



## EVERYDAY CURRENT AFFAIRS – NOVEMBER 16, 2020

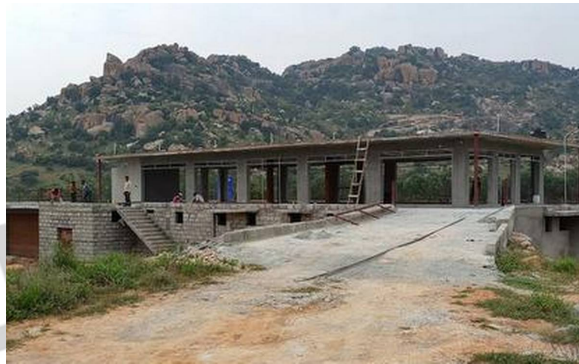
### TAMIL NADU

- **The Guidance Bureau of Tamil Nadu – to unveil the single-window portal with 200 more Government to Business (G2B) individual services for public usage**
  - ✓ At present, the current single window portal provides clearance for about 36 services, which are the basic level of services and offers electronic clearances.
  - ✓ The portal, developed by Tata Consultancy services, will add new services like forest clearance, setting up mobile towers among others
  - ✓ The initiative aims to enhance faceless, paperless and contactless approvals as part of the ease of doing business initiatives of the government
  - ✓ The process will be electronic with AI-enabled chat box to aid in the process of providing pre-project clearances
  - ✓ Guidance Bureau is the first point of interface for industrial investors targeting investment opportunities in the state
  - ✓ The state has set aside ₹70 crore for the project, which is intended to help small businesses more apart from large investors too.
  - ✓ It will be completed in two phases - where Phase-I will be executed by the year end and Phase-II will see completion by mid-2021.
  - ✓ TCS, India's largest IT services giant, had bagged the contract earlier in September, 2020.
  - ✓ In the latest Ease of Doing Business rankings for Indian states, Tamil Nadu was placed 14th, one spot higher than the 15th ranking it got in 2018.
  
- **The results of the third phase of trials of Covaxin - will be available only by February 2021**
  - ✓ This was announced by the pro vice-chancellor of SRM Medical College Hospital and Research Centre (SRM MCHRC) in Chennai.
  - ✓ SRM MCHRC is one of the few hospitals in the country to undertake Covaxin vaccine trials.

- ✓ The institute is conducting the third phase trials of the Covaxin vaccine, which will be administered to 1500 volunteers.
- ✓ The third phase will ascertain the efficiency and endurance of the vaccine in the administered volunteers
- ✓ Covaxin is the country's first indigenous Covid vaccine development by Bharat Biotech in association with the Indian Council for Medical Research (ICMR)
- ✓ The vaccine is approved by the drugs controller general of India for the trials
- ✓ The first phase human trials of the vaccine began in July with 30 volunteers while the second phase commenced in August where 45 volunteers received the Covaxin shot.

## STATES

- **A Formula Three (F3) racing track - is coming up at Kotapalli in Andhra Pradesh's Anantapur district.**



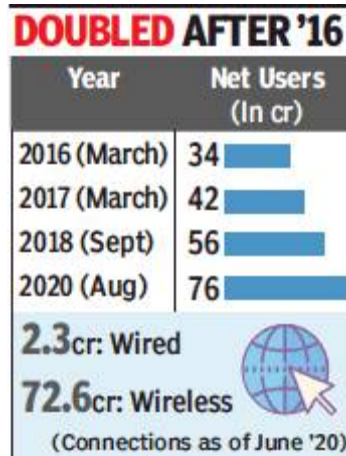
- ✓ Once completed, the 3.4-km track in Tankallu mandal will become one of the country's key tourist attractions
- ✓ The track will be similar to the Buddh International Circuit, India's only Formula One (F1) circuit located at Greater Noida in Uttar Pradesh, and on the lines of the 3.74-km track located at Irungattukottai, near Chennai.
- ✓ Bengaluru-based Nidhi Marque One Motors was developing the ₹100-crore racing track on a 219 acre plot alongwith a resort, a wellness centre and a golf course on 50 acres
- ✓ The recognition for the racing track would be obtained from The Fédération Internationale de l'Automobile (FIA) and the Fédération Internationale de Motocyclisme (FIM).
- ✓ The racing track will also be used by automobile manufacturers for testing purposes.
- ✓ The F3 restricts the speed of cars to 250 kmph, but it will have all the requisite features, such as straights and high-speed corners, along with an elevation of up to 40 m.
- ✓ An amusement park would be developed in the second phase and the project would provide employment to 150 to 200 people from the district

