



VEDHIK
IAS ACADEMY

The New Learning Mantra



VEDHIK

DAILY NEWS ANALYSIS

20 - JUNE - 2022

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.



CONTENTS

- GSP 02 A Editorials - Assistance to Sri Lanka has put us in the middle of geopolitics
 - GSP 02 A News - 'India, Bangladesh should work on river management'
 - GSP 02 C Editorials - Indian interests at the WTO Ministerial Conference
 - GSP 02 E News - 'Child has a right to access both parents'
 - GSP 02 I News - Five High Courts to get new Chief Justices
 - GSP 02 R Editorials - Recognising the 'compulsory' woman worker
 - GSP 02 T News - Agniveer to have distinct rank and insignia
 - GSP 03 L Editorials - Auctioning 5G spectrum bands
- 

- 
- GSP 03 O Editorials - Petty patents can boost R&D
 - GSP 03 P Editorials - The EPI may rankle but India can recast policies
 - GSP 03 T News - Services rule out rollback of Agnipath, reveal hiring plan Part I
 - GSP 03 T News - Services rule out rollback of Agnipath, reveal hiring plan Part II
 - GSP 03 W Editorials - Designation failure
 - Misc. 'VIP visitors' flock to PMs' Museum
- 

INTERVIEW | RANIL WICKREMESINGHE

‘Assistance to Sri Lanka has put us in the middle of geopolitics’

As Colombo readies a game plan for making economic recovery, we have got to ensure that India, China, Japan are singing the same tune, says Prime Minister

MEERA SRINIVASAN

Sri Lankan Prime Minister Ranil Wickremesinghe, appointed to the post for the sixth time in extraordinary circumstances last month, is tasked with setting the country's economy on track amid a crushing economic downturn. While the international community welcomed his appointment, protesting Sri Lankan citizens accuse him of “making a deal” with the Rajapaksas, and protecting the first family. Mr. Wickremesinghe speaks on his plans for economic recovery, foreign assistance, and political prospects. Excerpts:

It has been over a month since you took charge as PM. What are your key interventions so far?

■ I would say the key intervention is in the economy. By next month, we will certainly be able to deal with the issue of fuel. We have been able to use the Indian credit line. We have also been finding some money, Sri Lanka on its own, and we got the fuel in. We want to have uninterrupted supply and we feel by next month, we should be able to handle it.

We have started the discussion with the IMF [International Monetary Fund]. We are also having Lazard and Clifford Chance [financial and legal advisers] in

here. We are trying to finish the IMF staff-level agreement by the end of this month. Then we have to wait for the debt restructuring plan. That will give us a clear indication of what we have to do. By July, I also hope to bring in the interim budget. Then we go on to the next one, the donor conference. There, we have got to ensure that India, China, Japan all are singing the same tune.

Apart from Indian assistance [\$3.5 billion], you have sought help from China and Japan. You have especially urged the Quad grouping to take the lead in setting up an aid consortium for Sri Lanka. How are they all responding?

■ Well, there are two main members of the Quad who are involved, that is, India and Japan. India has taken the lead so far in providing assistance. I must say that Indian assistance has helped us get through these difficult times.

We have just started communicating with Japan, and speaking about this, because the relations are strained for some time. In addition to this, we have China also coming in. Now we have two Quad members, and one Belt and Road [Initiative] member. And we have one Paris Club member, that is Japan, and two non-Paris Club members, India and China. So we are in the middle of geopolitics [laughs].

Are you expecting any further assistance from India apart from the \$3.5 billion committed?

■ We are hoping to get an additional \$500 million assistance for fuel.

China has commended



There has to be austerity, but we want it to be on a short term so that by 2024, we can start moving

India's assistance to Sri Lanka, and expressed willingness to work with India and the international community to help Sri Lanka. Is China willing to support Sri Lanka's debt restructure initiative backed by the IMF?

■ I think they will certainly do that. We will speak with them. And I hope at some time the three countries, Japan, China and India, will speak with each other. China has acknowledged India's

contribution. I think it is a good start, but there will be so many other issues to be debated.

Some are raising concern over an IMF programme, saying that the conditions that come with it could be tough. Do you think Sri Lanka will be forced to go down the austerity path for some time?

■ Well, if you look at it now, I think we agreed with the IMF that the vulnerable groups have to be supported. If you look at some of what are called tough conditions, even if the IMF is not there, we would have had to do it. The advantage of going with the IMF is that you get money through the Extended Fund Facility. If you do it on your own, you get nothing. If you go with the IMF, you get something or maybe everything.

On austerity, yes there has to be austerity, but we want it to be on a short term so that by 2024, we can start moving, 2023 is going to be a difficult year, because while we

may make an improvement, the global GDP growth is now down to 2.9%. We still don't know if it will go further down because of the Ukraine war, and the inflation in the West and issues in China.

The Adani Group's entry into the energy sector has become controversial, with many in Sri Lanka asking how they got in, in the absence of an international bidding process. Wouldn't this deter other potential investors and affect the country's image?

■ Adani Group has brought in \$500 million, which we need at the moment. It is a good sign that investors are coming in. Sri Lanka's potential for renewable energy, wind power, is big.

I don't think all the big companies coming in here will be able to fully exploit it. So, we have no problem about Adani coming in.

If the Indian government was really interested, I would have been told about this by Prime Minister Modi or his office. I haven't got any re-

quest to expedite it.

Look, if anyone else in India wants to invest another \$500 million [project], I am not objecting [laughs]. If a third party wants it, we will give it to them. In this position, are we to throw \$500 million away?

Your government faces a severe crisis of credibility, citizens' protests are going on against the President, you, this government. How will the government restore confidence among citizens, that too when it must adopt tough measures to cope with the crisis?

■ Firstly, the 21st Amendment was discussed by all the parties, the government and outside, and it will be put before Cabinet next Monday. Then, on Tuesday, we will have to also look at the Supreme Court determination on the Leader of the Opposition and the SJB's [Samagi Jana Balawegaya, the main Opposition party] draft amendment to see how it interacts with the SC determination.

What about political credibility in the eyes of citizens?

■ So that will be the first step of building political credibility.

Secondly, I have put some proposals about the committee systems in Parliament. It is a sort of a step-by-step operation, but I think these two will be big.

You were brought in at such a crucial time to set the economy in order. Do you have the political backing of the President and the ruling party?

■ In my case, on the 9th of May, some of the backbench MPs wanted me to be Prime Minister [after Mahinda Rajapaksa resigned]. The situation was serious, and I thought someone had to do the job. So as I came in, I had the support of some of the backbenchers. Then later on the support built up, the President and the party gave me the support.

