



Use of Fingerprint Evidence in Crime

[Source: IE](#)

Why in News?

The **investigation** into the attack on a Bollywood actor highlighted the significance of **fingerprints** in solving crimes.

What is the Legal Stand of Fingerprints as Evidence Material?

- **About Fingerprint Use:** Fingerprints are used to establish if the accused has a **prior criminal record** or to match **prints lifted from the crime scene**.
 - The [Criminal Procedure \(Identification\) Act, 2022](#) allows the **storage of fingerprints** of individuals arrested for crimes carrying **more than a year of imprisonment**.
 - The **top one-third part** of the finger, under the **Henry Classification System (HCS)**, that has **unique patterns (whorls and arches)** in each individual are **considered for ascertaining identity**.
- **Constitutional Basis:** Under [Article 20\(3\)](#), **no person** accused of any offence shall be compelled to be a **witness against himself**.
 - The [protection against self-incrimination](#) extends to both **oral evidence and documentary evidence**.
 - However, it **does not extend** to compulsory **production of material objects, thumb impressions, specimen signatures, blood specimens, or compulsory exhibition of the body**.
 - Further, it extends only to **criminal proceedings** and **not to civil proceedings** or proceedings which are not of criminal nature
- **Judicial Stand:** In the *Kathi Kalu Oghad Case, 1961*, the [Supreme Court \(SC\)](#) held that compelling an accused to provide **specimen handwriting, signature, or fingerprints or footprints** for investigation **does not violate** their right against self-incrimination under **Article 20(3)** of the Indian Constitution.
 - In *Ritesh Sinha vs State of Uttar Pradesh Case, 2019*, the SC **broadened** the parameters of **handwriting samples** to include **voice samples**, adding that this would not violate the right against self-incrimination.
 - In *Selvi vs Karnataka Case, 2010*, the SC prohibited forcing an accused to undergo [narco-analysis](#) or [lie-detector tests](#), which could produce self-incriminating statements.

Note: Section 29 of the [Aadhaar Act, 2016](#) prohibits [Unique Identification Authority of India \(UIDAI\)](#) from sharing **core biometric information — fingerprint, iris scan or any such biological attribute** — with any agency **“for any reason whatsoever”**.

Read More: [Right against Self Incrimination and Constitutional Remedies](#)

ISRO's 100th Launch from SDSC

[Source: TH](#)

The [Indian Space Research Organisation \(ISRO\)](#) achieved its historic **100th launch** from the **Satish Dhawan Space Centre (SDSC) in Sriharikota**, using the [GSLV-F15](#) to deploy the **NVS-02 satellite**.

- NVS-02 is the **2nd satellite** in the **series of 2nd generation satellites** of the [Navigation with Indian Constellation \(NavIC\)](#).
 - The NavIC system is made up of **7 operational satellites** in orbit (**3 in [Geostationary Orbit](#) and 4 in [Geosynchronous Orbit](#)**).
 - NavIC provides accurate **position, velocity, and timing** to users in the **Indian sub-continent** and regions **up to 1,500 km beyond**.
- The GSLV-F15 is the **17th GSLV flight**, and **11th with an Indigenous [Cryogenic stage](#)**.
- The first launch from SDSC took place in **August 1979** carrying the [Rohini Technology Payload](#) (partially successful).
- Key Launches of ISRO include [Chandrayaan-1](#) (2008), [Mars Orbiter Mission](#) (2013), [PSLV-C37](#) (2017, World record: **104 satellites launched**), [Chandrayaan-2](#) (2019), and [Chandrayaan-3](#) (2023), [Aditya-L1](#) (2023).

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NAVIGATION WITH INDIAN CONSTELLATION (NavIC)

Navigation with Indian Constellation, also known as NavIC, is a stand-alone satellite navigation system, which is similar to GPS.