- ✓ Further, the Tourism Department of the state has submitted a proposal to the Central government to give its nod for the Rayalaseema Heritage Circuit in Anantapur-Kurnool-Kadapa districts.
- ✓ The circuit proposes to cover the Lepakshi and Tadipatri temples, the Penukonda and Gooty forts in Anantapur; the Belum Caves, Mahanandi and Ahobilam in Kurnool district; and the Gandikota fort and canyon in Kadapa.

## NATIONAL

- **The Centre - has geo-tagged all institutional drug-addiction treatment centres, drop-in and community-based peer led facilities supported by the social justice ministry.**
  - ✓ The move is aimed at providing information on the existing available facilities to those seeking treatment for drug addiction
  - ✓ There are around 560 such drug de-addiction centres across the country
  - ✓ With the new initiative, the location, address, photograph and contact details of the person in-charge of these centres are now available on the ministry's website
  - ✓ The geo-tagging of institutions would help people to find the nearest treatment, counselling and rehabilitation facility and seek the relevant information
  - ✓ The Ministry has already set up a dedicated national drug helpline, which guides callers to the treatment centres
  - ✓ According to the 'Magnitude of Substance Abuse in India' report 2019, the country has an estimated 16 crore alcohol consumers in the 10-75 age group
  - ✓ Among these consumers, 19% were dependent on alcohol and 5.7 crore dependent users required treatment.
  - ✓ Among users of drugs, those requiring treatment was estimated to be 72 lakh for cannabis, 60 lakh for opioids and 11 lakhs for sedatives.
  - ✓ The government is planning to set up addiction treatment facilities in 125 of the 272 vulnerable districts which do not have rehabilitation centres supported by the Centre.
  
- **The government – has announced that the number of internet connections in India has crossed the 75-crore milestone as of August 31, 2020**
  - ✓ The internet service was thrown open to the public on August 15, 1995.
  - ✓ The number of connections more than doubled from 34 crore in March 2016, coinciding with the launch of Digital India programme in 2015.
  - ✓ Out of the milestone connections, most of them are in urban areas and availed of through mobile phones and dongles.
  - ✓ As per the Telecom Regulatory Authority of India (Trai), there were 74.9 crore internet connections by the end of June 2020
  - ✓ Of this, there are 5 crore narrowband customers and 69.2 crore broadband customers.

- ✓ Even if narrowband connections remained the same as in June, the total number of internet connections stood at 76.7 crore at the end of August.



- ✓ Out of the total connection, 61% were in urban areas and 97% of them were wireless, as on June 30,2020
  - ✓ India hit the 50-crore mark with respect to the internet users in September 2018.
  - ✓ The country has since, on average, added 86 lakh connections each month.
  - ✓ Five states — Karnataka, Tamil Nadu, Andhra Pradesh (including Telangana), Gujarat and Maharashtra — account for 26 crore (or 35% of all) internet connections.
- **The Ministry of Environment, Forest and Climate Change - announced that the Lonar Lake in Maharashtra and Sur Sarovar lake in Uttar Pradesh have been added to the Ramsar sites.**



- ✓ The Lonar lake is the only crater lake in the country, which was created by asteroid collision during Pleistocene Epoch
- ✓ It is located within the Deccan traps of the Deccan Plateau
- ✓ The lake consists of two small streams Penganga and Purna entering into it
- ✓ In 2019, researchers of IIT Bombay found that it contains minerals, which are very similar to those found in the moon
- ✓ The Lonar lake is usually green in colour due to the presence of Cyanobacteria.