(For full interview, visit <https://bit.ly/3bcyqh7>)

‘India, Bangladesh should work on river management’

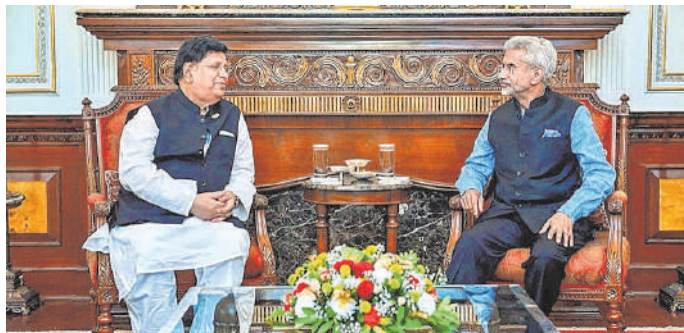
Ready to extend assistance in managing flood: Jaishankar

KALLOL BHATTACHERJEE
NEW DELHI

India and Bangladesh should work together for comprehensive management of rivers, External Affairs Minister S. Jaishankar said here on Sunday. Delivering opening remarks at the seventh round of India-Bangladesh Joint Consultative Commission, Mr. Jaishankar welcomed his counterpart A.K. Abdul Momen and extended India's assistance in management of the annual flood in Bangladesh. He said the Indian side wished to work with Bangladesh on Artificial Intelligence, start-ups, fintech and cybersecurity.

“We would also like to convey our support and solidarity at the unprecedented flooding that we have had in northern Bangladesh. We have also had in the north-east. We are now sharing flood management data for an extended period. I would like to take the opportunity to convey that if in any concrete way, we can be of assistance to you in the management of flood and relief efforts, we would be very glad to be supportive,” said Mr. Jaishankar.

The Minister took up the riparian dimension of bilateral relations with Bangla-



Bilateral ties: Foreign Minister S. Jaishankar meeting his Bangladesh counterpart A.K. Abdul Momen on Sunday. ■PTI

desh, which is the largest trade partner of India in south Asia, and said the two sides shared 54 rivers that required Delhi and Dhaka to work together and share “environmental responsibility” in areas such as the Sundarbans.

India and Bangladesh have resolved border problems through the Land Boundary Agreement of 2015, but have been in dialogue over the sharing of multiple rivers that define the borders and impact lives and livelihoods on both sides. Bangladesh, however, has been particularly keen on receiving a fair share of the waters of the Teesta that flows through the northern part of West Bengal.

A joint statement issued after the meeting said the two teams remain focused on the “importance of safe,

speedy, and sustainable return of forcibly displaced persons from Rakhine State to Myanmar, currently being sheltered by Bangladesh”. Bangladesh has been hosting more than a million displaced persons from Rakhine, the Rohingya. 2022 marks the fifth year of the exile of this community.

The visit of Mr. Momen came weeks after an international controversy broke out with two BJP leaders making derogatory comments on the Prophet. Bangladesh, however, has avoided issuing a direct condemnation of the remarks unlike several other countries of the Organisation of Islamic Cooperation (OIC). Officials in Dhaka had earlier told *The Hindu* that Bangladesh did not want to “trigger” an issue by raising the controversy at the bilateral level.

EXPLAINER

Indian interests at the WTO Ministerial Conference

What is the Geneva package? How did India present and push its interests especially with regard to the fisheries and agriculture sectors?

SAPTAPARNO GHOSH

The story so far: On June 17, member countries of the World Trade Organization (WTO) wrapped up the Ministerial Conference's twelfth outing (MC12) securing agreements on relaxing patent regulations to achieve global vaccine equity; ensuring food security, according to subsidies to the fisheries sector and continuing moratoriums relevant to e-commerce, among others. Together they constitute what WTO's Director-General Ngozi Okonjo-Iweala referred to as the "Geneva Package."

What is the WTO's Ministerial Conference?

The MC is at the very top of WTO's organisational chart. It meets once every two years and can take decisions on all matters under any multilateral trade agreement. Unlike other organisations, such as the International Monetary Fund or World Bank, WTO does not delegate power to a board of directors or an organisational chief. All decisions at the WTO are made collectively and through consensus among member countries at varied councils and committees. This year's conference took place in Geneva, Switzerland.

What were the debates around agriculture at the MC?

The agreements on the subject are of particular significance to India. Referring to its status as a significant contributor to the World Food Programme (WFP), India had earlier stated that it had never imposed export restrictions for procurement under the programme. It put forth that a blanket exemption could constrain its work in ensuring food security back home. In such a situation, it would have to keep its WFP commitments irrespective of its domestic needs. Negotiators agreed that member countries would not impose export prohibitions or restrictions on foodstuffs purchased for humanitarian purposes of the WFP. The decision would however not prevent member countries from adopting measures for ensuring domestic food

security.

Negotiators could not reach agreements on issues such as permissible public stockholding threshold for domestic food security, domestic support to agriculture, cotton, and market access. The central premise of the agreements was to ensure availability, accessibility and affordability of food to those in need, especially in humanitarian emergencies. It encouraged member countries with available surplus to release them on international markets in compliance with WTO regulations. Moreover, it instituted a work programme to come up with measures to help LDCs (least-developed countries) and NFIDCs (Not Food Importing Developing Countries) enhance their domestic food security and bolster agricultural production.

What about fisheries related agreements?

India successfully managed to carve out an agreement on eliminating subsidies to those engaged in illegal, unreported and unregulated fishing. The only exception for continuing subsidies for overfished stock is when they are deemed essential to rebuild them to a biologically sustainable level. Overfishing refers to exploiting fishes at a pace faster than they could replenish themselves – currently standing at 34% as per the UN Food and Agriculture Organization (FAO). Declining fish stocks threaten to worsen poverty and endanger communities that rely on aquatic creatures for their livelihood and food security.

Further, the agreements hold that there would be no limitation on subsidies granted or maintained by developing or least-developed countries for fishing within their exclusive economic zones (EEZ).

Have the current moratoriums on electronic transmissions been extended?

Member countries agreed to extend the current moratorium on not imposing customs duties on electronic transmission (ET) until MC13 – scheduled to take place in December 2023. 105 countries which includes the U.S., the U.K., Australia, China

and Japan among others, had sought an extension of the moratorium, with India and South Africa being in opposition.

Broadly, ETs consist of online deliveries such as music, e-books, films, software and video games. They differ from other cross-border e-commerce since they are ordered online but not delivered physically.

