



DNA DATABASE

A Legal Issue?

ABSTRACT

Law is very much important to maintain order in society, without law society can not be existed. The role of law is equally important for the welfare of the society. If we talk about the Law and Social Transformation so we can see the growth of society eastablishes law and whereas because of law many ill system can be eradicated. There are still many areas which have not adequately covered under law. So the objective of this paper is basically to highlight some scientific facts which takes the shape in legal world and emphasized its great impact over society as well. Methodology is doctrinal based with the help of books and articles. DNA profiling or fingerprinting seems like a scene straight out of some crime show, but is a reality adopted in the criminal investigation field. This has been used to solve crimes, find victims and criminals, and also in getting answers based on the biologically collected material. Recently, in India, attempts were put forth to regulate this area, by creating a DNA Data Bank. This move was deemed as a controversial one, where some people welcomed the move, and the others opposed it basis the privacy and similar concerns. This discussion embarks upon a journey of these very contentions, to understand if the concerns are genuine or not.

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Introduction

Deoxyribonucleic Acid or as is famously referred to as DNA is deemed as the most basic genetic material that is present in the cells of any human being. DNA is what determines the character, body, and behaviour of a person. No two people have the same DNA (save for identical twins) and this is the heredity material that can be used to identify a person. In criminal justice system and investigations, the advent of DNA has revolutionized the manner in which the forensic science and investigative aspects are undertaken. The use of DNA brings forth accurate and reliable results, which have helped in catching a number of criminals, and in solving numerous crimes. Reliance has been placed on use of DNAs across the globe since its development in 1980s in form of DNA profiling¹.

With the growing rates of offences like sexual crimes, particularly against children and women, the government has looked into steps to fast track the resolution of such cases. Within this context, efforts have been undertaken to ramp up the DNA infrastructure and capabilities so that the backlog of case pendency in courts and forensic labs can be curtailed. The recent DNA Technology (Use and Application) Regulation Bill is deemed as a key step in the direction of catalysing the actions and provisions for both the local and national level criminal offenders' DNA database². This has been a very controversial step, as experts have stated that the addition of this database would improve the manner in which the criminal investigations are undertaken³, while the others have raised privacy⁴ and data security issues⁵. This discussion aims to explore the debate surrounding use of DNA Database in the nation.

¹ 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 Blog", *SCC Blog* (Webpage, 2022) <<https://www.sconline.com/blog/post/2022/04/06/challenges-and-concerns-in-admission-of-dna-evidence-in-india/>>.

² "US And Europe Witness Almost 42% Drop In Repeat Offences With DNA Database – India To Follow Suit?", *Punekar News* (Webpage, 2022) <<https://www.punekarnews.in/us-and-europe-witness-almost-42-drop-in-repeat-offences-with-dna-database-india-to-follow-suit/>>.

³ ANI Release, "Experts Vouch For National DNA Database To Strengthen Crime Investigation In India", *Business-Standard.Com* (Webpage, 2021) <https://www.business-standard.com/content/press-releases-ani/experts-vouch-for-national-dna-database-to-strengthen-crime-investigation-in-india-121081201514_1.html>.

⁴ Rina Chandran, "India's DNA Data Law Seen To Harm Minorities, Hurt Privacy", *Reuters* (Webpage, 2021) <<https://www.reuters.com/article/india-tech-privacy-idUSL8N2K4091>>.

⁵ Mukesh Ranjan, "DNA Data Bank Still A Work In Progress", *Tribuneindia News Service* (Webpage, 2022) <<https://www.tribuneindia.com/news/features/dna-data-bank-still-a-work-in-progress-390888>>.

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DNA Database in India

Recent Update

In the year 2019, the efforts were brought forth by the Narendra Modi Government for setting up the DNA Bank of India, for storing the genetic information of the citizens, based on the previous attempts taken in this regard⁶. From the very day on which the DNA Technology (Use and Application) Regulation Bill, 2019 was brought forth, to the day it was passed in the Lok Sabha, the bill has been a controversial one. The aim of this Bill was to create the National DNA Data Bank, along with the regional databases, so that the genetic information that is collected from the bodies of the victims and from the crime scenes, during a civil or criminal investigation, could be stored. The Bill also proposed the establishment of a DNA Regulatory Body for controlling and regulating the data storage and collection of the DNA⁷.

International Perspective

The Global DNA Profiling Survey Results 2016 of the US Interpol shows that India is not the only nation to have or to propose a DNA Database. This survey has depicted that nearly 69 nations have a DNA database, which includes China, US, and Canada. When clubbed together, these nations held around 35,413,155 individuals' genetic information. In the eight four nations that rely on the DNA profiling when it comes to criminal investigations, India is one of them. However, as per the reports, India does not store any kind of DNA information in a central database. Yet, globally there have been many concerns raised regarding the potential misuse of these databases, as these held the most intimate information of any person⁸.

