

Human DNA Profiling Bill: A Brief Overview

Introduction

DNA profiling is the process where a specific DNA pattern, called a profile, is obtained from a person or sample of bodily tissue. Human DNA profiles can be used to identify individuals which can be useful during criminal investigations and for determining parentage, among other uses. The modern form of DNA profiling, also known as STR (short tandem repeats) analysis, is a technique which requires only a limited quantity of bodily substances for analysis. The Human DNA Profiling Bill, 2015 aims to regulate the use of DNA analysis of human body substances and profiles. The Bill also aims to establish the DNA Profiling Board to lay down standards for laboratories, collection of human body substances, create a custody trail from collection to reporting and to setup a National DNA Data Bank. The working version of Bill was first introduced by the Department of Biotechnology in 2007 and has been reviewed by several panel of experts. The Human DNA Profiling Bill is significant as it aims to create a mechanism for the regulation of DNA profiling. However, the privacy and accountability concerns in the Bill need to be addressed, before it is adopted by the legislature.

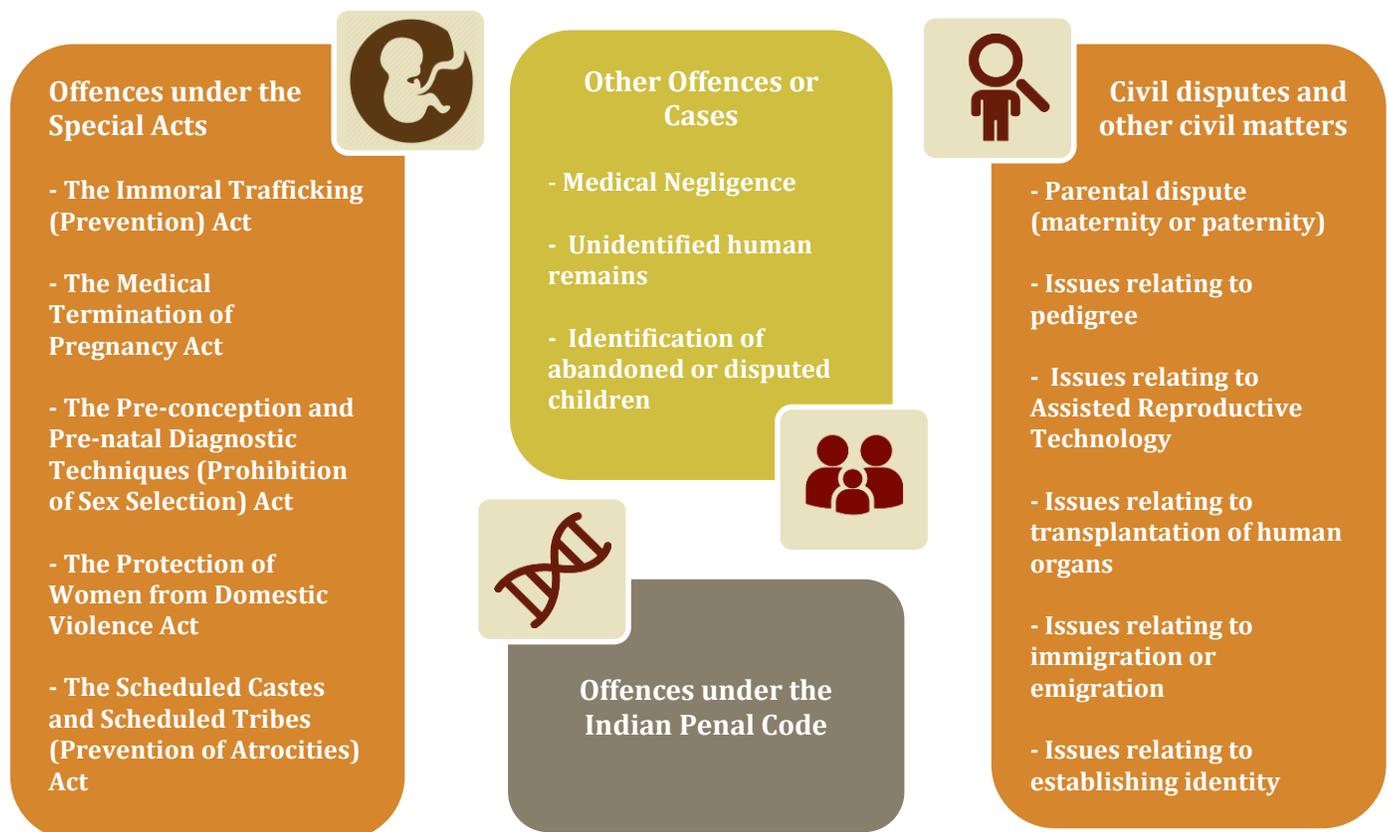


Figure: Specific provisions under the law where DNA profiling can possibly be used

Key Features

1. DNA Profiling Board

The Bill provides for the establishment of a DNA Profiling Board, with its head office at Hyderabad and other regional offices as may be required.

The DNA Profiling Board would be authorized to carry out the following major functions.

- Facilitating and assisting Central and State Governments in establishing DNA laboratories and DNA Data Banks.
- Issuing certificate of approval to DNA laboratories and supervising/monitoring their quality
- Making recommendations for provision of privacy laws relating to the access, use of stored DNA samples and their analyses.
- Sensitizing and creating awareness among public and other stakeholders including police officers, prosecutors, and judicial officers.
- Laying down standards and procedure for the establishment of DNA Banks and DNA Data Banks.
- Framing guidelines for the storage of biological substances and their destruction.
- Laying down procedures for the communication of information relating to DNA profile in civil and criminal proceedings and for investigation of crimes.
- Disseminating best practices regarding collection of DNA samples and their analysis and ensure quality and consistency in the usage of DNA techniques

Any DNA Laboratory would have to seek approval from the DNA Profiling Board in order to carry out any DNA profiling technique.

