

## **READING BEYOND THE PARTI PRIS: ANATOMIZATION OF THE HUMAN DNA PROFILING BILL**

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In the due process of law, adjudication has always been accompanied by technology. There have been times when technology has also triggered constitutional challenges, but, without technology and science, the broth of justice would have been spoiled by too many ‘influential’ cooks be it probabilities and doubts, words of influence casting its shadow on the system, etc. DNA fingerprinting technology has, like many other scientific tools, been an endeavour to see a merger of scientific and legal instruments for restoration of justice. The technology has served as a motif to the criminal justice systems of several countries in solving cases pertaining to paternity disputes, rapes, etc. for resolving the predicament at hand.

In India, the Human DNA Profiling bill is/was an attempt from the end of the parliament, in order to set the legal system and technology and science in a harmonious combination. The legislation in scrutiny was first introduced in parliament in the year 2007, further in the year 2012. The legislation has been prompted by CDFD (Centre for DNA Fingerprinting and Diagnostics), Hyderabad with full- fledged support of the Department of Biotechnology, under the Ministry of Science and Technology, following a Public Interest Litigation filed by NGO Lokniti Foundation v. Union of India , which raised the issue of thousands of unclaimed bodies with the police. Furor, which set foot even before introduction in the parliament has played a potential role in sparking the debates of civilians’ privacy and ethical issues.

In 2012, the Government of India, quoting reasons of privacy and insufficiency of funds in the government to handle the same, replied in negative, about enforcing such technology as a legal instrument. Perceptions of civil societies and NGO foundations did create ripples and added intricacies to the matter, but, the pedestal of public dread was in the year 2015, when one of the members of the Justice A P Shah committee (the committee was set up to culminate on the privacy concerns relating to the legislation), Ms. Usha Ramanathan broke her silence and voiced dissent to the bill and brought to the public’s wide notice about the dangers of the legislation and the lesser known truths about it. Subsequent sections in the paper investigate the pros and the cons of the legislation and look into how much of a difference will it make to

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the criminal justice system by seeing how successful the usage of such a technology has been in countries where it is streaming with the prosecutorial needs.

I. The exercise of defect detection in the legislation:

The bill, post- enactment would lead to establishment of a National DNA Data Bank and a Board of DNA Profiling. The DNA profiling data will be used for purposes specified in the legislation. The DNA Profiling Board is attributed with expansive powers- to certify labs across the nation and also manage the access to the available data by law enforcement agencies. The National DNA Data Bank Manager is actually attributed with the power to grant access to the DNA data to any person whom he considers appropriate, surprisingly, the CEO of the Board will be a scientist, whose touch with the legal system might not be meet the requirement of being well-versed with the technicalities. Preferably, there must have been a provision for acquiring court permission to access the data in case a private citizen wants to access the data. Within the purview of the legislation otherwise, there is no limitation on who can be granted access the data. There is no provision whatsoever, to provide for a specially appointed officer's permission or a specific procedural application to the DNA Data Bank Manager. To further justify the word 'expansive', sections 39 and 40 can be brought under the scan. Section 39 of the bill gives the board the power to add new indices and categories for which the DNA samples can be used, while Section 40(e) allows such data to be used for population research. The major problem of this section, which has been intensified after shocking report of Ms. Usha Ramanathan, is that an index of signature DNA Profiling on the basis of different caste groups of India was already being planned by the CDFD, under its population study, which was included as one of the ambitions under the 11th and the 12th plan. The provision can be misused and can potentially cause racial bias in many cases, raising serious human rights concerns.

Creating a database of DNA of citizens gives out a precarious vibe in its nature since the implications are tremendous. What can be done with such important, personal information about a person, is an imagination of substantive danger to the citizens and is potentially draconian. If the legislation were to be strictly followed, the DNA profile will be deleted if the person were to be acquitted after trial. But, there are failures of the same due to inept technology, even in countries such as the united Kingdom, where the technology pertaining to the subject is better and the number of criminal cases, where the aid of DNA profiling is required, is relatively very few in number. The concern, rather than the fact of the government holding access to private information, is that of the consequences in case the promise of privacy

is breached. As Ms. Usha Ramanathan rightly puts in context, “Edward Snowden has made us aware of the fact that the National Security agencies are capable of spying any and every individual.”

