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Evidentiary Value of DNA & Critical Analysis of DNA Technology (Use & Application) Regulation Bill, 2018

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ABSTRACT

Any living organism's DNA, also known as Deoxyribonucleic Acid, is one of the most fundamental building components of the body. Molecular blueprints called DNA can be found in many kinds of organisms that we come into contact with on a daily basis. Genes are encoded in DNA, which is found in all cells regardless of type, species, or genus. To put it another way, it serves as a blueprint for the organism's growth and development. All individuals save identical twins can be uniquely recognised by the analysis of their DNA. As one illustration of how far technology has transformed the scenario of delivering justice in today's criminal justice landscape, we can look to the usage of DNA evidence. As a result, recent years have seen a lot of attention paid to DNA because of its ability to distinguish between individuals and give justice so that the innocent are not convicted but is exonerated. There isn't any specific legislation governing the use of DNA technology in criminal investigations. Thus, different legislative provisions examine and enact diverse perspectives and methods on the use of DNA technology in criminal investigations and its evidentiary value in a court of law during a free and fair trial. Because of the DNA's outstanding effectiveness as a kind of evidence, which has been recognised by a myriad of Indian judicial decisions, in 2018, the DNA Regulation Bill, 2018 was presented to the Lok Sabha. It governed the use of DNA for identification and other purposes in civil and criminal cases. However, the Bill has not yet been enacted by the legislature. Through this research paper, the Author's objective is to demonstrate the importance of DNA evidence in the Indian legal system. In addition, the author shall evaluate the DNA Regulation Bill 2018's drawbacks and advantages.

Keywords – DNA, Evidence, DNA Regulation Bill, Criminal Justice System, Judicial Decisions.

I. INTRODUCTION

DNA, also termed Deoxyribonucleic Acid, is one of the most basic building blocks of life of

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any organism. Every living thing we see around us, like bacteria, fungi, humans, plants and animals, is composed of DNA. DNA is the genetic material that is present in all cells irrespective of the type, species or genus. It carries or stores the information vital for the structure and function of all biotic components of the environment. DNA makes every organism possess different structures and functional manner, not necessarily different from the genus or the species but distinct from its counterparts. It acts as a blueprint for the organism's biological development and functioning. However, the variation isn't completely different. The difference between the DNA of two individual humans can be up to 1/10th of the DNA between them. The property of the DNA to have multiple variants in aforesaid genes is called polymorphism. However, it can be said that there might be a single strand of the nucleotides that makes us all different from one another. Hence, there can be no other way that the DNA of a particular individual may be replicated unless the technology so progresses otherwise. Therefore, every individual can be distinctly identified with the help of DNA, except in the case of identical twins.

The use of DNA as evidence is one of the examples of how far technology has changed the scenario of delivering justice in this criminal justice landscape. The extensive focus that has been put on the DNA in the ongoing years is due to the power of DNA to make the distinction between various individuals and effectively deliver justice so that the innocent aren't convicted but is exonerated.

Colin Pitchfork is the well-known name among some crowds for a reason being the first-ever criminal to be convicted of murder in which DNA as evidence played a vital role in the investigation.

The development of DNA profiling can be attributed to Sir Alec Jeffreys, a British Scientist who developed this technique in the decade of 1980s. The technology that was put to use to convict Pitchfork went obsolete years ago. The technology used now is highly advanced and simplified. The technology makes it possible for the investigators to get hold of the accused and put them to trial as early as possible so as to render justice and exonerate.

DNA fingerprinting or profiling is an applied forensic science technique developed over the years that infers results after comparing various profiles of the suspects with the DNA evidence extracted from the spot regarding their involvement in the crime.