- ✓ In June 2020, the lake turned pink due to the presence of salt loving bacteria called haloarchaea or halophilic archaea.
- ✓ The Sur Sarovar lake is also called the Keetham lake.
- ✓ The canal originates from Okhla barrage on River Yamuna in Delhi and is home to more than 106 species of migratory birds
- ✓ The Ramsar sites maintain an international network of wetlands that are vital in sustaining global biological diversity.
- ✓ The Ramsar Convention was signed in 1971 and is one of the oldest inter-governmental accord.

## INTERNATIONAL

- **On November 15, 15 Asia-Pacific nations, led by China and excluding India - signed the world's biggest trade agreement, the Regional Comprehensive Economic Partnership (RCEP)**
- ✓ The RCEP was signed after eight years of negotiations at the conclusion of 37<sup>th</sup> edition of annual summit of Southeast Asian leaders and their regional partners, held virtually
- ✓ The agreement, which covers almost a third of the world economy, will progressively lower tariffs across many areas in the coming years

### Landmark pact

A look at some features of the Regional Comprehensive Economic Partnership (RCEP), which was signed on Sunday



- Members of the RCEP include all ASEAN countries (Indonesia, Malaysia, Philippines, Singapore, Thailand, Brunei, Vietnam, Laos, Myanmar and Cambodia) along with China, Japan, South Korea and Australia
- The members account for nearly 30% of the global GDP
- The RCEP

- includes provisions on trade in goods and services, intellectual property, e-commerce, telecommunications, small and medium enterprises, and other issues
- The three largest economies in the pact, China, Japan and South Korea, are part of a free trade agreement for the first time
- On November 4, 2019, India walked out of the agreement as negotiations failed to address the country's issues and concerns

**Virtual signing:** A screen grab showing Philippines' Secretary of Trade and Industry Ramon Lopez holding up the agreement on Sunday. • AFP

- ✓ These 15 countries accounts for 30% of world population and 30% of global GDP.
- ✓ After the signing, all countries would have to ratify the RCEP within two years before it becomes effective.
- ✓ This is the first time China and Japan reached a bilateral tariff reduction arrangement.
- ✓ Also, China, South Korea and Japan have come together for the first time in a single free trade agreement.
- ✓ The mega trade bloc is a landmark initiative, which is expected to boost commerce among the member-countries spread across the Asia-Pacific region.

- ✓ The RCEP was first proposed in 2012 and involves 10 Asean economies — Indonesia, Malaysia, the Philippines, Singapore, Thailand, Brunei, Vietnam, Laos, Myanmar and Cambodia — along with China, Japan, South Korea, New Zealand and Australia.
  - ✓ India, one of the leading consumer-driven market in the region, pulled out of talks in 2019
  - ✓ The country was concerned that the elimination of tariffs would open its markets to a flood of foreign imports that could harm local producers.
  - ✓ India's concerns were related to the dumping of manufactured goods from China, dumping of dairy products from New Zealand and agricultural products from Australia
  - ✓ India makes up nearly a third of the world's population and account for 29% of global gross domestic product.
  - ✓ Prime Minister Narendra Modi addressed the ASEAN Summit on November 12 and highlighted the necessity for peace and stability in the region without mentioning about RCEP
- **The UAE – to extend its “golden” visa system — which grants 10-year residency in the Gulf state — to certain professionals, specialised degree-holders and others**
- ✓ Foreigners in the UAE usually have renewable visas valid for only a few years and linked to employment.
  - ✓ All holders of doctorate degrees, medical doctors and also computer, electronics, programming, electrical and biotechnology engineers are eligible for the golden visa system.
  - ✓ The new system was announced by UAE vice-president and the ruler of Dubai Sheikh Mohammed bin Rashid al-Maktoum
  - ✓ Further, those with specialised degrees in artificial intelligence, big data and epidemiology, as well as high school students living in the UAE who rank top in the country and students from certain universities with a GPA of 3.8 or higher are also eligible for the new system
  - ✓ After first announcing a long-term visa plan in 2018, the UAE in 2019 started granting 5-year and 10-year renewable visas to certain foreign investors, entrepreneurs, chief executives, scientists and outstanding students.
  - ✓ In September, the UAE government said it would grant visas renewable every five years to wealthy foreign retirees

## DEFENCE

- **On November 13, India - test fired canister-based, all-weather Quick Reaction Surface-to-Air-Missiles (QRSAM) at the Chandipur Test Fire Range.**
- ✓ The missile, launched from mobile two vehicle system, is capable of striking aerial target at a height of 15 km.