2. Procedures and Quality Control

As per the Bill, DNA samples may be collected from bodily substances, scene of occurrence or crime, clothing and other objects, or any other objects specified by the regulations. Every DNA Laboratory that has been granted approval by the DNA profiling Board shall adhere to the quality and procedural standards prescribed by the Board. Adequate security measures must be undertaken such laboratories to protect the DNA data.

3. DNA Data Banks

A National DNA Data Bank shall be established in Hyderabad by the Central Government. Each State Government will establish a State DNA Data Bank. The State DNA Data Banks shall share all DNA data stored with the National DNA Data Bank. Every DNA laboratory, which has been granted approval by the DNA Profiling Board shall also share its data with the State and National DNA Data Banks.

The DNA Data Banks shall maintain a record of the all the information based on the following indices;



The information in the Offenders Index pertaining to a convict shall be kept on a permanent basis. However, on acquittal of the charges or in case of setting aside of conviction, all information pertaining to the convict shall be expunged from the Offenders list.

On receiving a DNA profile, the DNA Data Bank shall compare the profile with the other DNA profiles in the DNA Data Bank. After the process is completed, the results shall be communicated to directly to any court, tribunal, enforcement agency, approved DNA laboratory, and in case of an international organization or foreign government, through the Central Bureau of Investigation or any other approved agency.

4. Confidentiality

The DNA Data Bank shall maintain confidentiality with respect to all information, including DNA profiles, DNA samples and any records thereof. All DNA data shall be solely used for the purpose of identification of a person, in accordance with the provisions of the Bill. In addition, the Bill lists a set of situations where DNA data may be provided.

- To law enforcement agencies for identification purposes in criminal cases
- In judicial proceedings, in accordance with the rules of admissibility of evidence
- For facilitating prosecution and adjudication of criminal cases.
- For the purpose of taking defence by an accused in a criminal case.
- For the creation and maintenance of a **population statistics Data Bank** which may be used for the purpose of identification research, protocol development or quality control. However, the population statistics Data Bank must not contain any personally identifiable information and must not violate ethical norms.
- In case of investigations relating to civil disputes or civil matters or offences.