DNA has various applications in the investigation of crime. To name a few: -

1. Identifying convicts in sexual offences
2. Murder cases

3. Determining Maternity & Paternity of a child
4. Mutilated Remains
5. Identification of criminals

DNA evidence plays a vital role in the investigation. It has come to a stage where most crimes can be solved within a few days with the help of DNA fingerprinting and profiling. It comes down to comparing the different sets of DNA samples and confining them with a given set of DNA samples. The samples would then be narrowed down with the help of technology and matched with that of the victim in cases of murder and sexual offences and parties in cases of determination of maternity and paternity of a child.

The evidentiary value of DNA has been a topic of various different stances though most of the stances argue the extensive application of DNA evidence in cases of crime investigations facilitates the smoothness and procedural steps needed in order to achieve justice to be delivered – conviction and exoneration.

II. EVIDENTIARY VALUE OF DNA – INDIAN CONTEXT

The use of DNA as evidence is one of the examples of how far technology has changed the scenario of delivering justice in this criminal justice landscape. The extensive focus that has been put on the DNA in the ongoing years is due to the power of DNA to make the distinction between various individuals and effectively deliver justice so that the innocent aren't convicted but is exonerated.

DNA makes every organism possess different structures and functional manner, not necessarily different from the genus or the species but distinct from its counterparts. It acts as a blueprint for the organism's biological development and functioning. However, the variation isn't completely distinct. The difference between the DNA of two individual humans can be up to 1/10th of the DNA between them. The property of the DNA to have multiple variants in aforesaid genes is called polymorphism. However, it can be said that there might be a single strand of the nucleotides that makes us all different from one another. Hence, there can be no other way that the DNA of a particular individual may be replicated unless the technology so progresses otherwise. Therefore, every individual can be distinctly identified with the help of DNA, except in the case of identical twins.

The properties of DNA as a potential means in the process of the criminal justice system can be summarised below: -

1. It remains the same throughout the lifetime of a person².
2. DNA isolated from all tissues, irrespective of the type of tissue, remains the same throughout.
3. It is highly stable³.
4. It can withstand degradation through time.
5. It is scientific evidence
6. It has no room for bias.
7. A sample quantity of DNA is very small.

(A) Sources of DNA Technology

DNA can be found in every living organism. It can be extracted from any cell of the body.

They are listed below: -

1. Blood and bloodstains
2. Semen and semen stains
3. Hair and hair roots
4. Fingernail pairings
5. Tooth canal root pulp
6. Body tissues and organs
7. Bone marrow and bone ash
8. Saliva
9. Urine
10. Foetal material
11. Post-mortem samples
12. Faecal Matter
13. Blood samples in blood relationship tests
14. Other body fluids.⁴

The evolution of DNA technology as the latest method of forensic science is the outcome of the tremendous development of genetic science⁵. The extensive use and power of DNA technology as a means to identify brought a huge change in the criminal justice system. It has enabled us to identify the sources, as well as the biological samples, be it viscera or anything else at the scene of the crime. It helps in the resolution of disputes of various cases and types

² VR Dinkar, Justice in Genes, 1st Asia Law House 22-23 (2008).

³ *Id.*

⁴ Dr.BR Sharma, Forensic in the Criminal Investigation & Trials, Universal Publishing Company 1127 (2003).

⁵ Jothirmoy Adikari, DNA Technology in administration of Justice 24 (2007).

like – Maternity and Paternity; Mutilated Remains Identification, Missing child, Exchange of Babies, Identifying convicts in Rape/Murder, and Forensic wildlife.

The remarkable characteristic of the technology of DNA fingerprinting is accuracy and precision. It provides positive as well as negative identification with almost no room for error. Sir Alec Jeffreys coined the term “DNA Fingerprinting”, which is often referred to as DNA Profiling.⁶ The technique, which is synonymous with DNA testing, DNA Typing, as well as Genetic Fingerprinting, has been employed by various organisations and scientists to help facilitate the identification as well as the determination of individuals, convicts, and innocent through the means of their respective unique DNA profiles.

