

UNRAVELLING THE DOUBLE HELIX DILEMMA: ANALYSING THE DNA BILL, 2019

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The Lok Sabha enacted the DNA Technology Bill in January 2019, and it establishes guidelines for obtaining DNA samples from people who are suspected of committing crimes as well as those who have lost family to natural catastrophes or criminal activity. Although the bill addresses significant goals, it is vital to look at its restrictions. This essay identifies multiple lacunae in the DNA Bill. Given that DNA samples contain extremely sensitive and individual information, privacy invasions become a major problem. It is emphasized that there must be explicit regulations to protect privacy and stop unauthorized access to or exchange of DNA data. To prevent data mingling and associated difficulties, it is also advised to create distinct databases for each purpose. In order to prevent coercion into self-incrimination during DNA testing, the rule against self-incrimination and constitutional protections should be taken into consideration. To efficiently support and maintain DNA banks and laboratories, adequate cost evaluation is required. Additional privacy laws are necessary to safeguard people's rights and stop the misuse of DNA information. Clear laws and standards must be included in the bill due to security concerns concerning DNA banks. To preserve the integrity of DNA evidence and reduce contamination concerns, stricter procedures, frequent audits, and enhanced training for professionals taking DNA samples are necessary. A number of remedies, including stronger security measures, distinct databases, adherence to constitutional principles, precise cost estimates, and extra privacy legislation, might be helpful in mitigating the issue. By putting these standards in place, concerns will be addressed and a solid legal foundation for DNA collection and databases in India will be created. The essay's main goal is to draw attention to the fact that the DNA Bill creates important legal and security issues that must be overcome for it to be implemented successfully.

Keywords: DNA, Privacy, Security, Laboratories, Databases, Technology, Legality, Constitutional Principles.

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INTRODUCTION

Today, we live in a world where nobody is willing to compromise on the quality of their privacy, though is it possible to fully rely on the measures of privacy? One might argue that our Aadhar card is one of those many tools which can confirm one's identity, but it has been negated by a survey in Bangalore show that the number of Aadhar cards in a region is beyond the entire population of the place. It won't be wrong to assume that every mechanism or technology has some or the other lacunae in its working. On the other hand, identity is preserved in every human being through their DNA. It stands for deoxyribonucleic acid, which preserves the human genetic material and is unique in every individual, which acts as the blueprint of their lives. Forging DNA is impossible in today's time unlike that of identity cards. Lok Sabha presented a bill titled the DNA TECHNOLOGY BILL in August 2018 and passed it in January 2019 to conserve the identities of the people.¹

The main objective of the Bill is to establish rules for collecting samples from individuals implicated in criminal cases that are considered offenses under the Indian Penal Code (IPC). Additionally, it permits the collection of samples from individuals who have lost their relatives in disasters or criminal acts, whether they are blood relatives or connected by marriage. This provision is intended to assist authorities in locating and reuniting these individuals with their families. Nevertheless, the article will delve into the limitations of the Bill.

ABOUT THE BILL

It is primarily intended to control crime, so it allows for the collection of DNA samples from those who have participated in criminal and civil violations with their permission. The consent reason is not required, nevertheless, if a specific offense is specified as a "specific offence." Specific offenses are those IPC offenses that carry a death sentence or a sentence of more than 7 years in jail². The bill also includes a number of indices where the DNA of a certain individual will be stored, including criminal, civil, missing person, etc. Civil indices will take into account concerns relating to parental conflict, the property rights of a deceased child or child's inheritance, and establishing parentage. On the other hand, DNA samples of

¹ N.A., 'Lok Sabha Passes DNA Technology Bill – All You Need to Know' (*The Wire*, 9 January 2023) <<https://thewire.in/the-sciences/lok-sabha-passes-dna-technology-bill-all-you-need-to-know>> accessed on 2 June 2023.

² N.A., 'Specific Offences'(SLIDESHARE,) <<https://www.slideshare.net/atuljaybhaye/specific-offences>> accessed 2 June 2023.

those who are missing and for whom the families have made complaints will be present in missing person indices.

In the proposed legislation's second chapter, one of the key objectives is to establish a board dedicated to DNA profiling. This board would consist of twelve members, including a chairman appointed by the government and a Vice-chairman selected by the board having an accumulation of at least 25 years of DNA fingerprinting expertise. Notably, the committee would also include representatives from the National Human Rights Commission (NHRC), the Director General of Police (DGP) of the State, the Director of the Central Bureau of Investigation (CBI), the Director of Banks, and the Accreditation Laboratory.³

Furthermore, the bill's proposed measure is to establish DNA banks and laboratories in charge of gathering DNA samples. These laboratories will then generate reports on these samples, which would subsequently be submitted to the DNA banks. The DNA banks would review and validate all the samples obtained from the DNA laboratories. Additionally, DNA laboratories are authorized to carry out DNA collection.

