months from the effective date of implementation of these guidelines.

Feature films submitted for consideration in the National Film Awards, in the Indian Panorama Section of the International Film Festival of India, Goa and Mumbai International Film Festival also have to include closed captioning and audio description with effect from January 1 next year.

All other Feature Films being certified through CBFC and meant for theatrical release (digital feature films), would be required to mandatorily provide

The crime of piracy, and how maritime forces respond to it

#Piracy #ArabianSeaPirates #MaritimeSecurity #InternationalWaters #IndianNavy #InternationalRelations #GS2

Piracy is as old as seafaring itself, and has existed for centuries in various forms. **In recent years, waters off the west coast of Africa, Gulf of Aden, Horn of Africa, Bangladesh, and the Strait of Malacca have seen attacks by pirates.**

Why these areas and not elsewhere?

First, these sea areas are poorly policed. The coastal countries have weak maritime forces, or none at all.

Second, these areas normally have concentrations of shipping traffic, being either choke points in shipping routes where ships are forced to converge or slow down by geography, or anchorages where ships remain stationary for days before entering port.

Third, often poor governance or turmoil on land close to these areas leads to unemployment, poverty and consequently, crime.

Fourth, these areas are mostly international waters, international straits, or archipelagic waters which are long stretches of sea that fall within the maritime jurisdiction of several countries. This leads to legal complexities and difficulties in coordination.

What constitutes the maritime crime of piracy?

The term 'piracy' is used to describe a range of crimes from petty theft from ships at sea or anchorage to armed robbery and hijacking of a ship for ransom. The last is reason for the greatest concern, since **it causes panic in maritime business and leads to the establishment of high-risk areas, and a resultant increase in maritime insurance premiums. It also affects the safety of ships and seafarers, and disrupts global supply chains.**

How can the crime of piracy be tackled?

Since **piracy is a maritime manifestation of instability and misgovernance on land, the lasting solution too must be negotiated on land.**

While this is being done by the states concerned and through international diplomacy, the situation at sea has to be contained and stabilised by the world's maritime forces, since the disruption of mercantile peace — or peace that is conducive to maritime commerce — affects the economies of most countries.

What role has the Indian Navy played in tackling the problem?

Without a doubt, the **Indian Navy has been among the most proactive forces deployed in the troubled area off the Horn of Africa and the Gulf of Aden. Its anti-piracy patrol that started in 2008 continues to this day.** The Indian Navy has never shied away from intervening in any developing situation, and has foiled several attempts by pirates at hijacking merchant ships.

The **boundaries of the high-risk area that covered much of the Arabian Sea during the height of Somali piracy (2009-12) were pushed back westward primarily due to the efforts of the Indian Navy.** Several **recent intervention and rescue operations — including the rescue of a Sri Lankan fishing trawler, Lorenzo Putha, in a coordinated action with the Sri Lankan and Seychelles navies on January 29, and the rescue of two Iranian flagged boats with Iranian and Pakistani crew by the Offshore Patrol Vessel INS Sumitra within 36 hours — are testimony to the continuing professionalism and effectiveness of the Indian Navy in these waters.**

Who are the pirates, and what is their modus operandi off Somalia or in the Gulf of Aden?

There are no Johnny Depps from Pirates of the Caribbean here. **These are extremely distressed people driven by their poverty to do desperate things at sea while their handlers sit ashore and rake in the spoils of the crime.** The **pirate mother ship is usually a large boat or a small ship that carries resupplies, ammunition, and stores, and is accompanied by several skiffs, which are small, low-freeboard (portion of the ship side above the waterline) country fishing craft fitted with powerful outboard motors that give them speeds of more than 40 knots.** A typical merchant vessel steams at 12-15 knots, making it easy for the skiffs to approach them.

The **pirates zero in on a lone ship, preferably a slow-moving one with a low freeboard. The skiffs are small, so they do not appear on the radar of the target ship, and are visible only when they are very close. Merchant ships have small crews**; a large ship may have only 15-20 personnel on board. Barely 5-6 crew members are on watch at any time, sometimes resulting in poor visual lookout, especially at night and in the stern (rear) sector.

The **skiffs approach the target ship at high speed** and the pirates embark using grapnels and ladders. They usually carry small arms or at best a rocket launcher, which are still enough to intimidate and overpower the small, unarmed crew of a merchant ship.

Merchant ship crew often have orders not to resist pirates to avoid damage to the ship and its cargo. Ship-owners prefer to pay the ransom for its release and to avoid legal complications. The **crew normally lock themselves in a safe zone and send out a distress signal, which is monitored by piracy reporting centres and maritime safety agencies.**

So what do maritime forces do in their anti-piracy response?

Essentially four things.

First, they maintain a visible presence that aims to deter pirates from carrying out attacks.

Second, their ships and aircraft undertake surveillance of the high-risk area, identify suspect vessels, and report them for further investigation. This is supported by information fusion centres ashore.

Third, they warn passing ships about suspect vessels and announce escort schedules, if any, so that merchant ships transiting the high-risk area can join convoys between designated points.

Fourth, they proactively or reactively intervene to manage a developing situation, foil a piracy attempt, or rescue a hijacked vessel while trying to ensure minimum casualties and damage.

Naval ships can operate as part of a US-coordinated maritime coalition of forces, led by rotation by a commander of one of the participating forces. They use a common communication protocol, maintain presence, and share information to thwart piracy attempts. Surveillance aircraft also form part of this coalition force.

Some nations prefer to operate independently, coordinating loosely with other navies in the area.

Whereas coalition forces prefer a method of static patrol with each ship being assigned a geographical area, some navies choose to escort columns of merchant ships.

In any case, **there is reasonably effective communication and coordination among all maritime forces. Communications with merchant vessels are maintained on commercial open frequencies that are known to all seafarers and commercial aircraft. The first alarm by a merchant ship usually comes over these open frequencies.**

A ship with an armed helicopter is the most effective in dealing with a piracy situation because of its rapid response capability in reaching the spot, directing fire, and vectoring the nearest ship that can render assistance.

Marine commandos are the most effective in intervention operations. **The Indian Navy has been practising Maritime Intervention Operations (MIO) for decades, and has developed extremely high expertise in this niche area of naval operations.** Once the pirates have been overcome by the commandos, the crew is released from the safe zone on board.

What happens after the pirates have been subdued?

Handling captive pirates poses several legal challenges. **National laws are often inadequate to deal with apprehended pirates, and there is no effective international legal mechanism for their trial and disposal. The many nationalities, countries, maritime zones, flag states, etc. involved raise complex jurisdictional issues.**

Hence, captured pirates are usually disarmed, and their boats are drained of fuel and set adrift so that they are unable to undertake further attacks. However, they often find their way back ashore to return to piracy another day. On occasion, they are handed over to a coastal state for legal proceedings.

