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1. Legal Regime Governing Cyber Warfare: Comparative Analysis of Indian and International Legislations

By: K.S. Aravind

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i. Abstract

The world today is going through its second revolution, one involving information technology. All aspects of a person's day to day life involves the use of technology and it is an indisputable fact that information technology has made human life easier. Computers are replacing humans; they have taken over the mundane tasks. Computers are not only common today to assist in the execution of economic and industrial tasks in society, but also to carry out certain roles that rely on human life. This is used not only by people but also by governments to store sensitive information.

Cyberwarfare is a potential weapon waiting to strike at the right opportunity if cyber architecture is not well defended. It is the fifth and latest area of warfare after ground, water, air, and space. Any states have shown these aspects of cybercrime, along with militant groups, and have shown their technological capabilities. The usage of computer technology by terrorist organizations and individuals may be described as cyberterrorism to achieve their objectives. This involves usage of IT for the coordination and execution of attacks on networks, operating systems and telecommunications infrastructure, and the sharing of intelligence and cyber threats. The laws governing cyberspace as of now is in the developing stage if we look at international laws. The major issue we face when looking at laws relating to cyber warfare in international law is that most of the law has not been revised to accommodate cyber warfare. It does not conform to the usual norms of war and hence we can only make connections by pondering on the same. This research paper will be analyzing current laws that deal with cyber warfare in Internationally as well as in India.

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ii. Introduction

The world today is going through its second revolution, one involving information technology. All aspects of a person's day to day life involves the use of technology and it is an indisputable fact that information technology has made human life easier. Computers are replacing humans; they have taken over the mundane tasks. Computers are used not only extensively to assist in the execution of industrial and economic functions in society, but also to perform other functions that rely on human life itself. It is used to store confidential material by not just individuals but also governments.

Cyberwarfare is a potential weapon waiting to strike at the right opportunity if the cyber architecture is not well defended. It is the fifth and new domain of warfare after land, sea, air, and space. Some countries, along with terrorist outfits, have already demonstrated these facets of cybercrimes, displaying their cyber prowess. *“The cyber terrorism can be defined as the use of information technology by terrorist groups or individuals to achieve their goals. This may include the use of information technology to organize and execute attacks against networks, computer systems, and telecommunications infrastructure, and to exchange information and perform electronic threat”*.¹ The laws governing cyberspace as of now are also in the developing stage, if we look at international laws, it can be seen that it has not been revised to address this new form of terrorism. The only applicable laws are the respective national laws of each country. If we look to India, IT Act,2000, and the upcoming Data Privacy Bill though does not directly address cyber warfare is a potential counter against the same.

iii. Research Methodology

The methodology to be used to meet the objectives of this research would be preliminarily doctrinal and will be based on various research papers, articles, and books by the academicians. The research paper has been divided into chapters. Chapter I will be dealing with the Introduction of what cyber Warfare is. Chapter II will focus on different cyber warfare related

¹P. Madhava Soma Sundaram, K. Jaishankar, *Cyber Terrorism: Problems, Perspectives, and Prescription*, Manonmaniam Sundaranar University, India

International legal provisions and Chapter III will deal with Indian law concerning Cyber-attacks and suggestions.

iv. Research Object

To analyze whether there are sufficient legal provisions in International Law as well as Indian Law to counter or control the ever-increasing cyberattacks which are developing into cyber warfare and terrorism.

v. Research Hypothesis

Even though there has been an increase in cyberattacks between nations or by non-state actors against nation and the concept of cyber warfare and cyber terrorism has been recognized, there is no proper legislation to govern the same either in International Law or Indian Law.

Chapter I: Cyber Warfare

Cyberwarfare is the use of cyberspace to conduct or instigate a war. Internet development has demonstrated that the cyber-space platform is being exploited by people, countries, and organizations alike to attack governments across the world and terrorize civilians. Here the word 'war' cannot be construed in its common meaning of armed conflict but two or more groups using the cyberspace to "attack" each other. The major question that rises with term Cyber Warfare itself is that what laws will apply regarding the same as at a glance it has nothing to do with the traditional definition of "war" but still a link can be made with the use of 'force' under international law. Cyberwar has been given many definitions, one of the most used one

is by cybersecurity expert Richard A Clarke "*actions by a nation-state to penetrate another nation's computers or networks to cause damage or disruption.*"²

Cyberwarfare also includes Cyber Terrorism. Cyber-terrorism is the convergence of terrorism and cyber-space. "*The unlawful use of force or violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives through the exploitation of systems deployed by the target*"³

Around the world, different forms of cyber-attacks are taking place by one nation against another this can be seen in the attack of Iran in 2010 by a computer worm known as STUXNET which put the whole nuclear power plant to stop. The next example is of the massive distributive denial of service also known as DDOS in Burma which made the internet service standstill.⁴

Cyber Warfare always constitutes a cyber-attack and cybercrime while it is not vice versa.

This covers attacks in the sense of an ongoing armed conflict that compromise the operation of a computer network for the object of political or national security, infringe criminal law (e.g. war crimes), and have been committed through a computer system or network. Secondly, this covers attacks that generate results similar to traditional armed attacks, disrupt the operation of a computer network for political or national security purposes, and are infringements of criminal law conducted through a computer system or network.

I.I. Types of Cyber Attacks

The computer infrastructure attacks or techniques can be classified into three:

a. Physical Attack: Computer infrastructure with standard techniques is destroyed.

² As Cited in: Oona A. Hathaway, Rebecca Crootof, Philip Levitz, Haley Nix, Aileen Nowlan, William Perdue and Julia Spiegel, *The Law of Cyber-Attack*, California Law Review, Vol. 100, No. 4 (August 2012), pp. 817-885 <https://www.jstor.org/stable/23249823> Accessed: 04-10-2019 13:14 UTC

³ ICFAI Journal of Cyber Law (2002).

⁴ BBC NEWS (Nov 4, 2010), *Burma Hit by Massive Net Attack Ahead of Election*, <https://www.bbc.com/news/technology-11693214>

b. Syntactic Attack: Computer infrastructures are destroyed by changing the system's logic to delay or render the system unpredictable computer viruses and trojans are used in this type of attacks.

c. Semantic Attack: This is more damaging where the user 's confidence in the system is taken advantage of. During this assault, the information keyed in the program is changed without the awareness of a user when accessing and exiting the network.

I.II. Some common attacks used in cyber warfare:

1. Distributive denial of service attack: This type of attack has been the most common kind of cyber-attack in recent years. These attacks involve a computer network being hijacked by worms or viruses and shutting down the whole network. In many a case this will be just an inconvenience but in the DDOS attack on the republic of Estonia in 2007 saw the emergency line for ambulance and fire force rendered useless for an hour, this may have life-threatening consequences.
2. Misinformation: This is a form of semantic attack where inaccurate information is planted by another party in the victim computer network. This makes the computer appear normal even though it has been compromised making the whole situation more dangerous. These attacks are especially dangerous in the current era where heavy reliance is given to information received in computer networks for military purposes. One such example can be how in Syria, the radars were fed with wrong information of clear skies which allowed Israeli planes to land.⁵

Both of these are done through infiltrating a secured computer network.

⁵ As Cited in: Oona A. Hathaway, Rebecca Crotoof, Philip Levitz, Haley Nix, Aileen Nowlan, William Perdue and Julia Spiegel, *The Law of Cyber-Attack*, California Law Review, Vol. 100, No. 4 (August 2012), pp. 817-885 <https://www.jstor.org/stable/23249823> Accessed: 04-10-2019 13:14 UTC

Chapter II: International Laws and Cyber Warfare

The major issue we face when looking at laws relating to cyber warfare in international law is that most of the law has not been revised to accommodate cyber warfare. It does not conform to the usual norms of war and hence we can only make connections by pondering on the same. *“We conclude that while the law of war provides useful guidelines for addressing some of the most dangerous forms of cyber-attack, the law of war framework ultimately addresses only a small slice of the full range of cyber-attack.”*⁶ The Geneva Convention has been last revised during World War II and it doesn’t deal with attacks that don’t cause direct physical damage. It is still deliberated upon by scholars whether cyber warfare falls under the ambit of “armed conflict” or not.

II.I. Jus ad Bellum and Jus in Bellum

UN Charter Article 2 states all members of the UN should refrain from the threat or use of force against the territorial or political integrity of a state or any other manner that does not conform to UN’s purposes.⁷

The exact nature of the global risk or use of force prohibition has been the subject of intense international and academic discussion scholars have argued that Article 2(4) specifically forbids the use of armed force as well as political and economic exploitation or coercion but it is widely accepted that it only covers armed conflict.⁸ This raises the question of whether cyber-attack can be considered as “force” or “armed attack” and the means for the same can be considered as a “weapon”. A weapon may be construed to include anything used to gain a tactical, strategic, material, or mental advantage over an adversary or enemy target. If we go by this definition usage of worm, viruses or any other means can be considered as a weapon as it gives an advantage over another nation, hence can be considered as an armed attack.