(B) Statutory Provisions

Since there is no special legislation regarding the DNA Technology used in criminal investigations, various statutory provisions discuss and enact different outlooks as well as enacting procedures on the use of DNA in criminal investigations and its evidentiary value when it comes down to its worth in the court of law in a free and fair trial.

However, since various other enactments discuss the validity as well as the application of DNA profiling or fingerprinting in criminal investigations, the lack of specific legislation that has subject matter specifically as the validation as well as the enactment of DNA Fingerprinting or Profiling has been felt.

Various relevant statutes deal with DNA Profiling or fingerprinting under criminal investigations under the criminal justice system in India, which can be summarised below: -

1. Criminal Procedure Code, 1973
 - a. Section 53
 - b. Section 54
 - c. Section 53A
 - d. Section 164A
 - e. Section 173(8)
 - f. Section 293(2)
 - g. Section 293(4)
2. Indian Evidence Act, 1872
 - a. Section 45
 - b. Section 112

⁶ *Id.*

Code of Criminal Procedure, 1973 provides various implied provisions for the application of DNA-related medical procedures into criminal investigations. Section 53⁷ of the Criminal Procedure Code, 1973 deals with the examination of the accused by a registered medical practitioner at the request of the police officer or the person with whom such power vests.

Section 54⁸ of the Code of Criminal Procedure, 1973 lays down the provision for the examination of the arrested person by a registered medical practitioner at the request of the person who is arrested.

However, in the year 2005, The Code of Criminal Procedure Act, 2005 Amendment act was passed, which added two new provisions regarding the application of DNA fingerprinting or profiling in the enactment giving it statutory backing, namely- Section 53A & Section 164A, which enable the IO or the investigating officer to collect the DNA sample for the application of DNA technology for the purposes of criminal investigation from the body of a person who is accused of rape and the victim of the offence with the help of a registered medical practitioner.

Section 53A⁹ of the Code of Criminal Procedure, 1973, which was added to the Code Of Criminal Procedure 1973 after the 2005 Amendment Act of Code of Criminal Procedure, 1973, added a specific provision which lays down the procedure for the mandatory examination of a person accused of rape by a registered medical practitioner employed in a hospital which is run by the government or by a local authority and if in the absence of such a practitioner then within the radius of 16 kilometres from the place of the commission of the offence or any other medical practitioner acting at the request of a police officer, not below the rank of sub-inspector or any other person acting in good faith as well in the act and under his direction.

Section 164A¹⁰ of the Code of Criminal Procedure, 1973 lays down the effective as well as the mandatory provision of the medical examination of the victim of the offence of rape. The provision was inserted into the Code of Criminal Procedure Code, 1973 after the 2005 Amendment Act of Code of Criminal Procedure, 1973. It also lays down the effective time frame as well as the legal concept of concept in the procedure. It also lays down the requisites of the report that needed to be formed after the examination of the victim of the offence of rape.

Section 173(8)¹¹ discusses the sending of the report of such further development, if any,

⁷ Section 53, The Code of Criminal Procedure, 1973

⁸ Section 54, The Code of Criminal Procedure, 1973

⁹ Section 53A, The Code of Criminal Procedure, 1973

¹⁰ Section 164A, The Code of Criminal Procedure, 1973

¹¹ Section 173(8), The Code of Criminal Procedure, 1973

in the case that the police officer is investigating the above-said subject matter. It mandates that the procedure of forwarding any such report with development in the investigation that leads to obtaining any new evidence shall be sent to the Magistrate as soon as possible.

Section 293(4)¹² of the Code of Criminal Procedure lays down the application of the section and states what are government scientific experts. It also states that this section shall only apply to the mentioned scientific experts.

Section 293(2)¹³ of the Code of Criminal Procedure, 1973 lays down the power of the court to summon such experts if necessary or if it seems fit. It also exemplifies the power of the court to examine the expert and any such report as per the subject matter of his report.