A long-term solution to the problem of piracy lies in rooting out misgovernance and unemployment in nations ashore, which feed maritime criminal activities. Till that happens, piracy will recur periodically and maritime forces will have to work to ensure mercantile peace.

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Navy foils another piracy attempt, rescues crew of 19

#Piracy #FVOmari #FVAlNaeemi #MaritimeSecurity #IndianNavy #InternationalRelations #GS2

The **Navy has foiled yet another piracy attempt on an Iranian-flagged vessel Omari and successfully rescued a crew of 19 — 11 Iranian and eight Pakistani nationals**.

One of the Navy's drones undertaking surveillance in the area successfully located FV Omari and INS Sharada, which was deployed for anti-piracy mission in the region, was diverted to intercept the boat.

Note: INS Sharada belongs to Sukanya class patrol vessel. Other ships of this class are Sukanya, Subhadra, Suvarna, Savitri and Sujata.

Earlier this week, the **Navy rescued a crew of 19 Pakistani nationals from 11 Somali pirates in a successful operation on hijacked fishing vessel Al Naeemi.**

The Navy, in collaboration with Seychelles Defence Forces and Sri Lanka Navy had also successfully rescued a hijacked Sri Lankan vessel this week.

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What did Trump say about NATO funding and what is Article 5?

#NATO #NATOfunding #Article5 #InternationalOrganisations #InternationalRelations #GS2

Former US President Donald Trump raised a storm of criticism from the White House and top Western officials for suggesting he would not defend NATO allies who failed to spend enough on defence and would even encourage Russia to attack them.

What is NATO?

Founded in 1949 to counter the Soviet Union with Cold War tensions rising, the North Atlantic Treaty Organization is a political and military alliance of countries from North America and Europe.

Enshrined in Article 5 of its founding treaty is the principle of collective defence – the idea that an attack on one member is considered an attack on all of them.

NATO takes decisions by consensus but the political and military strength of the United States means that it is by far the most powerful country in the alliance, with its nuclear arsenal seen as the ultimate security guarantee.

Which countries are in NATO?

(WTO), with the latest attack by an influential group of 19 agri exporting countries.

The **Cairns Group – comprising Australia, Brazil and Canada among others members** — have claimed that India's public stockholding (PSH) programme is highly subsidised and the farm support that India gives is "distorting" global food prices and "hurting" food security of other countries.

Last year in November, the circulated a detailed proposal to slash trade-distorting farm support in WTO members, halving the total global entitlement to subsidize. This triggered tensions among developing nations including India. **While India's per farmer subsidy is abysmally low compared to what countries such as the US offer, the WTO rules do not consider subsidies on a per-farmer basis, thereby being heavily loaded against developing countries.**

Notably, **India cannot be dragged into a dispute over its subsidies as it is protected by the 'Peace Clause' that was agreed by the WTO members during the Bali ministerial in 2013. But due to some of the provisions in the clause being ambiguous, India is open to face disputes.**

"WTO norms don't restrict us from providing high MSP. Because of the peace clause there is no restriction on what should be the level of MSP or the level of procurement. But there is no 100% legal certainty. We are questioned at WTO and that is why we are trying to seek a permanent solution," Abhijit Das, expert on international trade and the former head, Centre for WTO Studies said.

If new schemes are to be implemented, then for those products we will have to comply with the 10% subsidy ceiling and they will not be protected under the 'Peace Clause'," he added.

This means that **if the government were to agree to farmers demands for an MSP law, it will not be covered under the peace clause that gives India protection from legal disputes at the WTO.**

India had informed the WTO that the total value of its rice production in 2019-20 stood at $46.07 billion and that it gave subsidies worth $6.31 billion, or 13.7%, which is above the 10% limit. Government officials, however, point out that India's subsidy to farmers comes in at $300 per farmer, compared to $40,000 per farmer in the US.

India is not facing a dispute on the subsidy issue at WTO because the Dispute Settlement Body (DSB) is not functional but questions will be regularly asked by member countries over breach of subsidy limits.

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Consumer sentiments improving but still stuck in pessimism

#ConsumerSentiments #IndexofConsumerSentiments #CMIE #CurrentSituationIndex #RBI #Economy #GS3

As the general election approaches, one is likely to witness a sharp variance in the way everyday reality is described by the government, on the one hand, and the Opposition parties, on the other. Last week, for instance, the government had released a white paper on the Indian economy where it claimed that the past decade under BJP (2014-24) was much better than the decade under Congress-led UPA coalition (2004-2014).

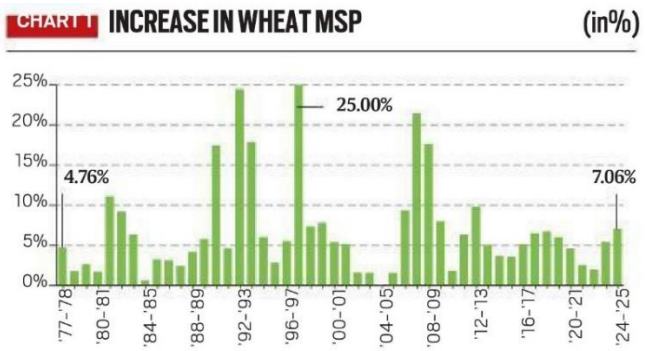
Of course, one can look at the nitty-gritty of each issue to ascertain which view is a more accurate description of reality.

Farmer protests demanding MSP as a legal right

Take, for example, the issue of farm distress and India's farm economy. This week, the nation's capital is witnessing a fresh surge of farmer protests demanding Minimum Support Prices (or the prices at which the government offers to buy many crops) as a legal right.

One can look at the last key MSP announcement to ascertain if there is a trend. In October 2023 the government announced the MSPs for wheat — the main winter crop in India — for the current marketing year (2024-25).

CHART 1 alongside **shows the annual increase (in %) for wheat MSP since 1977**. The **data is sourced from Centre for Monitoring Indian Economy (CMIE), a private sector firm.**



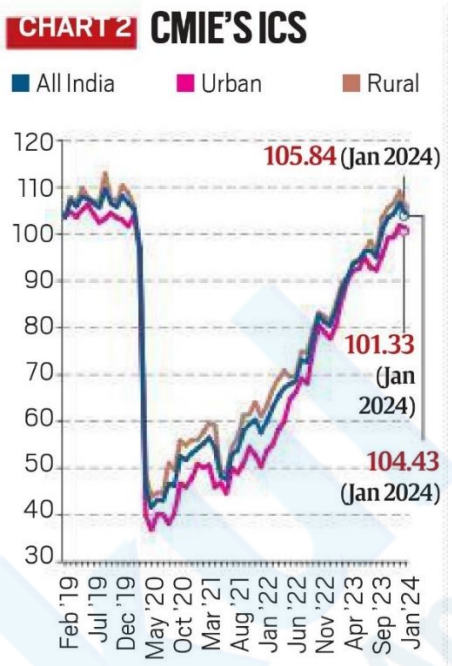
If one concentrates on the last two-and-a-half decades, it is clear that **MSPs tend to follow an election cycle — higher announcements in the years leading up to the election and much lower increases immediately after elections.** The **only exception was the Atal Bihari Vajpayee-led NDA government that barely increased MSPs in the run-up to the elections**. By sharp contrast, **the UPA years saw much higher increases in the MSP of wheat.**

But MSPs only tell one part of the story. To get a fuller picture about the farm economy one would have to look at a whole host of data — from incomes to inflation levels.