⁶ Ibid

⁷ U.N. Charter art. 2, *“All Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the Purposes of the United Nations.”*

⁸ Daniel B. Silver, *Computer Network Attack as a Use of Force Under Article 2(4) of the United Nations Charter*, Computer Network Attack, and International law 73, 80-82

“Most cyber-attacks, such as halting automated production systems or "blinding" the radar and air defense of another country, do not include direct damage, harm, or death. On the other hand, they can be considered highly inflammatory and dangerous, and thus contrary to the aims of the UN Charter to preserve international peace and security. It is a separate matter whether they constitute an “armed attack” and whether a state can use force against the same.”⁹This attracts Article 51 of the UN charter which allows for the right to self-defense. These all come into picture only if any cyber-attack is taken as a “force”.

In the end, the researcher suggests taking an effect-based approach when it comes to Cyberattack. If the cyber-attack has caused such an effect that has result in civilian casualties or a serious compromising of the security of a nation. It should be considered as an act of war and the technical means used should be considered as a weapon. While minor incidents can be compared with the ICJ decision with respect to armed use of force where it can be considered as frontier incidents instead of an armed attack.¹⁰

In response to a cyber-attack, the use of armed force by a government must not only be compliant with U.N. The use of armed force is forbidden by the Charter and customary international law, but in compliance with customary international law, it must also comply with the standards of necessity and proportionality. The rule of necessity demands that violence should only be used as a last resort.

Proportionality expands this principle, banning violence if the total extent and strength of the force in relation to the real or imminent danger of the state is unreasonable. The United States has acknowledged that these principles apply to cyber-attack military responses.”¹¹

If a war breakout, the attacking nations should follow the rules of war of distinction between military and civilians. The attack must not affect civilian life by the law of war but when it comes to cyber-warfare no precise targeting can be ensured. Moreover, the nation should be sure the state they are attacking is the one that made the cyber-attack as in many a case it may just appear it originated from the state while it did not.

⁹ Ziyad Hayatli, *Cyber Warfare in International Law*, <http://newjurist.com/cyber-warfare-in-international-law.html>.

¹⁰“It indicated that cross-border incursions that are minor in their "scale and effects" may be classified as mere "frontier incident[s]" rather than "armed attacks." Charles J. Dunlap Jr, *Military and Paramilitary Activities in and Against Nicaragua, Perspectives for Cyber Strategists on Law for Cyberwar*.

¹¹ Ibid.

II.II. Others

These laws are the general concept of governing war other than that when it comes to the law that directly regulates cybercrimes and attacks there are only the laws drafted by the council of Europe. The 2001 Council of Europe Convention on Cybercrime ("Cybercrime Convention") promoted "General criminal policy with a view to protecting society from cybercrime," mainly through legislation and international cooperation which was ratified by the US . The laws are mainly against illegal access, data, and system interference but the same is not made applicable to the government, this shows that the law has been made keeping in mind the necessity of cyber-attacks. For these reasons, only a portion of the overall threat is addressed by the Convention the most established international legal structure specifically governing cyber-attacks. In general, it is limited both by its inability to control the majority of state parties ' attacks and by its predominantly regional membership. Nevertheless, it offers a starting point for the creation of a robust global regulatory framework.

Chapter III: Cyber Warfare and India

III.I. India's Position

For the past several years, India has been pushing over digitalization. In many public sectors such as Income Tax, Passport Service, Bank, Visa, etc., India began using information technology in terms of e-governance. It should be practiced by industries such as police and judiciary. The travel industry also relies heavily on this. Total computerization has also been introduced to the concept of e-commerce in this field.

India has both strengths in cyberspace, a specific online identity, and a relatively high Internet user base (estimated at over 400 million), but also peer-to-peer drawbacks, lack of infrastructure, and weak Internet speeds. L As other developing countries, India's cyberspace issues represent both the 'pull' of economic growth (the advantage of free data flow) and the 'pressure' of national security (the problem of ever-increasing cyber-attacks). This makes India

a legitimate representative to shape the new cyber norms and their global governance. According to the United Nations survey, India ranks 23rd among 165 nations in the Cyber Security Index and is placed in the class of 'maturing'.

In the year 2018 India had nearly 6.9 lakh cyber-attacks from US, Russia, China, and the Netherlands, According to a lawyer at the Supreme Court and leading cyber law expert Pavan Duggal, while the risk of cyber-attacks remains "imminent," the country lacks the cyber army's institutional framework to counter the threat. He also said cyber warfare is not protected by Indian cyber laws as a phenomenon. India has seen a growing number of cyber assaults over the past few years.

III.II. Challenges to India's National Security

Most discourses about cyber terrorism in India are inspired by the US-launched 'Global War Against Terrorism' campaigns. The Critical Information Infrastructure is very vulnerable in India.

China can be considered as the greatest threat to India's National Security due to its proximity and its sweeping technology in Cyber Warfare. China has an openly declared Cyber Warfare Strategy and Hacker army for the same following military code. These also have a task-oriented structure, which means that in particular, multiple groups and professional individuals work against different goals." The opponents associated with this problem are successful because for extended periods they can preserve a presence on a targeted network. The Chinese have an advanced ability to attack the network of the opponent that could seriously threaten the national and another network-dependent civil operation of that country, and India is not an exception to this.

III.III. Case Studies

1. In 1998, the Bhabha Atomic Research Center (BARC) website at Trombay was hacked. The attacker obtained access to the computer network of the BARC and

collected digital information

2. Numerous prominent Indian websites were defaced in 2002, particularly that of Mumbai's Cyber Crime Investigation Cell.
3. The new computer hacking incident is "Ghostnet." This was a massive digital surveillance campaign from China that breached computers and stole information from hundreds of government and private offices throughout the globe, including those from the U.S. Indian embassy, Dalai Lama offices, and Tibetan refugee centers.

III.IV. Legal Provisions

In India, the Indian Parliament has passed its Information Technology Act, 2000 followed by Amendments in 2006 and 2008 and Information Technology (Intermediaries guidelines) Rules, 2011 to rectify the loopholes in the previous law. The IT Act covers punishment and fine in the areas of e-commerce, e-governance, e-banking, and cybercrime enforcement.

The provisions provided are in Section 66F which lists out Cyber Warfare as well as distributed among different crimes in the Information Technology Act, 2000. Cyber Warfare in the end falls under the umbrella of cybercrime. From the instances earlier it can be seen that most cyber terrorism attack involves Denial of service, Data stealing, or alteration. This falls under the sections of Cyber Crime against property. The sections governing under the same are:

Section 66F,¹² deals with punishment for Cyber terrorism and it has listed out three major actions as cyber terrorism:

- i. Denial of Service Attack
- ii. Accessing or attempting to enter computer resource without authentication
- iii. Introducing Contaminant.

According to the section, these acts have to be done with a motive to threaten the sovereignty, security, integrity, and unity or to cause fear in people. This section according to the researcher's opinion has covered the main possible action that can result from a cyber-terrorist attack, the problem with section though is that it is vague and can be used arbitrarily. This vagueness is beneficial also if we look it from a national security perspective as a wide range

¹² 66F. Punishment for cyber terrorism, Information Technology Act, 2000.

of attacks can be put under the term of Cyber Warfare as it one way or another falls under the three categories given. The concept of “intention” should be present can be a buffer to the potential arbitrariness of the section. If the acts were done without intention to affect the mass, then it may not attract this section and will fall under the different crimes given under IPC and IT Act 2000.

Cyberwarfare can also be caused by implanting misinformation which can result in certain acts that may cause death, affecting life or affecting the relationship of one country with another. Even though data stealing is covered under this section, Data alteration is not expressly covered by the same. This may be connected to Section 66C which covers punishment for identity theft. Where a password, electronic signature, or any other unique identification of another person is used dishonestly or fraudulently, Misinformation can be sent by stealing the identity of a person in power and then using the identity to misuse the power to give wrong information. Hence a provision should be put for greater punishment is identity theft is used for cyber terrorism activities.

In *R.K. Dalmia v Delhi Administration*,¹³ "The Supreme Court holds that, in the I.P.C, the word ' property' is used in a much broader sense than the expression ' movable property.' There is no valid reason to limit the meaning of the word "property" strictly to mobile property when used without qualification. Whether the offense given in a specific section of the IPC can be applied with reference to any specific type of property, by this case IPC also will be attracted to the stealing of Data, as Data may also be considered as a property.

Chapter IV: Conclusion

Cyber Warfare even though the term has become common, it can be seen that there is no common international law to govern the same. The laws that present especially with regard to the law of war have not been revised to accommodate this new emerging type of war. As cyber-attacks don't have any direct effect it becomes difficult to accommodate them in “armed attack” or “force” under international law. But it can be seen that if an effect-based approach is used

¹³ AIR 1962 SC 1821.

to determine a cyberattack, it is easier to accommodate them in the ambit of international law. Depending on the graveness of the effect it may be viewed as unauthorized use of force. Cyberwarfare is also governed by the principles of war Jus ad Bellum and Jus in Bellum. The only international law that directly deals with the cyberattacks is the council of Europe. The others are either in discussion or no treaty has been formed for the same. Hence when it comes to international law, it can be concluded that there is still a vacancy for proper cyber-attack legal framework, and this can be established only through revising the UN charter and Geneva Convention to accommodate Cyber Warfare.