- ✓ One of the vehicles in the system carries the missile while the second carries the radar, which can track 100 targets simultaneously.
- ✓ Also, it is capable of engaging six targets simultaneously.
- ✓ The canister-based systems are stored and operated from specially designed controlled-compartments.
- ✓ QRSAM consists of active array battery surveillance radar, a launcher and active array battery multifunction radar.
- ✓ The radars have 360-degree coverage with 'track on move' and 'search on move' capabilities.

## SPORTS

- Britain's Lewis Hamilton - won a record-equalling seventh Formula One world championship on November 15 to become the most successful driver in the sport's history.

HAMILTON	V	SCHUMACHER
7	Titles	7
94	Wins	91
264	Career starts	306
97	Pole positions	68
227	Points finishes	221
163	Podiums	155
53	Fastest laps	77
5	Races until first pole	41
6	Races until first win	18
11	Most wins in a season	13
5	Successive wins	7
16	Successive podiums	19
47	Successive points finishes	24
35	Age at seventh title	35

● Schumacher took 72 of his wins with Ferrari and 19 with Benetton. Hamilton has won 73 with Mercedes, after 21 with McLaren.  
 ● Schumacher took two titles with Benetton and five with Ferrari. Hamilton has one with McLaren and six with Mercedes.  
 ● There are more races in a season now than when Michael Schumacher was at his peak.

REUTERS

**TOP FIVE F1 DRIVERS WITH MOST CHAMPIONSHIP TITLES**

**MICHAEL SCHUMACHER: 7**  
(1994, 1995, 2000, 2001, 2002, 2003, 2004)

**LEWIS HAMILTON: 7**  
(2008, 2014, 2015, 2017, 2018, 2019, 2020)

**JUAN MANUEL FANGIO: 5** (1951, 1954, 1955, 1956, 1957)

**ALAIN PROST: 4** (1985, 1986, 1989, 1993)

**SEBASTIAN VETTEL: 4** (2010, 2011, 2012, 2013)

- ✓ The 35-year-old Mercedes legend secured a record-stretching 94th career win at the Turkish Grand Prix and bagged the championship title with three races to spare.
- ✓ Ferrari ace, Germany's Michael Schumacher has seven titles to his name and 91 career wins in the Formula one races
- ✓ Mercedes had already won the constructors' championship for a seventh year in a row.



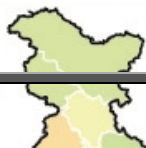
- ✓ Hamilton won six F1 championships in the years 2008 (for McLaren), 2014, 2015, 2017, 2018 and 2019 – all for Mercedes
- ✓ Hamilton already had more race wins (94), pole positions (97) and podium finishes than any other Formula 1 racer in the history of the sport
- **The Union Minister of Sports, Kiren Rijiju - recently announced that the government will provide incentives to 500 private academies under Khelo India scheme.**
- ✓ Under the initiative, the private academies will be graded into different categories based on the quality of achievement of the players.
- ✓ In the first phase, monetary assistance is to be provided to 14 Olympic sports disciplines that have been identified for excellence in the Olympics 2028.
- ✓ The incentivisation mainly aims to support institutions that are in remote areas of the country.
- ✓ The incentive will help these institutions to improve their resources, infrastructure and Sports Sciences.
- ✓ The Sports Authority of India recently sanctioned 5.78 crores of rupees under the Khelo India scheme.
- ✓ The fund has been allocated under the Khelo India Talent Development Scheme to benefit more than 2,783 Khelo India athletes.
- ✓ The khelo India programme was launched in 2018 to improve the sports culture in India.
- ✓ The programme subsumes other schemes such as Rajiv Gandhi Khel Abhiyan, Urban Sports Infrastructure Scheme and the National Sports Talent Search System programme.
- ✓ Under the Khelo India scheme, financial assistance of 5 lakh rupees to 8 lakh rupees is being provided to deserving sportspersons for eight consecutive years
- ✓ It is a central sector scheme that is 100% funded by the central government.