Rural India low on optimism

Mapping consumer sentiments. These are arrived at by regular surveys and can provide a composite picture of how people "feel" about their current state and how optimistic or pessimistic they are.

For instance, last week, **CMIE reported that rural India was low on optimism. According to CMIE, consumer sentiments in India fell quite sharply in January 2024 after seeing a steady rise during the festive season. The 2.2 per cent fall in the Index of Consumer Sentiments (ICS) in January was the steepest monthly fall in over two years. (See CHART 2).**



"The **fall in consumer sentiments seen in January 2024 is marked by two distinct characteristics. First, consumer sentiments have weakened significantly on all accounts in rural India. The ICS in rural India fell by 3 per cent while urban India saw a smaller 0.5 per cent fall. Second, household perceptions about their current economic conditions debased in January 2024**," a research note on CMIE's Economic Outlook.

CMIE's consumer surveys suggest that by late 2023, consumer sentiments had largely recovered to the pre-Covid levels. The latest dip in rural sentiments can be attributed to the stagnation in commodity prices and reduced profits.

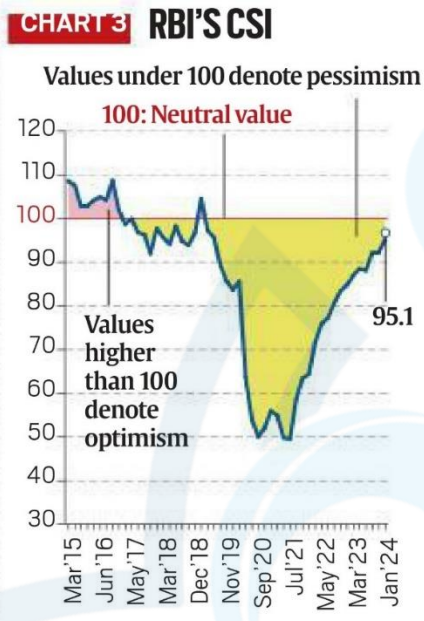
The story of Indian consumer sentiments

Last week, India's central bank, the **RBI, too, released its latest instalment of consumer confidence survey. RBI's survey is a bi-monthly affair. It collects current perceptions (vis-à-vis a year ago) and one year ahead expectations of households on general economic situation, employment scenario, overall price situation, own income and spending across 19 major cities. The latest round of the survey was conducted during January 2-11, 2024, covering 6,058 respondents (with over 53% respondents being women).**

The key variable to look for in **RBI's consumer confidence survey is the Current Situation Index (CSI).** The CSI is compiled on the basis of net responses on the economic situation, income, spending, employment and the price level for the current period (as compared with one year ago). In other words, it is the upshot of how people feel (when all these variables are taken into account) relative to a year ago.

It is important to note here that **a value of 100 is the neutral value. If the index value falls below the 100 mark, it implies that people are pessimistic, and a value higher than 100 conveys optimism.**

CHART 3 shows the CSI values since they were first compiled in March 2015. Here are the main takeaways:



Consumer sentiment has been negative right through Prime Minister Modi's second term. The index value was 104.6 in March 2019 — just before the last Lok Sabha election. But in May 2019, the index value went into the negative zone and has stayed there without a break.

In fact, **the optimism of March 2019 itself stands out as a sudden and solitary occurrence. If one ignores it for a moment, then consumer sentiment has been pessimistic since June 2017 — that is, for the better part of the past seven years.**

The highest consumer optimism was registered in November 2016 — that was the month when Prime Minister Narendra Modi announced demonetisation. Consumer sentiment has never recovered (let alone exceed) that level.

On a brighter note, though, **consumer sentiment has been steadily recovering since the collapse in the wake of the Covid pandemic.** Although, despite this recovery, the overall index is still stuck in the pessimism zone.

There is still a couple of months to go before the general elections. Do you think consumer sentiments can recover to break into the optimistic territory — just like they did before the 2019 elections?

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The cost of legal MSP is greatly exaggerated

#MSPguarantee #MSP #Agriculture #Economy #GS3

Farmers are back on the streets. Unlike the last time, when they marched to Delhi against the enactment of the three contentious farm laws, this time there is no immediate trigger. The demands of the farmers are manifold, but primarily, they are asking for a legal guarantee for Minimum Support Prices (MSP). While this has been a longstanding demand, there is little clarity on what it actually means. **The lack of clarity has obviously led to fear mongering, with exaggerated claims about fiscal costs, monopolisation of agricultural trade and missing markets. There was similar fear mongering during the run-up to enactment of the National Food Security Act (NFSA) and the National Rural Employment Guarantee Act. The reality is that neither of these pieces of legislation has bankrupted the government.** Instead, **they proved to be a lifeline for people during the pandemic.**

MSP is a simple mechanism to ensure the price stability of essential agricultural commodities. Similar mechanisms are available to farmers in other countries. **The purpose is to insulate farmers from price volatility with government actions through active intervention when the market prices fall below the MSP.** It has been in existence in India for more than five decades. Why, then, are

market demand for their produce, as reflected in the HCES data.

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Monthly spend of farm families below rural average

#FarmFamiliesSpending
#NonFarmFamiliesSpending
#CasualLabourSpending
#HouseholdConsumptionExpenditureSurvey
#HCES #MPCE #Economy #GS3

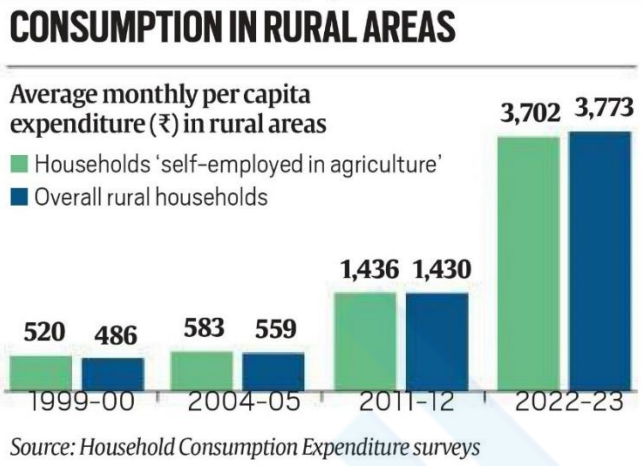
For the first time, the **average monthly per capita consumption expenditure (MPCE) of agricultural households has fallen below the overall average of rural households**, according to the latest Household Consumption Expenditure Survey (HCES) 2022-23 released by the National Sample Survey Office (NSSO).