Additionally, the bill includes a provision that allows individuals whose DNA samples are stored in specific indexes, such as criminal, civil, and missing person indexes, to request the destruction of their samples. This can be done by submitting an application to the board and obtaining a court order to support the request. This can be accomplished by making a request to the board and acquiring the necessary documentation, such as a court order. Furthermore, if a person is being tried and a DNA sample is taken, the sample must be destroyed if they are found not guilty, as mandated by a court order.⁴

In cases where an investigating officer needs to compare the DNA sample of a suspect, a Magistrate can only carry out an appropriate court investigation. And only after this inquiry and upon the investigating officer's application to the board will they be granted access to the individual's sample for matching purposes.

The Bill also stipulates that anyone associated with a DNA board or laboratory who engages in willful negligence or carelessness will be punished. Additionally, if a laboratory or

³ Subodh Asthana, 'Overview of DNA Technology (Use and Application Bill, 2018)', (*iPleaders*, 14 May 2019), <<https://blog.iPLEADERS.in/dna-technology-advantages-disadvantages/>> accessed 3 June 2023[hereinafter "SUBODH"].

⁴ N.A., 'In Depth – DNA Technology Bill', (*Drishti IAS*, 13 July 2019), <<https://www.drishtias.com/loksabha-rajasabha-discussions/in-depth-dna-technology-bill>> accessed 5 June 2023.

individual discloses a specific person's DNA sample, they will face strict sanctions, including a strict three-year prison sentence and a fine.

Furthermore, if the federal government approves the sharing of DNA reports with international authorities and organizations, this option is available.

LACUNAE

1. Breach of Privacy- The most private component of the body is a DNA strand, which serves as the person's unique identity. Individual privacy appears to be in danger, and Article 21⁵ appears to be flagrantly violated.

The Supreme Court ruled that privacy is the most important part of life and individual liberty in the Right to Privacy case of *KS Puttaswamy v. Union of India*. A thorough analysis led to the conclusion that the Right to Privacy is the most important aspect of the Fundamental Right. As a result, it can be argued that if taking a DNA sample can be considered a violation of privacy, why not take a retinal or fingerprint sample?

Due to this, there are many privacy worries for the people whose DNA samples would be collected because it is clear and justifiable that a privacy breach will be a problem in comparison to the Aadhar data breach.

2. Varied database- There are a number of concerns regarding DNA banks, including the fact that all DNA indexes will be held in a single database. Because there is a chance that DNA data would mingle and result in too many problems, there must be a clause stating that a separate database must be created for civil proceedings.

Additionally, criminal case perpetrators' profiles are not compared or contrasted to those of civil case perpetrators'.

3. Self-Incrimination- *Nemo Debet Prodere Se Ipsum*⁶ is a legal principle that states that no one may testify against themselves in court. As a result, it is crucial to discuss this matter in light of the Indian Constitution's Article 20(3), which established the prohibition against self-

⁵ Indian Constitution, art. 21.

⁶ Harshit Khare, 'Privilege Against Self - Incrimination', (*Legal Services India*, <<https://www.legalserviceindia.com/article/1466-Privilege-Against-Self---Incrimination.html#:~:text=The%20right%20to%20silence%20is%20based%20on%20the%20principle%20ne%20the%20privilege%20against%20self-incrimination>> accessed 4 June 2023.

incrimination and specifies that no person may be forced to testify against themselves. There have also been numerous instances in which courts have permitted DNA testing, though only in extremely rare circumstances.

The Supreme Court ruled in *Bhabani Prasad Jena v. Convenor Secretary*⁷, Orissa State Commission, that there must be a careful balance between the two so that Article 21 is not violated. The person submitting the DNA sample for DNA testing cannot be subjected to arbitrariness or despotic pressure.

4. Cost Evaluation- It is not simple to collect DNA samples and store them in a DNA bank and laboratory; ongoing maintenance and funding are required to keep them operating to their best potential. A capital of Rs. 25 crores, according to the government, would be sufficient to sustain and run the DNA bank and laboratory. But the idea that such an expensive apparatus could be kept running on such a pitiful budget is absurd. A total of Rs. 33,95, 69,350 was spent annually in 2015–16, based on reports from the UK DNA database⁸. The data demonstrate explicitly that the government did not do a thorough cost study of the necessary requirements and upkeep.

5. Lack of Private Legislation- A bill like this one needs to be backed by other privacy legislation that can prevent the misuse of such bills. This acts as a protection in cases wherein the DNA of a person who is under trial should be deleted from the databases after the person has been acquitted. However, in the majority of cases, the DNA remains permanently stored in the databases and has the possibility of being misappropriated, which is unconstitutional in nature. It hampers the quality of one's life by compromising their privacy rights. Moreover, to share such DNA findings with foreign agencies and institutions is a breach of a person's security and privacy since they could misuse the information against the individual.

6. Uncertainty in Security- The DNA of a person carries valuable information about their identity, familial connections, personal behavior, and even their characteristics. It can even provide insights into the diseases someone is currently suffering from or may develop in the future.