As far as the definitions laid down by the legislation is concerned, the ‘Crime Scene index’ includes person who is ‘reasonably’ believed to be a victim. ‘Offender’ includes anyone charged with the offence, not going into whether the accused was convicted. Many such definitions have been given a wide breadth of meaning, which can potentially sweep through a range of innocent citizens. Culminating the procedural aspect, as to how it must actually be carried out in practice is lacking. Retention of DNA samples in specified circumstances are enlisted in the test of the legislation but persons who can have access to those samples and the time period of retention of DNA evidence is an issue unanswered. There is lack of clarity of intention of the legislation as sections 37(i) and 37(ii) present a dichotomy. Whereas s. 37(i) provides that retention of DNA evidence even in cases where a person is charged with an offence, but not convicted as yet, s. 37(ii) provides for deletion of the profile after acquittal. As long as the case is closed by the judiciary, the DNA profile would still be in the database, which raises serious human rights concerns of persons who are not convicted as yet.

‘Standards, Obligations of DNA laboratory’, Chapter V of the Bill rightfully provides for the audit of DNA laboratories, but, the DNA Profiling Board is itself safe from any governmental audit. A quality threshold is provided for DNA databanks, but there is no suggestion of establishing a separate board or organization, such as the DNA Ethics Board, UK which handles human rights concerns. To add on an array of expansive powers that the Board has been vested with, even the authority of regulation of standards is vested with the DNA Profiling Board. Further, there is no clarity whether an individual has the right of appeal to check on his/ her own personal DNA Profile.

## II. Practical Frustrations:

The possibility of tampering with evidence must never be undervalued. VVIP criminals and politicians could always use money and influence either to exonerate themselves or to entrap an innocent individual. The law indeed provides for imprisonment of up to 3 years and an imposition of fine of up to Rs. 10,000, but there is no politico-legal or an administrative machine of preventing such a mishap and power play at the first instance. Aforementioned

issue can be related to almost any legislation in the nation. However, going into greater details, actually unearths a plethora of deficiencies.

DNA, as a piece of evidence, makes a perfect picture since DNA test is infallible. Scientific tests have also confirmed that there is almost zero uncertainty with the results of the test, since DNA sequences are unique in every human being, be it even in case of identical twins. DNA fingerprinting, hence, true to its title, remains as indispensable as the fingerprints are, as a mark of unique identification of a person. However, David Balding explains that the DNA is 'almost unique' and doesn't reach to be absolutely unique. DNA frequencies can match in cases as few as 1 in 10 billion, which is more than the population of the Earth, which only gives an impression that it's unique. In fact, even if the problem is not about the certainty one cannot deny that there could be errors committed by man, the human errors, rightly pointed by Forensic expert Jonathan Koehler. The infallibility of the DNA tests are constraint to a number of negative factors that are associated with persons in-charge of the tests, mostly ending in armistice. There could be laboratory errors, which may be resultant of technical glitches in the scientific instruments that are used. There could be false matches and cross contamination, all of which, make the evidence potentially unreliable. In a 2002 episode, Houston Police Department's Crime Laboratory was closed down on the grounds that DNA was being fabricated by the employees in the lab. In the Indian context, one has to remember how the forensic expert claimed that there were 'typographical errors' on Exhibits 14 and 20, giving raise to mismatch. The fault was only found after 2 years. Financial mismanagement and corruption are almost obligatory to be added as a black mark in carrying out the functioning of any system smoothly. Reliability on the false results would be a greater mistake of committing adultery on the justice system.

Technology is still in a situation of flux, as it has been happening since the time DNA as evidence set foot in the legal domain. For converting a databank to a database, electronic technology is a requisite. This is not free from encroachment to the data from hackers, even if there was encryption of the data. Even the CODIS (US) and the Interpol DNA database shared problems of selecting and pinning down on an agency that could implant the technology of converting a databank to a database, since the agencies could, by the way of technology, share the DNA database.

III. Would DNA profiling benefit the legal system if the limitations were taken care of?

Ever since the entry of DNA finger printing in criminal justice system, it has helped solve cases, which otherwise would have been very tough or even unimaginable. As per the records that Interpol has, in the year 2009, 54 countries had National DNA database and at the time, 26 countries were planning to bring up DNA database of their respective citizens. In 1985, first case to be solved using the method, saved a boy from deportation. In 1983 and 1986, rapes and murders of two teenage girls, on separate occasions were solved using DNA fingerprinting from the semen that was collected from the crime scene. It must not slip from our notice that in the case of 1986 aforementioned, one of the suspects tried tampering with evidence, with the help of a friend in the police department.

‘Familial DNA database searching’ has the potential of being used or misused. If the database holds no record of the true perpetrator, the record of a close relative can be found. The police officials could either use the data to reach out to the perpetrator or, they could falsely assume the close relative to be the perpetrator or, can misuse it to mistreat the relatives. Such a negative situation had in fact, arisen in a German case, where the brothers of a man who had committed rape were arrested by the police. The German constitutional court decided against the use of such kind of evidence. Even in the UK, innocent people, never charged of any crime have also fallen prey to making DNA valuable as evidence. The European Court, in the year 2008, held in its judgment that the regime of retaining DNA samples is a breach of privacy and unlawful, points out Dr. Helen Wallace, Director of GeneWatch UK. Further, the GeneWatch observed that in Germany, 63% of the DNA profiles in the database are associated with minor offences such as theft and less than 3% of the entries are associated with grave offences such as rape.

