

DNA TECHNOLOGY REGULATION BILL, 2019: A DETAILED ANALYSIS

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ABSTRACT

The greatest medical and technological method for identifying a specific person is to undertake DNA profiling on that person. The Indian government has often tried to establish this kind of technology through Acts in India, but it hasn't been successful. The DNA Profiling Bill is so controversial because it raises a wide range of concerns, including the greatest threat to an individual's right to privacy. In this in-depth research article, I will discuss that what are the reasons owing to which this bill has not been enacted, how it can benefit us, and how to fix its flaws.

INTRODUCTION

In late 2019, the **DNA Technology Regulation Bill¹** got passed by the Lok Sabha but it was sent to Parliamentary Standing Committee to scrutinize it and make some observations. The bill's goal is to control how DNA information is to be used for verifying people's identities. Then, these profiles are intended to direct law enforcement organizations' investigations. The International aspect of this DNA Profiling technology has a wide aspect, as how this technology has proved to be successful in other countries and which is why India should also have this kind of technology.

WHAT IS DNA?

DNA [Deoxyribonucleic acid]² is a kind of hereditary material present in every human body and living organism. DNA gets transferred from the parents to their offspring. DNA is present in each cell of our body and all are identical. Inside the Cell, DNA is majorly found in the Nucleus and to some extent in the Mitochondria as well. DNA contains Information in the form of a Code, which comprises four chemical bases- Adenine, Thymine, Guanine, and Cytosine³. Based on these four bases, the DNA of any person gets prepared and almost 99 percent of the

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¹ DNA Technology Regulation Bill, 2019 [PRS India Org]

² DNA, Britannica Dictionary

³ Bases of DNA, Wikipedia (<https://en.wikipedia.org/wiki/DNA>)

DNA is analogous in all human beings it is an interesting fact that only the remaining 1 percent creates the difference and owing to which all human beings do have a different identity.

WHAT IS DNA PROFILING?

In 1985, British scientist **Alec Jeffreys**⁴ discovered the modern technique of DNA profiling. DNA Profiling (also known as DNA fingerprinting) is a procedure through which the identification of a person is done. DNA profiling is the technique through which any person can be identified by taking biological samples from- skin, hair, blood, saliva droplets, etc. As there is DNA in every cell of our body, so if any biological sample is found, then the DNA of any human can be easily extracted from them. If a DNA sample is taken, then a special DNA profile will be formed based on it because the DNA that is yours will not be that of any other human being.

CONSTITUTIONAL AND LEGAL ASPECTS OF DNA PROFILING:

Each Indian citizen has a responsibility to promote humanism, science, and the spirit of inquiry, as well as strive for greatness in all spheres of individual and collective action, according to Articles 51A(h) and (j)⁵ of the Indian Constitution. Under Entry 65 and 66 of the Union List⁶, Parliament is authorized to adopt rules that support various mechanical and scientific techniques for detecting errors, speeding up investigations, and establishing policies in institutions for higher education and improvement in specialized foundations. Article 20(3)(I), which guarantees the right against self-incrimination, and Article 21, which guarantees each person's right to life and freedom, are the other significant sections of the Constitution.

AUTHORITIES ESTABLISHED UNDER THE DNA TECHNOLOGY REGULATION BILL, 2019

The draft bill talks about National DNA Databank as well as a DNA Profiling Board. National DNA Databank has the function of collecting data from the offender, suspects, missing persons, and unidentified dead bodies. They must also be responsible for profiling and storing the DNA. In addition to this, another responsibility associated with it that is, the data has to be made available to the accused or the suspected persons. This is the utility of DNA Profiling Bank or National DNA Databank. The DNA Profiling Board will be responsible for defining standards

⁴ Alec Jeffreys, DNA Fingerprinting, University of Leichester

⁵ The Constitution of India, Lexis-Nexis, 2021

⁶ *Ibid*

and controls regarding DNA Profiling. This Board is a decision-making body and this will finalize and make rules and regulations regarding the process of DNA profiling. Another responsibility of this Board is to certify the laboratories and banks. The draft bill also stated that this board must be set up both at the national and the state level.⁷ We have seen many utilities and positive aspects of this Bill but these are the reasons we are not able to pass this bill so Now let's look at the factors that pulled us back to enact this Bill as an Act.