Although the Code of Criminal Procedure, 1973 discusses the provisions related to the procedure of the sample collection and the application of the DNA Technology so used in criminal investigations, it is way more important if such evidence so collected is admissible in the court of law or not. Indian Evidence Act, 1872 discusses the admissibility of the DNA evidence so concerned.

Indian Evidence Act, 1872 discusses the admissibility of the DNA evidence under two sections, namely: -

1. Section 45
2. Section 112

Section 45¹⁴ of the Indian Evidence Act, 1872 deals with the provision about the admissibility of such evidence in the court of law, wherein it discusses the opinion of the court so formed on the admissions of such especially skilled persons in such field, for example, forensic evidence. Such persons are called experts in such fields.

Section 112¹⁵ of The Indian Evidence Act, 1872 deals with the conclusive proof of legitimacy. However, the section raises a presumption of conclusive proof on the conditions stated above, yet the same presumption is rebuttable through DNA evidence which is proved to be scientifically accurate.¹⁶ Hence the sole exception to the provision is through the DNA evidence. The Apex court held this in the case of *Nandlal Wasudeo Badwaik v. Lata Nandlal*

¹² Section 293(4), The Code of Criminal Procedure, 1973

¹³ Section 293(2), The Code of Criminal Procedure, 1973

¹⁴ Section 45, The Indian Evidence Act, 1872

¹⁵ Section 112, The Indian Evidence Act, 1872

¹⁶ Id, (Para 17), P.586

Wasudeo Badwaik & Anr¹⁷.

III. JUDICIAL ATTITUDE TOWARDS DNA TECHNOLOGY

Judiciary in India has always been the one that interprets and looks beyond the scope of the law and its future endeavours. Judiciary has been quite stringent in its attitude towards the admission and the evidentiary value of DNA technology in criminal investigations and has shown its attitude in various landmark cases. However, the same can be discussed under the heads of these categories-

1. Maintenance
2. Rape/Murder
3. Murder
4. Unnatural Offences
5. Assassinations

(A) Maintenance Cases

DNA Technology helps in determining the paternity of a child, which has been in recent times raised quite frequently. However, the law fails when there is no marriage as laid down under section 112 of the Indian Evidence Act, 1872. As such, in those cases where the requirements of the section aren't satisfied, it is required that DNA Technology must be put to use in order to determine the relationship of the child with the parents or one of the parents.

In the case of *Kunhiraman v Manoj*¹⁸, On the false promise of marriage, the respondent had sexual intercourse with the mother of the petitioner and denied all the facts and the contention after coming to the knowledge of the pregnancy. Since there is an absence of marriage between the parties, section 112 of the Indian Evidence Act, 1872 can be applied. Therefore, to determine the paternity of the child, DNA Technology was put to use. The amicus curiae to the case stated in his examination that-

“DNA profile study is considered as a conclusive method for determining the paternity and maternity of an individual. Except in the case of identical twins, the possibility of the persons having the same DNA pattern is impossible. Dr Lalji Singh is a competent molecular biologist. He has conducted a lot of scientific studies and research in the field of DNA profile tests, and he is an authority on the subject. I have with me photocopies of some articles reported in various scientific journals.

¹⁷ (2014) 2 SCC 576

¹⁸ (1991) 2 KLT 190

So, in my opinion, the test result is conclusive. A standard procedure is seemed adopted in this case."¹⁹

The Chief Judicial Magistrate (CJM), after examining, concluded that the admissibility of the DNA in the abovesaid case could be admissible and stated-

*"The evidence of Expert is admissible under Section 45 of the Indian Evidence Act. So also, the grounds on which the opinion is arrived at are also relevant under section 51 of the Indian Evidence Act. Dr Lalji Singh (PW4) is an expert in the matter of Molecular Biology, and the evidence tendered by him is quite convincing; and I have no reason why it should not be accepted. Just like the opinion of a Chemical Analyst or the opinion of Finger Print Expert, the opinion of Dr. Lalji Singh (PW4), who is also an expert in the matter of Cellular and Molecular Biology, is also acceptable. For the reasons stated above, I accept the expert report (Exp. P5) and come to the indubitable conclusion that the respondent is the biological father of the petitioner."*²⁰