For the past few years, India has been developing as an IT frontier and with more than millions of network users, India is especially susceptible to Cyber Attack. IT Act 2000 governs all the cyber-related crimes in India and by amendment the act has included 66F which gives punishment for Cyber Terrorism. Though Cyber Warfare has not been expressly mentioned, this section can be used to cover Cyber warfare also as the three components that are punishable under the section are what happens during cyber-attack by another nation also. These are Denial of Service Attack, Accessing, or attempting to enter computer resources without authentication, Introducing Contaminant. Still much stronger laws are required which directly addresses the issue of Cyber-attack by another nation.

It is concluded that it is imperative not just for India but for the whole world to make a proper legislation to govern the various cyberattacks of large scale like Cyber Terrorism and Cyber Warfare to understand when to retaliate and when not to as well as to develop an effective mechanism or treaty to prevent the same as in the end the civilians are the ones who suffer.

2. Liability of A.I and Future Perception in Law of Torts

By: Ashwin Singh

Pg. No: 15-29

i. Abstract

Liability in torts is an essential element. Real damage may be done; the plaintiff may be present found but without finding the liability of the accused, that this particular person is the one who in all bounds is responsible for the damage done to the plaintiff, proper justice cannot be awarded. A driverless vehicle runs over a passer-by, who might be at risk in every one of these conditions? The client of the vehicle? The developer of the clinical programming program? The maker or pilot of the automaton? The engineer of the AI framework? The AI framework itself? an automaton in part worked by a pilot crashes and causes harm; an AI programming program analyses an inappropriate clinical treatment. However, as humanity begins to take its first step into a whole new era of technology, the finding of this essential becomes harder, the courts in the past decades have applied the concept of foreseeability of damage. With new and automated machines runs on their own the liability is more blurred. This paper takes a look at the liability of A.I or automated machine when damage by the same is done towards a Third-party. The question of “Who will be liable?” will be looked upon. This paper will focus on this same question in respect of torts and how compensation in such cases should be given. This paper will give a potential answer to the liability question and solution to compensation and who should be made liable to give it. This Paper tends to the vital inquiry: who is obligated when AI comes up short?

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1. Introduction

The improvement of driving help and voyage help frameworks in the car business has been astounding, quickening drastically over the most recent ten years. Since the main DARPA Urban Challenge¹⁴ field tests have increased in the US. In California alone, there are as of now thirty-nine organizations testing self-driving cars,¹⁵ the once-remote possibility of "driverless" vehicles turning out to be economically accessible probably won't be so distant from reality.¹⁶ An expansive scope of logical investigations recommends the usage of completely robotized driving frameworks might be imminent.⁵ Highly Automated Vehicles (HAVs) are probably going to significantly change our social propensities and to upset our method for associating with the general condition. What's more, lawful researchers have just sketched out how computerized vehicles make a staggering challenge as far as controlling an item fit for affecting such a significant number of various territories of the law.⁶ One of the zones where research is genuinely necessary is tort obligation: intending to the guideline of mishaps brought about via robotized autos, law specialists must evaluate whether tort risk rules—as they are at present molded — are fit to administer the "vehicle short driver" multifaceted nature, while at the same time clutching their hypothetical premise. If the present structure demonstrates itself to be lacking and unsalvageable "off-key" with the new course elements, the main elective will be to correct or re-establish it.

The law has upgraded itself with upgrading times since time immemorial, when the modern rifle was discovered new laws were made when modern nations established they made new international laws, when steam engines and trains were made, new special laws were made for them. Likewise, in this new era where an A.I or Artificial Intelligence is in the process of being invented, we must make new laws dealing with the same. The major question which this new

¹⁴ The first Urban Challenge for automated vehicles was held in November 2007 in Victorville, California, and it was organized by the Defense Advanced Research Project Agency (DARPA). Participants were asked to develop and build vehicles “capable of driving in traffic, performing complex maneuvers such as merging, passing, parking and negotiating intersections.” Urban Challenge, DARPA, <http://archive.darpa.mil/grandchallenge/> (last visited June 21, 2018).

¹⁵ Sam Shead, There Are Now 39 Companies Testing Self-Driving Cars on Californian Roads, BUS. INSIDER (Sept. 1, 2017), <http://www.businessinsider.com/dozens-of-companies-testing-self-driving-cars-on-californian-roads-2017-9?r=UK&IR=T>; David Silver, California DMV Autonomous Vehicle List, MEDIUM (Sept. 5, 2017), <https://medium.com/self-driving-cars/california-dmv-autonomous-vehicle-list-1e38be0fcd0b>.

¹⁶ See AM. ASS'N FOR JUSTICE, DRIVEN TO SAFETY: ROBOT CARS AND THE FUTURE OF LIABILITY 34–35 (2017), <https://www.justice.org/sites/default/files/Driven%20to%20Safety%202017%20Online.pdf>.

type of technology puts in front of us is of liability, as to who will be truly liable for a wrong done by an independent A.I. When trains were invented the same liability problem arose however since they were non-living things the liability generally fell to the owner of the same. One different factor between trains and A.I is that A.I when it functions or will function, it will be an independent function without a person (generally) guiding it in performance of the particular act, which can be seen in the case of trains as they are controlled by a person namely driver who guides the train throughout the journey. Now the main question that arises with an A.I in case of liability will be that since the A.I was performing its actions independently without any supervision, now in this situation if the A.I hits or damages a third party who will be liable. The three contenders to this question are: The owner, the manufacturer of the A.I or the A.I itself. To answer this question, we will understand each of these entities separately in respect of their liability along with the current situation prevailing around the world in case of liability of A.I.

The primary component we consider intending to the obligation ramifications of robotized vehicle advancements is the way that, in light of the degree of detail that driving supporting frameworks have just come to (also the noteworthy measure of capital as of now put resources into Research and Development on the field), the vulnerability encompassing the dissemination of self-driving cars in the public eye isn't identified with "if", however to "when" such innovation will be presented. The way towards a universe of self-ruling autos may be far away, yet we will eventually arrive at a level of innovation that can do supplanting the human driver on the road.¹⁷Our society is most likely still a long way from those idealistic dreams conceived in sci-fi, writing, and mainstream society, which were more the result of the authors 'imagination than concrete logical studies,¹⁸ proposing the ideal concurrence of natural and counterfeit creatures. In any case, these advances are progressively being incorporated into our day by day lives. This marvel previously drove officials (for example in the European Union)¹⁹ to address whether current legitimate principles are reasonable to control the utilization of robots and computerized reasoning for the most part. Additionally, an upright look at the

¹⁷ See AM. ASS'N FOR JUSTICE, DRIVEN TO SAFETY: ROBOT CARS AND THE FUTURE OF LIABILITY 34–35 (2017),

<https://www.justice.org/sites/default/files/Driven%20to%20Safety%202017%20Online.pdf>.

¹⁸ See JAMES PATTERSON & EMILY RAYMOND, HUMANS, BOW DOWN (2016); PHILIP K. DICK, DO ANDROIDS DREAM OF ELECTRIC SHEEP? (1968); ISAAC ASIMOV, I, ROBOT (1950).

¹⁹ See E. Palmerini et al., Robolaw: Towards a European Framework for Robotics Regulation, 86 ROBOTICS & AUTONOMOUS SYS. 78, 83 (2016).

blossoming of calculations in private and business exercises (just as a glance at the discussions over cutting edge items in the data society)²⁰ bolsters that innovations will involve a significant test for administrative structures around the world. This high level of development in the field of robotics in a way forces us to make laws that could potentially give people ‘justice’ at a time when the idea of justice is itself blurring.

2. Current Scenarios

Autos, rambles, careful gear, family unit apparatuses, and different items are progressively utilizing man-made consciousness ("AI") and, specifically, AI to decide. The guarantee and desire is that AI will improve item security. Be that as it may, regularly software engineers don't know precisely how their AI will learn, change as a matter of fact, and show up at choices. At the point when wounds happen, it might be hard to figure out what turned out badly and who should bear obligation.

Conventional tort law will probably apply to AI, with humble adjustment, similarly as tort law adjusted to the crashworthiness of autos. Some vehicle producers purportedly will acknowledge obligation if their AI doesn't forestall a mishap. Missing such an understanding, courts should decide issues among item producers/vendors, AI fashioners/providers, and AI buyers/clients. A focal issue will be whether the client controls an item helped by AI, or AI controls the item's activity.

Another edge question is whether an AI framework is an item or assistance. Exacting obligation applies to imperfections in item configuration, assembling, or admonitions that cause individual injury or property harm to other people; carelessness applies to administrations, for example, information investigation to decide upkeep. Under the Uniform Commercial Code, mass-delivered, off-the-rack programming is a "decent," however programming explicitly intended for a client is an assistance. A few courts recognize the thing containing the product (an item) and data delivered by programming (not an item).

²⁰ See COMPUTERS, CHESS, AND COGNITION (T. Anthony Marsland & Jonathan Schaeffer eds., 1990).