+ DEVELOPED BY

- Indian Space Research Organisation (ISRO)

+ NUMBER AND POSITIONING OF SATELLITES

- 8 (only 7 active): 3 in geostationary and 4 in geosynchronous orbits

+ PREVIOUSLY KNOWN AS

- Indian Regional Navigation Satellite System (IRNSS)

NavIC is recognised by IMO as a part of World-Wide Radio Navigation System (WWRNS) for operation in the Indian Ocean Region.

+ APPLICATIONS

- Navigation** - Terrestrial, aerial and marine
- Tracking and Mapping** - Vehicle and fleet management
- Location Based** - Precise timing for ATMs and power grids
- Resource Monitoring** - Surveying and geodesy, scientific research
- Safety-of-life **alert dissemination**
- Time dissemination** and synchronization
- Integration with mobile phones**

+ SIGNIFICANCE

- Real time information** for civilian as well as strategic users
- India's reduced dependence** on other countries
- Scientific & technological **advancement**
- Regional integration and India's diplomatic goodwill gesture

+ ISSUES

- Constellation satellites **exceeding their operational lifespan**
- Mobile phones **lacking compatibility** with NavIC
- Limited coverage** of NavIC (extends only 1,500 km beyond India)

+ OTHER NAVIGATION SYSTEMS

Global Systems

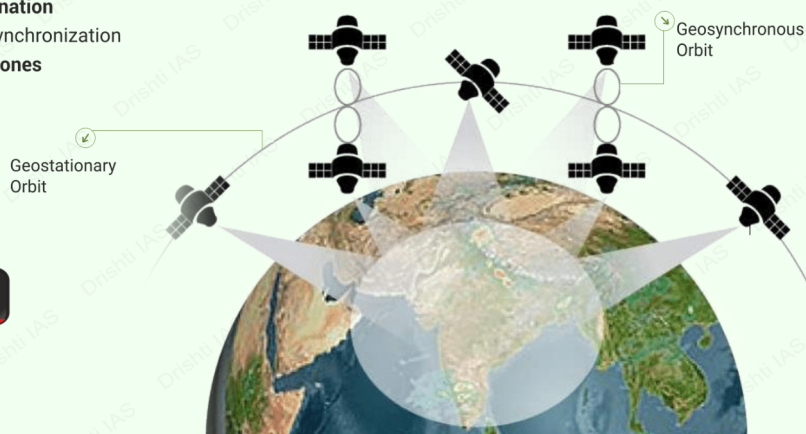
- GPS** (US), **GLONASS** (Russia), **Galileo** (European Union) and **BeiDou** (China)

Regional Systems

- Quasi-Zenith Satellite System (QZSS)** from Japan



Drishti IAS



Read More: [ISRO's new NavIC Satellite NVS-01](#)

Crosspathy

For Prelims: [Homeopathy](#), [Indian Medical Association](#), [Medical Council of India](#), [Supreme Court of India](#), [World Health Organization](#), [eSanjeevani](#)

For Mains: Crosspathy, Regulation of Healthcare Professions, Healthcare Access in Rural Areas, Medical Negligence and Liability

[Source: TH](#)

Why in News?

In December 2024, the **Maharashtra Food and Drugs Administration (FDA)** issued a directive allowing **homeopathic practitioners** with a pharmacology certificate to prescribe **allopathic medicines**.

- The decision has faced criticism from the **Indian Medical Association (IMA)**, which warns it could lead to "**crosspathy**" and harm patients.

What is Crosspathy?