The survey report shows that the **average MPCE of families "self-employed in agriculture" was Rs 3,702 in 2022-23 (August-July), while the overall average of rural households was Rs 3,773.**

The gap between the MPCE of agricultural families and the overall average of rural households has been narrowing over the years. In 1999-2000, the MPCE of agricultural families was Rs 520, while the overall average of rural households was Rs 486. In 2004-05, the MPCE of agricultural households was Rs 583, while the overall average of rural households was Rs 559. In 2011-12, the MPCE of agricultural households was Rs 1,436, a little more than the average rural spending of Rs 1,430.

Like the households "self-employed in agriculture", the **MPCE of casual labourers and regular wage earners engaged in agriculture was also lower than the rural average, according to the HCES 2022-23.**

The average MPCE of households with "regular wage/ salaried earning in agriculture" was Rs 3,597, while that of households with "regular wage/ salaried earning in non-agriculture" was Rs 4,533. Similarly, the average MPCE of households engaged in "casual labour in agriculture" was Rs 3,273, as compared to Rs 3,315 for "casual labour in non-agriculture".



According to an economist, one of the possible reasons could be the diversification of the rural economy, with non-agricultural activities gaining prominence.

Citing another possible reason, another economist said some of the migrant labourers who returned to their villages during Covid-19 may have stayed back and taken up agriculture, increasing the total number of those "self-employed in agriculture". The average MPCE of households "self-employed in agriculture" could be below the overall rural average due to this increase in the number of farmers, he said.

The latest survey report also shows that **in rural areas, Scheduled Tribes (STs) reported the lowest MPCE at Rs 3,016, while it was Rs 3,474 for Scheduled Castes (SCs), Rs 3,848 for Other Backward Classes (OBCs), and Rs 4,392 for others.**

In urban areas, SCs reported the lowest MPCE at Rs 5,307, followed by Rs 5,414 for STs, Rs 6,177 for OBCs, and Rs 7,333 for others. Overall, the average MPCE was Rs 3,773 for rural households, and Rs 6,459 for urban households.

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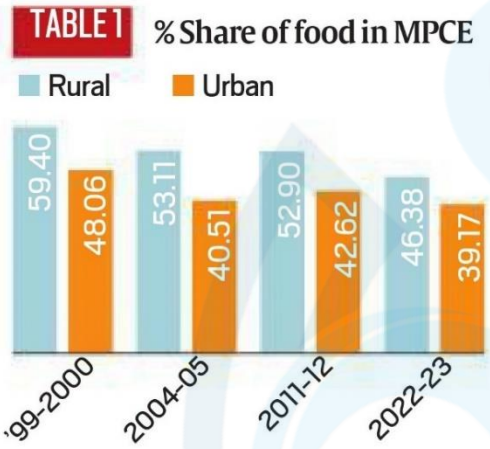
Consumption survey: 5 questions

#HouseholdConsumptionExpenditureSurvey
#HCES #MPCE #InflationBasket
#ImputedItemsCost #StandardofLiving
#Economy #GS3

1. How has the share of spending on food in India changed over the last 20-odd years?

As a percentage of your total consumption spending, if you spend less on food, it means you have more money for other things — from consumer durables to clothing and footwear, petrol or diesel for your vehicle, and even for entertainment. In other words, you can aspire for more.

Between 1999-2000 (National Sample Survey 55th round) and 2022-23, the share of expenditure on food has gradually declined for both urban and rural households. However, it is for the first time that expenditure on food has fallen to less than 50 per cent of the total consumption expenditure in rural India, and to less than 40 per cent in urban India. This is remarkable.



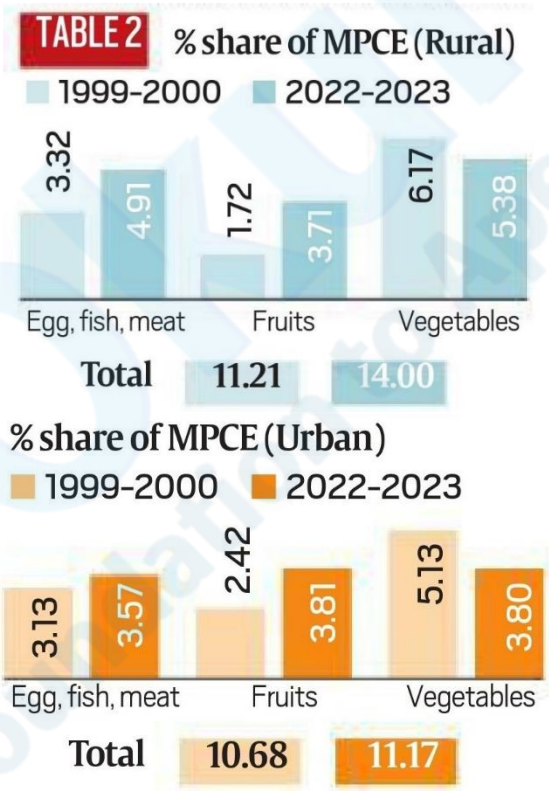
The share of food in consumption expenditure in rural India was as high as 59.4 per cent in 1999-2000, it hovered around 50 per cent levels through the first decade of the new millennium, and in 2022-23, it stood at 46.38 per cent.

In urban India, the share of food in the average monthly per capita consumption expenditure (MPCE) has fallen to 39.17 per cent in 2022-23 from 48.06 per cent in 1999-2000.

2. Within foods, what are Indians now consuming?

It is helpful to know how much money is spent for better nutrition beyond just cereals (rice, wheat, etc). Expenditure on cereals was almost 22 per cent of the total consumption expenditure in rural households in 1999-2000; it is now down to 4.91 per cent. In urban households, it was 12 per cent; it is now down to 3.64 per cent.

The spending on high-value/ nutritional items such as eggs, fish and meat, and fruits and vegetables has gone up more in rural households than in urban households over the last two decades.



In 1999-2000, rural households spent 11.21 per cent of the total consumption spending on these items, and urban households spent 10.68 per cent. In 2022-23, this was significantly higher for rural households at 14 per cent, and only marginal higher for urban households at 11.17 per cent.

3. Is there a need to review the inflation basket? What do the average MPCE data show?

Inflation is calculated based on the changes in the price levels of items in a large basket. These items must ideally reflect what you and I consume — and our consumption patterns may vary depending on whether we live in a city or a village. For accurate calculation of inflation, the basket of goods should represent the consumption expenditure pattern of households, be it urban or rural.