Proponents had put forth that the moratorium would help maintain certainty and predictability for businesses and consumers particularly in the context of the pandemic. On the other hand, India and South Africa, citing data from the UN Conference on Trade and Development (which calculates the amount of printed matter, music and video downloads, software and video games), submitted that extending duty-free market access due to the moratorium resulted in a loss of \$10 billion per annum globally – 95% of which was borne by developing countries. Additionally, they had also sought more clarity on what constitutes electronic transmission.

Customs duties have been traditionally used to avert an undesired surge in imports, allowing nascent domestic industries to remain competitive. Developing countries would need to import sizeable equipment and services for upscaling their digital capabilities. Customs duties provide the necessary capital infusion for capacity building and in turn, attempt to address the digital divide – particularly high in low-income and developing countries, further exacerbated by the COVID-19 pandemic. It is in this context that India and South Africa had sought to preserve policy space for the digital advancement of developing countries by letting them generate more revenues from customs and thereby facilitate more investment.

What were the discussions on patent relaxations?

Member countries agreed on authorising the use of the subject matter of a patent for producing COVID-19 vaccines by a member country, without the consent of the rights holder. Further, it asks member countries to waive requirements, including export restrictions, set forth by WTO regulations to supply domestic markets and member



countries with any number of vaccines. The agreement, however, comes too little, too late for economically poorer countries.

Several LDCs have suffered in their efforts to combat the now nearly three-year-old pandemic, owing to factors such as a stressed balance of payments situation, different levels of development, financial capabilities and varying degrees of import dependence on those products.

Within the next six months, members are expected to decide on increasing the scope of the agreement to cover the production and supply of COVID-19 diagnostics and therapeutics as well.

Trade talks: Director General of the WTO, Ngozi Okonjo-Iweala speaks at the opening ceremony of the 12th Ministerial Conference (MC12) in Geneva, Switzerland, on June 12. •AFP

THE GIST

■ On June 17, member countries of the WTO wrapped up the Ministerial Conference's twelfth outing (MC12) securing agreements on relaxing patent regulations to achieve global vaccine equity; ensuring food security, according to subsidies to the fisheries sector and continuing moratoriums relevant to e-commerce, among others. Together they constitute the "Geneva Package."

■ Negotiators could not reach agreements on issues such as permissible public stockholding threshold for domestic food security, domestic support to agriculture, cotton, and market access.

■ Within the next six months, members are expected to decide on increasing the scope of the agreement to cover the production and supply of COVID-19 diagnostics and therapeutics as well.

‘Child has a right to access both parents’

SC was hearing petition of a father

LEGAL CORRESPONDENT
NEW DELHI

The Supreme Court stepped into the shoes of children who find themselves in the middle of custody battles between estranged parents, saying a child is happiest when he or she can have both parents.

The top court was hearing an appeal from Rajasthan where the Family Court had rejected the father's plea for interim custody of his minor son in July 2021. The State High Court had dismissed his appeal.

In an order in which the COVID-19 pandemic features prominently, a Bench led by Justice Indira Banerjee said the lower courts' orders could not be faulted. But the SC then went on to

carve several occasions, such as the son's birthdays, weekends, and summer vacations, during which the father could meet and spend time with him.

“The child would perhaps be happiest if he could have both his parents. Unfortunately, the parents are unable to resolve their differences and stay together. Be that as it may, the child has a right to access both parents, and get the love and affection of both parents. The child cannot be denied the company of his father,” the top court explained.

The issue of custody and access to the child could also resume before the Family Court as “the COVID-19 situation in the country has improved”, the court said.

Five High Courts to get new Chief Justices

Telangana Chief Justice transferred to Delhi High Court

LEGAL CORRESPONDENT
NEW DELHI

The Centre has cleared the appointments of new Chief Justices for five High Courts and transferred Telangana Chief Justice Satish Chandra Sharma to the Delhi High Court.

The appointments have come within a month after the Supreme Court Collegium led by Chief Justice of India N.V. Ramana made the recommendations to the government.

The High Courts of Uttarakhand, Himachal Pradesh, Rajasthan, Gauhati and Telangana are getting the new Chief Justices.

Justice Vipin Sanghi, Delhi High Court judge, has been appointed Chief Justice of Uttarakhand.

Justices Amjad A. Sayed has been appointed Chief Justice of the Himachal Pradesh High Court and S.S. Shinde of the Bombay High Court.

Recently, the daughter of a Himachal Pradesh High Court judge was arrested in connection with the murder



N.V. Ramana

of national-level shooter and advocate Sukhmanpreet Singh Sidhu.

Justice Rashmin Manharbhai Chhaya, Gujarat High Court judge, has been appointed Gauhati Chief Justice.

Telangana High Court judge Justice Ujjal Bhuyan has been appointed Chief Justice of the Telangana High Court. Justice Bhuyan's parent High Court is Gauhati.

Justice Satish Chandra Sharma, whose parent High Court is Madhya Pradesh, would have a tenure till November 2023.

The Delhi High Court has not had a Chief Justice since Chief Justice D.N. Patel re-

tired. Justice Sanghi has been the Acting Chief Justice since March 13.

Judicial vacancies

As of June 1, the number of judicial vacancies in the 25 High Courts remain at 400, while the working strength is 708.

The sanctioned strength is 1,108.

CJI Ramana, in his address at the recent joint conference of Chief Justices and Chief Ministers, highlighted how the sanctioned judicial strength continued to be disproportionate to the burgeoning case load faced by the district courts, High Courts and Supreme Court.

"When we last met in 2016, the sanctioned strength of judicial officers in the country was 20,811. Now, it is 24,112, which is an increase of 16% in six years. On the other hand, in the corresponding period, pendency in district courts has gone up from 2.65 crore to 4.11 crore which is an increase of 54.64%," Chief Justice Ramana said.

Recognising the 'compulsory' woman worker

There is an urgent need for widespread surveys of poor rural women and how they spend their time



BRINDA KARAT

The Centre for Monitoring Indian Economy (CMIE) reported that the labour participation rate of rural women was 9.92% in March 2022 compared to 67.24% for men. This is a cause for concern. According to CMIE, millions who left the labour market stopped looking for employment “possibly [because they were] too disappointed with their failure to get a job and under the belief that there were no jobs available”. In countries like the U.S., Canada and Australia, such workers who are willing to work but give up searching for work for various reasons are called ‘discouraged workers’ and they are included in the unemployed category. This phenomenon, not captured in India by any official labour force surveys, is wrongly described as women “dropping out” or “leaving the labour market” giving the impression that this was a choice made by them, whereas, actually, women are pushed out of employment. The CMIE provides valuable inputs for urgently required government intervention in rural India.