- **About:** Crosspathy refers to the practice of healthcare professionals prescribing or **practicing medicine outside their recognized scope of expertise**.
 - Specifically, it involves practitioners of alternative medicine systems (**like Ayurveda, Yoga, and Naturopathy, Unani, Siddha and Homoeopathy (Ayush)**) prescribing or performing treatments typically reserved for **allopathic (modern) medicine**.
- **Concerns:** This practice is often criticized because it can lead to **misdiagnosis, inappropriate treatments**, and risks to patient safety, as these practitioners are not fully trained in the methods and practices of modern medicine.
- **Regulations and Legal Precedents:**
 - **MCI Code of Ethics 2002:** The **Medical Council of India (MCI)** established the **Indian Medical Council (Professional Conduct, Etiquette, and Ethics) Regulations, 2002**, under the **Indian Medical Council Act, 1956**, which restricts unqualified individuals from conducting medical procedures such as abortions or issuing medical competence certificates.
 - It also mandates that qualified doctors cannot assign non-qualified personnel for medical tasks.
 - **Supreme Court Judgments:** In a landmark 1996 case, **Poonam Verma Vs. Ashwin Patel**, the **Supreme Court of India** held a **homeopath liable for negligence after prescribing allopathic medicines**, which led to the patient's death.
 - The Court ruled that cross-system practice constitutes medical negligence.
 - This has been upheld in subsequent rulings, stating that **crosspathy is only permissible if explicitly authorized by the concerned State Government**.

What are Reasons for Promoting Crosspathy?

- **Shortage of Specialists:** A report on Health Dynamics of India 2022-23 highlights an **80% shortage of specialist doctors in Community Health Centres (CHCs)** in rural areas, with only 4,413 specialist doctors available, while **21,964 are needed**.
 - The government has been promoting AYUSH doctors to help alleviate the **shortage of medical professionals**, particularly in rural areas.
- **Expanding Healthcare Access:** As of June 2022, there were over **13 lakh allopathic doctors** and over 5.5 lakh AYUSH practitioners in India.
 - India's doctor-population ratio is **1:836**, surpassing the **World Health Organization (WHO) standard of 1:1000**, but most doctors are concentrated in **urban areas, limiting rural healthcare access**.
 - Crosspathy improves healthcare access in remote areas with **fewer allopathic doctors**, offering an affordable alternative for rural patients who cannot access specialists or urban facilities.
 - Poor **working conditions and low remuneration deter MBBS** doctors from taking up rural posts.

What are the Concerns Regarding Crosspathy in India?

- **IMA's Concerns:** The **IMA** criticizes the Maharashtra FDA's latest directive, arguing that the **National Medical Commission (NMC) Act, 2019** does not authorize AYUSH doctors to

practice allopathy.

- Maharashtra's decision contradicts national policies, as even the Central Council for Homeopathy does not permit homeopaths to practice allopathy.
 - The IMA insists that such practices would be **detrimental to patient safety** and could potentially lead to negligence or **malpractice**.
 - IMA argues that it promotes "crosspathy," undermining the integrity of medical qualifications and specializations.
- **Quality of Care:** Compromises the standard of healthcare, as AYUSH practitioners lack formal training in modern medicine.
 - **Hospital Practices:** The directive encourages appointment of AYUSH doctors in allopathic roles, violating medical ethics and contributing to **reduced employment opportunities for Bachelor of Medicine and Bachelor of Surgery (MBBS)** or Modern medicine doctors.

Indian Medical Association (IMA)

- Founded in 1928, the IMA is India's largest voluntary organization for doctors, focused on improving public health, medical education, and safeguarding the dignity of the medical profession.
- IMA headquartered in **New Delhi**, plays a pivotal role in shaping health policies and organizing national health programs.

Way Forward

- **Strengthen GP System:** Instead of integrating alternative medicine practitioners, efforts should focus on **attracting MBBS doctors** to underserved areas by improving **incentives and working conditions** in rural areas.
 - Strengthen India's general practice (GP) system by **mandating specialist training for mid-level healthcare providers**.
- **Regulation of AYUSH and Allopathy:** The government should create a regulated framework for AYUSH practitioners to work with allopathic doctors, with **clear role definitions**.
 - They must undergo **additional training in modern medicine**, especially pharmacology, to safely prescribe allopathic drugs, under the supervision of **medical regulatory bodies**.
- **Promoting Telemedicine:** The **Telemedicine (eSanjeevani)** can bridge the gap between rural patients and urban specialists, providing quality healthcare through technology without compromising safety.

Drishti Mains Question:

Define crossopathy and explain its impact on patient safety. Discuss the legal precedents and regulations governing cross-system medicine in India.

