

# **VEDHIK** DAILY NEWS ANALYSIS

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**VEDHIK**  
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*The New Learning Mantra*

## **FOREWORD**

We, at Team Vedhik is happy to introduce a new initiative - "Daily Current Affairs\_The Hindu" compilations to help you with UPSC Civil Services Examination preparation. We believe this initiative - "Daily Current Affairs\_The Hindu" would help students, especially beginners save time and streamline their preparations with regard to Current Affairs. A content page and an Appendix has been added segregating and mapping the content to the syllabus.

It is an appreciable efforts by Vedhik IAS Academy helping aspirants of UPSC Civil Services Examinations. I would like to express my sincere gratitude to Dr. Babu Sebastian, former VC - MG University in extending all support to this endeavour. Finally I also extend my thanks to thank Ms. Shilpa Sasidharan and Mr. Shahul Hameed for their assistance in the preparing the compilations.

We welcome your valuable comments so that further improvement may be made in the forthcoming material. We look forward to feedback, comments and suggestions on how to improve and add value for students. Every care has been taken to avoid typing errors and if any reader comes across any such error, the authors shall feel obliged if they are informed at their Email ID.

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# ASI reviving underwater division

DAMINI NATH  
NEW DELHI

The Archaeological Survey of India (ASI) is in the process of reviving its underwater archaeology wing that had become defunct over the years, Culture Ministry officials said.

A senior official told *The Hindu* that the underwater wing was being revived, while the details of excavations and projects to be taken up were yet to be decided.

Another official said the ASI had appointed Alok Tripathi, an expert in underwater archaeology, as its Additional Director General in 2021.

The Ministry has also informed the Parliamentary Standing Committee on Transport, Tourism and Culture that the underwater wing would be revived.

The standing committee had highlighted the need for reviving underwater archaeological sites in Maharashtra, Gujarat, Tamil Nadu and Odisha in its report on February 2.

EXPLAINER

## The Palk Bay fisheries conflict: A tale of competing livelihoods and a depleted catch

Why are both the fishing communities from Tamil Nadu and Sri Lanka at odds with each other?

MEERA SRINIVASAN

**The story so far:** The Sri Lankan Navy on Saturday arrested 12 Indian fishermen from Rameswaram district, Tamil Nadu, and seized two of their fishing boats on charges of engaging in illegal fishing activity. This is the third such arrest in a fortnight, prompting Tamil Nadu Chief Minister M.K. Stalin to, yet again, write to Prime Minister Narendra Modi, seeking the Centre's immediate intervention to secure their release. The development comes about 10 days after fishermen in Jaffna, in Sri Lanka's Northern Province, held a large protest, demanding strict implementation of Sri Lankan laws against illegal fishing by foreign vessels.

Though a long-dragging issue dominating Indo-Lanka bilateral ties, the recent weeks saw an escalation in tensions between fishermen following the death of two Jaffna fishermen, reportedly in mid-sea clashes with their Tamil Nadu counterparts. Sri Lanka has termed the fisheries conflict a diplomatic "flashpoint", threatening ties that are on the mend after a period of strain.

### What is the backstory?

For well over a decade now, fishermen of India and Sri Lanka have been unable to agree on how to share the fishes in the narrow Palk Strait separating the two countries. The Strait begins just north of Sri Lanka's Jaffna peninsula and spans about 100 km at its widest point. It is known to be a breeding ground for rich marine resources, especially shrimp.



**Ongoing conflict:** Boats anchored in the Rameswaram fishing jetty back in 20 December, 2021, against the arrest of fishermen by the Sri Lankan Navy. •BALACHANDAR L

Although India and Sri Lanka agreed to divide the Strait with an imaginary boundary line in the 1970s – the International Maritime Boundary Line (IMBL) – Indian fishermen, from the coastal districts of Tamil Nadu, and from Puducherry, are frequently arrested by the Sri Lankan Navy for "poaching" or engaging in "illegal" fishing activity in Sri Lankan waters. Several rounds of bilateral negotiations between the two governments and talks between fishing community leaders from both sides have been held over the years, but a solution remains elusive.

### What is the conflict, and between whom?

The main contention between the fishermen on either side is not so much about territorial rights, as historically both sides have amicably shared marine resources in the stretch. It is more to do with the use of "bottom trawling", the fishing method used by fishermen from Tamil Nadu.

A group of daily-wage fishermen set out on mechanised boats, owned by other affluent fishermen, and drag large fishing nets through the seabed. While they primarily target fish species and

shrimps, the practice of bottom trawling scoops out eggs, young fishes, and other marine organisms that eventually die and are thrown back into the sea.

The primary conflict here is between the Tamil Nadu trawler owners and the northern Sri Lankan fishermen, who are trying to rebuild their livelihoods after Sri Lanka's civil war ended in 2009. Until then, they were denied access to the sea at different points and displaced from their homes.

It is in the post-war decade that the Sri Lankan fishermen started voicing concern about depleting catches, owing to incessant trawling by the Indian fishermen. With the Indian side of the IMBL already ravaged by decades of high profit-yielding bottom trawling, they flock to the Sri Lankan side, with relatively less damage and therefore, more marine resources.

The clash now is essentially over competing livelihoods of two Tamil-speaking fisher communities, with a glaring asymmetry in power and resources. The Tamil Nadu fishing community, especially the trawler owners, are not only wealthier but also very politically influential. The northern Sri Lankan fishermen, on the other hand, are coming out of a brutal war, braving enormous losses and destruction. They use modest boats to practice traditional fishing and get little state support to resurrect their livelihoods.

### Why is it yet to be resolved?

One reason is the growing human cost of

the conflict – five Indian fishermen returned home dead last year after the Sri Lankan Navy allegedly attacked them mid-sea. More recently, the death of the two Jaffna fishermen has aggravated the anger on the Sri Lankan side as well.

For years now, India has urged Sri Lanka to adopt a humanitarian approach when it deters Indian fishermen.

However, when fishermen deaths occur, apart from customary condemnations and denials, there is little effort from authorities on either side to ensure investigations are completed and perpetrators brought to book.

Secondly, New Delhi tried diverting Tamil Nadu fishermen to deep sea fishing methods to wean them away from bottom trawling in the Palk Strait. But the initiative did not take off as planned, and the fishermen still resort to trawling, and often get caught by Sri Lankan authorities.

Thirdly, Tamil Nadu is yet to agree to the chief demand of northern Tamil fishermen – to stop bottom trawling to restore trust between the fishermen on both sides, and provide a real opportunity to re-commence talks, which they prefer over confrontation.

