

Monkeypox virus

- Monkeypox, an uncommon viral infection which was primarily restricted to some countries in western and central Africa as well as travellers to these countries has now spilled over driven by zoonotic events.

What is monkeypox and what causes the disease?

- First discovered in 1958, in monkeys at the Statens Serum Institute in Denmark, monkeypox is a zoonotic virus that can infect humans as well as other animals, including rodents and other primate species.
- Ever since the first case in humans was identified in 1970, in the present Democratic Republic of the Congo, the virus has become endemic in parts of Central and West Africa primarily driven by zoonotic spillovers.
- Despite being denoted as 'monkeypox', the actual origin and source of the disease are unknown and therefore a misnomer in many ways.
- The virus belongs to the same family of viruses as variola the virus that causes smallpox.

- The disease presents with symptoms that are similar to those previously seen in smallpox patients.

How is the virus transmitted?

- The virus can be transmitted from both animals to humans and between humans.
- Animal-to-human transmission of the virus can result from close contact with blood, fluids or skin lesions of infected animals.
- Human-to-human transmission could happen through close contact, and through body secretions, skin lesions or contaminated articles of individuals infected with monkeypox.
- Close human contact during sexual activities is believed to be a driver of the current spread of the disease, as evidenced by its predominant spread in gay, bisexual and MSM communities.

What does declaring monkeypox a health emergency entail?

- The WHO defines a PHEIC as a disease outbreak that "constitutes a public health risk through the international spread of disease" which may require an immediate and coordinated international response.

- Since 2009, the WHO has made seven PHEIC declarations including the ongoing COVID-19 pandemic.
- This designation entails accelerating international efforts to contain the spread of the disease before it escalates into a pandemic.
- This would mean promoting countries to devise efforts to control transmission and coordinate sharing of key resources such as vaccines and therapeutics apart from heightened contact tracing, diagnosis and vaccination.
- While studies are underway to understand the epidemiology, transmission routes, and clinical presentations of the disease, the WHO will offer support to affected nations for developing an effective outbreak response and surveillance as well as prevention and therapeutic strategies against monkeypox.
- It is also not currently understood if a previous monkeypox infection lends protective immunity against future infections.
- However, due to the genetic similarities of smallpox and monkeypox viruses, vaccines and antiviral agents used for the worldwide eradication of smallpox can also protect against monkeypox.
- The WHO reports that vaccination against smallpox is approximately 85% effective in preventing monkeypox and thus prior immunisation against smallpox may lead to mild disease.

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Sports code

The story so far:

What are the current prevention and treatment options against monkeypox?

- There are no specific treatments available for monkeypox.
- Clinical management of monkeypox includes relieving symptoms and managing complications and preventing long-term effects.
- The sports administration in India was in the headlines frequently these past few weeks all for the wrong reasons.
- Both the All India Football Federation (AIFF) and the Indian Olympic Association (IOA) face potential ban/suspension if elections to the executive body are not done immediately.
- Hockey India has also come under scrutiny by the International Hockey

Federation (FIH) for the delay in conducting elections.

What is the Sports Code?

- The Sports Code, or National Sports Development Code of India to be precise, was introduced in 2011 by the Central government, which wanted good governance practices in the management of sports at the national level without interfering in the autonomy of the national sports bodies.
- It was widely accepted that such a sports code was needed as it was felt that most of the sports federations had become personal fiefdoms of certain individuals many of the politicians as they continued to remain in power for long periods.
- The National Spots Code laid down restrictions regarding age and tenure.

What happens when a sports body is found to be in violation of the Sports Code?

- The respective federations can be put under a CoA.
- That is what happened with the football and hockey associations.
- Last May, the Supreme Court had appointed a three-member CoA led by former Supreme Court judge A.R.

Dave to run the AIFF, whose President Praful Patel had to resign.