UPSC Civil Services Examination, Previous Year Question (PYQ)

Mains

Q. How is the Government of India protecting traditional knowledge of medicine from patenting by pharmaceutical companies? (2019)

Fiscal Health Index 2025

[Source: PIB](#)

Why in News?

In a bid to enhance fiscal governance, [National Institution for Transforming India \(NITI Aayog\)](#) launched its **inaugural Fiscal Health Index (FHI) 2025**.

- The Index provides a comprehensive evaluation of the **fiscal health of 18 major Indian states for 2022-23**, offering data-driven insights that will guide policy interventions at the state level.

What is the Fiscal Health Index (FHI)?

- **About:** The **Fiscal Health Index (FHI)** is an **assessment tool** to evaluate the fiscal health of Indian states **and highlights specific areas for improvement**.
- **Parameter:** FHI ranks states based on five key sub-indices.
 - **Quality of Expenditure:** Measures the proportion of spending on long-term growth (developmental) vs. routine operations (non-developmental).
 - Assesses capital investments as a share of economic output.
 - **Revenue Mobilization:** Reflects a state's ability to **generate its own revenue** and cover its expenditures independently.
 - **Fiscal Prudence:** Tracks **deficits (fiscal and revenue)** and borrowing relative to economic output, signaling fiscal health.
 - **Debt Index:** Assesses the **state's debt burden**, focusing on interest payments and liabilities relative to economic size.
 - **Debt Sustainability:** Compares **Gross State Domestic Product (GSDP)** growth to **interest payments**, with a positive difference indicating **fiscal sustainability**.

MAJOR SUB-INDICES	MINOR SUB-INDICES
1. Quality of Expenditure	1.1 Total Developmental Expenditure/Total Expenditure
	1.2 Total Capital Outlay/ GSDP*
2. Revenue Mobilization	2.1 State Own Revenue/ GSDP*
	2.2 State Own Revenue/ Total Expenditure
3. Fiscal Prudence	3.1 Gross Fiscal Deficit/ GSDP*
	3.2 Revenue Deficit/ GSDP*
4. Debt Index	4.1 Interest Payments/Revenue Receipts
	4.2 Outstanding Liabilities/ GSDP*
5. Debt Sustainability	5.1 Growth Rate of GSDP* - Growth Rate of Interest Payments

GSDP at current prices for the year 2022-23

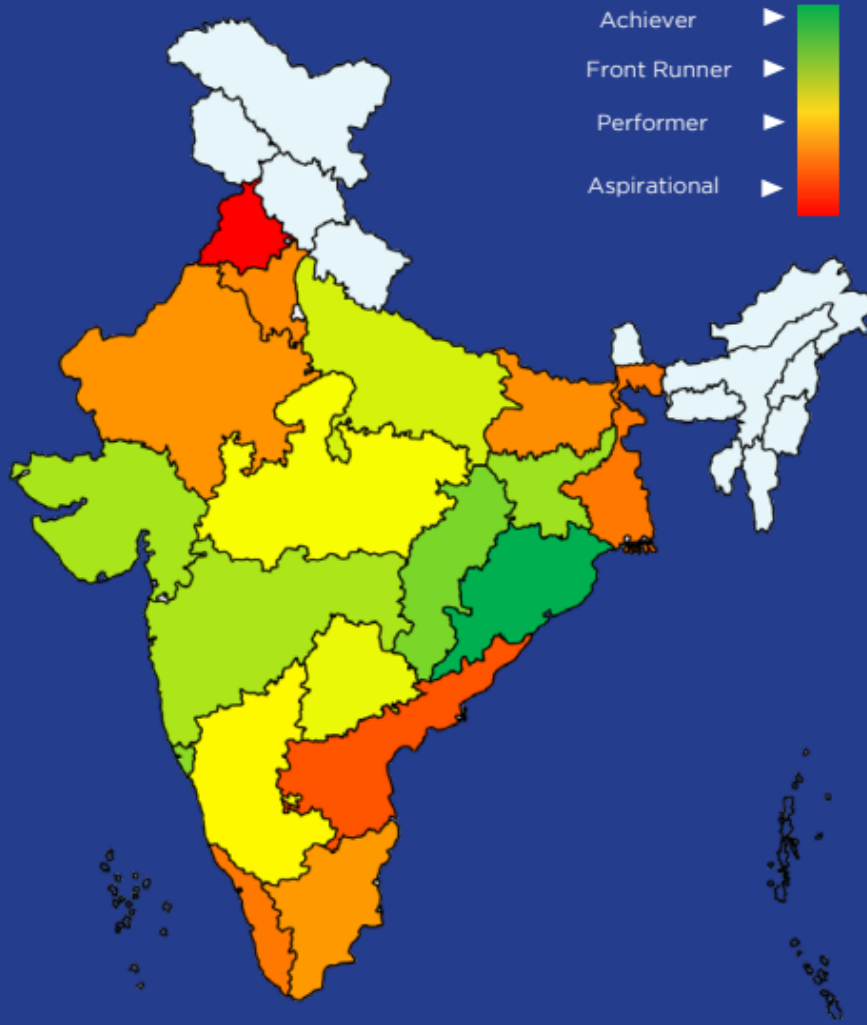
- **Aim:** Guide policymakers in formulating **targeted reforms for sustainable economic growth**, fiscal consolidation, and better **resource management** at the state level.
 - Encourage healthy competition among states, aligning their fiscal strategies with national economic objectives.