Financial concerns cannot be unnoticed. In the United Kingdom, a country with very less population in comparison to India, 2.2 million pounds was taken up for maintenance and working of the NDNAD (National DNA Database) in the financial year 2013-14 alone. The management of NDNAD is a collaborative assignment of the Strategy Board, a statutory body which issues guidelines on deletion of profiles and the DNA ethics group, which was established in the year 2007 looks into collection of data in cases of rape, setting aside of contaminant profiles, which could be from the working staff, etc.

Failure of DNA tests in giving conclusive evidence must not be left out of context. The case of People v. Castro in New York brought out spectacular fallacies in the technology, as early as 1989. Even in 2014, where situation is expected to have improved with respect to the technology, the Italian case of Knox and Sollecito raised eyebrows about the evidentiary value

of forensic DNA fingerprinting. NDNAD in its report mentions that from 2001 to 2006, 26 % of the matches ended up on two or more persons recorded in the database. The underlying problem was that the profile was partial. Incompleteness of a profile gives rise to confusion since only a part of allele markers would be present, which can randomly match up to another person's DNA.

The NCPCR (National Commission for Protection of Children's Rights) could have made use of the database to ensure that missing children are re-associated with their families, but, Supreme Court of India has ruled that the best interests of the child must be the priority and just scientific determination of parenthood doesn't necessarily provide a testimony of affection. Pinning down on the most troubling aspect, being ethics and morals- Principles of Ethics and Privacy must be strictly followed during investigation appertaining persons and groups, as established by protocols such as the International Convention on/ for the Protection of all Persons from Enforced Disappearance , UNESCO's Declaration on the Protection of the Human Genome , etc. The information as to why the data is being collected must be given to people, whose data is being collected. In a 2012 incident, a committee headed by Mr. Virginius Xaxa found that scientists from the Centre for Cellular and Molecular Biology, India went to Andaman Islands to collect blood samples of tribals, with the intention of researching on India's genetic history. The situation again unearths the link to the racial and caste based profiling, which could definitely take further shape, if left untreated.

Deploying DNA fingerprinting technology can be tremendously useful in cases of mass disasters, where the death toll is remarkably high. The technology was indeed deployed to identify bodies of people who were killed in the World Trade Centre incident and of those who faced the wrath of Hurricane Katrina. However, back home, in India there have been numerous examples where DNA tests have proved to be cumbersome exercises with no guarantee of benefitting the criminal justice system in the restoration of justice, be it the French diplomat rape case, where DNA analysis was not conclusive since the tests came out with both positive and negative results. Or the Abhishek rape case where DNA analysis had to be done again from the start since the test was not conclusive.

#### IV. Conclusion and Recommendations:

The legislation lacks backing of proper reasoning in cases where it provides for retention of the DNA Profiles, which in turn raises human rights concerns. The aim of restoration of justice fails when there is no mutual respect for human rights. Financial mismanagement, probability of errors, probability of using data for genetic tracing of races and casts groups are factors that only re-affirm the failure of the legislature at various levels. Provisions appertaining the Right of an individual to appeal to examine his/ her own DNA profile, subject the DNA Profiling Board to the audit by the Office of the Comptroller and Auditor General of India, Clarity in the process of selecting the Chairman of the Board, limiting any misguidance to the individuals whose DNA is being collected, especially if they are volunteering, Restriction of using DNA database for Genetic studies related to caste, race, etc. are some of the immediate concerns that must be treated.

As far as the research experience in penning down the paper has taught me, the DNA Profiles only cause havoc to the already tangled situations that the investigators, suspects and the like associated with a crime have to deal with. Most of the cases showcase that the human error percentage is phenomenally high and does more harm by convicting the innocent. As for the present, the bill can be put on a hold for some time, until there is a potentially successful way of solving the concerns that are presented in preceding sections. Research in the field of Science and Technology, as always, is fluctuating and this could give raise to innovations that does not pose serious challenges. Till the reliance on DNA technology doesn't pose such deep-rooted concerns, the government should and must necessarily focus on storage of the unclaimed bodies. At the present, funds could be used to build repositories for storage of bodies and for encouraging studies and research in the field of Biotechnology and Forensic sciences. Even as latest as 2014, Italian Legal system was exasperated with the legal challenges that the impugned technology threw up. Encouragement of research in the field and allocation of resources could solve a global concern pertinent to the Criminal justice systems and Forensics across the globe.