Ground-level realities are worse than what the CMIE suggests and what the government denies. Women who belong to landless households or with meagre landholdings cannot afford the luxury of being “discouraged.” These are the “compulsory” workers.

The depths of distress

The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) sites are probably the best places to understand the compulsions of millions of women to work. One particular project in Kalaburagi district focuses on creating more than 200 percolation ponds, which are designed to address the declining levels of ground water and to help recharge wells. This project provides a few workdays to an estimated 300 workers from four villages. The soil is hard and dry and the project stretches over several kilometres. The women, who outnumber



KIRAN BAKALE

the men, work in women-only pairs. They dig and lift the mud. In the searing heat, they have to dig a 10X10X1 tank in a day. An assistant to the officer-in-charge estimated that because the soil is hard and stony, this would mean digging and lifting about 3,000 kg of mud a day. Since most of these women are unable to complete this task, they do not get the piece rate of ₹309; they get only ₹280 to ₹285. There was no crèche at the site. There was no water, so women took turns to walk a kilometre to a water source to fill their two-litre bottles. They said their limbs ached. Many said they felt dizzy.

But despite the difficult conditions, every worker on the site complained about getting only about 40 days of work in a year. They wanted more as they regard MGNREGA work as their savior. The fact that they want to do more of this punishing work reveals the depths of the distress of poor rural households.

During the agricultural season, all the women worked on the lands of others, earning around the same as on the MGNREGA site. But the mechanisation of agricultural operations has drastically decreased workdays to less than three months a year. Many women therefore become part-time construction workers. They are hired by a network of “mistries” working for contractors. They migrate to construction sites for a few months, with their families or with other women from the village. Not one of them I had met had registered as a construction worker. They were therefore ineligible for any legal benefits accruing to them from the Construction Workers’ Welfare Board. At

a construction site, each of them carried a minimum of 1,000 bricks a day, weighing two kilos each, or other heavy construction material, often climbing to the first or second floor with this load. They were being paid ₹300 a day, less than the men.

When manual or construction work is unavailable, the women find other work. Some of them make twig baskets and brooms. They walk from village to village, often 25 km a day, to sell the baskets. It takes two days to make 10 baskets for which they make ₹10 per basket. Some women provide services such as cleaning or do odd jobs for landholding families for an average of three or four days a month. Some do tailoring work. They also do their own housework. So, going by the anecdotal evidence of women at a MGNREGA site, an individual woman in the course of a year is a MGNREGA worker, an agricultural worker, a construction worker, a migrant worker, a self-employed street vendor, a tailor, an odd job domestic worker, and a home-maker doing multiple domestic chores.

The ‘compulsory’ woman worker’s work never ends. Siddhama, a 45-year-old mother of four from Yadgiri district, stretched out her arms and said: “My arms that labour... this is the property I have, to earn money for my family to survive. When I work, they eat.”

The high prices of essential commodities have led to a huge cut in women’s consumption of vegetables and pulses. To prove their point, some of the women at the worksite brought out their lunch boxes, which contained rice or rotis and a chilli chutney. Two sisters, Sheelawati and

Chandamma, said, “We drink water after having the chilli chutney. Then we don’t feel hungry.” Others nodded in agreement. They said that the 10 kg of grain per head from the Central and State governments’ free foodgrains programme was of great help and were afraid it would end. The deprivation of nourishment that women face due to high prices and low incomes is another dimension of the ‘compulsory’ woman worker’s life.

Providing minimum wage

Almost every woman spoke of being trapped in debt. What the women earn from multiple tasks for which there are no fixed piece rates is in no way equal to the amount of labour they do. The dismantling of labour laws in urban areas has weakened labour departments. Implementation of minimum wage in rural India is conceivable only with strong movements of agricultural workers’ unions. While there should be strict implementation of minimum wages with piece rates fixed for different types of women’s labour, it is unfair that landless manual labourers in rural India are denied the pitiful government annual cash transfer of ₹6,000 given to land-owning farmers. While rural labourers should also be entitled to a similar cash transfer, the schedule of rates for women at MGNREGA projects based on impossibly high productivity rates must be lowered and the work sites made more worker-friendly.

With the deep penetration of capitalist processes in rural India, there is a crisis of livelihood options. Poor women adopt various strategies to deal with it. To make a correct analysis of this crisis requires a sensitive lens. The invisibility of women’s work can be addressed through time use surveys. The village-level time use surveys done by the Foundation for Agrarian Studies, for instance, revealed the extent of women’s work. In fact, widespread surveys of poor rural women and how they spend their time are an urgent necessity. The ‘compulsory’ woman worker must be recognised and protected by laws and policies that address her issues, while India celebrates the 75th year of Independence.

Brinda Karat is a member of the CPI(M) Polit Bureau

Agniveer to have distinct rank and insignia

‘Seva Nidhi’ package of about ₹11.71 lakh will be paid at the time of discharge

DINAKAR PERI
NEW DELHI

Agniveers recruited under the Agnipath scheme would form a distinct rank different from any other existing rank and also sport distinctive insignia on their uniform, according to the terms and conditions of the scheme.

The Indian Air Force (IAF), in a detailed brief, “Agnipath scheme for enrolment in armed forces”, said Agnipath is a “new HR (human resource) management scheme” for the armed forces.

“Agniveers would form a distinct rank in the IA [Indian Army], different from any other existing ranks... A distinctive insignia will be worn by the Agniveers on their uniform during their service period. Detailed in-

structions shall be issued separately,” the Army’s terms and conditions state. “The recruitment will be on All India All Class basis,” it stated.

Personnel enrolled through the Agniveer scheme will be required to undergo periodic medical check-ups and physical, written and field tests as governed by orders issued and the performance so demonstrated would be considered for “subsequent offer for enrolment in the Regular Cadre”.

No retirement benefit

On discharge after completion of four years, Agniveers will be paid a *Seva Nidhi* package to enable them to return to society for pursuing employment in other

sectors, both the Indian Army and the IAF said, which would approximately be ₹11.71 lakh. “Agniveers will not be eligible for any kind of pension or gratuity, neither will they be eligible for Ex-Servicemen Contributory Health Scheme (ECHS), Canteen Stores Department (CSD) facilities, Ex-Serviceman status and other related benefits,” the terms state.

“Agniveers will be barred from disclosing classified information gained during service to any unauthorised person or source under Official Secrets Act, 1923.”