ADVANTAGES OF DNA TECHNOLOGY REGULATION BILL, 2019:

- It will help in Criminal Investigations. As we know that DNA of every individual is unique so when you profile the DNA, it becomes easier for the investigative officers to find the criminals.
- This will also help in establishing Blood Relations. In case the person is missed or if somebody has to find blood relation, it is easy through DNA Profiling to establish Blood Relations because it is shared by one's ancestors.
- It will help in tracing the medical history of a person and this will also facilitate the field of Medical Research.
- DNA profiling can also be used for Law Enforcement. To cite an example, if you are collecting the blood of a person then it can be stored only for a certain time because after a particular time it starts losing its utility. But that is not the case with DNA because it can be stored or can remain for an endless time. So, this will eventually help in investigations and forensic searches. Also, in the long run, it can better enforce the law in society.
- It will also help in Disaster Victim Identification. In case of disasters sometimes we only get a part of the dead body or only a part of the remaining will be collected so, in that case, it becomes much more difficult to identify the person or to identify that whom they remain belongs. So, in such cases, DNA profiling will act as a panacea to identify the persons. If we can identify the person or to whom they remain to belong, then authorities can easily issue the Death certificate also.

The issuance of a Death certificate is also very important because only in case when you identify the person as dead it is easy for the law enforcement agencies also, otherwise it can be misused. According to the National Crime Records Bureau,

⁷ Drishti IAS, <https://www.drishtiias.com>, (May 15, 2022)

(NCRB)⁸ about 1 lakh children in our country go missing every year and through this bill, we can help to find those children and other missing dead bodies as well.

- Certain Emotional factors are attached to the death of a person. In a multicultural and diverse nation such as India, if we see, people do certain final rites or cremation and the way of performing these rites vary from place to place, family to family, and religion to religion as well. In case you are not sure to whom this body or remains belong then final rites cannot be done.

Even after a lot of benefits of the modern technology used in this bill, India refused to pass this bill and thus currently does not have any existing legal provisions regarding the profiling of DNA.

CRITICISMS OF DNA TECHNOLOGY REGULATION BILL, 2019

- It has been argued that DNA profiling is also in violation of a Privacy⁹ of a person. In India, privacy or the right to privacy is one of the hotly debated issues. It has been speculated that there can be a breach of data, data theft or this data can be misused. Such concerns are with the general public. As there is a provision in a Bill that allows for the profiling of suspects, victims, and undertrials, means they are not convicted yet but then also they will be subjected to the procedure of Profiling for future investigation. As the Right to Privacy has been declared to be the Fundamental Right of a person, by the Supreme Court of India, in the KS Puttaswamy Vs Union Of India¹⁰ Case, it is speculated that this bill is a violation of the general public's privacy.
- The current Draft Bill is not complete or it does not give the complete picture of what is going to happen. Currently, the draft bill has no special provision concerning the funding of any of the DNA Database, Profiling board, or banks. So how these Data Banks or boards will be established, what will be the Composition of the Board, and where the financial resources and funding will be mobilized for the enforcement of this Act is not clear as of now.
- As we have seen that how in criminal investigations or law enforcement DNA Profiling can be used but the bill does not say at what stage can the DNA samples be collected. There are many Offenders, victims, and persons who have become homeless in a Disaster,

⁸ National Crimes Records Bureau (<https://ncrb.gov.in/>)

⁹ Ram Jethmalani vs. Union of India (2009)

¹⁰ Justice K.S. Puttaswamy vs Union Of India, AIR 2018 SC 4161

and if we have to make a proper identification of this person then we require proper legislation to regulate this procedure efficiently.