The **Consumer Price Index (CPI)-based inflation, also called retail inflation, is currently based on a basket that was decided in 2012. But over the last 11 years, as the latest Household Consumption Expenditure (HCE) Survey 2022-23 shows, a lot has changed.**

For example, the CPI (Rural) basket assigns a weightage of 12.35 per cent to 'cereals and products'. But as mentioned above, the latest HCE Survey shows rural households spend just 4.91 per cent on cereals (and cereal substitutes). Again, the share of expenditure on food in rural households is 46.38 per cent, according to the Survey. But food in the CPI (Rural) basket has a weightage of 54.18 per cent — much higher than what a rural consumer now spends.

Similarly, in the CPI (Urban) basket, food has a weightage of 36.29 per cent; the HCE Survey shows the share of urban household expenditure on food is higher, at 39.17 per cent. In urban households, the spends on pan, tobacco and intoxicants, and entertainment are 2.43 per cent and 1.58 per cent respectively. But the weightage for these two items in the CPI (Urban) basket is 1.36 per cent and 2.04 per cent respectively.

The share of spending on rent has increased both for rural and urban households to 0.78 per cent and 6.56 per cent respectively.

The Reserve Bank of India (RBI) decides to increase or decrease the policy rate (repo rate, the interest rate at which the central bank lends money to commercial banks) based on retail inflation — and this has an impact on growth. A lower interest rate will help economic growth by facilitating loans at lower rates. But if the RBI is guided by wrong data, it will most likely delay any action on interest rates.

4. What does the difference between imputed and non-imputed average MPCE data show?

In the latest HCE Survey 2022-23, the National Sample Survey Office (NSSO) has provided another set of MPCE data by adding the **imputed value of a number of items received free by households through various social welfare programmes.**

These include: **i) food items such as rice, wheat, atta, pulses, salt, sugar, edible oil, etc and ii) non-food items such as laptop/ PC, tablet, mobile handset, bicycle, motorcycle/ scooty, clothing (school uniform), footwear (school shoes, etc).**

A fractile class of MPCE is the segment of population lying within two fractiles. For instance, the 0-5 per cent fractile represents the bottom 5 per cent of the population. The 5-10 per cent fractile represents the next 5 per cent of the population, and so on. The 95-100 per cent fractile represents the top 5 per cent of the population.

The MPCE of rural and urban households which includes the imputed value of free food and non-food items is higher compared with the MPCE which does not include the free items.

It is, however, interesting to see who benefits the most in absolute terms. **In rural households, the bottom 0-5 per cent of the population got the least to spend in terms of imputed value of free items. This group got just Rs 68.**

The **highest benefit in absolute terms was garnered by the population in the 70-80 per cent fractile; and even the top 5 per cent of the population got Rs 80**, which is more benefits than the bottom 5 per cent of the population.

TABLE 3 Figures in ₹

Fractile class	Average MPCE	Average MPCE with imputation	Diff.
0-5%	1,373	1,441	68
5-10%	1,782	1,864	82
10-20%	2,112	2,196	84
20-30%	2,454	2,540	86
30-40%	2,768	2,856	88
40-50%	3,094	3,183	89
50-60%	3,455	3,545	90
60-70%	3,887	3,978	91
70-80%	4,458	4,551	93
80-90%	5,356	5,447	91
90-95%	6,638	6,725	87
95-100%	10,501	10,581	80
All	3,773	3,860	87

Of course, in percentage terms, this would differ.

So, the **bottom 5 per cent of population's consumption expenditure was 4.95 per cent more including the free items, compared with the bottom 5 per cent of the rural group which did not receive the free items; the 5-10 per cent fractile spent Rs 82 more, or 4.6 per cent extra, including free items.**

For the 70- 80 per cent fractile population, whose extra spend including free items was the highest at Rs 93, the percentage increase was just 2.08 per cent.

In urban households, however, the consumption expenditure of the three lowest fractiles of population — 0-5 per cent, 5-10 per cent and 10-20 per cent — was the highest in percentage and absolute terms by Rs 86 (4.29 per cent), Rs 88 (3.37 per cent) and Rs 84 (2.66 per cent) respectively.

5. Which states have a lower standard of living compared with the national average?

One can get a quick idea about the economic well-being of a family by looking at the average monthly consumption spending by its members.

In nine states, both the rural and urban average per capita consumption spending is less than the national rural and urban average MPCE. These are: West Bengal, Uttar Pradesh, Odisha, Meghalaya, Madhya Pradesh, Jharkhand, Chhattisgarh, Bihar and Assam. Together, these nine states account for approximately 57 per cent of the country's total population.

TABLE 4 Lowest rural spending (in ₹)

States	Rural	Urban	Diff.	% of rural
Chhattisgarh	2,466	4,483	2,107	81.79
Jharkhand	2,763	4,931	2,168	78.46
MP	3,113	4,987	1,874	60.19
Odisha	2,950	5,187	2,237	75.83
UP	3,191	5,040	1,849	57.94
All-India	3,773	6,459	2,686	71.19

The Survey data suggest a relatively lower standard of living for people in these states compared with the rest of India.

In five other states/UTs, viz., Lakshadweep, Ladakh, J&K, Dadra & Nagar Haveli, and Manipur, the urban average MPCE is less than the national urban average MPCE of Rs 6,459.

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Trade diplomacy: Govt depts red-flag high duties to curb China imports, seek nuance in strategy

#TradeDiplomacy #ImportTariff #TradeProtectionsim #MostFavouredNation #WTO #InternationalTrade #Economy #GS3

Multiple wings in the government have started to red-flag the Centre's moves to progressively hike customs duties, especially the more recent offensive targeted at imports of Chinese components and inputs. A section within the government is in favour of a more nuanced approach in using tariffs as a diplomatic tool, failing which there is a possibility of the gains of India's manufacturing-focused thrust that include schemes such as Production-Linked Incentive (PLI) being squandered away.