To put this in perspective, one can look at the issues that cropped up in the UK, which was the very first nation to form a forensic National DNA database in 1995⁹. Initially, this was widely supported but changes were brought in this with the advent of legislation in 2001 that allowed for the DNA profiles of people to be kept in the database, even when the individual

⁶ "Human DNA Profiling – A Draft Bill For The Use And Regulation Of DNA-Based Technology", *Lawcommissionofindia.Nic.In* (Webpage, 2017) <<https://lawcommissionofindia.nic.in/reports/Report271.pdf>>.

⁷ "Establishment Of DNA Databank In India: A Legal Analysis" (2022) 50 <<https://www.aequivic.in/post/aijacla-establishment-of-dna-databank-in-india-a-legal-analysis>>.

⁸ Roisin Costello, "Personal DNA Tests Might Help Research – But They Put Your Data At Risk", *The Conversation* (Webpage, 2019) <<https://theconversation.com/personal-dna-tests-might-help-research-but-they-put-your-data-at-risk-110755>>.

⁹ H.M. Wallace et al, "Forensic DNA Databases–Ethical And Legal Standards: A Global Review" (2014) 4(3) *Egyptian Journal of Forensic Sciences*.

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had been acquitted of such a crime. In 2003, amendments were brought to the legislation that allowed for the DNA to be taken when a person was arrested, rather than for such an individual to be charged with an offence. The result of this was that nearly the DNA profile of one million innocent people were added and retained in the criminal database¹⁰.

Indian Perspective

The Bill presented in India allowed the regulators to identify some specific category of people like unknown deceased people, missing people, undertrials, suspects, victims, and offenders, and to use and apply the DNA technology on them. The DNA databanks created across the nation can store and track the DNA profiles of these individuals. An example of this was given in context of using this technology in sexual assault cases, where the DNA could be used as a standard component of the sexual assault evidence collection kit. In this regard, the technology being used in the US has been taken help of for preparing the initial database. The software allows for DNA profiles to be maintained on searchable database that can be used in investigating leads and even in terms of identifying the victims. The use of this can be done to track the movement of criminal elements that crosses the geographical boundaries¹¹.

Controversy

Proponents

As stated earlier, the DNA Database has been a very controversial addition. There have been individuals who have stated that such databases being present at a local and national level would allow for bringing improvements in the conviction quality, in increasing the ability of solving the cases, and in helping the judiciary in bringing down the pending cases' backlog, which would effectively be backed by scientific validation. The essence here is that the data bank would allow for expedition of justice and would also help in improving the conviction rates. A careful analysis of this however, highlights the legal concerns¹².

This was highlighted by one of the senior police officers, who stated that the store of DNA fingerprint data was a violation of Article 14, along with the right to equality, doctrine of

¹⁰ Mohana Basu, "What Modi Govt's 'DNA Bank' Will Look Like And The Concerns Over Its Misuse", *The Print* (Webpage, 2019) <<https://theprint.in/theprint-essential/modi-govts-dna-bank-and-concerns-over-its-misuse/309463/>>.

¹¹ At 5

¹² Ibid

proportionality, right to privacy given covered in Article 21¹³, and the right against self-incrimination, even when the officer deemed this as a good database. This was because of his perspective on a number of cases pertaining to suicide bombing, terrorism and infiltration remaining inconclusive owing to the lack of strong evidence, which can be presented through DNA fingerprints. Such cases could be covered with the human biological tissues. Apart from this, in connecting the dots and in confirming the death of terrorists as well, such a database is strongly required¹⁴.

Considering the threat that the states are put in, in the dangerous times we live in, it becomes a necessity for the state to protect and secure the citizens. The need is to bring extraordinary measures to deal with such extraordinary situations. The protection can be granted to the fundamental and civic rights only when the benevolent democratic state can be made secure. In doing so, the example of CCTV cameras was cited by the senior police officer, where initially they were deemed as a breach of privacy of people, but have grown to be a symbol of safety for many. The use of DNA testing helped in solving the gangrape and murder case in Kotkhai, Himachal Pradesh, of a sixteen year old¹⁵. Again, reliance was placed on DNA evidence by the courts, in delivering their judgements in Nirbhaya¹⁶ and Priyadarshini Mattoo¹⁷ cases. An 84 year old man was granted bail recently, who had been accused of rape, as the DNA report successfully highlighted that the old man was not the father of child, which was birthed by the rape victim¹⁸.