▪ **Key Findings of FHI 2025:**

- **Top Performers: Odisha** leads with the highest overall FHI score of **67.8**, followed by Chhattisgarh (55.2), Goa (53.6), Jharkhand (51.6), and Gujarat (50.5), with strengths in **Debt Index, Revenue Mobilization, and Fiscal Prudence**.
- **Revenue Mobilization: Goa, Telangana, and Odisha** lead in Revenue Mobilization and Fiscal Prudence.
 - Odisha, Jharkhand, Goa, and Chhattisgarh excel in non-tax revenue, with Odisha heavily relying on **mining-linked premiums** and Chhattisgarh benefiting from **coal block auctions**.
 - Punjab and West Bengal lag in Revenue Mobilization, highlighting disparities in fiscal management and economic resilience.
 - Aspirational States like **Punjab, West Bengal, Andhra Pradesh, and Kerala** face significant fiscal challenges.
 - Punjab and Kerala struggle with **Debt Sustainability** and **Quality of Expenditure**, while Andhra Pradesh faces high **Fiscal Deficits**.
- **Capital Expenditure:** Madhya Pradesh, Odisha, Goa, Karnataka, and Uttar Pradesh allocate 27% to **Capital Expenditure**, enhancing long-term investments.
 - States like West Bengal, Andhra Pradesh, Punjab, and Rajasthan allocate only 10%, impacting long-term growth.
- **Debt Management:** Top states like Odisha and Goa manage debt effectively, with low risk of default, while bottom states like West Bengal and Punjab show growing debt burdens, raising concerns about **debt sustainability**.



State-wise Composite FHI Score Heatmap



Achiever	Front Runner	Performer	Aspirational
Odisha (1)	Maharashtra (6)	Tamil Nadu (11)	Kerala (15)
Chhattisgarh (2)	Uttar Pradesh (7)	Rajasthan (12)	West Bengal (16)
Goa (3)	Telangana (8)	Bihar (13)	Andhra Pradesh (17)
Jharkhand (4)	Madhya Pradesh (9)	Haryana (14)	Punjab (18)
Gujarat (5)	Karnataka (10)		

NITI Aayog

(National Institution for Transforming India)

HISTORY- PLANNING COMMISSION

Set up in **1950**
to direct investment
activity

Replaced by **NITI
Aayog** on January
1, 2015

Composition of #NITLaayog

Chairperson

Prime Minister

Governing Council

CMs (States) and Lt Governors (UTs)