However, for the duration of their engagement period, Agniveers will be entitled to medical facilities at military hospitals as well as CSD provisions. They will also be entitled to honours and

awards, as per extant guidelines governing the subject. Agniveers would be eligible for 30 days’ leave per year and sick leave based on medical advice.

Further on the enrolment process, the terms state that each Agniveer will be required to formally accept all terms and conditions of the Agnipath Scheme, and for personnel below the age of 18 years, the enrolment form will “need to be signed by the parents/ guardians, in accordance with extant provisions”.

Agniveers who are completing their engagement period in each batch will be offered an opportunity to apply for enrolment in the regular cadre based on organisational requirements and policies promulgated.

EXPLAINER

Auctioning 5G spectrum bands

What are the use cases of the new cellular technology? How is the roll-out being planned?

YUTHIKA BHARGAVA

The story so far: The Union Cabinet, chaired by Prime Minister Narendra Modi, gave its nod for the auction of spectrum that can be used to offer 5G services, at its meeting held on June 14. A total of 72,097.85 MHz (or 72 Ghz) of spectrum with a validity period of 20 years will be put on sale during the auction planned towards the end of July. The auction will be held for spectrum in various Low (600 MHz, 700 MHz, 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz), Mid (3300 MHz) and High (26 GHz) frequency bands. It is expected that the Mid and High band spectrum will be utilised by telecom service providers (TSPs) to roll-out 5G services wherein speeds would be 10 times higher than what is possible through the current 4G services. This follows the Budget 2022 announcement by Finance Minister Nirmala Sitharaman that the government would auction telecom spectrum in 2022, which will enable private players to roll out 5G services before March 2023.

When will the spectrum be auctioned? The auctions are scheduled to commence from July 26. The Department of Telecom has invited applications from prospective bidders to participate in the auctions. Based on the applications, the



government will pre-qualify applicants who meet the eligibility criteria.

When will the commercial roll-out happen?

Telecom Minister Ashwini Vaishnaw recently said that the 5G deployment is likely to start from August-September this year, and service should commence in about 20-25 cities by the year-end.

Experts and analysts expect a gradual roll-out of 5G across the country in a phased manner over the next two to three years, with roll-outs beginning from the second half of the current year.

“Given the operator’s public statements, nascent 5G device penetration and limited use cases, we expect a more gradual 5G roll out by

telcos over the next 2-3 years,” according to a note by Credit Suisse. Likewise, Nomura in a research note has said that relief measures by the government, such as scrapping of spectrum usage charges (SUC) for future spectrum auctions and moratorium on deferred spectrum payments and Adjusted Gross Revenue (AGR) dues has considerably eased the pathway for 5G rollouts in India. “...we think 5G rollouts would commence in 2H CY22F. However, given the nascent 5G ecosystem and evolving use cases, we think 5G rollouts would likely be granular starting with metros and larger cities,” Nomura added.

What are the key issues?

The two issues that the industry has highlighted with regards to the upcoming auctions are high reserve prices for the spectrum and direct allotment of spectrum to enterprises for setting up captive private networks.

The government has accepted the recommendations given by the Telecom Regulatory Authority of India (TRAI) on reserve prices for spectrum auctions. While the TRAI had earlier recommended reducing prices of airwaves across various bands by 35-40% from its earlier proposed base price, the telecom operators had expressed disappointment given their demand for a 90% cut in the prices. “At these prices, a

block of 5MHz spectrum (paired) in the 700MHz band will cost ₹196bn (US\$2.5bn), 50MHz block in the 3.4GHz band will cost ₹159bn (US\$2bn) and 400MHz block in the 26GHz band will cost ₹28bn (US\$0.4bn),” according to Credit Suisse.

On allowing direct allocation of spectrum for captive non-public networks, the government has reasoned that the move will spur a new wave of innovations in Industry 4.0 applications such as machine to machine communications, Internet of Things (IoT), Artificial Intelligence (AI) across automotive, healthcare, agriculture, energy, and other sectors. However, the Cellular Operators Association of India (COAI), which counts the three private telcos as its members, has said that the move severely degrades the business case of TSPs. “This will diminish the revenue so much that there will be no viable business case left for the TSPs and there will not remain any need for 5G networks roll-out by TSPs,” it had said before the Cabinet decision.

What benefits are likely to come with 5G?

5G is the next generation cellular technology that will provide faster and more reliable communication with ultra low latency. As per the set standards, with 5G, the peak network speeds are

expected to be in the range of 2-20 Gbps as opposed to about 25 Mbps on current 4G networks. In India, however, 4G speeds average at around 6-7 Mbps, but are picking up gradually.

It is expected that with 5G technology, consumers will be able to download data heavy content such as 8K movies and games with better graphics in just a few seconds. The users will need to update to 5G-enabled devices to access the network, if they are not already using one. However, it is likely that the primary use of the technology will go beyond delivery of services on personal mobile devices. 5G is expected to form the backbone of emerging technologies such as IoT and machine to machine communications, thereby supporting a much larger range of applications and services, such as tele-surgery and real time data analytics. Ultra low latency offered by 5G makes the technology desirable for such use cases. Latency is the amount of time data takes to travel between its source and destination.

As per a report by a government panel on 5G, even after the entry of 5G into the Indian networks, the earlier generation mobile technologies – 2G, 3G and 4G, will continue to remain in use and may take 10 or more years to phase out. 5G is expected to create a cumulative economic impact of \$1 trillion in India by 2035, the report added.

THE GIST

■ The Union Cabinet gave its nod for the auction of spectrum that can be used to offer 5G services, at its meeting held on June 14. A total of 72 Ghz of spectrum with a validity period of 20 years will be put on sale towards the end of July.

■ The two issues that the industry has highlighted with regards to the upcoming auctions are high reserve prices for the spectrum and direct allotment of spectrum to enterprises for setting up captive private networks.

■ 5G is expected to form the backbone of emerging technologies such as IoT and machine to machine communications, thereby supporting a much larger range of applications and services, such as tele-surgery and real time data analytics.

Petty patents can boost R&D

A petty patents regime could encourage domestic enterprises to undertake minor adaptive innovations



NAGESH KUMAR & REJI K. JOSEPH

Innovative activity is the key driver of competitiveness and economic growth. In that context, India's rank of 46 in WIPO's Global Innovation Index (GII) 2021, up from 81 in 2015, is encouraging. This finding corroborates an earlier one by UNCTAD in its Digital Economy Report 2021 where India was seen as exceeding expectations. While these findings are encouraging, India, which aspires to emerge as one of the largest economies of the world, needs to move up further in the innovation rankings, for building self-reliance in technology, especially in the context of the incipient digital revolution. China occupies the 12th rank in GII, ahead of Japan at 13th. This shows that it is possible to move up the ladder with sustained effort.