A few researchers advocate applying a carelessness standard to AI since AI is "venturing into the shoes" of people. In any case, courts may think that it's hard to apply a "sensible individual" or "sensible PC" standard. Should AI have figured out how to perceive a youngster dashing out between left vehicles? Should AI have chosen to abstain from hitting that kid or an approaching school van?

Offended parties ordinarily favor severe risk for cases of imperfect items. Offended parties will contend that, excepting item abuse, inability to refresh, or physical harm, an item with AI causing injury or property harm may do the trick to demonstrate a deformity guarantee.

Arranging can decrease vulnerability. Authoritative guarantees, repayments, and impediments on each may distribute risk. Organizations likewise ought to consider how to show their AI's dynamic procedure by and large and on explicit occasions. Since AI, utilizing advancements, for example, neural systems, can figure out how to perform works and show up at choices past its unique programming, organizations additionally should think about how to report and demonstrate that a capacity was performed or a choice was made because of sensible programming that satisfied then-current industry guidelines or best practices. Or on the other hand, an organization may need to depend on the best in class resistance: that the item chance was not sensibly predictable at the hour of programming. To muddle matters, contingent upon guidelines, occasion recorder information might be accessible however not permissible to decide shortcoming.

A hazard examination ought to consider buyer desires for the execution and wellbeing of items with AI. It will be significant for organizations to teach purchasers about the abilities, dangers, and confinements of AI, especially constraints on the working area. The hazard utility test may turn on confirmation that items consolidating AI proceeded as least as securely as their human-subordinate partners. Testing, reproductions, and field execution information across horde predictable uses and abuses, just as archived configuration changes to relieve predictable dangers, would assist with exhibiting sensible wellbeing.

Organizations ought not ignore chances to take an interest in the making of moral, legitimate, and industry norms for items consolidating AI. Different associations give those chances, including the American Law Institute, the Partnership on AI, SAE International, and the National Council of Information Sharing and Analysis Centers. The U.S. Division of

Transportation and National Highway Traffic Safety Administration has welcomed contributions from associations to encourage the improvement of guidelines.²¹

3. Liability

To fully understand the liability of the defendant and to find out who will be the defendant in this trivial case we first must look at the liability concept itself. The concept of liability in torts is not independent. In torts, certain rights and duties are given to every individual and the other persons are expected to respect the rights of others while simultaneously conducting their duties. If someone breaks the right of another person then liability arises, if someone does not follow their duty then liability arises. Liability, therefore, is not an independent concept that acts in its self but is dependent on someone else violating the rights of another person or not following their duties in respect of another person. Since the law of torts is not codified courts generally rely on precedence and jurisprudence to understand its principals along with all other essential elements.²²

Liability in simple terms could also mean legal injuries that are not limited to physical injuries and may join eager, fiscal, or reputational wounds, similarly as encroachment of security, property, or consecrated rights. Torts join such change focuses on vehicle crashes, false confinement, analysis, thing hazard, copyright infringement, and characteristic pollution (hurtful torts). While various torts are the delayed consequence of thoughtlessness, tort law also sees intentional torts, in which an individual has purposely acted with the end goal that harms another. Moreover, concerning thing hazards, the courts have developed a principle of "strict liability" for torts arising out of injury realized by the usage of an association's thing just as an organization. Under "strict liability," the hurt party doesn't have to exhibit that the association was indiscreet to win a case for hurts.

²¹ Notitle. (n.d.). Retrieved from <https://www.jonesday.com/en/insights/2018/03/mitigating-product-liability-for-artificial-intell>

²² Tort law liability. (2018, April 24). Retrieved from <https://www.legalmatch.com/law-library/article/tort-law-liability.html>.

4. Liability of Owner/Driver

An owner is generally defined as someone who owns something. An owner in tort law is defined as the legal person who is the owner of the particular land, property in dispute, or in question (generally). The concept of owner generally comes in torts in case of trespass, land, strict or absolute liability, in the case where goods have been stolen, in a case relating to the animal where a person's animals go to the other party's property and do some damage. Trespass permits owners to sue for tort an individual if he enters the owner's property, damages it, made some hanging structure, burglary, etc.²³

We see that the driver of the vehicle is customarily viewed as the prompt party in question for street accidents happening while he/she is directing the vehicle; such a standard is—with slight minor departure from the weight of confirmation officeholder on the driver to show the simultaneous obligation of outsiders/third parties, for example, a mechanical imperfection of the vehicle—a typical element of street guidelines both in common and in customary law systems.²⁴

The immateriality of the driver in the new elements of automated driving cars requires a re-meaning of the conventional standards to arrive at an answer ready to accomplish, on one side, consistency with the basic standards of each lawful framework and, on the other one, a productive assignment of the expense of mishaps.

5. Liability of Manufacturer

Manufacturer in the consumer protection act, 1986²⁵ is defined as:

“Manufacturer” means a person who—

- i. makes or manufactures any goods or parts thereof; or

²³ Tort. (2001, March 12). Retrieved from <https://en.wikipedia.org/wiki/Tort>.

²⁴ PROSSER AND KEETON ON TORTS (W. Page Keeton et al. eds., 5th ed. 1999). For a prominent example in Europe see, e.g., art. 2054 of the Italian Civil Code. Codice Civile [C.c.] art. 2054 (It.).

²⁵ The Consumer Protection (Amendment) Act, 1991 (34 of 1991) (w.r.e.f. 15-6-1991).

- ii. does not make or manufacture any goods but assembles parts thereof made or manufactured by others; or
- iii. puts or causes to be put his mark on any goods made or manufactured by any other manufacturer;

Product liability is a field of tort law that concerns the commitment of the maker, manufacturer, vendor, or trader of a product to ensure that product is secured and doesn't cause injury of the consumer (who in turn becomes the owner of the particular good). Product presented to commitment fuse all purchaser items, clinical contraptions, business/singular vehicles, plane and consumable product, for instance, sustenance and doctor embraced drugs. As it is the commitment of a Product manufacturer or maker to make/supply a thing that won't cause hurt during normal use, producer/vendors of unsafe things are needy upon recovery for hurts. A defective product is portrayed as a thing that is ludicrously risky to the customer when used for its arranged purpose with no impedance or abnormal usage.²⁶

The liability of a manufacturer however is limited to the extent of his own mistake in case the product defaults in functioning during the normal circumstances. In our case assuming that the A.I is not faulty the manufacture's liability seems to be non-existent. Because the A.I would function under normal circumstances. If otherwise however the liability exists of the manufacturer only as the A.I would have done activities for which it was not intended to perform.²⁷

6. Liability of A.I.

In computer science, artificial intelligence (AI), sometimes called machine intelligence, is intelligence demonstrated by machines, in contrast to the natural intelligence displayed by humans and animals.²⁸ Leading AI course books describe the field as the examination of "intelligence agents": any contraption that sees its condition and takes exercises that help its

²⁶ A full overview of products liability. (2019, December 22). Retrieved from <https://tort.laws.com/products-liability>.

²⁷ Legal Service India. (n.d.). Product liability: Who is liable? Retrieved from <https://www.legalservicesindia.com/article/954/Product-Liability:-Who-is-liable?.html>.

²⁸ Artificial intelligence. (2001, October 8). Retrieved from https://en.wikipedia.org/wiki/Artificial_intelligence.

danger of viably achieving its goals. Colloquially, the articulation "modernized thinking" is normally used to delineate machines (or PCs) that duplicate "abstract" limits that individuals join forces with the human mind, for instance, "learning" and "basic reasoning".²⁹

If the actions done by the A.I are done in a normal functioning of the work it was supposed to do and even after that in our hypothetical situation, an accident or mishap happens, the A.I should/can not be held liable. The argument for this is as follows-

1. A.I. is not a legal entity.
2. As of now A. I.'s work is the bare minimum to searching and doing an activity.
3. No independent decision-making system.

One other way of looking or potentially defining the liability of A.I could be done along the lines of Asimov's "Three Laws of Robotics". These laws state-

1. a[n] [autonomous vehicle] may not injure a human being, or, through inaction, allow a human being to come to harm.
2. a[n] [autonomous vehicle] must obey the orders given it by human beings except where such orders would conflict with the First Law.
3. a[n] [autonomous vehicle] must protect its existence as long as such protection does not conflict with the First or Second Laws.

If these laws are somehow inserted in the mindset/ hard drive of an automated driving vehicle, then the liability of automated vehicle which is even at fault would be minimized or ignored since we would assume full priority given to these rules by the A.I which would hypothetically make the A.I in this case not liable at any given situation.

Even if one might think that a review of fiction literature concerning artificial intelligence is not something a legal scholar should take into account when addressing the "real" implications of technology within modern society it is worth observing—maybe with some skepticism—that those same Three Laws (plus the subsequent Zero Law) have been quoted by the European Parliament as essential guidelines in assessing the impact of robotics on the future generations: "Whereas Asimov's Laws must be regarded as being directed at the designers, producers and

²⁹ Russell & Norvig 2009, p. 2.

operators of robots, including robots assigned with built-in autonomy and self-learning, since those laws cannot be converted into machine code.”³⁰

7. The Tesla Situation (Case Study)

Elon Musk’s TESLA company is rolling out automated futuristic-looking cars on the road which was controlled by independent A.I software who as the company states are safe and sound for usage by the general public and the CEO of the company himself have been spotted several times driving these cars.