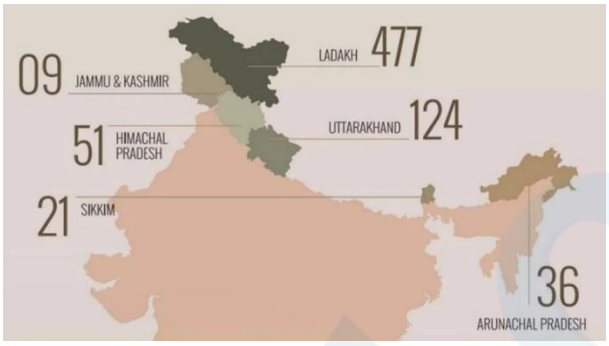
China still accounts for 14 per cent of India's imports with not just inputs for the domestic industry in sectors ranging from electronics to pharmaceuticals and textiles to leather, but also capital goods, being sourced from China. This, coupled with the fact that **average tariffs in India have jumped to 18.1 per cent in 2022 from 13 per cent eight years ago in 2014, has made India uncompetitive vis-a-vis countries such as Vietnam, Thailand and Mexico.**

In fact, much of the protests from ministries have come after the industry warned of the detrimental impact of higher tariffs being used as a protectionism tool. **The blockade targeting Chinese imports, which gained traction across Central ministries and departments in the aftermath of the Galwan border clash since 2020, is now seen to be impacting sectors such as electronics and pharmaceuticals.** The roadblocks to imports in

India's snow leopard count: Why this Himalayan feat is only the first step to securing the cat

#SnowLeopardPopulationAssessment #SnowLeopard #WildlifeConservation #Environment #GS3

The **Snow Leopard Population Assessment in India (SPAI) has estimated a population of 718 in Ladakh, Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Sikkim and Arunachal Pradesh. Carried out between 2019 and 2023**, this study is a major leap in our understanding of the keystone species.



Where snow leopards were found in India and their numbers. (Via SPAI)

Snow leopards are believed to occupy around 1 lakh sq km of the higher Himalayan terrains in India. As recently as 2016, the cat's status was unknown in as much as one-third of its range. This went well with the legend of the 'ghost of the mountains' built around the elusive cat's mastery of stealth and camouflage.

But for this 'ghost' to have a future — and since the future of most species is increasingly determined by human actions — knowledge of the cat's status across its range was necessary for framing the right policies. This was also a question of securing our future because the snow leopard's habitat is where all major Himalayan rivers that sustain life across much of India spring to life.

Yet, a national effort to count snow leopards — colloquial for 'studying abundance' — across its range remained daunting on multiple counts.

The challenges in counting snow leopards

The first and foremost on the list of obstacles is the **unforgiving terrain snow leopards occupy**. While the cold deserts of Ladakh and Spiti are their strongholds, **snow leopards range all along the higher Himalayas above the tree line between the altitude of 10,500 to 17,000 feet. Much of this habitat is not accessible by motorable roads and its rarified air makes even routine fieldwork, such as locating suitable sites for placing camera traps, a test of endurance.**

Analysing photos camera-trapped in the field poses the next challenge. **Specialised software can identify unique individuals by comparing stripes or rosettes on both flanks from a pool of photographs. But unlike tigers, zebras or even leopards, snow leopards do not yield to artificial intelligence.**

For long, researchers have grappled with the issue of misidentifying individual snow leopards "as their spot patterns may not be easily recognised when their thick fur gets ruffled or when their body is photographed at different angles." To overcome this challenge, a **global consensus of researchers recommended manual evaluation using at least three marking patterns to differentiate between individuals, and employing multiple independent analysts for identification.**

The head and tail of a snow leopard provide the best reference points for identification. Some researchers have tried to position cameras strategically to capture the forehead region of snow leopards, as was done in Ladakh during the present SPAI exercise. But that requires multiple camera traps at each location and can stretch resources.

The exercise

Given the methodological intricacies associated with precisely estimating snow leopard populations owing to their cryptic behaviour and the expansive, rugged nature of their habitats, notes the SPAI report, the **Wildlife Institute of India (WII) partnered with two NGOs — Nature Conservation Foundation**

and WWF-India — to prepare India's snow leopard estimation protocol in 2019.

The groundwork was carried out in the next three years. In all, **photographs collected from 1,971 camera trap locations led to the identification of 241 unique individuals which was extrapolated to an estimated population of 718 snow leopards in India.**

Area	Camera Traps locations	No. of Unique Individuals	Density Estimates (#/100 km^2)	Estimated numbers
Ladakh	956	126	0.34	477
Jammu and Kashmir	135	9	0.75	9
Himachal Pradesh	284	44	0.08-0.37	51
Uttarakhand	382	40	0.7-1.04	124
Sikkim	99	14	0.40	21
Arunachal Pradesh	115	8	0.26	36
Total	**197**	**241**	**-**	**718**

In Ladakh, camera traps were placed in 956 locations covering 8,604 sq km for 120 to 180 days. Based on their distinctive forehead patterns, 126 unique adult individuals were identified from 10,789 images of snow leopards. The population was estimated to be 477 across 47,572 sq km.

In Jammu and Kashmir, only 9 unique individuals were identified by deploying 278 camera traps at 135 locations. Even after dropping four individuals due to poor image quality and unfavourable capture angles, notes SPAI, this data set fell short of providing a comprehensive estimate for the snow leopard population across 949 sq km.

In Himachal Pradesh, 44 unique individuals were identified from 187 photos captured across 284 camera trap locations, leading to an estimated population of 51 across 25,000 sq km was extrapolated. From 41 unique individuals identified from 396 snow leopard photos, Uttarakhand estimated a population of 124 occupying 12,768 sq km.

In the eastern Himalayas, Arunachal Pradesh estimated a population of 36 across 14,156 sq km from 8 unique snow leopards identified from 115 camera trap locations. In Sikkim, 14 unique individuals were identified from 64 snow leopard photos captured from 99 camera trap locations. The estimated population was 21 snow leopards across 400 sq km.

The outlook for snow leopards

In the 1980s, a guesstimate of a global population of 4,000–7,500 snow leopards cited 400–700 individuals in India. In the 1990s, another guesstimate put 200-600 snow leopards in India out of a global count of 3,020-5,390. In 2016, India's leading snow leopard researchers came together to put the national estimate at 516 (238-1039).

The present count of 718 (594-825) is consistent with the trend and suggests overall population stability. Yet, this is just the beginning of understanding the elusive species, its dispersal and competitive land use patterns and mortality trends at a landscape level.

Infrastructure development, particularly highways and hydropower projects, is causing a rapid influx of labourer camps in the higher Himalayas who often depend on scarce natural resources for fuel and food. Such migrations, along with a boom in tourism in snow leopard areas, have also led to garbage mismanagement which, in turn, is fuelling an explosion in the free-ranging dog population that competes with snow leopards.

While climate change is likely to determine the snow leopard's fate in the long term, mitigating the impact of such rapid demographic changes on the species is essential to secure its immediate future.

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Why the Union Budget's plans for deep tech and research funding are significant

#DeepTech #ResearchFunding #NationalQuantumMission #NationalDeepTechStartupPolicy #NationalResearchFoundation #1lakhcorpus #ResearchAndDevelopment #ScienceandTechnology #GS3

In her Interim Budget speech, Finance Minister Nirmala Sitharaman announced a **Rs 1 lakh crore fund to provide long-term, low-cost or zero-interest loans for research and development.**

She also promised to **launch a new scheme to strengthen deep-tech capabilities in the defence sector** — an announcement that is likely to be followed up later in the year with a larger policy to promote deep tech startups across all sectors, not just defence.