Opponents

Despite the above mentioned contentions, there are individuals like Suhas Chakma, the director of the Rights and Risks Analysis Group, who have raised concerns regarding the use of such database. The main problem in this context has been presented in the equality given to the national DNA data bank being created of a crime scene, to include the unknown deceased people, missing people, undertrials, suspects, victims, and offenders in the very same category. The present law essentially brings equality to the convicts and the non-

¹³ "Four Reasons Why India's Controversial DNA Bill Should Be Sent To A Standing Committee", *The Wire* (Webpage, 2018) <<https://thewire.in/government/dna-profiling-bill-parliament>>.

¹⁴ At 5

¹⁵ *Zahur Haidar Zaidi vs Central Bureau Of Investigation* CrMP(M) No. 1519 of 2017

¹⁶ *Mukesh and Anrs. Vs NCT Delhi* (Nirbhaya Case)(2017) 6 SCC 1

¹⁷ *Santosh Kumar Singh v State Thr. CBI* (2010) 9 SCC 747

¹⁸ Utkarsh Anand, "After DNA Test, 84-Year-Old Man Granted Bail By SC In Minor Rape Case", *News18* (Webpage, 2020) <<https://www.news18.com/news/india/octogenarian-man-to-set-be-free-after-dna-test-proves-his-innocence-in-minor-rape-case-2815337.html>>.

convicts, who have not been proven guilty. The essence of Indian law is “innocent until proven guilty”, which is essentially lost through the proposed law. The very cardinal principles of constitutional guarantees and criminal jurisprudence are thus violated. Apart from this, the scope of crime scene has a very broad and vague description in the Bill, and covers all type of crime scenes, including terrorism acts, violent turned democratic protests, and domestic violence. The possibility of abuse of this database can easily be fathomed in cases of violent turn democratic protests and riots as these are crime scenes. This allows for the political opponents and specific communities to be easily targeted by bringing them under the definition of a broadly defined crime scene¹⁹.

Then there are concerns regarding the strength of the data protection laws, which are present in a range of European nations that rely on use of DNA data bank. The landmark case of *Justice K.S. Puttaswamy (Retd.) and Anr. v. Union of India and Ors* (2017) 10 SCC 1²⁰ brought the right to privacy as being the fundamental right of every person, which is properly protected under Constitution’s Part III. However, before the data protection laws of India are actually enacted, the Government of India has brought a way to collect the data before the law comes in action, by “putting the card before the horse”²¹.

Sanjeev Sahay, the Supreme Court lawyer, has stated that this Bill regulates the DNA technology usage for forming the identity of people. And the Bill can be very helpful in identification of crimes and criminals, when implemented by using proper safeguards and mechanisms. The presentation of such a useful database is undoubtedly a thoughtful measure in curbing crime, as is done in many nations across the globe. However, the police work in India brings the possibility of the consent for DNA collection to be taken under coercion and undue fear. This is because the nation lacks conclusive measures to preserve or protect the crime scene. There is a commonality of other people reaching the crime scene before the police does. This consent is a crucial aspect in DNA sample collection, save for cases that come with seven years or more imprisonment, or are punishable with death²².

¹⁹ At 5

²⁰ *Justice K.S. Puttaswamy (Retd.) and Anr. v. Union of India and Ors* (2017) 10 SCC 1

²¹ At 5

²² Ibid

Challenges

Now that the opposing and supporting sides have been looked at, there is a need to look at the specific challenges that come with the proposed bill. This is crucial to come to a solution, rather than merely criticizing the shortfalls or praising the achievements. The need is thus to look into the areas of further development for this bill, to come to a strong standing of the DNA data base in India.

The first step that has to be taken in this regard is to ensure that the forensic science institutions are independent as they function directly under the respective Home Department and the law enforcement authorities. There is a high chance of the evidence being mishandled or tampered with, in absence of such independence. The next aspect to be looked into is the manpower of forensic laboratories, which is usually not adequate, along with the lack of proper functioning infrastructure in such laboratories. There is a need to understand that the DNA database requires a lot of experts, for properly undertaking the research, for communicating the progress to the investigating officers, and for creating a sync between the police and the forensic wing. The next challenge in line is the need for the investigating officers and the police to be fully equipped for handing and collecting the evidence from the crime scenes. As a result of the present day incoherent basic training, or improper one, the individuals present at the crime scene, end up destroying the crucial evidence, which could have been proven helpful, had the same being collected by a proper trained officer, or where the person handling such a crime scene had applied the requisite diligence and care, along with knowledge in catering to such evidence²³. More significantly, there is a need for a strong legislation, which can help in the use of DNA evidence to be legitimized for investigation purposes. A properly drafted law could therefore help in resolving all the mentioned challenges²⁴.