However, in case an accident occurs, which has occurred, the liability part is still not confirmed as of now. Taking a hypothetical situation, where a TESLA automated car hits a third party, the liability will remain on the people who make use of the car, which is the owner himself. Though this might change in the coming future either as the result of a major lawsuit or as more automated cars becomes available and are being used by the public. “The rationale for the owner being responsible is that the laws have not caught up to autonomous vehicles,” New York insurance lawyer Keith McKenna told Reuters. He added that liability will shift to manufacturers and their insurance if fully autonomous vehicles become the norm on roads. Reuters also talked to Michigan lawyer Jennifer Dukarski, who said that insurance claims car crashes related to Smart Summon will go through the car owner’s auto coverage, “but as the number of incidents build, you’ll find someone who will entertain a class action [lawsuit] dealing with a product defect.”³¹

³⁰ Report with recommendations to the Commission on Civil Law Rules on Robotics (2015/2103(INL)), at 6 (Jan. 27, 2017), <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+REPORT+A8-2017-0005+0+DOC+PDF+V0//EN> [hereinafter Report with recommendations]. On the background of the ethics of artificial intelligence, furthermore, the traditional “trolley problem dilemma” (should a car choose to hit pedestrians in the road, or swerve into the path of an oncoming lorry, killing its occupants?) is always present. Cf. Simon Chesterman, *Do Driverless Cars Dream of Electric Sheep?* (Sept. 1, 2016).

³¹ Report: Lawyers say users will be responsible for crashes using Tesla's smart summon. (2019, October 7). Retrieved from <https://www.bizjournals.com/sanjose/news/2019/10/07/yourtesla-crashes-while-you-summon-it-it-ll-be.html>.

8. Solution

The liability problem is connected deeply with the compensation problem. If we can decide through a law as to who will give compensation to a potential victim, we can find out who will be liable for the damage done. In real-life situations as of now, liability is solely of the manufactures (as evident from the Tesla case study) which may change with upcoming cases and decisions. However, till then we must establish a benchmark to decide that liability and the compensator. Our solution to the problem of liability is thus embedded in the solution to potential compensator.

Three Key Takeaways:

1. Organizations should screen how governing bodies and courts shape tort law to apply to items, parts, and programming consolidating AI.
2. Organizations ought to think about utilizing authoritative guarantees, repayments, and confinements to control obligation hazard.
3. Organizations ought to consider taking an interest in industry gatherings and government offices to create moral rules and industry measures that mirror the advantages, dangers, and restrictions of items with AI.

Our Proposal: A FUND WITH REWARDING FUNCTION AND A TWO-STEP LIABILITY ASSESSMENT. What we propose is a two-step liability, in light of an assessment and on a fund financed, sponsored for half by makers/manufactures—based on the number of mishaps caused—and another half through a special fund (which should be created by the central government). The half paid by producers will be partitioned among them as indicated by their separate piece of the overall industry just in the primary time of authorization of the framework. The money in the fund should be collected by a type special of tax which should be levied upon the manufactures.

In the event of a mishap, the victim will document their case against the fund, and an individual supervisor or government officer (could be a judicial officer) will supervise assessing whether the accident was brought about by carelessness/negligence. On the off chance that the government officer finds the maker's carelessness, the maker will pay the entire payment to the

survivor of the mishap. On the other hand, if the mishap was not brought about by carelessness, the fund will repay the person in question. In the two cases—and uniquely in contrast to what A&R recommend—the remuneration system will repay damages to individuals and items associated with the setback, without recognizing among physical and material harms. The carelessness assessment will be performed by the ALJ through surveying the presence of (in any event one of) two conditions:

- a) the blunder in the product that made the vehicle carry on unusually is anything but difficult to recognize and fathom, based on the information that the data recorder in the
- b) the innovation utilized by the maker is viewed as insufficient concerning the current mechanical best in class in the self-governing vehicle industry. product gives;

On the off chance that one of these two conditions is fulfilled, the producer is viewed as careless and in this way held completely subject for the mishap. The main benefits from this system could be:

1. Overall lower pricing of the product.
2. Increase transparency in the development by the manufacturer.
3. Works as an incentive for the manufacturer to improve his R&D.
4. Establishment of a direct link between the level of negligence and the compensation, thus making the manufacturer more liable.
5. Increased focus of law in this sector at the expense of minimum resources.

Although this solution does not aim at giving the people their criminal (accused), yet it does all the necessary things which one can expect from a good judgment. Compensation is given to the victim and the accused (defendant) paid the compensation. Thus, we conclude by stating that this is the most probable solution one can expect in this early age of technical development.

9. Conclusion

Humanity has come a long way since caveman times. We have had much development before we came to the point where we are at now. Today we stand at a juncture where each step will define the future of the whole race. Just like we read laws from 1600 as ancient laws and somewhat the starting of modern law, tort law for example. We as of now are starting to write A.I laws which will be read 100s of years later as basics for A.I law and thus it is our duty to be extra diligent while defining these laws. Along with that we still have to make sure that these laws are good enough for the current situation.

We can also see the development of A.I in Indian perspective as the judicial brains already gave us a hint of involvement of A.I in judicial processes, for that we specifically need the laws to deal with them and also some changing phase in other laws like which is discussed by researcher here i.e. Law of Torts. Law cannot remain static it must need to be change with change in times. The CJI already provides us the way to think forward in the present subject as Speaking at an event held at the High Court Bar Association in Nagpur CJI Bobde said, “I wish to point out that it is not an attempt to introduce artificial intelligence in the decision-making process itself. The system we are looking at has a reading speed of about ten lakh words per second. Which means you can make it read anything and ask it any question, it will give you the answer,” he said.

A.I. and A.I. law as of now is mostly composed of uncharted waters which we are yet to explore. Therefore, it is our implied duty to tread carefully and develop laws that can also be used in the future. The solution provided in this research paper is one such solution.

3. The Need for Prison Reforms in India

By: Renuka Nevgi

Pg. No: 30-44

i. Abstract

This research project focuses on the need for legal reforms pertaining to the operation of the state machinery and various correctional homes like prisons existing in the country. It points out the various evident aberrations present in the system wherein the public servants who are supposed to protect the human rights from getting violated, themselves contribute to their deterioration. The legal provisions existing for the functioning of the prisons are stated. International standards set by various treaties and conventions are also asserted. The cause and effect relationship between different burning issues that the prisoners encounter in Indian jails are affirmed. The menace of overcrowding strikes most of the Indian prisons where the youth can be seen languishing for years awaiting trial. The number of undertrial prisoners is more than the convicts. In such circumstances, urgent reforms are required to liberalize the laws related to bail and make it accessible to all, rather than a matter of privilege for the rich. Other problems like a large number of vacancies, lack of training to the prison staff, custodial torture, custodial death, custodial rapes, lack of basic sanitation facilities, etc. are also addressed in the project. The researcher seeks to suggest viable reforms to improve the present conditions of Indian prisons by expediting the entire criminal justice system. Emphasis is laid on the reformatory approach that has to be adopted to secure the rights of prisoners and bring about a rudimentary change in their conscience.

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1. Introduction

Correctional homes like the prisons are important pillars of the criminal justice system of our nation. The primary aims of this entire system are retribution and rehabilitation. Whether the present structure and functioning of this system suffice in fulfilling these aims is the focal point of contention of this paper. The researcher attempts to determine if there has to be a change in the approach while dealing with problems like overcrowding, lack of basic sanitation facilities, custodial violence, and so on. While doing so, the pre-existing laws will be first touched upon. Their provisions for protection of rights of prisoners and detainees will be seen. The present situation in the Indian jails will be observed. The regular problems faced by prisoners in different sections of the country will be stated. The root causes of these problems will be examined and a solution to them will be suggested.

All kinds of problems that occur in prison are inter-related. Indian prisons are highly crammed with the prisoners, most of who are not even convicted of any offense. Most of the jails are burdened to accommodate many more prisoners than their capacity. This leads to the denial of many human rights to the prisoners. Proper sanitation facilities are difficult to maintain due to this condition. Sometimes, the number of personnel deployed in the prison is not adequate. Such personnel need to be specially trained and sensitized in a better manner regarding the management of the prisoners. Instances of custodial torture, violence, rape, and death are widespread due to the ineffective implementation of such policies.

The main objective of punishing criminals shall be more importantly rehabilitative, although retributive too. The behavioral engineering of prisoners is necessary to facilitate their reunion with the society on completion of punishment. They shall be enabled to develop their personality by learning new skills. There shall be a fundamental shift in their thoughts and perspectives. Their value system as well as conscience shall be redefined. If the criminal activity committed by the convict was circumstantial, counseling shall be offered to such prisoners. Training shall be given in various occupations like pottery, baking, etc. so that they have a means of livelihood when their sentence is completed. The prisoners shall be provided with a conducive environment to rehabilitate themselves and reunite with the society.