The separate announcements on the fund and defence deep tech are intricately linked, and must be seen together with the government's other plans for the R&D sector.

Why deep tech matters

Deep tech refers to advanced and disruptive technologies, many of which are still under development, that have the potential to trigger transformative change, and provide solutions for the future.

The term is used to describe cutting-edge research in nanotechnology, biotechnology, material sciences, quantum technologies, semiconductors, artificial intelligence, data sciences, robotics, 3D printing, etc. These technologies are expected to play a key role to address complex global challenges like climate change, hunger, epidemics, energy access, mobility, physical and digital infrastructure, and cyber security.

Advanced capabilities in deep tech are also likely to **enhance productivity** and **drive economic growth** and **create jobs** in coming years, and **offer competitive advantage to countries with strong foundations in these areas.**

With its large base of relatively high-quality science and engineering manpower and a fairly well-established technology culture, India feels it is well placed to be one of the frontrunners in these areas. There is scope to contribute to the development of these technologies, which can ensure early adoption, shares in intellectual property, indigenous know-how, and self-reliance. **Major associated benefits in terms of spin-off technologies, trained manpower, entrepreneurship and technology exports can accrue as well.**

Building an ecosystem

Over the past few years, the government has tried to incentivise research in some of these areas by setting up a **National Mission on Transformative Mobility and Battery Storage** and, more recently, a **National Quantum Mission.**

Last year, a policy framework to create an enabling environment for companies working in these technology areas was finalised. The **National Deep Tech Startup Policy (NDTSP), piloted by the Department for Promotion of Industry and Internal Trade and the Office of the Principal Scientific Adviser, is currently awaiting government approval.**

The **policy seeks to address specific challenges faced by technology startups, and to provide them with a platform to compete and collaborate with the best in the world.** The **idea is to create a deep tech startup ecosystem by offering the right incentives to companies that invest time and money in innovation and research. More than 10,000 startups working in these technology domains were identified as part of the effort.**

The **NDTSP talks about some of the things that need to be done in this regard: create opportunities for long-term funding; a simplified but stronger intellectual property rights regime; tax incentives; a conducive regulatory framework; development of**

standards and certifications; nurturing of talent; and linkages between industry, research centres, and educational institutions.

The challenge of funding

One of the key policy recommendations in the NDTSP is to open up opportunities for long-term funding of research projects. It acknowledges that most deep tech projects are time- and money-intensive, with relatively high funding requirements.

Lack of adequate research funding has been a major complaint of the scientific community. India's expenditure on research is far below the global average, and significantly lower than the scientifically advanced countries with which India competes.

For more than two decades now, the Indian government's stated objective has been to allocate at least 2% of GDP for research and development. Absolute spending has increased, but expenditure on research as a share of GDP has come down in the last few years. India currently spends just about 0.65% of its national GDP on research and development activities. The global average is about 1.8%.

Going by recent decisions, the thinking in the government seems to be that R&D spends cannot rise substantially without partnering with the private sector. Efforts are being made to create better synergies between industry, research labs, and educational institutions in order to broad-base both research activity and the funds to support it. The **National Research Foundation (NRF), which became operational on Tuesday, seeks to do this — about 70% of the Rs 50,000 crore allocation for NRF over the next five years is supposed to come from private industry.**

The 1 lakh crore corpus

It is here that the Rs 1 lakh crore corpus to finance research and development becomes important. **Startups and other private sector ventures who can obtain seed money for their projects are expected to be the main beneficiaries.** The idea is to start the flow of money in the research ecosystem — and the hope is that as projects take off, industry would be encouraged to invest its own money, and the pool would grow, benefiting everyone in the research community.

But many in the scientific community remain sceptical. **Expectations of the infusion of private sector money into research have been belied earlier.** Finance has been both unpredictable and inadequate. **Scientists say too much is expected from the private sector without commensurate increase in funding by the government.**

Even where funds are available, delays and interruptions in disbursal often affects projects. Complex bureaucratic requirements contribute to delays.

As of now, the government seems to be banking heavily on the success of its new initiatives to infuse money into research. **There have been only nominal increases in budgetary allocations of its science and research departments in the Interim Budget.**

ALLOCATIONS IN INTERIM BUDGET 2024-25 (in cr)

	2023-24 BE	2023-24 RE	2024-25 IB	Change*
Department of Atomic Energy	25,078.49	26,799.78	24,968.98	-0.41%
Department of Space	12,543.91	11,070.07	13,042.75	4.51%
Department of Science & Technology	7,931.05	4,891.78	8,029.01	2.00%
Department of Biotechnology	2,683.86	1,607.32	2,251.52	-26.90%
CSIR	5,746.51	6,202.53	6,323.41	9.30%
Ministry of Earth Sciences	3,319.88	2,879.02	2,521.83	-27.72%
Department of Agriculture Research	9,504.00	9,876.60	9,941.09	4.43%
Department of Medical Research	2,980.00	2,892.83	3,001.73	0.75%
Department of Defence Research	12,850.00	12,942.85	13,208.00	2.77%

BE: Budget Estimates, RE: Revised Estimates, IB: Interim Budget **2023-24 BE to Interim Budget*
Source: Budget documents

The **highest increase, for CSIR, which runs a network of 37 labs, is all of about 9%, and the poster-boy Department of Space has received only a 4% increment in its budget. The Departments of Atomic Energy and Biotechnology, and the Ministry of Earth Sciences have actually had their budgets slashed.**

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Meet HAPS: India's very own UAV that can fly 20 km high and float for months

#HAPS #HighAltitudePseudoSatellite #NationalAerospaceLaboratories #ScienceandTechnology #GS3

The **National Aerospace Laboratories (NAL) in Bengaluru has successfully completed the first test of a solar-powered "pseudo satellite",** a new age unmanned aerial vehicle (UAV) that can significantly increase India's surveillance and monitoring capabilities in the border areas.

The **high-altitude pseudo satellite vehicle, or HAPS, can fly at altitudes of 18-20 km from the ground**, **almost double the heights attained by commercial airplanes**, and, thanks to **its ability to generate solar power, can remain in air for months, even years, offering it advantages of a satellite**. But **because it does not require a rocket to get into space, the cost of operating HAPS is several times lower than that of a satellite** that is usually placed at least 200 km from the earth.

HAPS is a still-developing technology, and the successful test flight last week puts India among a very small group of countries currently experimenting with this technology.

The **test flight, carried out in the Challakere testing range in Chitradurga district of Karnataka**, saw the scaled-down 23-kg prototype with a wing-span of about 12 metres, remain in air for about eight and a half hours, achieving an altitude of about 3 km from the ground.

