

Current Affairs 8th December 2023 by Saurabh Pandey

Deepfake regulation

How did deepfake tech emerge?

- Deepfakes are made using technologies such as AI and machine learning, blurring the lines between fiction and reality.
- Although they have benefits in education, film production, criminal forensics, and artistic expression, they can also be used to exploit people, sabotage elections and spread largescale misinformation.
- While editing tools, like Photoshop, have been in use for decades, the first ever use of deep fake technology can reportedly be traced back to a Reddit user who in 2017 had used a publicly available AI driven software to create pornographic content by imposing the faces of celebrities on to the bodies of ordinary people.
- Now, deepfakes can easily be generated by semiskilled and unskilled individuals by morphing audiovisual clips and images.
- For instance, the Massachusetts Institute of Technology (MIT) created a Detect Fakes website to help people identify deepfakes by focusing on small intricate details.
- The use of deepfakes to perpetrate online gendered violence has also been a rising concern.
- A 2019 study conducted by AI firm Deep trace found that a staggering 96% of deep fakes were pornographic, and 99% of them involved women.

- Highlighting how deepfakes are being weaponized against women,

What are the laws against the misuse of deepfakes?

- India lacks specific laws to address deepfakes and AI related crimes, but provisions under a plethora of legislations could offer both civil and criminal relief.
- For instance, Section 66E of the Information Technology Act, 2000 (IT Act) is applicable in cases of deepfake crimes that involve the capture, publication, or transmission of a person's images in mass media thereby violating their privacy.
- Such an offence is punishable with up to three years of imprisonment or a fine of two lakh.
- Further, Sections 67, 67A, and 67B of the IT Act can be used to prosecute individuals for publishing or transmitting deepfakes that are obscene or contain sexually explicit acts.
- The IT Rules, also prohibit hosting 'any content that impersonates another person' and require social media platforms to quickly take down 'artificially morphed images' of individuals when alerted.
- In case they fail to take down such content, they risk losing the 'safe harbour' protection a provision that protects social media companies from regulatory liability for third party content shared by users on their platforms.
- Provisions of the Indian Penal Code (IPC) can also be resorted for

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cybercrimes associated with deepfakes Sections 509 (words, gestures, or acts intended to insult the modesty of a woman), 499 (criminal defamation), and 153 (a) and (b) (spreading hate on communal lines) among others.

- The Delhi Police Special Cell has reportedly registered an FIR against unknown persons by invoking Sections 465 (forgery) and 469 (forgery to harm the reputation of a party) in the Mandanna case

What has been the Centre's response?

- The Union Minister of Electronics and Information Technology Ashwini Vaishnaw on November 23 chaired a meeting with social media platforms, AI companies, and industry bodies where he acknowledged that “a new crisis is emerging due to deep fakes” and that “there is a very big section of society which does not have a parallel verification system” to tackle this issue.
- The Hindu

Flooding and after disaster challenge

- The Indian monsoon brings with it cyclones and flooding.
- Fearful and battered communities are left to cope with vector borne diseases; an ever present threat of drowning, electrocution, snakes, poisonous insects, respiratory diseases and of late COVID19, owing to crowding.

- Floods disrupt access to food, water and safe shelter and jeopardise the community's ability to get the healthcare services they need.
- Contaminated water which is all around after flooding is responsible for vector borne diseases such as cholera, typhoid, and malaria.
- After the cyclone and rains died down, the State government also commissioned mobile medical units.
- The units, which include a doctor, staff nurse, a sanitary inspector and an assistant, will function all day in the urban health centres for at least a week.
- Acute diarrhoeal diseases and cholera can be prevented by ensuring safe water and sanitation.
- Those with severe symptoms will need rapid treatment with intravenous fluids and antibiotics.
- In localities that have a high risk of cholera, improved sanitation and oral vaccines have helped.
- The Union World Conference on Lung Health 2023

- For over 100 years, The Union World Conference on Lung Health has come together to present the latest scientific research in all aspects of lung health.
- THEME FOR 2023
- TRANSFORMING EVIDENCE
- INTO PRACTICE
- The Union World Conference on Lung Health 2023 will take place in-person from 15-18 November in Paris.

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- The Hindu

DRUG RESISTANT TB

Box 1. Definitions drug-resistant tuberculosis.

- > **Multidrug-resistant (MDR)-TB:** TB caused by strains of *Mycobacterium tuberculosis* that are resistant *in vitro* to rifampicin and isoniazid.
- > **Extensively drug-resistant (XDR)-TB:** TB caused by strains of *M tuberculosis* that are resistant *in vitro* to isoniazid, rifampicin and at least one injectable agent (ie amikacin, kanamycin or capreomycin) and any of the fluoroquinolones (totally drug-resistant [TDR]-TB is not official terminology).
- > **Mono-resistant TB:** TB caused by strains of *M tuberculosis* that are resistant to just one anti-TB drug.
- > **Poly-resistant TB:** TB caused by strains of *M tuberculosis* that are resistant to more than one drug, but not isoniazid and rifampicin together.

MDR = multi-drug resistant; TB = tuberculosis.

- **Tuberculosis diagnostics:** Several molecular tests are now endorsed by the WHO, including Xpert MTB/RIF Ultra (Cepheid Inc., USA), TrueNAT MTB and TrueNAT MTBRIF Dx (Molbio Diagnostics, India), loop mediated amplification (LAMPTB), assay line probe assays and centralized assays. Some are low complexity tests, while others are moderate to high complexity assays.

The Hindu

(CIVIL SERVICES EXAMINATION)

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