The northern Tamil fishermen repeatedly acknowledge Tamil Nadu's solidarity and support extended to Sri Lankan Tamils during the years of war and later. But they also remind their brothers across the Palk Strait that solidarity does not justify exploitation of resources on which their lives and livelihoods depend.

## THE GIST

■ For over a decade now, fishermen of India and Sri Lanka have been unable to agree on how to share the fishes in the narrow Palk Strait which separates the two countries.

■ The main contention between the fishermen on either side is about the use of "bottom trawling", the fishing method used by fishermen from Tamil Nadu. In this method, fishermen set out on mechanised boats and drag large fishing nets through the seabed. While they primarily target fish species and shrimps, the practice also scoops out eggs, young fishes, and other marine organisms damaging the seabed.

■ Apart from customary condemnations and denials whenever there are fishermen deaths, there is little effort from authorities on either side to find a solution to this problem.

# Do not make ‘irresponsible’ remarks on border issue: China

Beijing responds to S. Jaishankar’s comments on violation of agreements

ANANTH KRISHNAN  
HONG KONG

China on Monday said it hoped India would not make “irresponsible remarks” on the border situation and that both sides “should follow through on agreements”.

The comments came a day after External Affairs Minister S. Jaishankar, speaking in Melbourne following a meeting with his Australian counterpart Marise Payne, said China had violated written agreements by amassing troops.

“The situation [at the LAC in Ladakh] has arisen due to the disregard by China in 2020 of written agreements with us not to amass forces at the border. So, when a large country disregards written commitments, I think it’s an issue of a legitimate concern for the entire international community,” Mr Jaishankar said during a press conference.

Asked about his com-

 **China always maintains that we should follow through on treaties and agreements we signed and we jointly uphold peace and tranquillity at the border region**

**WANG WENBIN**  
Chinese Foreign Ministry spokesperson



ments at a press conference in Beijing, Chinese Foreign Ministry spokesperson Wang Wenbin said, “The merits of the matter are very clear and responsibility does not rest with China.”

## Talks on

“Now the two sides are in communication on improving border management and measures to build trust,” he said.

“We hope the Indian side will abide by agreements, not issue irresponsible remarks, and uphold peace and tranquillity along the border area with concrete actions”

On India’s position that China had violated previous agreements by amassing troops along the LAC and carrying out transgressions that sparked the LAC crisis in April 2020, Mr. Wang said, “China always maintains that we should follow through on treaties and agreements we signed and we jointly uphold peace and tranquillity at the border region.”

“We hope the two sides will continue to maintain communication through military and diplomatic channels to resolve the outstanding issues.”

Those on-going talks to re-

solve issues have, however, been slow-moving and Indian officials say China has been dragging its feet towards disengagement.

While there was no breakthrough during the 14th round of talks held last month, both sides did, however, release a joint statement saying the two sides would consolidate outcomes, maintain communication through military and diplomatic channels and stability along the border.

## Friction points

There is as yet no agreement to disengage and reduce tensions in the three remaining areas of difference or friction points.

The focus of the 14th round was Hot Springs where both sides are thought to be close to agreeing on a plan to disengage, while more pronounced differences remain in Demchok and Depsang.

# Russia ready for more talks to end crisis

Lavrov asks Putin to continue talks to end Ukraine standoff; Moscow says military drills are ending

AGENCE FRANCE-PRESSE  
MOSCOW

Russia held the door open on Monday to further talks on resolving its standoff with the West and said some of its military drills were ending, signalling a possible easing of the crisis over Ukraine.

While the comments from President Vladimir Putin and his Foreign and Defence Ministers seemed to offer hope of a de-escalation, the Pentagon said Russia had strengthened its forces amassed on the border with Ukraine over the weekend.

Mr. Putin “continues to add forces along that border with Ukraine and in Belarus, even just over the course of the weekend, he’s well north of 1,00,000,” spokesman John Kirby told CNN.

During a carefully choreographed meeting with Mr. Putin, Russian Foreign Minister Sergei Lavrov said “there is always a chance” to reach an agreement with the West over Ukraine.

He told Mr. Putin that exchanges with leaders in European capitals and Washington showed enough of an opening for progress on Russia’s goals to be worth pursuing.

“I would suggest continuing,” Mr. Lavrov said in televised remarks. “Fine,” Mr. Putin replied.

Ukraine has demanded an urgent meeting with Russia and other members of the pan-European security body, the OSCE, to explain Moscow’s troop movements.

European leaders have warned that the build-up is the worst threat to the conti-



**Sign of peace:** Russian President Vladimir Putin, right, and Foreign Minister Sergei Lavrov during a meeting at the Kremlin, in Moscow, on Monday. ■ AFP

nent’s security since the Cold War, with Putin demanding a rollback of Western influence in eastern Europe and a ban on Ukraine joining NATO.

## ‘Sanctions awaiting’

Western allies have prepared what they warn would be a crippling package of economic sanctions in response to any attack. Moscow has repeatedly said it has no plans to attack Ukraine.

Alarm has been fuelled by recent Russian military exercises, including with Belarus, where the U.S. said Moscow had dispatched 30,000 troops for more than a week of drills.

Russian Defence Minister Sergei Shoigu told Mr. Putin that some of the drills were “ending” and more drills would end “in the near future”.

In Kiev, Ukrainian Defence Minister Oleksiy Reznikov hailed “positive” talks with his Belarusian counter-

part. He said he had been assured “there are no threats to Ukraine from Belarus”.

U.S. intelligence officials worry that weeks of crisis talks have given Russia the time to prepare a major offensive should Mr. Putin decide to attack Ukraine.

On Sunday, Washington warned that Russia was ready to strike at “any moment”.

But on Monday, Oleksiy Danilov, secretary of Ukraine’s Security and Defence Council, said Kiev authorities did not believe Russia would attack on Wednesday or Thursday.

## Scholz to Moscow

Germany plays a central role in efforts to mediate in eastern Ukraine, where a grueling conflict with Russian-backed separatists has claimed more than 14,000 lives.

But Berlin’s close business relations with Moscow and heavy reliance on Russian

natural gas imports have been a source of lingering concern for Kiev’s pro-Western leaders and U.S. President Joe Biden’s team.

Mr. Scholz has hedged against unequivocally backing Mr. Biden’s pledge to “bring an end” to Russia’s new Nord Stream 2 gas link to Germany.

Brussels will wait for the results of Mr. Scholz’s visit to the Kremlin and an emergency summit was “possible” if needed when EU leaders gather in Brussels Thursday for the Africa meeting, a senior EU official said.

Mr. Zelensky repeated during the press conference on Monday with Mr. Scholz that joining the NATO alliance would guarantee Ukraine’s survival.