The **need for development of high-endurance, high-altitude flying instruments arose from the desire to have continuous surveillance of border areas to detect changes or movements**, particularly in the wake of the Doklam standoff in 2017. **Battery-powered UAVs can remain in air for a limited period of time and can scan relatively smaller areas. Satellites placed in low-earth orbits and meant to observe the Earth usually move in their orbits and are not watching constantly.**

Solar-powered unmanned aircraft is considered a better solution. Although **NASA has been using solar-powered engines for its Pathfinder series of aircraft for a long time**, it is only now that other countries have got into developing more sturdy and nimble versions of solar aircraft for a variety of purposes. **China, South Korea, and the UK are some of the other countries where this development is taking place.** Some private companies are also developing HAPS, even in India.

In December **last year, Bengaluru-based NewSpace Research and Technologies, a deep-tech start-up, flew a similar solar-powered UAV, having developed the technology through the Innovation of Defence Excellence initiative of the Defence Ministry.**

The **test flight by NAL was the result of a separate initiative of R&D in this area started by CSIR**.

HAPS can be very useful in disaster situations as well. It can even be used to provide mobile communications networks in remote areas, if the normal networks get damaged due to any calamity. A lot of other things that satellites are deployed to do can be done by these vehicles.

NAL will only develop the technology and a prototype. The manufacturing of the actual thing would happen with industry linkages. The **aircraft that was successfully tested was a scaled-down version, one-third in size to the eventual aircraft.**

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GS 3 – DISASTER MANAGEMENT

NITISH device to alert farmers on flood, lightning, heatwaves, coldwaves

#NITISH #AlertSystem #DisasterManagement #GS3

Call it a smart acronym or a bid to keep Chief Minister Nitish Kumar in good humour, the Bihar State Disaster Management Authority has introduced a device matching the CM's name for farmers and common people to alert them on lightning, floods, heatwaves, and coldwaves.

Termed **Novel Initiative Technological Intervention for Safety of Humanlives (NITISH)**, the **Bihar State Disaster Management Authority, in collaboration with Indian Institute of Technology (IIT), Patna, has come up with a pendant-shaped device that will sound alert to its users through voice message on lightning, floods, heatwaves and coldwaves. The device is synced with the Bihar meteorological service centre.**

The **NITISH pendant will sound an alert to its users half-an-hour before lightning or flooding. The pendant will get charged from body heat. The device will sound an alert in three ways: it will send voice messages; its colour will change from green to red; and the device will keep warming till its user switches it off.**

NITISH device is waterproof and is designed keeping in mind farmers. Recurrent deaths because of lightning and flash floods had been the trigger for the disaster management authority to design it.

A disaster management department official explained that though **there's an App called Indravraj to sound similar alerts, it has been only helping in minimising deaths and injuries caused by lightning and thunderstorm.**

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INTERNATIONAL AFFAIRS

Drought hits Northeast Spain

#LaBaellsReservoir #CataloniaRegion #Spain #PlacesInNews #InternationalAffairs

La Baells reservoir near Berga, north of Barcelona is at 21 percent of its capacity. **Barcellona and its surroundings in northeastern Spain's Catalonia region** are preparing for tighter water restrictions amid a historic drought that has struck reservoirs to record lows.

Drought affected La Baells reservoir

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Bird flu found in penguins near Antarctica

#BirdFlu #AntarcticaPenguin #FalklandIslands #SouthGeorgiaIsland #PlacesInNews #InternationalAffairs

A **highly lethal form of bird flu has been detected in Antarctic penguins for the first time**. The **virus, H5N1, was confirmed in two gentoo penguins that were found dead on Sea Lion Island in the Falkland Islands**, a British territory.

Why the deaths matter Penguins are already under pressure

The **birds are facing numerous threats, including climate change, pollution, and commercial fishing. Three Antarctic penguin species —emperor penguins, southern rockhopper penguins and macaroni penguins — are listed as vulnerable or near threatened**.

Extent of the threat

Before H5N1 arrived in the Antarctic region last fall, highly pathogenic bird flu viruses had never been documented in the area. That means that the penguins are likely to have little existing immunity. And **because they breed in large, crowded colonies, once one penguin is infected, the virus could spread rapidly, causing mass mortalities.** As H5N1 spread through South America last year, Chile reported the deaths of thousands of **Humboldt penguins.**

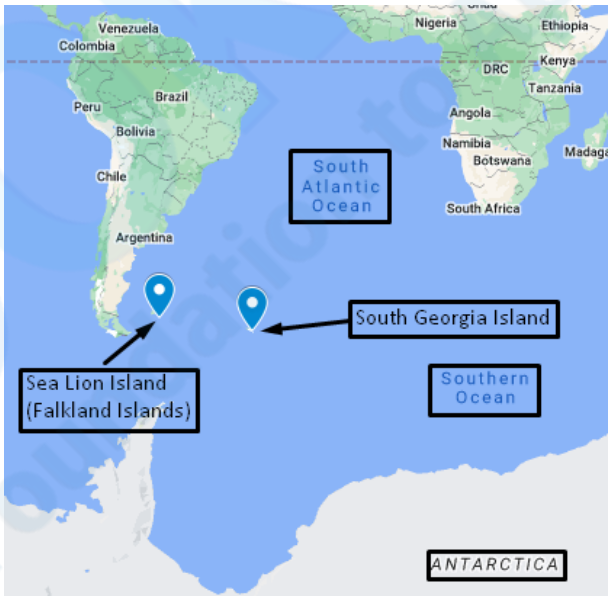
At least **one suspected case has also been reported in king penguins in South Georgia**, another British territory. But that report was based on a single dead king penguin, and investigators have not seen a spike in penguin deaths at that location.

Scientists are worried

Scientists have been worried about the spread of the virus in Antarctic. **The virus, which first emerged in 2020, has taken an unprecedented toll on wild birds and mammals**. After it was detected at the tip of South America last year, OFFLU, a global network of flu experts, warned that the pathogen could spread to Antarctica next.

The **Antarctic region provides critical breeding territory for more than 100 million birds as well as seals, sea lions and other marine mammals. If the virus arrived in the region, its impact on those animals "could be immense"**, OFFLU said

in a statement last August. Just two months later, the **virus was detected in brown skuas in South Georgia, the first cases in the region.** Since then, infections have been confirmed in numerous other bird species, as well as in elephant and fur seals. These marine mammals also breed in large colonies, and they suffered major losses as the virus spread through South America, where tens of thousands of seals and sea lions were reported dead. Scientists worry that the same fate may befall Antarctica's seals as the virus spreads.



Sea Lion and South Georgia islands

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Russian Cosmonaut sets new record

#OlegKononenko #RussianCosmonaut #PersonInNews #InternationalAffairs

Russian Cosmonaut **Oleg Kononenko has broken the world record for the most cumulative time spent in space.** The 59-year-old has now **spent 878 days and 12 hours** in space, **surpassing fellow Russian Gennady Padalka**, who set the previous record of 878 days, 11 hours, 29 minutes and 48 seconds in 2015.

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