Boosting R&D activities

India has much room for enhancing its innovative activity. Among the key indicators, gross R&D expenditure (GERD) as a percentage of GDP at 0.7% is low. It needs to rise to upwards of 2% of GDP, as in the leading innovative nations. Furthermore, only about 30% of the GERD is spent by business enterprises, despite the generous tax incentives offered by the government. This suggests that Indian enterprises have not got into an R&D culture, not to talk of innovative rivalry. The bulk of innovative activity is conducted by a handful of companies in the pharma and auto sectors.

What can be done to boost the R&D activities of Indian enterprises? Given the strategic importance of innovative activity, governments in developed countries spend billions of dollars on R&D subsidies given to national enterprises to shore up their competitiveness. Subsidies up to 50% of project costs have been made non-actionable under the World Trade Organization rules. In India, R&D activities have been encouraged mainly through weighted tax deductions. Partial funding for specific R&D projects undertaken by business enterprises may be desirable to develop products or processes, thus strengthening competitiveness.

Funding support for R&D activity of business enterprises may help to direct it to a desirable direction or field. For instance, it may be used to promote capability building for new products, process innovations for local or global markets, focus on enhancing ecological sustainability, promote industry's lin-

kage with public-funded research laboratories and universities, and so on.

A generous programme is needed to push R&D activities of enterprises through partial funding for viable R&D proposals of industry to strengthen India's competitive edge. Besides, products based on indigenously developed technology could be given production tax concessions (such as those extended to small-scale industry products) and income tax concessions (such as those enjoyed by export turnover) to encourage innovation.

The patent system

The number of patents registered by residents is another indicator of innovative activity. The patent filings by Indian enterprises and other institutions have increased from 8,841 in 2011 to 23,141 in 2020 (WIPO). However, patents granted have been only 776 and 4,988 respectively. Although the ratio of applications to grants has gone up over the years, many patent applications fail to satisfy the three-pronged test of novelty, inventive step and utility. In that context, another policy to promote local innovation could be to protect minor innovations through the so-called utility models or petty patents, as has been done by several East Asian countries. The patent system fails to encourage minor innovations since the criteria for inventiveness tend to look at the novelty of the invention. The experience of several East Asian countries suggests that petty patents and industrial design patents could be effective means of encouraging domestic enterprises to undertake minor adaptive innovations and foster an innovation-based rivalry among them. India should consider adopting a petty patents regime that provides limited protection to minor incremental innovations made, especially those by MSMEs, often called jugaad. The utility models or petty patents typically provide a limited period of protection (5-10 years in contrast to 20 years in case of patents) and have less stringent requirements and procedures. Incentivising minor and incremental innovations through limited protection under utility models will help to foster the innovation rivalries among firms, particularly MSMEs, paving the way for more significant innovations by them in the future.

India's rising rank in the global innovation league suggests its potential, opportunity, and stakes in boosting the R&D culture among business enterprises to strengthen their competitiveness. R&D funding and petty patents could foster these.

Nagesh Kumar is Director and Reji Joseph is Associate Professor, Institute for Studies in Industrial Development, New Delhi. Views are personal

The EPI may rankle but India can recast policies

The country ought to adopt a dashboard approach to indicators, modelled on the Stiglitz-Sen-Fitoussi proposal



G. ANANTHAKRISHNAN

For a government acutely sensitive to global rankings, the latest Environmental Performance Index (EPI) placing India last among all 180 assessed countries has naturally touched a raw nerve. The assessment, carried out by Yale and Columbia Universities with an emphasis on climate change mitigation, has become controversial for prioritising the flow of greenhouse gases from countries while reducing the emphasis on the stock of carbon dioxide from industrialised countries that is warming the globe.

Evidently, if countries were assigned a penalty for the stock of CO₂ in the atmosphere, rather than measure their mitigation actions over a decade, India would fare much better. Less controversially, the EPI dwells on performance on air quality, waste management and ecological conservation measures.

Government's response

Unsurprisingly, the EPI ranking and scores have been rejected by the Union Government as based on “unfounded assumptions”, “surmises” and “unscientific methods.” The national rank of 165 on Climate Policy and score of 21.7 in this category – which overall has a 38% weightage in the calculations along with 42% for Ecosystem Vitality and 20% for Environmental Health – has particular significance. India is under pressure to raise its ambition and commitment towards the more ambitious 1.5° Centigrade goal for temperature rise under the Paris Agreement, going beyond the less

rigorous target of well below 2°C.

Within the overall climate score, India does better in sub-metrics such as growth rates for black carbon, methane and fluorinated gases, and greenhouse gas emissions based on their intensity and per capita volumes. The Index rates the country low on projected greenhouse gas (GHG) emissions for mid-century, a target for Net Zero emissions. The EPI report estimates that China, India, the United States, and Russia are expected to account for over 50% of global residual greenhouse gas emissions by 2050.

This projection has met with strong protest from India, which has faulted the EPI for introducing a new metric on climate with increased weight in the calculation compared to the 2020 assessment. It stands accused of ignoring the important tenet of equity in global climate policy within the United Nations framework: that India has low per capita GHG emissions, reduced intensity of GHG emissions in its economy, made big strides achieving 40% renewable power generation, supported electric vehicles, launched a major carbon sink initiative, and done a lot for wetland conservation.

Claims and low PARI score

The country has protested that the new India State of Forest Report (ISFR) 2021 was not factored in as part of the biodiversity metric. On the face of it, India scores abysmally low on some of the Ecosystem Vitality variables, such as Marine Protected Areas (0.3 of a possible 100) and Protected Areas Representativeness Index, or PARI (0.5), Terrestrial Biome Protection (TBM) - National (1.2) and TBM - Global (2.1). Wetland loss prevention is among the best scores for India, at 62. Given the many biomes that exist in the country, the low PARI score puts pressure on the Government to defend its



claim that the EPI scores for biodiversity health are faulty due to weaknesses in collecting species and habitat data.

The ISFR, on which the Union government relies, ran into trouble for making spectacular claims, because of perceived methodological weaknesses. It is faulted for relying on a relaxed definition of forest and claiming expansion of forests when satellite imagery of the same areas showed a decline. Ecologist and co-founder of the Nature Conservation Foundation M.D. Madhusudan pointed out that palm trees in private plantations in Tamil Nadu, tea estates in several States and even urban tree agglomerations were found added as forest. Researchers have been demanding that the actual maps used for the ISFR estimates be released publicly, not just the report making claims of expansion.