Kerala High Court, on hearing the revision petition filed by the respondent, ruled that-

"I am of the view that the result of the DNA test by itself could be taken as conclusive in deciding paternity."²¹

(B) Rape & Murder Cases

The court has, in various instances, discussed the important role that DNA evidence plays in the conviction of the accused in rape and murder cases.

In a case where the accused had raped a minor girl and strangled her to death and denied allegations so put on him by the prosecution, DNA evidence played a vital role in delivering justice to the victim. The Apex Court, in the case of *Rajkumar v State of Madhya Pradesh*²², stated the following-

"We have been taken through the impugned judgments rendered by the High Court as well as the trial court and the evidence on record. In view of the concurrent findings of fact recorded by the courts below, particularly in respect of the DNA report to the extent that the semen of the appellant was found in the vagina swab of the prosecutrix and that she died of asphyxia caused by strangulation, we affirm

¹⁹ VR Dinkar, Justice in Genes (Evidential Facts of Forensic DNA Fingerprinting, 1 Asia Law House, Hyderabad 166-167 (2008).

²⁰ *Id*

²¹ *Id*

²² (2014) 5 SCC 353

the findings of fact recorded by the courts below."²³

The DNA report played a vital role in the investigation and led to the completion of the case in Supreme Court within 8 months after the filing.

(C) Assassinations Cases

The infamous Rajiv Gandhi Assassination case²⁴ is one of the few remarkable cases wherein DNA Technology played an important role in the criminal investigation. The DNA evidence, in this case, helped to establish a link between the victims and the accused. DNA tests helped in identifying as well as determining the identity of the dismembered body parts spread over the area of the victim as well as the assassin.

IV. DNA TECHNOLOGY (USE AND APPLICATION) REGULATION BILL, 2018

The lack of special legislation is always felt when a specific aspect of the law is concerned. Since the special legislation always takes a step above the general legislation, the need for special legislation is always felt.

The case is the same for the DNA Technology application in criminal investigations. Since there is no special enactment regarding the role and applicability of DNA evidence in the court of law as well as its use of it in criminal investigations through its applicability in the area of criminal investigations as well as the court of law is due to various judicial precedents and amendment acts which pave the way only for the specific instances. However, the applicability and use at the same time are unregulated.

(A) The benefits of a specific DNA legislation

The certainty of Identification- As stated earlier, no two persons in the world have two same DNA except in the cases of identical twins. Therefore, the certainty of the identification of the person also his DNA is highly accurate in certain. Hence, there is no other way of identification that has a certainty ratio as high as DNA Fingerprinting or Profiling.

Indefinite period of storage- A DNA profile is distinct as it can be. A DNA profile can be stored in a storage device or database for an unlimited period of time. It can be sent through various forms of communication instantly.

No Specific Sample Size- There is no specific sample size for the collection of DNA evidence. A small specimen shall provide the same result as a large specimen would. Therefore, the size of the sample doesn't alter the resulting potential of a specimen. Hence, data can be collected

²³ *Id*, Para 16, 359

²⁴ (1991) 3 SCC 87

and stored indefinitely, making the data readily available.

The sample Collection Process is easy- Small swabs are needed for the collection of DNA Samples. The swab can be made with the help of brushing the surface of the skins as such. Therefore, it is not a difficult or obtrusive process for a person.