This was one aspect of the challenges pertaining to the DNA Data base. The other relates to the unwillingness of the courts in accepting the forensic evidence when it comes to the criminal investigations. This is majorly because of the unprofessional conduct of physical evidence, non-collection of evidence, chain of custody not being maintained, neglect or delay in dispatching physical evidence for the purpose of undertaking scientific analysis, lack of

²³ Dinkar V.R, "Forensic Scientific Evidence: Problems And Pitfalls In India" (2015) 3(2) *International Journal of Forensic Science & Pathology*.

²⁴ At 1

evidence preservation, and improper collection of evidence. There are other reasons that cover the accused not being sent for medico-legal examination, the fingerprints not being lifted from the crime scene by the investigating officers, or the bloodstained objects being forwarded to the lab for chemical examination, sans proper covering in wrapper post seizing the object. This would naturally result in the court being compelled to reject the final report²⁵. If this is not enough, there are the technical lacunas, which result in evidence being tampered, covering examples like improper tests, delayed inspection of exhibits, or the blood group not being mentioned in the report of serologist²⁶.

There is also a need for the measures to be brought in to make certain that the collected personal information is not violated by any authority that collects such data, and proper punishment to be imparted on the individuals violating the same so as to offer proper protection to the individuals. The discussion has already touched upon the privacy concerns that have been brought forth due to this Bill. This is specifically in context of the rights of privacy of a citizen²⁷. These concerns are well founded in the backdrop of absence of laws in the nation to protect against the leak of data. Even though the bill has a number of provisions to handle the DNA profiles in a proper manner, so as to ensure that the personal information is not shared negligently or kept confidential, but there is a lack of specific penalization on the authority where such a breach takes place, be it for the authorities of regional or national DNA data bank. Even in cases of mishandling, there is no larger authority that can be made liable²⁸.

When the privacy concerns are seen in light of improperly trained people handling the DNA samples, the chances of manipulation of evidence, its mishandling, and even improper planting of evidence brings high concerns, at the collection and examination level of evidence. The other problem is that section 57 of this bill removes the court's jurisdictions in such matters as these are to be determined by the Board. In essence, this means that the court cannot question what is being done by the Board, which gives the regulatory body the

²⁵ A. Dutta, R.C. Arora and P.C. Sarmah, "Analysis Of Problems Related To Forensic Examination In Offences Against Human Body And Need For Auditing," (2011) 58(3) *The Indian Police Journal* <<https://bprd.nic.in/WriteReadData/userfiles/file/9609506404-July%20September%202011.pdf>>.

²⁶ At 1

²⁷ Vivek Sahajpal, "DNA Database Not A Threat To Privacy", *Downtoearth.Org.In* (Webpage, 2018) <<https://www.downtoearth.org.in/blog/science-technology/dna-database-not-a-threat-to-privacy-61461>>.

²⁸ At 1

overriding authority for taking actions, bringing in a no check mechanism²⁹. Considering the arbitrary nature of these provisions demands the same not to be brought into implementation phase. Where the law is not brought to protect in this regard, the fundamental right of privacy of an individual would be breached, as people cannot approach the courts in case of breach of these rights. The court's ouster thus leaves no remedy to the people where arbitrary decisions are taken by Board, making it unlawful³⁰.

Conclusion

One cannot deny that the criminal investigations are improving day by day and one of the key reasons for this being possible, is the advent of the DNA profiling and fingerprinting. This has allowed the investigators in catching the criminals, and even in identifying the victims and other pertinent groups. However, the manner in which DNA is stored is a matter of contention, particularly in the backdrop of introduction of the DNA Technology (Use and Application) Regulation Bill, 2019 in the Indian jurisdiction. Even when there have been people welcoming this bill, there have been others, who have highlighted several concerns and challenges that come with this bill.

The main theme in all these concerns is the lack of comprehensive legislation to protect the privacy and data of the individuals. With the clauses like the restrictions being placed on the intervention of court, the arbitrary nature of the bill has been highlighted, necessitating the need of bringing amendments to this bill. One cannot deny the fact that the bill is needed and that the use of DNA technology in forensic criminology has changed the manner in which a crime is resolved. However, the provisions with which this area is being attempted to be regulated is very concerning, particularly because there are high chances of the evidence being manipulated, tampered with, and mishandled. Apart from this, keeping the criminal and non-criminals at par, within the legislation, or giving a broad definition to what is to be deemed as crime scene also raises some strong concerning points. Hence, it is suggested to relook into the bill that is soon to be the law in the nation, so as to take away the clearly identified and pretty concerning issues, as have been elaborated in this discussion. Unless this is done, the Bill merely opens a plethora of problems for the citizens basis the privacy and other concerns stated here.

²⁹ Ibid

³⁰ At 23

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