## RANKINGS

- **Arunachal Pradesh - recorded the best sex ratio in the country, while Manipur recorded the worst sex ratio**
- ✓ This was revealed by the 2018 report on “Vital statistics of India based on the Civil Registration System” published by the Registrar-General of India.
- ✓ Sex ratio at birth is the number of females born per 1,000 males.
- ✓ Arunachal Pradesh recorded 1,084 females born per thousand males, followed by Nagaland (965) Mizoram (964), Kerala (963) and Karnataka (957).
- ✓ The worst was reported in Manipur (757), Lakshadweep (839) and Daman & Diu (877), Punjab (896) and Gujarat (897).
- ✓ Delhi recorded a sex ratio of 929, while Haryana had 914 and Jammu and Kashmir 952.

### Gap persists

Among the major States, Kerala (963) had the best sex-ratio at



Delhi 929



- ✓ The ratio was determined on the basis of data provided by 30 States and Union Territories
- ✓ However, six States namely Bihar, Jharkhand, Maharashtra, Sikkim, Uttar Pradesh and West Bengal did not participate in the survey.
- ✓ The number of registered births increased to 2.33 crore in 2018 from 2.21 crore registered births the previous year.
- ✓ The level of registration of births has increased to 89.3% in 2018 from 81.3% in 2009, as per the report

## NATIONAL AND INTERNATIONAL DAYS

### ➤ International Day for Tolerance – November 16



- ✓ The day is celebrated every year by the UNESCO to raise awareness about the importance of tolerance and its benefits in the society
- ✓ According to the 1995 Declaration of Principles of Tolerance by UNESCO, tolerance is 'acceptance, respect and appreciation of world cultures and ways of being Human'.
- ✓ The United Nations General Assembly adopted the resolution to observe the International Day for tolerance in 1996.
- ✓ The Madan Jeet Singh Prize is being awarded by UNESCO every year for the promotion of tolerance and nonviolence on the International Day for Tolerance.

- ✓ The winner of the prize is presented with prize money of \$100,000
- ✓ Madan Jeet Singh was an Indian diplomat, who joined as ambassador of India to UNESCO in 1982
- ✓ In 2000, Madan jeet became the goodwill ambassador of the United Nations.
- ✓ Madan Jeet took active participation in the Quit India Movement of Mahatma Gandhiji in 1942 against the Colonial rule of British.
- ✓ He joined the Indian Foreign Service in 1953 and served various countries such as Greece, Yugoslavia, lost, Sweden, Spain, USSR, Sweden and Denmark.
- ✓ The award recognizes Madan Jeet's lifelong devotion to the cause of peace and communal harmony.
- ✓ The year 1995 was celebrated by the UNESCO as the United Nation Year for Tolerance.
- ✓ This was in connection with the 125th birth anniversary of Mahatma Gandhi, the father of Nation.
- ✓ The celebrations of the year 1995 were funded by Madan Jeet Singh.

➤ **National Press Day - November 16**



- ✓ The day marks the establishment of the Press Council of India on November 16, 1966.
- ✓ The Press Council of India acts as a moral Watchdog for media in the country.
- ✓ The observance of the day aims to create a free and responsible press in the country.
- ✓ The Article 19 of the Constitution of India provides the right to freedom of speech and expression
- ✓ According to the Global Press Freedom Index, 2020, that was released in April 2020, India was ranked 140th out of 180 countries.
- ✓ The Index is published by an independent Non-Governmental Organisation, Reporters Sans Frontieres or Reporters without borders since 2000 every year
- ✓ The NGO has a consultative status with the UNESCO, United Nations and the International Organisation of Francophonie.
- ✓ It ranks the countries based on the parameters such as media independent, pluralism, media environment, legislative Framework, quality of infrastructure and transparency.