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SC on bail

- In *Satender Kumar Antil v. Central Bureau of Investigation* (2022), the Supreme Court expressed its unhappiness with the current state of India's criminal justice system.
- The court said there was scant regard for the violation of basic human rights. It was categorical that indiscriminate arrests are indicative of a colonial mindset and create the impression of India being a "police state."
- Justice Krishna Iyer had said in *State of Rajasthan, Jaipur V. Balchand alias Baliay* (1977): "The basic rule is bail, not jail, except where there are circumstances suggestive of fleeing from justice or thwarting the course of justice or creating other troubles in the shape of repeating offences or intimidating witnesses and the like by the petitioner who seeks enlargement on bail from the court."

Problem of overcrowding

- The Supreme Court also drew attention to the problem of overcrowding of prisons, which has

attendant issues such as corruption, crime and hygiene within prisons.

- An overwhelming majority of the inmates are under trials. There are two ills here.
- One, there is an insistence during trial on judicial custody, which is different from what prevails in many countries, especially the U.K., where grant of bail is much more liberal.
- And two, court proceedings are tortuous as a result of the collusion between principal players in the scene. This situation has been discussed with only a marginal impact.

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Citizen and digital governance

- The right to live with dignity is a constitutional imperative.
- However, it rarely manifests in discussions surrounding digital initiatives in governance.
- The Integrated Child Development Scheme (ICDS), launched in 1975, is one of the world's largest early childhood care and development programs.
- An important component of ICDS is supplementary nutrition for children in the 0 to 6 years age group,

pregnant women and lactating mothers.

- This became a legal entitlement when it became part of the National Food Security Act in 2013.
- As per this, the rights-holders get hot cooked meals or take-home rations at the local Anganwadis. In 2021, the Union government launched the Poshan Tracker, a centralised platform, to monitor all nutrition initiatives, including ICDS.
- As per Union government circulars, the updating of Aadhaar of ICDS rights-holders, including children, on the Poshan Tracker is mandatory, and subsequent Central funds for supplementary nutrition to States is being made contingent on this.
- Nearly three-fourths of children between the ages of 0 to 5 years do not have Aadhaar cards, and Supreme Court orders specify that children cannot be denied their rights for lack of Aadhaar.
- The Union government has issued an order introducing the National Mobile Monitoring Software (NMMS) app to record attendance of MGNREGA workers at worksites.
- As per the order, the app will record “two time-stamped and geo-tagged photographs of the workers in a day” which “increases citizen oversight of the programme besides potentially

enabling processing of payments faster.”

- In worksites with 20 or more workers, the app will replace physical attendance registers.
- The app makes this hard as they have to now stay back at the worksite even after completing their work only to get photographed and geo-tagged.

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Public investment

- The Finance Minister, Nirmala Sitaraman, said recently that India’s long-term growth prospects are embedded in public capital expenditure programmes. She added that an increase in public investment would crowd in (or pull in) private investment, thus reviving the economy.
- The investment distribution has hardly changed over the last decade, with the public sector’s share remaining 20%.
- As roads and communications are classic public goods, investment in them is welcome.
- But over-emphasising it may be lopsided.
- For healthy domestic output growth, there is a need for balance between

“directly productive investments” (in farms and factories) and infrastructure investments.

- The contribution of foreign capital to financing GCF fell to 2.5% in 2019-20 from 3.8% in 2014-15 (or 11.1% in 2011-12).
- The lack of domestic capacity for essential raw industrial materials and capital goods could prove costly.
- It will likely test India’s ability to withstand external economic challenges.
- With a depreciating currency and rising (imported) inflation, prospects of sustaining investment recovery are likely to get harder.

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Ministerial conference 12

- The ministerial outcome on the so-called TRIPS waiver represents the biggest gain for the EU.
- It is relevant to recall the sequence of events.
- In October 2020, India and South Africa put forth a proposal seeking to temporarily suspend the protection of intellectual property rights such as patents, copyrights, industrial designs and trade secrets, so that the production of vaccines, therapeutics and diagnostics could be ramped up

to help overcome the crisis and fight the COVID-19 pandemic.