(B) Highlights of the Bill

1. The bill will help in regulating the use of DNA technology to help establish the identity or determine the same of the person in the matters as listed in a Schedule.
2. The schedule shall include criminal matters concerning the Indian Penal Code, 1860, as well as civil matters such as paternity, transplantation as well as immigration issues.
3. The Bill will also establish a National DNA Data Bank & Regional DNA Data bank, which will also maintain some of the indexes such as crime scene index, trials index, missing person index etc.
4. It will also establish a DNA Regulatory board. The board shall accredit the DNA sample so analysed by each and every DNA Laboratory needed to determine and establish the identity of a person.
5. The consent shall be taken from the individuals to get their DNA samples. However, the same is not required in the serious offences as laid down under the Indian Penal Code, 1860.
6. The profiles can be removed on a written request or court order or filing a police report or end of trials.

(C) Issues

1. It is unclear if the bill will regulate DNA laboratories as established by the government or not.
2. The consent requirements haven't been specified.
3. Right to Privacy violations.
4. No procedure to remove DNA profiles from the Data Banks.

(D) DNA Regulatory Board

1. A Regulatory Board shall be made which shall supervise DNA Data Banks & Laboratories.
2. The ex officio Chairperson of the Board shall be the Secretary of the Department of Biotechnology.
3. The board shall comprise of 12 members, which shall include-
 - a. Experts in the field of biological science

- b. Director-General of NIA (National Investigation Agency)
 - c. Director of CBI (Central Bureau of Investigation)
 - d. NHRC member (National Human Rights Commission)
4. The functions of the board shall be-
- a. To supervise Data Banks.
 - b. Accredite DNA Laboratories
 - c. Recommendations to the Central Government on the aspect of privacy protection regarding the use of DNA samples.
 - d. Confidentiality of DNA profiles so collected.
 - e. Manpower to deal with DNA matters.

(E) Offences & Penalties

The bill also discusses offences and penalties for the same. It states that unauthorised disclosure of information or obtaining information or using the DNA sample without ample authorisation shall lead to imprisonment of up to 3 years and a fine of up to 1 Lakh INR.

The penalty for tampering with the biological evidence so stored in the DNA banks has imprisonment of up to 5 years and a fine of up to 2 Lakh INR.

V. DNA REGULATION BILL, 2018: CONCERNS

The bill is criticised with various concerns that revolve around various aspects of the rights of the citizens. The bill, although it tries to get a revolutionary intrusive law into force but fails to address the redressal as well as remedial issues of the same. The bill highlights the instances as well as the new entities that it shall establish through the statutory enactment but fails in the meantime to address the regulatory loopholes that those entities shall entertain.

The bill is heavily criticised for its Right to Privacy violations.

(A) AP Shah Committee Report

The committee headed by Ajit Prakash Shah had presented its report in October 2012. It outlines the aspect of safeguards that are needed to prevent misuse of DNA Data. It also outlined that there are no safeguards against the proposed body that if misuses the data. It also targeted the redressal issues citing there is no remedial mechanism for the citizens who get wronged by the misuse of data. It also highlighted the fact that there is no proper procedure laid down for the collection of consent from the individual who volunteers for the DNA sampling as well as the sampling shall be collected freely at the crime scene. There is no procedure to withdraw their data. There is no mechanism for the destruction of data after the

purpose of its requirement has been fulfilled. Also, the bill doesn't disclose the sharing of data with 3rd parties as well as the consent requisites for the same. The bill is silent on the purpose of sharing the data. It stressed the annual report issuance that remarked the practices as well as the organisational structures of the entities so made under this act.

(B) Right to Privacy Concerns

India had signed the International Covenant on Civil & Political Rights 1966 in 1966 and enshrined the Right to Privacy as derived under Article 21 of the Constitution of India as well as in Part IV of the Constitution of India that deals with the Directive Principles of State Policy.

Article 17 of the International Covenant on Civil & Political Rights, 1966 defines what interference with privacy as well as unlawful interference and the right to protection against such interference is needed.²⁵

Article 21²⁶ of the Constitution of India defines the Right to life and personal liberty as well as the ambit of such rights.