Ukraine’s membership is a sticking point in discussions between Russia and the West, which has spurned a demand from Moscow that Kiev never be admitted to the U.S.-led military bloc.

## Centre of the debate

A convention of CMs should not be drowned in the polemic of electoral politics

The Chief Ministers of West Bengal and Tamil Nadu, Mamata Banerjee and M.K. Stalin, respectively, have jointly proposed a convention of non-BJP Chief Ministers. The initiative is still nascent and there is no clear agenda or a definite date but the political context is amply clear. Relations between the Centre and the States ruled by Opposition parties are strained due to various factors, ranging from questions related to GST, the partisan behaviour of central agencies, the Centre's move to give itself absolute powers in the transfer of IAS, IPS and IFS officers and the overbearing attitude of several Governors. The relations among States are also fraying in many instances even as the Centre's moral authority to be a neutral arbiter is at a low. The tendency to mobilise political support in one State by berating other States, though not new, seems to have acquired an additional edge with the BJP drawing its support from the northern and western regions, while the Opposition holds on to the southern region in general. A communal angle is occasionally added, as Uttar Pradesh CM Yogi Adityanath did last week in branding West Bengal, Kerala or Kashmir, apparently for the high levels of political power enjoyed by Muslims there. In Parliament recently, Prime Minister Narendra Modi and Congress leader Rahul Gandhi had a heated debate on the scope and limits of Indian federalism.

The autonomy of the States in their relations with the Centre depended less on any ideological distinction between parties than on the nature of power sharing among them. When the government at the Centre is dependent on regional parties for survival, it is more accommodative towards the aspirations of constituent groups – linguistic, religious, ethnic or political. The 2014 victory of the BJP brought an end to the coalition era that had lasted for 25 years. The current upheaval among parties in power in States is related to larger questions debated in Parliament but there are individual factors too. The TRS is anxious about the BJP's push to expand in Telangana; the DMK is anxious to protect its social justice politics from the Centre's unilateralism; the TMC, though it emerged victorious over the BJP in last year's Assembly election in West Bengal, still has scores to settle; the Shiv Sena in Maharashtra is determined to protect its turf from the former ally's persistent encroachment attempts. For individual factors of power politics, some CMs and State parties could be less enthusiastic than the TMC, DMK, TRS and Sena in confronting the BJP and the Centre. Andhra Pradesh CM and YSRCP leader Jagan Mohan Reddy and Odisha CM and BJD chief Naveen Patnaik might consider it prudent to protect their respective turfs in tacit acquiescence with the BJP. A convention of the CMs can articulate the concerns of States but it should guard against turning into an occasion for counterproductive polemic rooted in electoral calculations.

## CMC must fill 70% PG seats from minority list: Supreme Court

'The rest can be filled by the management as in the previous academic year'

LEGAL CORRESPONDENT  
NEW DELHI

The Supreme Court, in an interim order on Monday, clarified that 70% of the postgraduate admissions for 2021-22 at the Christian Medical College (CMC), Vellore, should be made from the list of Christian minority students prepared by the State of Tamil Nadu on the basis of the marks obtained in the NEET-PG examination.

A Bench of Justices L. Nagawara Rao and B.R. Gavai directed that the remaining 30% of the seats be filled by the college management following the procedure adopted in the previous academic year of 2020-21.

The students belonging to States other than Tamil Nadu, who have completed MBBS at the college, should be treated as residents on the basis of the prevalent procedure, the court ordered. It underscored that its order was restricted for the purpose of admissions for 2021-22 and should not be treated as a precedent. "Do not discriminate. If students who have completed five years are treated as residents, you have to treat these students also the same. Do not make them come here again. All these years, admissions have been done smoothly; let them be done smoothly this year," Justice Rao addressed Additional Advocate-General of Tamil Nadu Amit Anand Tiwari.

The court told the CMC, represented by senior advocate Shyam Diwan and advocate Krishna Srinivasan, that it should not raise any new condition for admissions now. The oral remark came after Mr. Tiwari complained that the CMC had raised "unnecessary conditions like a bond for ₹1.25 crore to dissuade students from taking admissions". "That should go," he submitted. "Mr. Diwan, don't raise any new conditions," Justice Rao said.

The allotment of seats in the undergraduate courses, the court said, would mirror that in the postgraduate courses.

The court further ordered that the annual allotment of 10% seats to the dependents of the college staff members would be within the 30% seats. Mr. Diwan said the practice of allotting 10% seats for the children of the staff members, regardless of whether they are Christian or not, had been followed for years. Even the Supreme Court had affirmed it as non-discriminatory.

The court was hearing an interim application filed by the college on the January 19, 2022 order of the court. In January, the court directed Tamil Nadu to conduct postgraduate admissions to the prestigious college from the NEET merit list of students belonging to the Christian minority after counselling by the State Selection Committee.

The college pleaded that pursuant to the January 19 order, the allotment of students for postgraduate courses ought to be made from the all-India merit list and not the list prepared by the State.



# EWS norms will stay, says SC


Decision expected in March will apply for 2022-23 NEET too, says Bench

LEGAL CORRESPONDENT  
NEW DELHI

The Supreme Court on Monday said whatever it decides on the criteria to identify Economically Weaker Section (EWS) for granting benefits of reservation will apply in NEET-PG 2022-23 admissions as well.

“We have not stalled the process of determining the EWS criteria for next academic year. We have said EWS quota will be as per our order. We have kept the matter in March for disposal. The process cannot stop. Whatever we decide will apply,” a Bench led by Justice D.Y. Chandrachud addressed the petitioners.

The court was hearing a petition filed by Varun Dileepbhai Bhatt and others on the applicability of the EWS criteria in NEET PG 2022-

 We have not stalled the process of determining the EWS criteria for next academic year. We have said EWS quota will be as per our order. We have kept the matter in March for disposal. The process cannot stop. Whatever we decide will apply

SUPREME COURT



2023 exam. Advocate Charu Mathur, appearing for the students, said they had sought an extension of the deadline for edit option in the online forms with respect to the EWS norms.

#### No extension

The Bench said it cannot grant any such extension of the edit window and if the authorities have taken a call, then it should be as it is.

“Whatever happens in the matter, it will govern, because that is our jurisdiction under Article 32,” Justice Chandrachud said.

#### Plea sought

Some MBBS doctors, who have also filed a plea, sought direction to the Centre to specify in an information bulletin that the EWS criteria for academic session 2022-23 would be decided in

terms of the pleas challenging the amended reservation policy (27% OBC and 10% EWS) in the All India Quota for the NEET.