- Pushed into a corner, the European Union (EU) unleashed its masterstroke. It made a counterproposal to undermine the proposal made by India and South Africa.
- This counter proposal provided a cosmetic simplification in certain procedural aspects of compulsory licensing in patent rules.
- With the active support of the WTO's Director-General, it also launched a process in December 2021 to reach a compromise.
- The issue of a permanent solution to public stockholding was identified by the Indian Minister of Commerce and Industry, Piyush Goyal, as being its top most priority and nothing more important than it for the world.
- Despite having the support of more than 80 developing countries, this issue has not found mention anywhere in the ministerial outcome.
- Instead, the WTO members have succeeded in diverting attention from India's interest by agreeing that food security is multi-dimensional, requiring a comprehensive solution.
- India has also failed in many of its other objectives, such as securing

the right to raise revenues by taxing electronic transmissions.

- In the area of fisheries subsidies, it gets two years to have suitable regulatory mechanisms in place to monitor fish catch and reporting.
- Otherwise, subsidies to traditional fishermen will be prohibited.
- Although it has secured a temporary reprieve to provide subsidies for enhancing its fishing fleets, it will have to fight an uphill battle on this issue in future negotiations.

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Fiberisation

The story so far:

- India is preparing to auction off about 72 GHz of airwaves to rollout 5G services in the country. However, the infrastructure needed for such a rollout requires existing radio towers to be connected via optical-fiber cables.

What is fiberisation?

- The process of connecting radio towers with each other via optical fibre cables is called fiberisation.
- It helps provide full utilisation of network capacity, and carry large amounts of data once 5G services are rolled out.

- It will also aid in providing additional bandwidth and stronger backhaul support.
- The backhaul is a component of the larger transport that is responsible for carrying data across the network.
- It represents the part of the network that connects the core of the network to the edge.
- About ₹2.5 lakh crore will be needed to set up 15 lakh towers in the next four years, according to estimates by the National Broadband Mission and Cellular Operator Association of India (COAI).
- Government programmes like BharatNet and Smart Cities will further add to the demand of fibre deployment, necessitating a complete tower fiberisation.

Where does India stand with respect to tower fiberisation?

- To transition into 5G, India needs at least 16 times more fibre, according to estimates by STL, a technology company specialising in optical fibres and cables.
- In India, currently, only 33% of the towers are fiberized, compared to the 65%-70% in South Korea and 80%-90% in the U.S., Japan and China, according to a 2021 report by India Infrastructure Research.
- The fibre kilometers (fkm) per capita in India is lower than other key markets. Ideally, a country needs 1.3 km of fibre per capita to ensure good fiberisation.
- One of the biggest issues in the way of fiberisation remains the Right of Way (RoW) rules.
- The Indian Telegraph RoW Rules 2016 were gazette notified by the Department of Telecommunications (DoT), Govt. of India on November 15, 2016.
- The rules aim to incorporate nominal one-time compensation and uniform procedure for establishment of Overground Telegraph Line (OTL) anywhere in the country.
- While all States/UTs are required to implement these rules, they are not in complete alignment and still require certain amendments to align, the EY report pointed out.

What are the challenges?

- To reach the targeted level of fiberisation, India requires about ₹2.2 lakh crore of investment to help fiberise 70% towers.
- Further, several districts and local bodies have not agreed to the RoW policies as notified in those respective States.

Can satellite communication help in 5G deployment and improve network backhaul?

- Processing power needs to be distributed from centralised data centres to edge servers closer to users
- Satellite communication can facilitate 5G broadband connectivity to underserved areas where it is not feasible to deploy terrestrial infrastructure like remote villages, islands or mountainous regions.
- Satellite-based networks are the only means for delivering 5G broadband to users on board moving vessels, including cars, ships, airplanes and high-speed trains.
- In addition, space-based broadcast capabilities support over-the-air software updates for connected cars anywhere in the world.

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