2. Existing Laws

2.1. The Prisoners Act, 1894

This century-old legislation dealing with the management of prisons continues to operate in our country despite its obsolescence. It hardly mentions anything about the rights of prisoners, for whose reformation this entire structure is built. There are no provisions establishing minimum standards of hygiene that is to be expected in prisons. A Medical Officer is appointed to examine a prisoner on admission and before discharge of a prisoner.³² The Act provides for segregation of male and female prisoners, convicted and undertrial persons, and a prisoner who is under death sentence.³³ The Act discriminates with the convicted criminals by providing that the supply of food, clothing, bedding and other necessities from private sources can only be allowed for civil and unconvicted prisoners.³⁴ Only the civil prisoners are allowed to carry on work/ profession of their choice and shall receive their earnings subject to deduction by the Superintendent.³⁵ The health of all prisoners is taken care of by the Medical Officer and Medical Subordinates³⁶. Prison offenses like assault, disorderly behavior, contumaciously refusing to work, insulting or threatening language, etc, and their punishments are enlisted in the Part XI of the Act.

2.2. The Transfer of Prisoners Act, 1950

According to this Act, any prisoner can be transferred from one state of India to another based on a writ, warrant or order can be issued by the Court. This legislation was mainly enacted to facilitate inter-state transfer of prisoners from overpopulated to less congested jails.

³² The Prisons Act, 1894 (Act IX of 1894), S. 24, S. 26.

³³ The Prisons Act, 1894 (Act IX of 1894), Chp V.

³⁴ The Prisons Act, 1894 (Act IX of 1894), S. 33.

³⁵ The Prisons Act, 1894 (Act IX of 1894), S. 34.

³⁶ The Prisons Act, 1894 (Act IX of 1894), Chp VIII.

2.3. The Prisoners (Attendance in Courts) Act, 1954

This Act provides for the procedure that is to be followed when a prisoner has to attend the Court proceedings to act as a witness/ give evidence in another case or answer a charge against oneself.

2.4. Indian Constitution

The Constitution of India entitles prisoners to certain fundamental rights enshrined in Part III. Art 20 protects the convicts from the application of ex-post facto laws, double jeopardy and self-incrimination. It was held by the Supreme Court in the case of *Sunil Batra v. Delhi Administration*³⁷ that prisoners are no less of human beings just because they are imprisoned. Thus, they are entitled to have the Right to Life and Personal Liberty under Art 21 limited by certain reasonable restrictions. Art 22 of the Constitution protects against arbitrary arrest and detention in certain cases. Art 22(1) states that a person shall be informed of the grounds of the arrest and shall be allowed to consult as well as be defended by a legal practitioner of his own choice. A person arrested shall be produced before the magistrate within 24 hours of such arrest, unless otherwise prescribed by the advisory board or parliament.³⁸ Art 39 A provides for free legal aid given to the prisoners. The President and Governors of states are empowered to grant mercy from judicial punishment to prisoners.

The Model Prison Manual acts as guidelines for the Prison Management Systems in India. Recommendations of the Mulla Committee and Krishna Iyer Committee are also considered to be guiding principles. However, Prison administration is a subject in the State List in the Seventh Schedule. Hence, each State government has different laws concerning this subject.

³⁷ *Sunil Batra v. Delhi Administration*, AIR 1980 SC 1579.

³⁸ The Constitution of India, 1950, Art 22.

3. Role Played by the Judiciary

The Hon'ble Supreme Court has reiterated in cases such as *D.B.M. Patnaik v. State of Andhra Pradesh*³⁹ and *State of Andhra Pradesh v. Challa Ramkrishna Reddy*⁴⁰, that the prisoners are entitled to the fundamental rights. They do not cease to be human beings only because they are in the prisons and hence they shall be treated with the basic standards required for human existence.

SC underscored the rehabilitation and reformation of prisoners in the case of *Hiralal Mallick v. State Of Bihar*⁴¹. The ultimate desideratum of most judicial sentences is to turn offenders into non-offender. Delinquency was perceived as indicative of the person's underlying difficulties, inner tensions, and explosive stresses. There is a need for informal treatment by a free mix of professionals, social workers, and experts operating within the legal framework.

In the case of *Sunil Batra v. Delhi Administration*⁴², a prisoner was subjected to inhuman torture by the jail warden that led to profusely bleeding injuries at the anal aperture. The SC held that Grievance Deposit Box is to be maintained in every prison under the orders of District Magistrate and Sessions judge. The writ of Habeas Corpus shall be used to guard other inherent rights of the prisoners. Solitary imprisonment, hard labor, dietary change as a painful additive or other punishment denying amenities shall not be imposed without the judicial appraisal of Sessions Judge. It was also held that in the eyes of law, the prisoners are persons and not animals. The deviant guardians of the prison system must be punished where they go berserk and defile the dignity of the human inmate. A Prisoner's Handbook shall be made freely available to the inmates in their regional language. The District Magistrates shall submit a report of their periodical visits to jail before respective High Courts.

The Supreme Court stressed on the Right against hand-cuffing in the case of *Prem Shankar Shukla v. Delhi Administration*.⁴³ It was held that the golden triangle of Art 14, Art 19, and Art 21 will spring into disshackle an individual from dehumanizing practices under the garb of 'security' or 'dangerousness'. While the parallel claims of protecting the prisoners from fleeing

³⁹ *D. Bhuvan Mohan Patnaik & Ors v. State Of Andhra Pradesh & Ors*, 1974 AIR 2092.

⁴⁰ *State of Andhra Pradesh v. Challa Ramkrishna Reddy*, AIR 2000 SC 2083.

⁴¹ *Hiralal Mallick v. State Of Bihar*, 1977 AIR 2236.

⁴² *Supra* Note 6.

⁴³ *Prem Shankar Shukla v. Delhi Administration*, 1980 AIR 1535.

and securing the personality from barbarity have to be harmonized, handcuffing is prima facie ‘inhuman’. The absence of fair procedure and objective monitoring to inflict ‘iron’ makes it unreasonable. Thus, binding a man’s (or woman’s) hand and foot, fettering his limbs with the hoops of steel, shuffling him along in the streets, and making him stand for hours in the Court leads to his torture and defiles his dignity. Such type of treatment is against our Constitutional culture. Hence, restrictions were imposed on the discretionary powers of police to handcuff the prisoners.

In the case of *Madhav Hayawadanrao Hoskot v. State Of Maharashtra*⁴⁴, the Supreme Court held that denial of free legal aid to the accused will be a violation of fair and reasonable procedure under Art 21. It will be against the principles of Natural Justice. Under CPC and CrPC, it is the duty of the State to provide free legal aid and shall not be construed as the government’s charity.

The Hon’ble Supreme Court held that the Right to Speedy trial is implicit in the spectrum of Art 21 of the Constitution in the case of *Raj Deo v. State of Bihar*.⁴⁵ An incarceration procedure that keeps a large number of people behind the bars without trial so long cannot be considered as reasonable, just, fair, or in conformity with Art 21.

The Right to Medical aid was highlighted by Court in the case of *Paschim Bengal Khet Mazdoor Samiti v. State of West Bengal*⁴⁶. It was held that the preservation of human life and health is of paramount importance. Hence, Art 21 imposes a liability upon the State to provide medical assistance to the aggrieved in the prison.

The Hon’ble Court held, in the case of *Selvi v. State of Karnataka*⁴⁷, that techniques like narcoanalysis, polygraph and brain mapping are violative of the Right against Self-incrimination granted to the accused under Art 20(3) of the Constitution. When such techniques are forcibly applied in cases, it affects the reliability of statements made by the accused and hence does not fulfill the substantive standards of due process. This makes the confessions obtained under the influence of such impugned techniques inadmissible.

⁴⁴ *Madhav Hayawadanrao Hoskot v. State Of Maharashtra*, 1978 AIR 1548.

⁴⁵ *Raj Deo v. State of Bihar*, AIR 1999 SC 3524.

⁴⁶ *Paschim Bengal Khet Mazdoor Samiti v. State of West Bengal*, AIR 1996 SC 2426.

⁴⁷ *Selvi v. State of Karnataka*, (2010) 7 SCC 263.

In the case of *Dharambir And Anr v. State Of U.P*⁴⁸, the SC held that long prison terms with inhuman conditions debase the prisoner and promote recidivism instead of humanizing and rehabilitating. Hence, the Court issued certain directions to ensure that the crippled psyche of the prisoner gets restored in this course. This included keeping in touch with the family and allowing the family members to visit them.