Regional Councils

Formed on need-basis, comprising CMs
and Lt Govs of the region

Members

Full-time basis

Part-time Members

Max 2, rotational, from relevant institutions

Ex-officio Members

Max 4 from Council of Ministers,
nominated by PM

Special Inviters

Experts, specialists, practitioners with
domain knowledge

Chief Executive Officer

Appointed by PM for fixed tenure
(Secy rank)

Secretariat

As deemed necessary

OBJECTIVES

- ↳ Foster **cooperative federalism**
- ↳ Develop mechanisms to **formulate credible plans (village level)**
- ↳ Interests of **national security** in economic strategy and policy
- ↳ Special **attention to weaker sections**
- ↳ Provide advice and encouragement to partnerships between **key stakeholders, national-international Think Tanks, research institutions**
- ↳ Create **knowledge, innovation and entrepreneurial support system**
- ↳ **Platform for** inter-sectoral and inter-departmental **issues resolution**
- ↳ Maintain **state-of-the-art Resource Centre**

NITI Aayog vs Planning Commission

NITI Aayog	Planning Commission
Advisory Think Tank	Extra-constitutional body
Wider expertise	Limited expertise
Secretaries (CEO) appointed by PM	Secretaries appointed by usual process
Bottom-up approach	Top-Down approach
No Mandate to impose policies	Imposed policies on states
No power to allocate funds	Allocated funds to ministries/state govts

Major Initiatives

- ↳ SDG India Index
- ↳ Atal Innovation Mission
- ↳ e-AMRIT Portal (electric vehicles)
- ↳ Good Governance Index
- ↳ India Innovation Index
- ↳ Aspirational District Programme
- ↳ 'Methanol Economy' programme

Issues

- ↳ **No powers** in granting **discretionary funds** to states
- ↳ Only an **advisory body**
- ↳ **No role in influencing private or public investment**
- ↳ **Politicisation of the organisation**
- ↳ **Lacks the requisite power** to bring positive change



Drishti IAS

Read more: [RBI Report on State Finances 2024-25](#)

UPSC Civil Services Examination, Previous Year Question (PYQ)

Prelims:

Q. Atal Innovation Mission is set up under the (2019)

- (a) Department of Science and Technology
- (b) Ministry of Labour and Employment
- (c) NITI Aayog
- (d) Ministry of Skill Development and Entrepreneurship

Ans: (c)

Q. The Government of India has established NITI Aayog to replace the (2015)

- (a)** Human Rights Commission
- (b)** Finance Commission
- (c)** Law Commission
- (d)** Planning Commission

Ans: (d)

Mission 300 Africa Energy Summit

Source: DTE

- The **Mission 300 Africa Energy Summit**, held in **Dar es Salaam, Tanzania** aiming to accelerate **energy access across Africa**.
- Africa Energy Summit hosted by the **Government of Tanzania**, [African Union](#), [African Development Bank](#), and the [World Bank](#).
 - The summit focuses on the **Mission 300** initiative, which aims to provide electricity **access to 300 million people in Sub-Saharan Africa by 2030**.
 - Over **600 million Africans lack reliable electricity access**, with Nigeria and Sub-Saharan Africa home to 80% of the global population without electricity.
- At the summit, the **National Energy Compacts** were presented by **12 African countries**, which include **Chad, Côte d'Ivoire, Democratic Republic of Congo, Liberia, Madagascar, Malawi, Mauritania, Niger, Nigeria, Senegal, Tanzania, and Zambia**.
- The government-led National Energy Compacts will serve as roadmaps to achieve **universal electricity access and clean cooking by 2030**, aligning with the [UN's Sustainable Development Goal 7 \(SDG7\)](#) for affordable, reliable, sustainable energy access for all by 2030.

Read more: [Tracking SDG7: The Energy Progress Report 2023](#)

PDF Reference URL: <https://www.drishtias.com/current-affairs-news-analysis-editorials/news-analysis/30-01-2025/print>