#### Equality of opportunity

They too had urged for an extension of the date for the edit window from February 11, 2022 to enable the candidates to choose Economically Weaker Section category after the final decision in the pending matter.

On January 20, the top court had said merit cannot be reduced to narrow definitions of performance in an open competitive examination which only provides formal equality of opportunity. It had upheld the 27% reservation for OBCs in All India Quota (AIQ) in the NEET for UG and PG medical courses.

## There is Constitutional impropriety, says NC

‘Delimitation draft won’t ensure equal representation’

PEERZADA ASHIQ  
SRINAGAR

The National Conference (NC) has mainly highlighted—“constitutional impropriety, lack of implementation of laid-down guidelines and irrational distribution of geography and population” in the proposals in the second draft of the J&K Delimitation Commission. Three party leaders who are associate members on the panel submitted its response to the draft in New Delhi on Monday.

“The threshold of our response to the commission’s second draft has been that it should stay away from such exercises till the Supreme Court decides the matter before it. We reiterated that the J&K Delimitation Commission was set up under the Delimitation Commission Act, 2002, which was not applicable to J&K. Out of deference, moral and constitu-



Hasnain Masoodi

tional propriety, the exercise should not have been held as it is tantamount to pre-empting the SC verdict.” Justice Hasnain Masoodi (retd.), NC leader and MP, told *The Hindu* in an exclusive interview after submitting the party response to the panel.

He said the NC’s response also pointed out to the commission that it “has violated and departed from the laid-down norms”.

“There are constituencies

with 1.92 lakh voting population and some with just 51,000. An aggregate population of three constituencies matches the population of just one seat of Dooru in south Kashmir with around 2 lakh voting population. The draft has defeated the purpose of giving equal representation to people,” Mr. Hasnain said.

Mr. Masoodi said the parameters on aspects such as geographical contiguity, hilly terrain and lack of communication were violated.

“In the first draft, it was proposed that there could be a deviation of minus 10 on the basis of tough geographical conditions. However, there are deviations as large as 60%. For example, the newly created Paddar constituency [in Jammu] has just a population of 51,000 against the average population distribution of 1.36 lakh per constituency.”



## ABSTRACT

# The fight against antimicrobial resistance

AMR is a leading cause of death around the world, with the highest number of deaths occurring in low-resource settings

## THE GIST

■ Bacterial antimicrobial resistance occurs when changes in bacteria causes the drugs used to treat the infection to become less effective. A paper authored by Antimicrobial Resistance Collaborators states that around 4.95 million deaths were associated with bacterial anti microbial resistance in 2019 alone.

■ The paper is an analysis of the burden of AMR, producing estimates for 204 countries and territories, 23 bacterial pathogens, and 88 drug-pathogen combinations in 2019. The six leading pathogens for deaths associated with resistance included *E. coli*, *S. aureus*, *K. pneumoniae*, *S. pneumoniae*, *A. baumannii* and *Pseudomonas aeruginosa*. They have been registered as priority pathogens by WHO.

■ The indiscriminate use of antibiotics, no proper sanitation and the lack of awareness among the public about the dangers of AMR are some of the reasons which need to be tackled in order to fight against antimicrobial resistance.

RAMYA KANNAN

Antimicrobial Resistance Collaborators, "Global burden of bacterial antimicrobial resistance in 2019: a systematic analysis", *The Lancet*, January 19, 2022, [https://doi.org/10.1016/S0140-6736\(21\)02724-0](https://doi.org/10.1016/S0140-6736(21)02724-0).

After two years of relentless conversations about one pathogen that has ruled over the world causing over 52 lakh deaths in this period, *The Lancet* recently woke the world up to six other deadly pathogens (individually, or in combination with certain drugs) wrecking havoc in 2019, as a result of antimicrobial resistance (AMR). A late January 2022 publication in the peer-reviewed journal estimated that 4.95 million deaths were associated with bacterial anti microbial resistance in 2019. Bacterial antimicrobial resistance occurs when changes in bacteria causes the drugs used to treat the infection to become less effective.

Arguably the first such comprehensive study on AMR globally, the paper authored by Antimicrobial Resistance Collaborators states that AMR is a leading cause of death around the world, with the highest number of deaths occurring in low-resource settings. "Understanding the burden of AMR and the leading pathogen-drug combinations contributing to it is crucial to making informed and location specific policy decisions, particularly about infection prevention and control programmes, access to essential antibiotics, and research and development of new vaccines and antibiotics," the authors have recommended.

### Research on a massive scale

The study is an analysis of the burden of AMR, producing estimates for 204 countries and territories, 23 bacterial pathogens, and 88 drug-pathogen combinations in 2019. They obtained data from multiple data sources – including from published studies (microbiology data, in patient data, data on multiple causes of death, and pharmaceutical sales data), and directly from the collaborators on the Global Research on Antimicrobial Resistance project, members of the Global Burden of Diseases, Injuries and Risk Factors collaborator network. Additionally, they computed two counterfactual scenarios – one where all drug resistant infections are replaced by susceptible infections, and secondly, a scenario where all drug resistant

infections are replaced with no infections. The deaths and burden of AMR were estimated in these two scenarios, and served as a measure to inform the development of potential intervention strategies.

The six leading pathogens for deaths associated with resistance included *E. coli*, *S. aureus*, *K. pneumoniae*, *S. pneumoniae*, *A. baumannii* and *Pseudomonas aeruginosa*. They accounted for 73.4% of the deaths attributable to AMR, and have been identified as priority pathogens by WHO.

While the study was done in 2019, it is possible that the intervening epidemic has worsened the situation in terms of pushing AMR levels further. Dr. V. Ramasubramanian, Senior consultant, Dept of Infectious Diseases, Apollo Hospitals, Chennai, explains that during the COVID-19 pandemic, the use of antibiotics went up. The tendency was also to use antibiotics for patients on a ventilator with fever. Secondly, due to the large number of patients during the peaking waves, lack of appropriate infection control (as will be done in the case of patients with resistant bacteria) was rendered impossible. He points out that antibiotics are the only batch of drugs, used in one person, that can impact the rest of the community. When the gut biome is modified and excreted, it can lead to contamination of lands and water sources, thus spreading resistant bacteria further in the community.

"We have always known that the burden of AMR in the world was huge. If action was not taken it was not because of the lack of data," says Abdul Ghafur, infectious diseases expert, Apollo Hospitals, and architect of the Chennai Declaration. "It is because at the global level, we lost momentum." India had framed its AMR policy in 2017, but only three States have initiated a state plan of action. According to official sources, 11 States are still working on a state plan of action.