However, this right isn't completely unrestricted as held in *Menaka Gandhi v Union of India*²⁷. It was held that a person might be deprived of his life and personal liberty if the two conditions were compiled-

1. Valid law
2. Procedure established by law which is just, fair and reasonable.²⁸

In the landmark judgement of *Justice KS Puttaswamy (Retd.) v Union of India*,²⁹ wherein the right to privacy was held to be under the ambit of Article 21 of the Constitution of India stated a threefold test-

1. Must be a law
2. Law must have a valid purpose
3. The purpose should be proportional to the infringement of an individual's privacy.³⁰

The aspect of "informed consent" is also a debatable aspect of the Bill. Justice DY Chandrachud has talked about the aspect of Informed consent on various occasions. However,

²⁵ No one shall be subject to arbitrary or unlawful interference with his privacy, family and home, or correspondence, nor to unlawful attacks on his honour and reputation; does everyone have the right to the protection of the law against such interference or attacks.

²⁶ No person shall be deprived of his right to life and personal liberty except according to the procedure established by law.

²⁷ AIR 1978 SC 597

²⁸ Dr. JN Pandey, *The Constitutional Law of India* 239 (49 ed. 2012)

²⁹ (2017) 10 SCC 1

³⁰ Vivian Eyben, *DNA Bill Unclear on Consent and Privacy* | NewsClick NewsClick (2019), <https://www.newsclick.in/DNA-bill-unclear-consent-privacy> (last visited Oct 11, 2019).

the case mentioned above took over the aspect of consent to another dimension, i.e. consent shall be tainted if all the facts were not known to the person.

Moreover, the bill fails in the matters of civil wherein the collection of DNA Samples of the parties concerned does not at all serve a public purpose.

The bill also fails to prove its purpose to retain the data so collected after the convict has completed his sentence. It also fails to lay down the procedure required for the withdrawal of the information so collected or the DNA profile stored in the bank if the person is acquitted or has served whatever was sought.

The redressal issues regarding the privacy concerns are also alarming for the fact that there have been no redressal safeguards regarding the misuse of data or sharing of it with the 3rd parties, which ultimately infringes the privacy of the individual. In 2012, Lokniti Foundation,³¹ a non-governmental organisation, filed public interest litigation against the Government in the Apex Court, i.e. Supreme Court of India, regarding the alarming privacy concerns that the bill has proposed for the purpose of its creating of a nationalised data Bank. Thus, the Supreme Court asked the government to put forward a detailed roadmap wherein the mandatory procedure to make DNA profiles was to be done.

(C) Right Against Self Incrimination

Part III of the Constitution of India provides for various fundamental rights that have been safeguarded by it.

Article 20(3)³² of the Constitution of India stated that no person should be a witness against himself.

However, the provision has some components –

1. Right available only to the accused
2. Protection against compelled to be a witness
3. Such compulsion might result in giving evidence against himself.³³

These components are jointly required for the application of Article 20 (3), and if one of the components isn't satisfied, the article cannot be invoked³⁴.

This raises the question if the collection of a DNA sample from the accused is a part of the

³¹ Writ Petition 607 of 2016

³² No person accused of any offense shall be compelled to be a witness against himself.

³³ *Id.* 1244-45

³⁴ *Id.* 1245

violation of the right against self-incrimination.

The Supreme Court of India had discussed the same nature of the collection in respect of fingerprint collection in *State of Bombay v Kathi Kalu Oghad*³⁵ wherein the Supreme Court held that fingerprinting doesn't offend Article 20 (3) of the Constitution of India.

Bombay High Court has also held the same; however, in the case of blood sample collection in the point of *Anil Ananthorav Lokhande v State of Maharashtra* held that the taking of the blood sample of the accused doesn't amount to testimonial compulsion.³⁶

The Supreme Court has discussed the constitutionality of the DNA Test conjointly with Narco Analysis, Polygraph examination and Brain Electrical Activation Profile (BEAP) test in the case of *Smt. Selvi & Ors. V State of Karnataka*³⁷ held that the majority decision in the case of *Kathi Kalu Oghad* stands true, and the above tests don't amount to a violation of Article 20(3).