- One of the most important observations is that- The Bill can be misused for Caste Based Profiling. Apart from it, when DNA Profiling will be done then there is many extremely sensitive information related to an individual like- skin, color, behavior, illness, etc. and unfortunately, if this case-sensitive information gets into the hands of any wrong person, it can be misused to an extent of creating multiple profiles of the same individual and later can be used in criminal activities which is a huge threat.
- It could even be used to set up a link between Criminal activities with a particular caste or community. This means that through the profiling data can be extracted that this is a community people of who are engaged in a lot of criminal activities. This kind of data can create a kind of taboo or stigma attached to a particular caste or community which would be insidious and harmful to the integration of our society.
- The Draft Panel says that the Profiling of a convict is a reasonable step but there is no moral justification in doing the profiling of undertrials, victims, and their relatives. Doing any kind of profiling on any undertrial convict or victim can be problematic as this would breach the rights of the accused.
- The bill says that the written consent of the person whose profiling is done will be taken but this consent is just for the namesake because if the person does not give the consent for the same then his consent can be overturned by the Magistrate.
- There is no mention of how long the authorities can keep the DNA that will be found from the crime scene. So, it involves a danger that the database may fall into the wrong hands. We can also say that it in some way violate the right to Privacy which is a fundamental right of every citizen under Article 21. Thus, to overcome this problem there should be independent scrutiny as to how long the database should be kept and when we should destroy it.

DECISIONS DEALING WITH SELF-INCRIMINATION OF PERSONS

1. State of Bombay v. Kathi Kalu Oghad & Ors¹¹

Self-incrimination was addressed in this instance, and the court found Self-incrimination refers to the disclosure of information based on the specific knowledge

¹¹ 1962 AIR SCR (3) 10

of the person providing the information, and it can be distinguished from the rote process of providing records in court that may shed light on any issues at issue but don't include any claims made by the accused based on his knowledge.

2. **Smt. Selvi & Ors. v. State of Karnataka**¹²

In this instance, the Supreme Court determined that two premises explained the scope of "testimonial coercion." The first is that "individual testimony" typically refers to oral or written accounts that convey specific information about an individual in relation to pertinent facts, thus approaching the restriction envisioned by Article 20 (3).

3. **Ritesh Sinha v. the State of U.P**¹³

In this case, the issue of whether conducting a Voice Spectrographic Test without a person's agreement violates Article 20(3) of the Constitution has come up. Additionally, if the aforementioned provision is upheld, the issue of whether a magistrate who lacks any innate authority or legal authority under the provisions of the Criminal Procedure Code 1973 (Cr. P.C.) can direct a person to undergo such a test without that person's consent has also come up. The Court, in this instance, decided that taking the exam would not violate Article 20(3) of the Constitution, contrary to what the Supreme Court decided in the Selvi case.

4. **Bhabani Prasad Jena v. Convenor Secretary, Orissa State Commission for Women**¹⁴

When there is an obvious conflict between a person's right to protection against being subjected to a clinical examination and the court's duty to determine reality, the Supreme Court held in this case while squeezing the meaning of DNA testing during the time spent administering equity that the court should only exercise its carefulness after balancing the interests of the parties and on careful consideration of the parties.

WAYS TO DEAL WITH THE SHORTCOMINGS OF THE BILL

As we have seen that there is an issue of Breach of Privacy and there can be a misuse of DNA, there must be safeguards to prevent the illegal collection and use of DNA.