4. International Standards

The International Covenant on Civil and Political Rights is a pivotal international treaty for the protection of prisoners' rights. The Covenant came into force on 26th March 1976 and it was ratified by India in 1979. Hence, India is bound to incorporate the provisions laid down in this treaty into its domestic law. Art 7 implies that no one shall be subjected to torture or cruel, inhuman, or degrading treatment or punishment. Art 10(2) states that the accused persons shall be segregated from convicted persons and shall be subject to separate treatment appropriate to their status as unconvicted persons. Furthermore, a part of Art 10(3) reads as “*The penitentiary system shall comprise treatment of prisoners the essential aim of which shall be their reformation and social rehabilitation*”. It was specifically held by the Human Rights Committee of ICCPR that overcrowding, lack of medical attention, depriving prisoners of natural sunlight, etc amounts to torture and violates the abovementioned articles.⁴⁹

The International Covenant on Economic, Social, and Cultural Rights suggests that the prisoners are entitled to the highest attainable standard of physical and mental health. The human rights laid down in this convention also apply to the prisoners.⁵⁰

The Universal Declaration of Human Rights also protects prisoners from such cruel and inhuman treatment. Art 1 of UDHR reads as “*No one should be subjected to torture or cruel, inhuman or degrading treatment or punishment.*” Art 9 of the same reads as “*No one shall be*

⁴⁸ *Dharambir And Anr v. State Of U.P*, 1979 AIR 1595.

⁴⁹ U.N. General Assembly, *The International Covenant on Civil and Political Rights*, 1966, Res. 2200, Sess. 22, U.N. Document A/RES/2200XXI. Retrieved on 21st May 2020 from <https://treaties.un.org/doc/publication/unts/volume%20999/volume-999-i-14668-english.pdf>.

⁵⁰ U.N. General Assembly, *The International Covenant on Economic, Social and Cultural Rights*, 1966, Res. 2200, Sess. 23, U.N. Document A/RES/2200XXI. Retrieved on 21st May 2020 from <https://www.ohchr.org/Documents/ProfessionalInterest/cescr.pdf>.

subjected to arbitrary arrest, detention or exile.” Whereas Art 11 of the UDHR reads as *“Everyone charged with a penal offense has the right to be presumed innocent until proved guilty according to law in a public trial at which he has had all the guarantees necessary for his defense.”* Apart from this, the UN General Assembly also adopted the Declaration on Protection from Torture in the year 1975.

5. Burning Problems

5.1. Overcrowding

The Indian prisons continue to burst at seams due to the issue of over-crowding. This menace particularly strikes the most populated states of the country badly. The Indian Justice Report 2019, prepared by certain Indian non-profit institutions with the support of Tata Trusts released the first-ever state-wise ranking of the prisons, judiciary, police, and legal aid systems. According to this report, the overall nationwide occupancy rate at Indian jails was 114%. 12 States in India had an occupancy rate of over 100% including Chattisgarh (222.5%), Madhya Pradesh (208%) and Uttar Pradesh (168%).⁵¹

The prime cause of overcrowding is a large number of undertrial prisoners and delays in the justice system. The survey conducted by the National Crime Records Bureau shows that 68% of prisoners in India are undertrials and have not been convicted of any offense. Most of them have to wait for years for their trial to begin. The report also suggests that the jails are mostly flooded with illiterate or semi-illiterate people coming from socio-economically backward classes. Above 65% of prisoners belong to SC, ST and OBC categories who cannot even afford a bail fee. The 268th Law Commission Report of India had also stated the evident norm that powerful and rich obtain bail easily, whereas the poor keep languishing in the jails.⁵²

⁵¹ Bhattacharya A. (November 7, 2019). *Some Indian states have more than twice as many prisoners than they can house*. Quartz India. Retrieved on May 19, 2020 from <https://qz.com/india/1743852/overcrowded-indian-prisons-are-understaffed-underfunded/>.

⁵² Law Commission of India, Government of India. (2017). *Amendments to Criminal Procedure Code, 1973 – Provisions Relating to Bail* (268th Law Commission Report). Retrieved from <http://lawcommissionofindia.nic.in/reports/Report268.pdf>.

Sec 436A of CrPC states that a person shall be given bail on personal bond with or without sureties when s/he has undergone one-half of the maximum punishment for the particular offense. It was added by an amendment in the year 2005. The Home Ministry had also released certain guidelines for the States to ensure reckoning half-life of time spent in judicial custody of the undertrial prisoners in the year 2014.⁵³ The Supreme Court of India has also observed that overcrowding of prisons is a violation of human rights and also requested the Chief Justices of High Courts to take up this matter suo moto.⁵⁴

5.2. Shortage of Staff

The Indian Justice Report also suggests that Indian prisons are understaffed by at least 33 %. The highest number of vacancies are found at the officer and correctional staff level. However, this dearth was experienced at all levels such as officers, cadre staff, correctional staff, medical staff, and medical officers.⁵⁵ 6 Indian States have more than 50% posts vacant at the cadre level.⁵⁶ This tremendously increases the burden on the working staff. It also adversely impacts the ‘correctional’ aspect of imprisonment. Moreover, low salaries and poor training of staff worsen the situation further. This shortage also results in a lack of basic sanitation and medical facilities. The lack of free legal aid is one of the most important factors in this vicious cycle of torture. For instance, the number of legal aid lawyers in a large state like West Bengal with 13 prisons is just 27. Each of them makes up to 2 visits every month.⁵⁷ To maximize reformation, the services offered by psychologists, welfare officers, lawyers, counselors, etc are very important.

⁵³ Ministry of Home Affairs, Government of India. (2014). *Guidelines for reckoning half-life of time spent in judicial custody of the Under-trial prisoners under under Sec 436A of Cr.P.C.* (V-17013/24/2013-PR). Retrieved from https://www.mha.gov.in/MHA1/PrisonReforms/NewPDF/GuidelinesForRreckoningHalfLife_161014.pdf.

⁵⁴ Press Trust of India. (May 13, 2018 13:09 IST, UPDATED: MAY 13, 2018 13:45 IST) *Overcrowding prisons a violation of human rights, says Supreme Court*. The Hindu. Retrieved on 19th May 2020 from <https://www.thehindu.com/news/national/overcrowded-prison-involves-violation-of-human-rights-says-worried-supreme-court/article23871465.ece>.

⁵⁵ Khetarpal S. (November 8, 2019, 15:04 IST). *Prisons understaffed by 33% and overcrowded at 114% occupancy rate, says report*. Business Today. Retrieved on 19th May 2020 from <https://www.businesstoday.in/current/economy-politics/indian-prisons-understaffed-by-33-per-cent-overcrowded-at-114-per-cent-occupancy-rate-says-report/story/389250.html>.

⁵⁶ Supra Note 18.

⁵⁷ Amnesty International India. (2017). *Justice Under trial: A state of pre trial detention in India*. Pg No. 14. Retrieved on 19th May 2020 from <https://amnesty.org.in/justice-trial-study-pre-trial-detention-india>.

5.3. Custodial Crimes

As per data by NCRB, the custodial deaths increased by 9% from 92 deaths in 2016 to 100 deaths in 2017. 58 people out of these had not been produced before the Court yet. In 62 such cases relating to custodial deaths, 33 policemen were arrested, charge-sheet was filed against 27, four of them were acquitted or discharged. However, none of them were convicted. The most cited reason for such deaths is suicide.⁵⁸ The Statistics placed by the Home Ministry in the Upper House of parliament shows that there were 1764 custodial deaths in India between 1st April 2017 and 28th February 2018. Out of these, 1,530 were in judicial custody and 144 in police custody. It was observed in a Report⁵⁹ published on the National Training of Prisoners Rights that many a times, women are not given basic sanitation facilities like sanitary pads, soaps, etc due to which many of them easily contract infections. When a person is in the custody of the police, they exercise a greater degree of control over their mobility and liberty. But the police officers have to keep such custodians protected under supervision and conduct the investigation honestly. When rising instances of custodial rape into light in the late 19th century, more stringent punishment was prescribed for this crime as it is being committed by the protector himself. However, a greater challenge is experienced by the victim to file a complaint to start a trial against police officers.⁶⁰ All these statistics are adequate to paint a clear picture of the ongoing custodial torture in India. In the case of *Francis Coralie Mullin v. Administrator, Union Territory of Delhi & Ors.*⁶¹, the Supreme Court had held that such custodial torture, cruel and degrading treatment is severely violative of Right to Life and Liberty enshrined in Art 21 of our Constitution.

⁵⁸ Mallapur C. (November 2, 2019). *100 Custodial Deaths Recorded In 2017, But No Convictions*. India Spend. Retrieved on 19th May, 2020 from <https://www.indiaspend.com/100-custodial-deaths-recorded-in-2017-but-no-convictions>.

⁵⁹ Centre for Constitutional Rights, India (CCRI), Human Rights Law Network (HRLN). 2018. *REPORT OF THE NATIONAL TRAINING ON PRISONERS' RIGHTS*. Retrieved on 21st May, 2020 from <https://www.prisonersforum.in/files/Report%20of%20the%20National%20Traininig%20on%20Prisoners%20Rights.pdf>.

⁶⁰ Bhog, S. (2019, April 24). *What Is Custodial Rape And Why We Need To Be Discussing It*. Retrieved May 21, 2020, from <https://feminisminindia.com/2019/04/16/custodial-rape-india>.

⁶¹ *Francis Coralie Mullin v. Administrator, Union Territory of Delhi & Ors.*, AIR (1981) SCC 608.