## **COVID-19 VACCINE STORAGE – A REPORT**

- India – to analyse the possibility of setting up super-cold storage for storing the Covid vaccines at medical freezers with recommended storage temperatures as low as -70°C or -80°C

## PREPARING SHOTS FOR EVERYONE

**V**accine dispatches will have to reach at least **18% of the Indian population within six months**


- The health ministry expects to receive and utilise 400 to 500 million vaccine doses to cover nearly 25 crore people by July next year
- **India has a strong record on vaccination, with the world's largest inoculation programme, capable of distributing 400 million vaccines a year**
- This programme is supported by more than 27,000 cold chain points – 750 of these are located at the district-level and above



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### COVID-19 POSES AN UNPRECEDENTED CHALLENGE....


- News of the Pfizer vaccine this week – makers claim **IT CAN PROTECT NINE OF 10 PEOPLE FROM COVID** – offered renewed hope. But it also provided a peek into how difficult vaccine storage/deployment is going to be for governments



- The shot injects messenger (m)RNA – essentially, genetic code of the virus – into the body. It triggers the immune system into making antibodies that protect against the pathogen
- **The Moderna vaccine announced earlier uses this trick as well**

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### COOLING




Industrial freezer farms that can reach -70°C

**THE (m)RNA VACCINES, HOWEVER, ARE NOT GOING TO BE EASY TO STORE OR TRANSPORT**

- The Pfizer vaccine, for example, cannot be removed from a temperature of **-70°C (-94°F)** more than four times. **It's the 'coldest' of all the leading Covid-19 vaccines in development**
- Moderna's shot needs -20°C to survive; the Russians' Sputnik is unstable at "higher than -18°C"; and the AstraZeneca-Oxford vaccine has to be refrigerated at 2-8°C
- The Pfizer jab then (to be taken in two doses 3 weeks apart) **may not be able to travel everywhere, and will be extremely expensive to dispatch.** The company says it has a "transport box" packed with dry ice and GPS locators, which can keep 5,000 doses safe for 10 days, as long as it remains unopened

- Now, a standard chilled transport box that is temperature-controlled at -8°C (not -80°C) for five days and big enough to hold 1,200 vaccines can cost nearly \$6,000 per unit



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#### BEST OF EVERYTHING

“

I think India should wait for vaccines that will be affordable, easy to store and transport

—Dr Lalit Kant | THE FORMER HEAD OF EPIDEMIOLOGY AND COMMUNICABLE DISEASES, INDIAN COUNCIL OF MEDICAL RESEARCH

#### DAMAGED VACCINES, LIMITED REACH

**3** billion of the world's 7.8 billion people live in places with insufficient storage facilities for a Covid-19 vaccine

Several parts of the world remain cut-off from cold chain networks

25% of vaccines reach their destinations in a degraded state due to breaks in the cold chain

- ✓ The move assumes significance considering Pfizer vaccine, which promises 90% efficacy, will need to be stored in -70°C.
- ✓ The Moderna vaccine too — its efficacy rating is expected by December-end — needs -20°C to survive.
- ✓ Considering the challenges behind setting up such storage facilities, these vaccines will not be ideal for developing countries
- ✓ Further, massive pre-orders for these vaccines (Pfizer and Moderna's) from the United Kingdom, United States and Japan will make them mostly unavailable for India until 2021



Good results of the Pfizer vaccine have spread cheer across the world. Some other vaccines also look promising, and large-scale vaccination of at least health staff and other at-risk people could begin soon. Yet, experts say it could take four years to immunise the world against the coronavirus. That's because rich countries have already reserved billions of doses – equal to more than a year's supply – of vaccines for their citizens, leaving little for the world's poor.

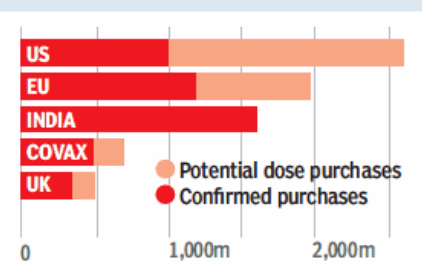
- The US alone has bought nearly a sixth of the world's supply and Canada has secured enough doses to inoculate each citizen nine times. With 1.6 billion doses, India is the number 1 advance buyer, but it averages out to just over 1 dose per person.

- The rush to hoard vaccines has left many low- and middle-income countries unable to immunise their entire populations until 2024.