### Action plan to control AMR

"We should apply the principles of COVID control to AMR control. By whom was the most effective strategies against COVID deployed? By the public. If you look at global strategy, the public have been consistently kept out of the picture. We should involve the public, carpet bomb them with information and announce an AMR action plan that will involve them in control. Another major strategy would be to ensure hygiene and sanitation in all places. In a study that we

conducted among healthy volunteers, 14% of them were carrying colistin-resistant bacteria in the gut, that had a food source, they did not contract it in a hospital, Dr. Ghafur said.

AMR, reasons Dr. Ramasubramanian, is a classic case of "tragedy of the commons" where a perfect solution is elusive. "You have got to use antibiotics, they are life saving. But there are so many factors that impact on such use such as using the right drugs, following the right quantity/schedule, over the counter issue of antibiotics, exposure to antibiotics used in certain sectors in farming and poultry as well as the lack of clear guidelines to follow (by the medical community) and incentives (by the pharma industry) to write out prescriptions for antibiotics ...". The authors of the paper also make a strong case for improving sanitation across the world, as part of an intervention strategy to prevent infections. Along with implementing hospital based prevention programmes, community based programmes that will improve hygiene, water and sanitation is essential. This is particularly important in low and middle income countries where the burden of AMR is highest and a clean water and sanitation network difficult to come by.

They have also suggested that preventing infections through vaccinations will automatically reduce the need for antibiotics. Currently, vaccines are available only for one of the six leading pathogens (*S pneumoniae*) but vaccine programmes are reportedly on for some others as well.

### The way forward

Reducing exposure to antibiotics that are used in the farming sector and poultry industry is also key. In this context, Dr. Ghafur points out that India's move to ban colistin usage in the poultry industry will go a long way in reducing the AMR burden in the country.

Antibiotic stewardship, or minimising the use of antibiotics unless absolutely necessary, remains at the core of the fight against AMR. It is in this aspect that Dr. Ghafur indicates the strong involvement of the community.

It is the hope of all collaborators, who continue to fight the big war with bacterial antimicrobial resistance, before, and through pandemics, that this new data provides the urgency and fresh momentum for global action to counter the single biggest burden that poses a major threat to human health.

# Inflation edges past 6% in January

He added that inflation is over 6% in most States, with Haryana seeing the steepest rate of 7.2%.

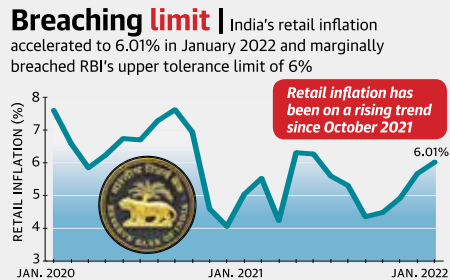
RBI Governor Shaktikanta Das said the 6% inflation print should not cause concern or trigger any alarm, because the central bank has already taken its prospect into consideration.

But with global crude oil prices now hitting \$95 a barrel, economists said the government's stance on retail fuel prices after the ongoing Assembly polls – to raise them or pare excise duties – will be critical in determining the inflation trajectory from March. "Rising international crude oil prices remain a huge threat, accentuating inflationary pressures, even though fuel inflation eased in January to 9.32% from 10.95% in December," said M. Govinda Rao, chief economic advisor at Brickwork Ratings.

"The ongoing Ukraine crisis is likely to escalate the international crude oil prices higher, hence the Central government may have to lower

the excise duties in the coming months to control inflation," Mr. Rao, who was a member of the Fourteenth Finance Commission, said.

Clothing and footwear inflation accelerated to 8.84% in January from 8.3% in December, following the introduction of a higher GST rate on footwear products. A proposed GST hike on clothes from January 1 had been called off by the government after a GST Council meeting in late December. Mr. Sabnavis said the main challenge thrown up by the January data is the high 6% plus inflation in non-food segments like clothing, fuel and light, household goods, health, transport and recreation. Even if retail inflation peaks in the current quarter, ICRA chief economist Aditi Nayar said it may not moderate quickly. Ms. Nayar now expects a change in the monetary policy stance only in June 2022, followed by two repo rate hikes of 25 basis points each in August and October.



## Inflation edges past 6% in January

### Rural India bears the brunt of spike

**SPECIAL CORRESPONDENT**  
NEW DELHI

India's retail inflation accelerated past the 6% mark in January to hit 6.01%, breaching the central bank's tolerance threshold for consumer price inflation for the first time since June 2021. Retail inflation was 5.66% in December 2021.

Rural India bore the brunt of the inflation spike as per official data, with the pace of price rise touching 6.12% from 5.36% in December.

Inflation in urban India was virtually unchanged at

5.91% in January, from 5.9% a month earlier.

The Consumer Food Price Index spiked significantly from 4.05% in December to 5.43% in January, with rural India again reporting a sharper rise.

"Food inflation is high mainly due to the higher edible oils component, but the overall basket is below the headline number at 5.6%," said Bank of Baroda chief economist Madan Sabnavis.

**CONTINUED ON** ▶ PAGE 8  
**WHOLESALE PRICE INFLATION**  
**FALLS TO 12.96%** ▶ PAGE 12

# RBI Governor Das defends FY23 inflation projection

### Price stability is top priority for the Reserve Bank, he says

**SPECIAL CORRESPONDENT**  
NEW DELHI

The central bank's inflation projection of 4.5% for FY23 is quite robust and a single-day price movement cannot help arrive at an accurate projection, Reserve Bank of India Governor Shaktikanta Das asserted on Monday.

Stressing that price stability is the uppermost priority for the central bank, Mr. Das said making a projection for the full year based on current crude oil prices of \$95 a barrel would be fraught with error.

"You will definitely go wrong because it may go up even further or come down steeply. So, therefore based on several factors, we take



Shaktikanta Das

into account a particular range within which crude prices are expected to fluctuate," he said.

"Our inflation projection is quite robust and we stand by it. If there is something, totally unforeseen... of course, that is different. And

we are saying that it is contingent on the risks on the upside and downside," he said, speaking after a meeting of the RBI board.

January's retail inflation breaching the 6% threshold should not cause concern, he said, adding that the character and the content of inflation in advanced economies is different from the character, content and the drivers of inflation in India.

"The momentum of inflation in India is on the downward slope since October 2021. It's primarily the statistical reasons, the base effect, which has led to higher inflation... and a similar base effect will play a role in the coming months," he noted.

EXPLAINER

# LIC's road to the IPO

How does the LIC make revenue? How is the Government planning to attract investors?

## THE GIST

■ The Life Insurance Corporation of India (LIC) filed its draft red herring prospectus on Sunday to kick-start the IPO process. LIC makes money by selling various insurance products but unlike other insurance companies, LIC redistributes most of its profits back to policyholders in the form of bonuses.