The proposed bill from the ministry states that it should comply with regulations and international standards. However, neither the bill nor any existing laws specify these

⁷ [2010] 8 SCC 633.

⁸ SUBODH, n. 3.

regulations and standards. This casts doubt on the reliable character of DNA banks. There is a possibility that DNA test reports could be tampered with by individuals, and there are no provisions for re-evaluation or re-examination, which is a very salient issue that requires attention.

The Home Ministry has reported that there is a dearth of specialists who can gather DNA samples, particularly those taken from crime scenes. It's important to remember that DNA samples are extremely delicate and that even the smallest amount of contamination can lead to DNA structural damage. As a result, this factor must be considered.⁹ Consequently, this discussion proves to us that there are numerous security issues with the bill. It is essential to either refer the measure to the standing committee or form a special committee to review its provisions in-depth.

RESOLUTION AND RECTIFICATION

To resolve the problems in the bill, here are some suggested solutions¹⁰:

1. Breach of Privacy:

- Make sure the bill includes clear rules to protect the privacy of individuals whose DNA samples are collected.
- Take inspiration from the case of *KS Puttaswamy v. Union of India*, one of the most renowned judgements which tried to ensure that privacy rights are respected.
- Implement strict measures to prevent unauthorized access, misuse, or sharing of DNA data.

2. Varied Database:

- Add a provision in the bill that requires separate databases for different purposes, like criminal cases and civil proceedings.

⁹ Khyati Jain, 'Challenges and Concerns in Admission of DNA Evidence in India: With Special Reference to DNA Technology (Use and Application) Regulation Bill, 2019', (*SCC Online*, 6 April 2022), <<https://www.sconline.com/blog/post/2022/04/06/challenges-and-concerns-in-admission-of-dna-evidence-in-india/>> accessed 4 June 2023.

¹⁰ Shweta Mohandas and Elonnai Hickok, 'The DNA Bill has a sequence of problems that need to be resolved', (*News Laundry*, 14 January 2019), <<https://www.newslaundry.com/2019/01/14/the-dna-bill-has-a-sequence-of-problems-that-need-to-be-resolved>> accessed 5 June 2023.

- Clearly define how each database should be managed to avoid mixing up data and causing problems.

3. Self-Incrimination:

- Consider Article 20(3) of the Indian Constitution while conducting a DNA test because it deals with the principle of self-incrimination.
- Establish guidelines to ensure DNA testing is only done in specific cases and with proper consent, avoiding any coercion or violation of individual rights.

4. Cost Evaluation:

- Conduct a thorough study to determine the actual costs of establishing and maintaining DNA banks and laboratories.
- Allocate sufficient funds and resources to ensure these facilities can operate effectively and sustainably.

5. Lack of Private Legislation:

- Develop additional privacy laws that specifically address concerns related to DNA databases and prevent misuse of the collected data.
- Include provisions in the bill to protect individuals' rights, such as deleting DNA records from databases when a person is acquitted or imposing strict regulations on sharing DNA reports with foreign institutions.

6. Uncertainty in Security:

- Clearly outline and include regulations and international standards regarding the security and integrity of DNA samples, testing, and databases in the bill.
- Establish a system for regular audits, inspections, and re-examinations of DNA banks and laboratories to ensure compliance with security measures.
- Increase the number of experts trained in collecting DNA samples, especially from crime scenes, and enforce strict protocols to minimize the risk of contamination and maintain the integrity of DNA evidence.

- By implementing these measures, we can address the concerns related to privacy, varied databases, self-incrimination, cost evaluation, lack of privacy legislation, and security uncertainty in the bill regarding DNA collection and databases.

CONCLUSION

The DNA Bill raises a number of significant legal and security issues regarding the gathering and storage of genetic data along with the utilization of personal information. After taking into account the many issues raised, it is clear that a number of crucial issues must be resolved for this legislation to be implemented successfully.

Since a person's DNA is the most private portion of their body and acts as their unique identity, the invasion of privacy is a serious problem. Another crucial factor is to design unique databases for various uses. As stated by Article 20(3) of the Indian Constitution, it is crucial to strike a balance between the necessity of DNA testing and a person's right to self-incrimination.

To guarantee the long-term financial viability of DNA banks and laboratories, a detailed cost appraisal is necessary. Additionally, new legislation is required to safeguard people's rights and prevent the exploitation of DNA information. Finally, it's important to solve security issues. The security and integrity of DNA samples, testing techniques, and databases should be covered in detail by the DNA Bill's laws and international standards. It is advised to involve a standing committee or create a specific committee to carefully analyse the DNA Bill's provisions in order to ensure a complete approach. This will make it possible to thoroughly evaluate the legal, personal information, and security issues, addressing the concerns highlighted, and creating a solid legal framework for DNA collecting and databases in India.

India will be on a path to achieving a balance between the need for genetic information and the preservation of individual rights, privacy, and security by skilfully addressing these complex issues. This thorough strategy is essential for protecting individual genetic data and promoting public confidence in the DNA Bill's implementation.