¹² AIR 2010 SC 1974

¹³ (2013) 2 SCC 357

¹⁴ (2010) 8 SCC 633

1. There must be a provision in the Bill providing for the proper mechanism using which the citizens can appeal against the retention of Data.
2. As we have seen that DNA sample is used in Criminal Investigation and also for Law enforcement, so citizens undergoing trial are also required to give their DNA Samples according to the bill. That is why there should be a provision in a bill providing for a mechanism under which the citizen's undertrial can request fresh sample collection.¹⁵
3. If suppose Person- (A) voluntarily gave his DNA Sample but at some point, of time he/she feels that his privacy is getting harmed and he wants to withdraw his sample. According to the Draft Bill, there is no provision for withdrawal of the sample. Therefore, there should be a provision in the bill providing for the withdrawal of the sample.
4. The purpose of the Sample collection should be publicly stated. As DNA samples can be collected for various purposes like- Criminal investigations, Law enforcement or Identification purposes, etc. So, whatever the purpose be it must be stated publicly as this will ensure transparency and can also prevent the misuse to a certain extent.
5. There should be an Annual report that should be published and released by the DNA Profiling Board to bring transparency and the general public should know - what is happening, the achievements, utilities, and get updates for the general public.
6. The Malimath Committee also made a recommendation for amendments in the CrPC to comply with DNA Profiling.
7. Law Commission in its 271st report also made two Recommendations:
 - (a) DNA Profiling Board must be given statutory status.
 - (b) There should not only be National Data Banks but there should also Regional Data Banks.
8. We know that sometimes for Law enforcement and for identification of dead persons, we have to share the DNA Profiles with foreign Governments or foreign institutions. To achieve this safely and safeguard our own data, there needs to be a proper set of rules in the bill regarding the sharing of DNA Profiles with Foreign governments or with foreign institutions.

If the government complies with these recommendations, the DNA Profiling bill can be made free of concerns and criticisms.

¹⁵ The Hindu, <https://www.thehindu.com>, (May 15, 2022)

INTERNATIONAL ASPECT OF DNA PROFILING:

As there are nearly **60 countries** in the world, that already have this kind of Legislation. Moreover, the USA came up with this law in the year 1994 itself and this is one of the biggest reasons that the criminals get apprehended so fast and identification processes also get completed in a very short period of time in the US.¹⁶ Now let's see what are the laws that are prevailing in other countries regarding DNA Profiling:

1. **The USA-** In the USA, the Federal Bureau of Investigation (FBI) has designed a **Combined DNA Index System**¹⁷. This amalgamates Forensic sciences and computer technologies for sorting and identifying crimes. Thus, the USA they have adopted an appropriate technology of DNA Profiling.
2. **ARGENTINA** - In Argentina, the **National Criminal Procedure Code**¹⁸ was amended in the year 2009 in order to give a uniform approach to DNA testing in cases of Illegal adoption.
3. **CANADA-** In Canada, a **DNA Identification Act**¹⁹ has been passed and under the Act, they have a DNA Bank and they have also amended the Criminal Code so as to be in accordance with the DNA Identification Act.

There are several countries that have adopted appropriate laws in order to comply with DNA Profiling. India also needs to have a similar law on DNA Profiling and the current in-talks DNA Technology Regulation Bill can do so. From these above international examples, it is clear that DNA profiling is really necessary and also much needed.

CONCLUSION

A precise and well-founded scientific technique called DNA profiling is used to identify missing people and human remains, investigate crimes, identify disaster victims, and conduct clinical exams. For the aforementioned goals, the majority of the nations have established appropriate laws within the framework of their own constitutions and other legal frameworks. DNA profiling raises a variety of legal and moral concerns, and people's personalities are raised with regard to its abuse, which, if not protected, may lead to the disclosure of personal information, such as health-related information that can be exploited by those with ill

¹⁶ First Post, <https://www.firstpost.com>, (May 14, 2022)

¹⁷ CODIS & NDIS , FBI , United States of America

¹⁸ NCPC – Argentina, Application of Criminal Law, 1984

¹⁹ DNA Identification Act, House of Commons - Canada

intentions, adversely affecting the privacy of the individual. Moreover, Article 51A of DPSPs also endorses the view of DNA Profiling as this article talks about developing Scientific temper, Humanism, and the Spirit of Enquiry. There is scholarly debate about whether privacy is a necessary component of Article 21 of the Constitution in the Indian context. In my opinion, appropriate changes are required to be done in the bill in order to have a way forward this way this bill can be turned into an act as soon as possible and India can also reach new technological advancements.