■ The Government, which wants to sell 5% of its stake in LIC, has recognised that these methods of profit redistributing can put off investors. Investors who buy shares would want a larger share of the profits earned by LIC each year. This means that the share of profits that is distributed to policyholders is likely to drop as the Government tries to sell its stake in LIC at the best price.

■ LIC has been used as a piggy bank by the Centre but not many falling businesses. LIC's purchase of IDBI bank as well as its investments in other struggling companies such as DLF, Reliance Capital etc. have come under scrutiny. There is likely to be greater resistance to such endeavours when its shares are traded in the stock market.

**The story so far:** The Life Insurance Corporation of India (LIC) filed its draft red herring prospectus on Sunday to kick-start the initial public offering (IPO) process. The Government, which owns 100% of LIC, will be offloading 5% of its stake through the IPO. All the proceeds from the IPO, which is in the form of an offer for sale and is expected to total up to at least 500,000 crore, will go towards meeting the Government's disinvestment target for FY22.

**What does the LIC do?**  
LIC makes money by selling various kinds of life insurance products. The company collects premiums from customers promising to pay a certain amount as insurance cover in the case of death, disability due to accident, etc. Then like any other insurance company, when LIC annually pays out less against individual claims than what it collects as premium from all its policyholders, it makes a profit.

The company also invests some of the premium it collects and other surplus money into stocks, government bonds and other investment products, returns from which add to its overall profits. LIC, which manages about 57 lakh crore in assets and underwrites three out of every four life insurance policies in the country, reported a net profit of ₹1,437 crore in the first half of FY22.

LIC also redistributes most of its profits back to policyholders in the form of bonuses. In fact, LIC currently pays out just 5% of its profits to the sole shareholder — the Government. The remaining 95% of the profits is either reinvested back into the company or distributed to policyholders as bonuses. This allows LIC to market its insurance policies to its policyholders as investment products besides the element of risk coverage, although critics argue the returns offered by LIC are lower when compared with other investments.

**Why are policyholders worried about**



• REUTERS

**the IPO?**  
The Government, which wants to sell 5% of its stake in LIC to the public, has recognised that the way LIC distributes its profits can turn out to be a problem in attracting a lot of investors. Investors who buy shares of LIC would want a larger share of the profits earned by LIC each year if they are to purchase the shares offered by the Government at a price desired by the Government. After all, the price that investors are willing to pay for the shares of any company depends on the future cash flow that they expect from owning the shares. All this means that the share of profits that is distributed to policyholders is likely to drop as the Government tries to sell its stake in LIC at the best price. In fact, reports suggest that by FY25, the share of LIC's profits that would be distributed to policyholders would drop to 90%, from 95%, with the remaining profits going to shareholders including the Government. In short, as the Government tries hard to make

its stake sale attractive to investors participating in the IPO, the returns that policyholders could expect from their policies could diminish going forward.

**What lies ahead?**

Policyholders may likely reconsider their investment in LIC's products as the percentage of LIC's profits redistributed to them drops going forward, thus affecting their returns. Also, the primary appeal of LIC among policyholders has been the implicit sovereign guarantee offered by the Centre which has convinced policyholders to park their money with LIC despite low returns. In fact, in a country like India which has no proper safety net for citizens, some have seen LIC as offering low but safe returns to millions of citizens.

Supporters of the IPO, however, argue that the hit to policyholder returns must be weighed against the benefits of greater private participation in the management of LIC's assets. LIC parks most of its capital in

government bonds and this money can be better used in other ways that yield higher returns and also help the economy. The higher returns can even trickle down to policyholders if greater competition is encouraged in the insurance industry. With a greater share of profits going to shareholders, returns would also become commensurate with the risk undertaken.

It should be noted that LIC has been used as a piggy bank by the Centre for years to bail out many falling businesses. LIC's purchase of IDBI bank, for instance, came under criticism as making no business sense. LIC's investment in other ailing companies such as DLF, Reliance Capital etc. have also come under similar scrutiny. There is likely to be greater resistance from shareholders to such non-core use of LIC's capital when its shares are traded publicly. The Centre last year, for instance, walked back its decision to take a larger share of BCTC's earnings after investors dumped the company's shares.

## THE HINDU

### First launch of 2022

On Monday, Earth Observation Satellite EOS-04 and two small satellites — INSPIRESat-1 and INS-2TD — were placed in the orbit by the PSLV-C52 rocket. A detailed look at the payload

#### DETAILS OF THE LAUNCH

- 1 Monday's was the 54th flight of PSLV and 23rd mission using PSLV-XL configuration with six PSOM-XLs (strap-on motors)
- 2 After a flight of about 18 minutes, the vehicle injected the satellites into their intended orbit
- 3 Primary satellite EOS-04 was put into the intended sun synchronous polar orbit of 529 km altitude at 6:17 a.m.

**EOS-04** Weight: 1,710 kg  
Mission life: 10 years

Use: Radar Imaging Satellite is designed to provide high quality images under all weather conditions for applications such as agriculture, forestry and plantations, soil moisture and hydrology and flood mapping

**INSPIRESat-1** Weight: 8.1 kg  
Mission life: 1 year

Use: Two payloads in the satellite are aimed at improving the understanding of ionosphere dynamics and the sun's coronal heating processes

- The satellite is built by Indian Institute of Space Science and Technology in association with Laboratory of Atmospheric and Space Physics at University of Colorado Boulder, NTU, Singapore and NCU, Taiwan

**INS-2TD** Weight: 17.5 kg  
Mission life: 6 months

Use: Having a thermal imaging camera as its payload, the satellite benefits the assessment of land surface temperature, water surface temperature of wetland or lakes, delineation of vegetation (crops and forest) and thermal inertia (day and night)

- This is a technology demonstrator satellite from ISRO, a precursor to the India-Bhutan Joint Satellite (INS-2B)

SOURCE: AP  
IMAGES: ISRO

**Flying start:** ISRO's workhorse launch vehicle, PSLV, blasting off from the launchpad at Sriharikota at 5:59 a.m. on Monday

# ISRO puts 3 satellites into orbit aboard PSLV C-52

The first launch of the year under the new Chairman S. Somanath went off without a glitch

T.K. ROHIT  
CHENNAI

Thick orange fumes from the PSLV C-52 briefly lit up the pre-dawn dark sky and Pulicat Lake as the workhorse of the Indian Space Research Organisation soared into the skies from the first launch pad of the Satish Dhawan Space Centre, Sriharikota, on Monday, the booming noise of the launch vehicle carrying three satellites breaking the morning silence.