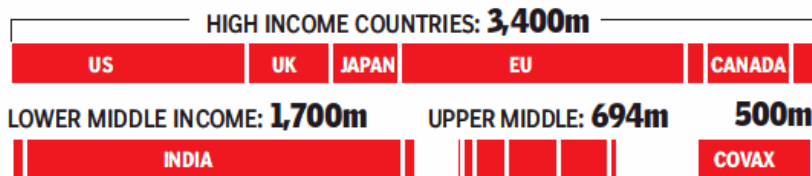
### 6.4 BILLION DOSES BOOKED

- Countries are hedging their bets by purchasing billions of doses of the vaccines undergoing advanced trials. Of the 9.6 billion doses that have been reserved, 6.4 billion are confirmed purchases and 3.2 billion are under negotiation or parts of an option to expand an existing deal.

- But with the limits of manufacturing capacity, some countries – mainly lower- and middle-income ones – may not have enough doses to immunise their entire populations by 2024. High-income countries have 3.4 billion doses in confirmed deals but no low-income



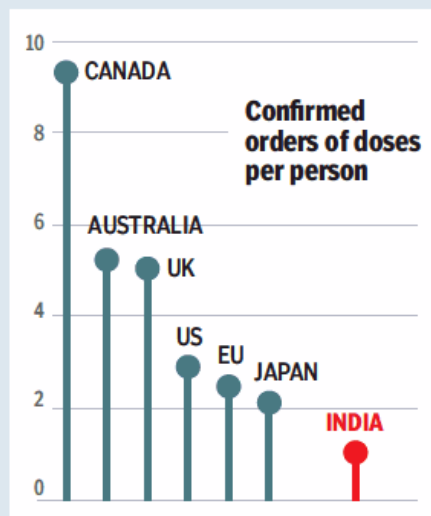
### Confirmed vaccine doses procured, by country income level



country has signed direct deals to secure vaccines, according to a Duke University database.

- To help low- and middle-income countries immunise at least 20% of their population, a coalition of international agencies and nonprofits, called Covid-19 Vaccines Global Access Facility (Covax), is raising funds to secure 2 billion doses by the end of 2021. Many governments will be entirely dependent on Covax to immunise their people. More than 150 countries have agreed to contribute to it.

### NINE DOSES FOR EVERY CANADIAN



- Many countries will struggle to vaccinate anyone beyond frontline healthcare workers and some of their most vulnerable citizens for years. But some wealthy countries have advance-purchased

enough doses to immunise their citizens several times over.

- For instance, Canada has bought 358 million doses for its 38 million citizens. That's nine doses per person. It could still buy another 56 million doses to take it over 10 doses per person.

### Confirmed orders & manufacturers

Country	Manufacturer	Doses (m)
INDIA 1,600m	Novavax	1,000
	Oxford-AstraZeneca	500
	Gamaleya Research Institute (Russia)	100
EU 1,200m	Oxford-AstraZeneca	400
	Pfizer-BioNTech	300
	Sanofi-GSK	300
	J&J	200
US 1,000m	Oxford-AstraZeneca	500
	Novavax	110
	Pfizer-BioNTech	100
	Sanofi-GSK	100
	J&J	100
	Moderna	100

- But much of the world's population will likely struggle to get even a single dose for months, if not years, after the first vaccines are approved and commercially available.

- Some middle-income countries like India and Brazil are developing their own vaccines, although they are still in the early phases of trials. Should India's vaccines, for instance, prove successful, global supply will get a boost and prices will remain relatively low.

Source: Duke Global Health Innovation Center, Economist, media reports

- ✓ Both the Pfizer and Moderna vaccines are mRNA (messenger RNA) shots that require ultra-low storage temperatures and such freezers are not available in India
- ✓ However, there are vaccines in development that can be stored in temperatures between -2°C and -8°C.
- ✓ Existing cold storage networks fulfil requirements of three vaccine candidates — from Bharat Biotech, Zydus Cadila and Serum Institute — that are being tested for Indian conditions.
- ✓ According to the World Health Organisation, an estimated 70% of the global population has to be inoculated to end Covid-19.