Access to the information stored by the DNA Data Bank may also be made available to a person or a class of persons for operation and maintenance of the DNA Data Bank and for training purposes.

5. Offences and Penalty

The Bill provides the following penalties for various offences ranging from unauthorized acquisition of information to unlawful disclosure.

Offence	Penalty
<ul style="list-style-type: none"> ▪ For unauthorised disclosure of information in the DNA Data Bank. ▪ For obtaining information from the DNA Data Bank without authorization. ▪ For providing or using DNA sample or result without authorization 	Simple imprisonment upto three years & fine upto One Lakh Rupees.
<ul style="list-style-type: none"> ▪ For unlawful access of information in the DNA Data Bank 	Simple imprisonment upto two years & fine upto Fifty Thousand Rupees.
<ul style="list-style-type: none"> ▪ For knowingly and intentionally destroying, altering, contaminating, or tampering with biological evidence, with the intention to prevent the production of that evidence in a judicial proceeding. 	Simple imprisonment upto five years & fine upto Two Lakhs Rupees.

Privacy and Accountability Concerns in the Bill

The Report of the Group of Experts on Privacy headed by Justice A. P. Shah, outlined the various privacy and confidentiality concerns in the National DNA Profiling Bill.¹ For instance, the Bill does not obligate the DNA Data Banks and DNA laboratories to send notice to the person whose DNA sample has been obtained, Notice must also be served in case there is any instance of destruction or tampering of the DNA samples. There must be adequate and clear distinction between the cases where DNA profiling can be undertaken without consent and instances where the DNA profiling can only be undertaken after obtaining consent from the relevant parties.

¹ Report of the Group of Experts on Privacy, available at http://thewire.in/wp-content/uploads/2015/06/rep_privacy.pdf.

Moreover, there should be adequate restrictions placed on the purpose for which the DNA profiling is undertaken. For instance, if the DNA sample has been collected for the purpose of identification, the profiling should be limited to that purpose only. In addition, once the DNA profiling has been completed, the results should not be used for any other purpose than for which the individual consented to.

The Bill should provide a retention period based on the National Privacy Guidelines for which the data would be stored. The procedure for the destruction of such data should also be provided in the Bill.

Individuals should have the right to access their personal information stored in the DNA Data Banks and to update or rectify any inconsistencies regarding the same. There should also be provision to verify the correctness of the DNA analysis and the information placed in the DNA databank.

The Bill does have a redressal mechanism, in case of unlawful use and tampering of DNA profiling data and analysis. Individuals should have recourse to a system of redressal, including provision for appeals, where such private cause of action can be pursued.

In addition to these concerns, the provision for the creation and maintenance of a population Data Bank is also problematic due to the possibility of misuse for the purposes of caste or religious profiling. The Bill does not provide specific instances where such profiling may be carried out and procedural safeguards to prevent misuse.

Conclusion

Human DNA Profiling is an important technique used for identification for individuals. As such, it has multiple uses and can be potentially used for many important functions. The sensitive nature of the DNA Profiling Data necessitates the creation of a mechanism to regulate such processes. The Human DNA Profiling Bill sets out with the same objective. Some of the features of the Bill such as the creation of DNA Profiling Board, and the regulation of DNA laboratories is laudable. However, its provisions on maintaining confidentiality and privacy of the individuals whose data has been collected seems to be inadequate. The Bill needs to lay emphasis on obtaining the consent of individuals as well as informing them through notices whenever such profiling is conducted. The Bill also needs to strengthen the provisions for accountability of the DNA profiling Board, and provide a grievance redressal mechanism for addressing the concerns of individuals. It also needs to come up with stricter regulations regarding the use of the collected DNA samples and results and ensure that it is not misused for creating a demographic profile of the population. Hopefully, legislative discussions will bring out these issues further and the final version of the Bill will incorporate the necessary changes.