The ISRO's maiden launch of 2022 and the first under its new Chairman, S. Somanath, went off without a glitch, placing all the three satellites into orbit with precision. The PSLV C-52 was the 54th flight of the rocket and the 23rd in its XL configuration.

The success of the launch was crucial for ISRO that had a very muted 2020 with just two launches, one of which – the GSLV-F10 – failed after



ISRO's PSLV-C52 successfully lifting off from the Satish Dhawan Space Centre at Sriharikota. • B. JOTHI RAMALINGAM

launch. The PSLV C-52 carrying the Earth Observation Satellite, EOS-04, the INS-2TD, a technology demonstrator from ISRO, and the INSPIRESat-1, a student satellite, lifted off at 5.59 a.m.

Around 18 minutes later, the three satellites were separated and placed into their orbits. "The primary satel-

lite, the EOS-04 has been put in a precise orbit. The co-passenger satellites have been placed into the right orbit," Mr. Somanath said adding ISRO will be "back with the next launch of PSLV very soon".

With a mission life of 10 years, the EOS-4, a radar imaging satellite is designed

to provide high-quality images in all weather conditions for applications such as agriculture, forestry, plantation, flood mapping, soil moisture and hydrology. The satellite will collect earth observation data in C-band and will complement and supplement the data from Resourcesat, Cartosat series and RISAT-2B series, ISRO said.

The INS-2TD is a precursor to the India-Bhutan joint satellite [INS 2-B] and will assess land and water surface temperatures, delineation of crops and forest and thermal inertia.

## Student satellite

The INSPIRESat-1 is a student satellite from the Indian Institute of Space Science and Technology in association with the University of Colorado, U.S., and is aimed at improving the understanding of ionosphere dynamics and the Sun's coronal heat-

ing processes. The Nanyang Technological University, Singapore and the National Central University, Taiwan, were part of the development team of the INSPIRESat. Taiwanese media reported that this was the first time Taiwan collaborated with an international team to launch a satellite from India.

## PM's message

Prime Minister Narendra Modi congratulated India's space scientists on Monday on the successful launch of the PSLV C52 mission.

Mr. Modi tweeted, "Congratulations to our space scientists on the successful launch of PSLV C-52 mission. EOS-04 satellite will provide high resolution images under all weather conditions for agriculture, forestry and plantations, soil moisture and hydrology as well as flood mapping."

(With inputs from PTI)

# Zooming in on the potential of India's geospatial sector

But the main hurdles are the lack of awareness among potential users and inadequate skilled manpower



BHARAT LOHANI &  
RAJESH MATHUR

The date, February 15, 2021 will be regarded as a watershed moment when new guidelines took effect to completely de-regulate the geospatial sector for Indians (<https://bit.ly/362B5a1>). As we celebrate the first anniversary of this moment, it is time to look back and assess its impact and identify the bottlenecks so that the full potential of the geospatial sector can be realised.

## Not much of a percolation

India has a robust ecosystem in geospatial, with the Survey of India (SoI), the Indian Space Research Organisation (ISRO), remote sensing application centres (RSACs), and the National Informatics Centre (NIC) in particular, and all ministries and departments, in general, using geospatial technology. However, the full benefits have yet to percolate to the public; neither is there much contribution to the nation's GDP.

Since the declaration of the guidelines, there has been a lot of hype and hoopla about the geospatial sector. The Prime Minister's speech during Independence Day and mention of geospatial in the Union Budget have created the necessary buzz. The media too pu-

blished many articles projecting the market to some ₹1 lakh-crore by the year 2029 with 13% Compound Annual Growth Rate (CAGR). Consequently, the geospatial sector, which was considered taboo by investors, is seeing new interest.

The last year has also witnessed some activity on the ground. The most noticeable was the over-subscription of the initial public offering of MapmyIndia. The other noticeable activity was the launching of a city mapping programme by Genesys International in India. Such an aggressive stance by investors for geospatial was not seen in the earlier regime; it is certain that the new guidelines have played a role. Today, there is a positive mood in the private industry, which is no more apprehensive and conservative like it was in previous years.

While the Government has done its bit and industry is gung-ho, questions remain: is the full potential of geospatial being exploited? Or are there roadblocks still despite the enabling policy in place? These are important questions and should be dealt with.

## Key issues

Among the most prominent hurdles is the absence of a sizeable geospatial market in India. There is no demand for geospatial services and products on a scale linked to India's potential and size. This is mainly due to the lack of awareness among potential users in government and private. The other hurdle has been the lack of skilled manpower across the entire pyra-

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mid. The unavailability of foundation data, especially at high-resolution, is also a constraint. The lack of clarity on data sharing and collaboration prevents co-creation and asset maximisation. Lastly, barring a few cases, there are still no ready-to-use solutions especially built to solve the problems of India.

Unless these issues are addressed, the policy alone will not suffice. Of course, it can be argued that the restrictive data policy of yesteryears was the root cause of many of these limiting factors. However, the experience has been that despite one year since the new guidelines came into effect, users are still not fully aware of things. This is true across government departments, and confusion prevails in private industry.

## Have a protocol in place

It is understood that these issues cannot be resolved overnight and that the formulation of guidelines alone is not enough. The inertia and the mindset due to decades of restrictions will be difficult to shrug off. However, India needs to be aggressive to make a leapfrog; therefore, special attention is required as far as this sector is concerned. First and foremost is the need to publish the entire policy

document and make government and private users aware of things. The data available with government departments should be unlocked, and data sharing should be encouraged and facilitated. This will only be possible through an open data sharing protocol. The Government needs to invest in developing standards and must mandate the adoption of standards. There is a need to establish a geospatial portal to make all public-funded data accessible through data as a service model, with no or nominal charge. Most important is to inculcate the culture of data sharing, collaboration and co-creation.

While different types of data will be produced on a project-to-project basis, there is a need to generate foundation data across India. This should include the Indian national digital elevation model (InDEM), data layers for cities, and data of natural resources. Solution developers and start-ups should be engaged to build solution templates for various business processes across departments. Local technology and solutions should be promoted, and competition should be encouraged for quality output. As the new guidelines prevent high-accuracy data being stored in overseas clouds, there is a need to develop a geospatial data cloud locally and facilitate a solution as service. For instance, the Ministry of Environment, Forest and Climate Change can host a complete suite of Geographic Information Systems (GIS) applications like working plan, wildlife corridor mapping, social forestry, etc. Na-

tional organisations like SoI and ISRO should be entrusted with the responsibility of regulation and the projects related to the nation's security and scientific significance. These organisations should not compete with entrepreneurs for government business as the latter remains in a disadvantageous position.