DNA profiling technique has been expressly included among the various forms of medical examination in the amended explanation to Sections 53, 53-A and 54 of the Criminal Procedure Code. It must also be clarified that a DNA profile 'is different from a DNA sample which can be obtained from bodily substances. A DNA profile is a record created on the basis of DNA samples made available to forensic experts. Creating and maintaining DNA profiles of offenders and suspects are useful practises since newly obtained DNA samples can be readily matched with existing profiles that are already in the possession of law enforcement agencies. The matching of DNA samples is emerging as a vital tool for linking suspects to specific criminal acts. It may also be recalled that as per the majority decision in *Kathi Kalu Oghad*, the use of material samples such as fingerprints for the purpose of comparison and identification does not amount to a testimonial act for the purpose of Article 20(3). Hence, the taking and retention of DNA samples which are in the nature of physical evidence, do not face constitutional hurdles in the Indian context. However, if the DNA profiling technique is further developed and used for testimonial purposes, then such uses in the future could face challenges in the judicial domain.

VI. CONCLUSIONS & RECOMMENDATIONS

DNA, also termed Deoxyribonucleic Acid, is one of the most basic building blocks of life of any organism. Every living thing we see around us, like bacteria, fungi, humans, plants and animals, is composed of DNA. DNA is the genetic material that is present in all cells

³⁵ AIR 1961 SC 1808

³⁶ *Id*

³⁷ (2010) 7 SCC 263

irrespective of the type, species or genus. It carries or stores the information vital for the structure and function of all biotic components of the environment. DNA makes every organism possess different structures and functional manner, not necessarily different from the genus or the species but distinct from its counterparts. It acts as a blueprint for the organism's biological development and functioning.

The use of DNA as evidence is one of the examples of how far technology has changed the scenario of delivering justice in this criminal justice landscape. The extensive focus that has been put on the DNA in the ongoing years is due to the power of DNA to make the distinction between various individuals and effectively deliver justice so that the innocent aren't convicted but are exonerated.

DNA Profiling and Fingerprinting is one of the most remarkable scientific development that has been achieved and applied in the field of the Criminal Justice System. It speeds up the procedure as well as provides admissible evidence that is highly accurate and precise.

However, the need for special legislation regarding the regulation of the DNA technology as well as its application in the areas of civil and criminal aspects of the law in force is needed since, largely, the general laws have no particular enactment purpose that fulfils the purpose of application of DNA Technology to be used in the Criminal Justice System.

DNA Technology (Use and Application) Regulation Bill, 2018 is a bill that aims to fulfil that purpose as well as satisfy the current need for DNA Profiling application in India that would resolve various issues such as identification of unidentified bodies, mutilated remains, as well as large, facilitate the speedy trial of various cases of the matters of criminal as well as civil nature such as offences under Indian Penal Code, 1860 and the issues mentioned under various civil Acts.

However, concerning the various drawbacks that the bill has regarding privacy, self-incrimination as well as lack of safeguards for the data so collected and stored in the DNA Data banks, it is alarming that these issues should be fixed before the bill has to be passed or enacted.

Informed consent, as discussed in the *Puttaswamy Judgement* by the Supreme Court of India, has also been an issue in the Bill so discussed above. The safeguards, as well as the procedures to get the consent of the parties concerned in the case as per requirement and the lack of it, gives rise to various issues as well as various data privacy and Right to Privacy violations. It also violates various International Conventions such as the International Covenant on Civil and Political Rights, 1966.

Therefore, as per the need of the hour and in this era where Information Technology has

become a part of our very lives, it is a prerequisite that these issues shall be fixed before the Bill is enacted and should come into force so that the information doesn't go into the wrong hands and be misused.