Biome protection, air quality

The EPI-assigned rating for India in protecting biomes has led to sharp differences too. The Index assigns a ‘laggard’ rank on tropical and subtropical dry broadleaf and coniferous forests, montane grasslands and shrublands and the worst performance on deserts and xeric shrublands. The Government's defence is that national and legal boundaries for protected areas may not match geographical boundaries of biomes, and international classifications may not be optimal to measure conservation.

A second sensitive area in which India brings up the rear in the EPI is air quality. With a score of 7.8 and a rank of 179, the familiar dispute over data and reliability of several parameters has reopened. The Government faults the dataset on pollutant concentration data – covering mainly Particulate Matter (PM_{2.5}), Oxides of Nitrogen, Sulphur Dioxide and Volatile Organic Compounds, because of “higher uncertainty in regions with less extensive monitoring networks and emissions inventories”.

Although the scores and rank could be contested, there is little doubt that India's air is widely seen as among the foulest. Data for 2019, when economic activity was unfettered by COVID-19, attribute 1.67 million deaths during the year from air pollution.

This has been reiterated by recent literature with commentary in The Lancet Planetary Health pointing out that “India has developed instruments and regulatory powers to mitigate pollution sources but there is no centralised system to drive pollution control efforts and achieve substantial improvements. In 93% of India, the amount of pollution remains well above WHO [World Health Organization] guidelines.”

There are some aspects of the EPI that the Union government has rejected, blaming the ranking agencies for not “engaging” with India on the climate change mitigation programme, and for not providing a handicap under the United Nations principle of Common But Differentiated Responsibilities and Respective Capabilities (CBDR-RC), which forms the basis of the Paris Agreement.

India's defence has always been that its current emissions profile may be high, but it has to raise living standards of hundreds of millions with cheap energy. It seeks a significant share of the remaining global carbon budget and climate

funds for mitigation actions.

Green goals

The national case would be stronger if policies on luxury urban emissions are aimed at helping poorer Indians. On transport (about 13% of emissions), prevailing high fuel and vehicular taxes could exclusively drive change and raise a green commons such as clean public transport, cycling and pedestrianisation. The national policy of achieving Net Zero emissions by 2070 provides a longer timeline for a coal phaseout, but other areas can benefit from policies that prevent a carbon lock-in effect. Emissions from buildings, including embedded carbon in construction materials such as cement and steel, provide scope for reduction.

India has also not expanded disaggregated rooftop solar power across residential deployments and commercial structures. There cannot also be excessive reliance on carbon sinks in the short term, since tree cover of the right kind takes time to store carbon. Stronger protection for biomes (protected areas represent about 5% of the land) can generate wide-ranging benefits and biodiversity can recover.

What India needs to adopt is a rigorous dashboard approach to indicators, assigning high weight to the environment, modelled on the proposal made by Amartya Sen, Joseph Stiglitz and Jean-Paul Fitoussi in their exploration of development beyond GDP. This can generate good data, identify the real beneficiaries of policies, avoid serious environmental deficits and ensure inter-generational equity in the use of natural resources. It can also curb pollution. Distorted rankings from external assessments would matter little.

G. Ananthakrishnan is a Chennai-based journalist

Services rule out rollback of Agnipath, reveal hiring plan

Aspirants should not have been part of protests

DINAKAR PERI
NEW DELHI

Terming Agnipath the “only progressive step” to make the Army younger, a senior military officer on Sunday ruled out any rollback of the scheme, and said those applying for it should give an undertaking that they did not take part in protests that broke out after its announcement.

The three Services announced the recruitment schedule for the first batch of Agniveers with training set to commence by 2022-end.

“There is no space for indiscipline in the armed forces. No space for arson and vandalism. Every individual who aspires to join Agnipath has to give an undertaking and pledge that they have not taken part in any protest or arson... There will be police verification after that. No one can come into the armed forces without police verification,” Lieutenant-General Anil Puri, Additional Secretary in the Department of Military Affairs, said at a tri-service press conference after Defence Minister Rajnath Singh met the three Service chiefs for the second



Pressing ahead: Lt. General Anil Puri, Additional Secretary, Military Affairs Department, at a press meet in New Delhi. ■PTI

consecutive day.

Lt. Gen. Puri said efforts to bring down the average age of the armed forces started three decades ago. The Kargil review committee had reiterated the need for a reduction in age, but it did not come about, he added.

With Agnipath, he said, the average age will come down from 32 to 26 in line with the age profile of major Armies worldwide.

Stressing that future wars will be technology driven and hence a younger profile is required, Mr. Puri said there had been no opportunity in the past 30 years to undertake this transformative reform.

Noting that recruitment was not held for two years due to the pandemic, he said “God and nature” gave this opportunity to build a youn-

ger Army. The forces had been waiting since 1984 to reduce the age profile, he said.

On Agniveers, he said their allowances would be the same as what regular soldiers drew. There would be no discrimination.

IAF schedule

Air Marshal S.K. Jha, Air Officer in-charge, Personnel, said the notification and registration process for enrolment of the first batch would go live online from June 24 through the online system of the Indian Air Force.

“From July 24, an online examination will start and by end December, we will enrol the first batch and December 30, the training will commence,” he said.

CONTINUED ON ► PAGE 10

Services rule out rollback of Agnipath

The Navy's Chief of Personnel, Vice-Admiral Dinesh K. Tripathi, said the force had already started working on the process and the advertisement would reach the Ministry of Information and Broadcasting by June 25 and the process would start within one month.

"By November 21 the first batch of Agniveers will report at our training centre INS Chilka. The Agniveers will be gender neutral," he said. Of the 3,000 Agniveers to be inducted by the Navy this year, there will be some women, Vice Adm. Tripathi said. "We are working out the numbers based on the number of ships they can be accommodated and the facilities in training establishments."

The Navy already has women officers serving on aircraft and onboard warships, he noted. The Navy is looking at recruiting up to 600 women Agniveers depending on the modalities they would be posted on warships as well, it has been learnt.

For the Army, the terms and conditions and eligibility criteria have already been put up on the Army website, said Lt. Gen. C.B. Ponnappa, Adjutant General of Army. "On July 1, we will have notification from all recruitment offices. The first rallies will start in first week on August to November. In two batches induction will be done into training centres," he explained.