## An academic programme

Though India has many who are trained in geospatial this is mostly either through a master's level programme or on-job training. Unlike the West, India lacks a strata of core professionals who understand geospatial end-to-end. India should start a bachelor's programme in geospatial also in the Indian Institutes of Technology and the National Institutes of Technology. Besides these, there should be a dedicated geospatial university. Such programmes will propel research and development efforts which are crucial for the development of technologies and solutions locally.

The geospatial sector in the country is rightly positioned for investment. However, clarity on the issues discussed and the creation of an enabling ecosystem are essential. By the time we celebrate the 10th anniversary, we should have achieved the projected market volume and have Indian entrepreneurs stand out internationally.

Bharat Lohani is a Professor at IIT Kanpur and the Founder-Director of Geokno India Pvt Ltd. Rajesh Mathur is an adviser to ESRI India Technologies Ltd.

General Studies Paper I	
A	History of Indian culture will cover the salient aspects of art forms, literature and architecture from ancient to modern times;
B	Modern Indian history from about the middle of the eighteenth century until the present-significant events, personalities, issues;
C	Freedom struggle-its various stages and important contributors / contributions from different parts of the country;
D	Post-independence consolidation and reorganization within the country;
E	History of the world will include events from 18 <sup>th</sup> century such as industrial revolution, world wars, re-drawal of national boundaries, colonization, decolonization,
F	Political philosophies like communism, capitalism, socialism etc.-their forms and effect on the society
G	Salient features of Indian Society, Diversity of India;
H	Effects of globalization on Indian society;
I	Role of women and women's organization;
J	Social empowerment, communalism, regionalism & secularism
K	Salient features of world's physical geography;
L	Geographical features and their location- changes in critical geographical features (including water bodies and ice-caps) and in flora and fauna and the effects of such changes;
M	Important Geophysical phenomena such as earthquakes, Tsunami, Volcanic activity, cyclone etc.
N	Distribution of key natural resources across the world (including South Asia and the Indian subcontinent);
O	Factors responsible for the location of primary, secondary, and tertiary sector industries in various parts of the world (including India);
P	Population and associated issues;
Q	Urbanization, their problems and their remedies
General Studies Paper II	
A	India and its neighbourhood- relations;
B	Important International institutions, agencies and fora- their structure, mandate;
C	Effect of policies and politics of developed and developing countries on India's interests;
D	Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.
E	Indian Constitution, historical underpinnings, evolution, features, amendments, significant provisions and basic structure;
F	Comparison of the Indian Constitutional scheme with other countries;
G	Functions and responsibilities of the Union and the States, issues and challenges pertaining to the federal structure, devolution of powers and finances up to local levels and challenges therein; Inclusive growth and issues arising from it;
H	Parliament and State Legislatures - structure, functioning, conduct of business, powers & privileges and issues arising out of these;
I	Structure, organization and functioning of the executive and the judiciary, Ministries and Departments;

J	Separation of powers between various organs dispute redressal mechanisms and institutions;
K	Appointment to various Constitutional posts, powers, functions and responsibilities of various Constitutional bodies;
L	Statutory, regulatory and various quasi-judicial bodies;
M	Mechanisms, laws, institutions and bodies constituted for the protection and betterment of these vulnerable sections;
N	Salient features of the Representation of People's Act;
O	Important aspects of governance, transparency and accountability, e-governance- applications, models, successes, limitations, and potential;
P	Citizens charters, transparency & accountability and institutional and other measures;
Q	Issues relating to poverty and hunger,
R	Welfare schemes for vulnerable sections of the population by the Centre and States, Performance of these schemes;
S	Issues relating to development and management of social sector / services relating to education and human resources;
T	Issues relating to development and management of social sector / services relating to health
General Studies Paper III	
A	Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment;
B	Effects of liberalization on the economy, changes in industrial policy and their effects on industrial growth;
C	Inclusive growth and issues arising from it;
D	Infrastructure Energy, Ports, Roads, Airports, Railways etc. Government budgeting;
E	Land reforms in India
F	Major crops, cropping patterns in various parts of the country, different types of irrigation and irrigation systems;
G	Storage, transport and marketing of agricultural produce and issues and related constraints;
H	e-technology in the aid of farmers; Technology Missions; Economics of Animal-Rearing.
I	Issues of buffer stocks and food security, Public Distribution System- objectives, functioning, limitations, revamping;
J	Food processing and related industries in India – scope and significance, location, upstream and downstream requirements, supply chain management;
K	Issues related to direct and indirect farm subsidies and minimum support prices
L	Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology;
M	Indigenization of technology and developing new technology;
N	Developments and their applications and effects in everyday life;
O	Issues relating to intellectual property rights
P	Conservation, environmental pollution and degradation, environmental impact assessment
Q	Disaster and disaster management
R	Challenges to internal security through communication networks, role of media and social networking sites in internal security challenges, basics of cyber security;
S	Money-laundering and its prevention;



T	Various forces and their mandate;
U	Security challenges and their management in border areas;
V	Linkages of organized crime with terrorism;
W	Role of external state and non-state actors in creating challenges to internal security;
X	Linkages between development and spread of extremism.
<b>General Studies Paper IV</b>	
A	Ethics and Human Interface: Essence, determinants and consequences of Ethics in human actions;
B	Dimensions of ethics;
C	Ethics in private and public relationships. Human Values - lessons from the lives and teachings of great leaders, reformers and administrators;
D	Role of family, society and educational institutions in inculcating values.
E	Attitude: Content, structure, function; its influence and relation with thought and behaviour;
F	Moral and political attitudes;
G	Social influence and persuasion.
H	Aptitude and foundational values for Civil Service , integrity, impartiality and non-partisanship, objectivity, dedication to public service, empathy, tolerance and compassion towards the weaker sections.
I	Emotional intelligence-concepts, and their utilities and application in administration and governance.
J	Contributions of moral thinkers and philosophers from India and world.
K	Public/Civil service values and Ethics in Public administration: Status and problems;
L	Ethical concerns and dilemmas in government and private institutions;
M	Laws, rules, regulations and conscience as
N	sources of ethical guidance;
O	Accountability and ethical governance; strengthening of ethical and moral values in governance; ethical issues in international relations and funding;
P	Corporate governance.
Q	Probity in Governance: Concept of public service;
R	Philosophical basis of governance and probity;
S	Information sharing and transparency in government, Right to Information, Codes of Ethics, Codes of Conduct, Citizen's Charters, Work culture, Quality of service delivery, Utilization of public funds, challenges of corruption.
T	Case Studies on above issues.