The Army which plans to induct 40,000 Agniveers in the first batch will recruit around 25,000 Agniveers in first batch by first half of December and remaining in the second batch by first half of February 2023. For this, 83 rallies planned across the country covering all States, he added. Officials also explained that the intake of Agniveers would be progressively increased in the next few years. Intake of recruits under Agnipath will increase from 46,000 annually in the first 4 years, to 90,000 in the 5th year to 1,25,000 from the 6th year.

On June 14, the Government announced the Agnipath scheme for recruitment of soldiers into the armed forces for four years doing away with the current process and the age bracket for new recruits was fixed at 17 ½ to 21 years of age.

All recruitment in the forces for soldiers, sailors and airmen will now be through this route.

Agniveers on completion of four years will get an opportunity to join regular cadre and upto 25% would be selected through another recruitment process.

In the last few days several Ministries and Government departments announced measures to accommodate Agniveers in various avenues post the four stint, amid violent protests by youth across the country against the new scheme.

Designation failure

India must keep gathering evidence and build its case on cross-border terror in global fora

There is a sense of *déjà vu* about China's decision on June 16 to block the UN Security Council designation of Lashkar-e-Taiba (LeT) deputy chief Abdul Rahman Makki as a terrorist, given that Beijing had repeatedly blocked the designation of the Jaish-e-Mohammad chief Masood Azhar until 2019, and other terror designations prior to that. Here too, the pile of evidence against Abdul Makki is considerable: that he is part of the command and control of the UNSC-designated terror group LeT, later renamed the Jamaat ud Dawa (JuD), which is also a UN-designated terror group, is in no doubt. He was not just a member of the governing body or "Shura"; he served as the head of its "foreign relations" department, and raised funding. He is also a member of LeT chief Hafiz Saeed's family (brother in law). The LeT/JuD has been prosecuted in India, the United States and even Pakistan for the 26/11 Mumbai attacks, and Makki was himself tried and sentenced by a Pakistani special court to nine years imprisonment on terror financing charges – a ruling overturned a year later. India wants him for his involvement in attacks over the past two decades, including the Red Fort attack in Delhi in 2000, and, more recently, in attacks on security forces in Jammu and Kashmir. He is on India's UAPA list of designated terrorists and also the U.S.'s Specially Designated Global Terrorists with a \$2 million reward for information that would convict him. Given what India and the U.S., which forwarded the proposal to put him on the UNSC's 1267 list of terrorists linked to the al Qaeda and ISIL, have called "overwhelming" evidence, New Delhi has termed China's move to place a hold on the process (this could delay it for as much as six months) as "regrettable" and "extremely unfortunate".

While China's actions may be motivated by growing acrimony with the U.S. and India, it is necessary to analyse the situation beyond bilateral tensions. That Beijing's last-minute hold on Makki's listing came even as the Financial Action Task Force was meeting in Berlin to credit Pakistan's actions on terror financing, and begin the process to relieve it from the grey list, pending an on-site visit in the next few months, may not be a coincidence. While China defends its actions on Makki and previous designations that it blocked as "technical objections" based on "procedural" loopholes, it is clearly part of a pattern of protecting Pakistan internationally. It is also notable that as a result of China's objections or otherwise, none of the terror designations under UNSC 1267 thus far against LeT commander Zaki ur Rahman Lakhvi in 2008, Hafiz Saeed in 2009 and Masood Azhar in 2019 actually contains charges against them for any attacks carried out in India. Beyond criticism and continued pursuance of the listing, it is necessary for the Government to continue to gather evidence and systematically build its case on cross-border terrorism on the international stage that cannot be derailed by political or geopolitical considerations.

'VIP visitors' flock to PMs' Museum

Over 37,000 visited the facility since it was opened to the public on April 21

DAMINI NATH
NEW DELHI

The Prime Ministers' Museum has welcomed over 37,000 visitors since being opened to the public on April 21, with everyone from Union Ministers, Chief Ministers, the Chief Justice of India, and business leaders visiting, according to the company operating the museum.

Inaugurated by Prime Minister Narendra Modi on April 14 and thrown open to the public a week later, the museum is located at the Nehru Memorial Museum and Library complex on Teen Murti Estate.

From April 21 to June 17, the museum sold 37,245 tickets, according to Tagbin, the government's design, technology and project management consultant for the project. Most visitors chose to buy tickets offline (79%), though there is a discount of ₹10 for those who book online on the entry ticket of ₹110.

VIP visitors

Sources said Union Ministers and Bharatiya Janata Party (BJP) MPs were encouraged to visit the new museum by



Prime Minister Narendra Modi at the inauguration of the Pradhan Mantri Sangrahalaya in New Delhi on April 14. ■PTI

the Prime Minister, and several of them have visited so far. President Ram Nath Kovind visited along with his family.

Vice-President M. Venkaiah Naidu and Ministers Nitin Gadkari, Nirmala Sitharaman and Kiren Rijiju have paid a visit. Chief Ministers of BJP-ruled Uttarakhand (Pushkar Singh Dhami) and Haryana (M.L. Khattar), as well as Delhi Chief Minister and Aam Aadmi Party chief Arvind Kejriwal, were among the VIP visitors, a source said.

Chief Justice of India N.V. Ramana and other holders of Constitutional posts have visited. Author and chairperson of Infosys Foundation

Sudha Murthy and author Amish Tripathi were among the visitors.

Speaking about the experience of the first three months, Tagbin founder and CEO Saurav Bhaik said the museum, which is about 90% digital, had maintained a "99.9% up time" with a control room constantly monitoring the functioning of the holograms and audio-visual exhibits. To keep the largely digital museum running, he said an operations and maintenance staff of 55 people were on the job, along with specially designed software.

For visitors, the audio guide has been designed with an indoor GPS to go

along with the exhibits. Mr. Bhaik said that while GPS is used outdoors, an indoor navigation system using multiple sensors and WiFi was being used in a museum for the first time to his knowledge.

He said the idea was inspired by "high security offices, like nuclear plants", where sensors are located inside the helmets of workers. Mr. Bhaik said the guide was currently available in Hindi and English, but 22 Indian languages and six international languages would be added in the coming months.

Built at a cost of ₹306 crore over 18 months, the museum is located at the erstwhile residence of former Prime Minister Jawaharlal Nehru that was converted into a memorial to him after his death.

While the original heritage building where Nehru lived continues to be largely dedicated to his life, with a few additional galleries of gifts given to PMs and other topics, a new building was constructed behind it to house the galleries on all Prime Ministers after him. A gallery on Mr. Modi is being planned, sources said.

| 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 th century such as industrial revolution, world wars, re-drawing 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. |
| | |
| General Studies Paper IV | |
| 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. |