6. Reforms Needed

India is a signatory of The Convention against Torture and Other Cruel, Inhuman, or Degrading Treatment or Punishment since October 1997. However, India is still yet to ratify it. The ratification would make it mandatory for India to maintain certain basic standards to prevent inhuman torture against prisoners.

Setting up of better oversight mechanisms for shall be prioritized. These functionaries shall be responsible for scrutiny of conditions in the prison at regular intervals. Inspection shall be carried out without the interference of Prison authorities. This would help to hold the Prison authorities accountable in a better manner.

The government should give some responsibility to Non-profit organizations and law schools to ensure that the prisoners are known their rights well and have access to adequate legal aid.

The capacity of criminal justice prison-related functionaries should be built. The large number of vacancies that are overburdening the working officials should be filled. Specialized training on how to deal with such prisoners should be given to all the staff working in jails. A certain amount of sensitization is also necessary to achieve the objective of reformation.

The Right to Legal Aid should be converted into a fundamental right from the Directive Principles of State Policy. This will ensure that the State is compelled to provide free legal aid to all the prisoners. The entire justice delivery system will be facilitated due to this.

The 154th Law Commission Report, 2017 suggests certain bail reforms to ensure that number of undertrials is decreased to a great extent. This will also save the lives of thousands of innocent youth languishing in jail due to the inability to get bail. The report recommends that the undertrial prisoners who have completed one-third of their maximum sentence for offenses up to seven years shall be released on bail. The Commission also stated that there is a need to include new provisions for remission of undertrials who have already completed the full length of the maximum sentence.

The project of the Unified Prison Management System that has been recommended by NALSA and successfully executed in the Tihar Jail shall be adopted by other prisons in the country as

well. This system has the record of all the prison inmates so that they do not encounter inconvenience while collecting the Court orders and the process is carried out smoothly.

Reasonable wages should be paid to the prisoners which would ensure that they have enough financial security when they come out of the prison. Various training programs like pottery, baking, carpentry, sewing, etc. should also be arranged for the prisoners that would enable them to take up an acceptable job blend with the society.

The presence of a psychologist should be made compulsory in all the prisoners. Such counselors are essential if we want to bring about a fundamental change in the psyche of the prisoners. They are constantly exposed to negative environments when they are residing with fellow-mates who may also adversely influence them in certain cases. Hence, the presence of a mental health professional is a must.

Unfortunately, a civilized democracy like India has not codified the Rights of Prisoners yet. Amendments should be made to the Prisons Act to include the Rights of Prisoners.

The scope of work of the National Human Rights Commission should be widened and greater compensation should be given to victims of custodial crimes.

7. Conclusion

Hon'ble Justice Krishna Iyer had asked, "*Is a prison term in Tihar Jail a post-graduate training in tough crime?*"⁶² This question has relevance even today. The conditions in which our prisoners are kept are such that they would rather be instigated to commit a crime against the society. Correctional orientation and cautious humanization have to be implemented in such circumstances. The criminal justice system must protect these caged human beings from torture.

The constitutional purpose of imprisonment should not be defeated. The justification for a sentence of imprisonment or similar depriving measures is to protect the society against crime. This end can only be met if the duration of imprisonment is used responsibly to ensure that

⁶² *Ramesh Kaushik v. B. L. Vig, Superintendent And Anr*, 1981 AIR 1767.

upon his/her return to the society, the offender is not only willing but also able to lead a law-abiding and self-supporting life. Gandhiji had suggested a hospital-setting approach for prisons. Prisoners should be treated as patients who have come for treatment. Therapeutic techniques should be used to raise the level of conscience of the individual. Higher awareness and feeling of socialization should be instilled. This method also revolves around meditation, self-expression through work, studies, and artistic development.

The prison reforms surely need to see light of the day. But, they also need to be accompanied by police reforms and the judicial system reforms as these form important pillars of our criminal justice system. Prison violence and criminality directly flow from anti-rehabilitative strategies. The Prison Administration has a conscientious responsibility to maintain dignity while discharging the correctional obligations. A greater emphasis should be laid on behavior modification, rehabilitation, treatment, and the psychological growth of inmates. Re-integration of the prisoner in the society can only be achieved if such measures are adopted.

“Every saint has a past and every sinner has a future”- Oscar Wilde

4. The Personal Data Protection Bill, 2019

By: Aishwarya Kumar

Pg. No: 45-58

i. Abstract

Recently in Houston, the Prime Minister of India quotes, ‘Data is the new oil, new gold’ which made it clear that India has entered the next level of dependency on the internet Industry 4.0 is completely based on data. For the cheap availability of data in India, it requires laws that make it not only cheap but also secure. As India looks forward to a free and fair digital economy, we must make sure it must be safe and secure. As the COVID-19 takes over the country the internet has become our solutions for everything. From businesses, government rules, educational institutes, and even concerts are online. This means the amount of data available is humongous and without proper regulation, the data is vulnerable to all sorts of abuse. Data fiduciaries and Data principals as discussed in the bill must be responsible and accountable to each other with regards to the storage and control over the data. India finds its way to the bill which is inspired by the existing laws in other common law countries. This paper deals with in-depth meaning, usage, and issues in the cyber world. It also explains the cyber laws in the world and why data protection is of prime concern. The Indian perspective is also discussed which pulls out a few flaws.

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1. Introduction

Data protection is to safeguard and protect data from being corrupted and misused. It is extremely important to protect this data as data is created every second and stored when it is shared in different cloud storage. Data protection also helps to quickly restore data after its corruption or loss. The right technique of data management is necessary to protect data. Data management is of two types: data life cycle management which deals with systematic and strategic movements of data from online to offline storage, information life cycle management which deals with the protection of data from applications, malware, viruses, and even user errors. Data availability is a different concept altogether which ensures that irrespective of malfunction of data in the system, it must be available so that there is business continuity. This happens by replication or duplication of data whereas data management archiving data in a way that the corruption does not take place of is minimalized. The only thing common is the option of backing up data that helps to do both management and availability of it. This concept is the ‘backup’ which means to replicate or mirror data files and store them separately so that if the original is affected in any way, they may be restored by the means of these replicas created and stored.

Data portability is a facility that provides for the movement of data from one application to another similar to cloud services. Cloud services are used by people and businesses to store data online on public or private clouds to back up their data. This proves as a solution to data management and data availability but poses a problem for data protection. Backups have been an effective solution for the problem of corruption or system failure. The mirroring of data is done and stored in clouds online and will stay there until the primary data storage is distorted and these duplicate files substitute them. The issue that comes up here is that if these cloud services fail or get hacked there is a huge chance of misuse of these files. There will occur breach of private data, business secrets, private strategies, or any other damage to the owner of these files. Hence, data protection is extremely essential, and legal aid for such disputes must also be available as internet breach of rights is similar to breach in person.

Continuous Data Protection (CDP) is a process of creating a single copy of the backup array instead of replicating multiple copies and saves any modification made to the original copy so

that when the need arises it serves the same purpose⁶³. This is revised and a better version of the backup system, as it serves as a backup with modification similar to the original but the chances of misuse remain. The technological aspect is taken care of by bringing in the revised version to reduce the risk factor but what also needs to consider that with an increase of internet usage and web dependence all our personal and business data is prone to being corrupt and laws and remedies against such breach of rights is extremely important.

2. Data Thefts and Cyber Crimes: The Dark Web

Data theft or Data breach is unauthorized access into data and personal files of the system which may be misused against the owner leading to damage of reputation and business which may take a lot of time to repair. As our dependence on the internet increases, cyber attackers also do an increase in a similar ratio. Corporate firms, business organizations, famous identities are attractive targets to these criminals. Data theft often leads to either any monetary damage or compromise on identities and selling this personal data on the dark web that is extremely dangerous. Few reasons that may increase the scope of data theft could be out-dated software, weak passwords, spamming and phishing attacks, downloads from unknown or non-verified sites which may lead to the download of the malware. In the year 2018, an organization called ‘Dubsmash’ was booked under breach of data and selling data identities of over 162 million user accounts. They sold it to companies such as MyFitnessPal and a dating site named CoffeemeetsBagel⁶⁴. The company had no explanation on how the database access was provided to these firms. The greatest data theft scandal reported was the ‘Facebook- Cambridge Analytica scandal’ which shook the entire reputation that Facebook had earned as it has more than a billion-user base spread across the world, and has managed its privacy so-called efficiently. The scandal brought-forth the importance of privacy of the individuals who are trusting the network with their data. Facebook sold a vast number of user data for political

⁶³ Rouse, M. (2019, August 21). What is Data Protection and Why is it Important? Definition from WhatIs.com. Retrieved July 11, 2020, from <https://searchdatabackup.techtarget.com/definition/data-protection>.

⁶⁴ Swinhoe, D. (2020, April 17). The 15 biggest data breaches of the 21st century. Retrieved July 11, 2020, from <https://www.csoonline.com/article/2130877>

needs⁶⁵. Another incident was by Yahoo who claimed that there occurred a data breach of almost 500 million accounts and also claimed it to be a state-sponsored one. These incidents of data breach clearly show the fact that data is not safe as hackers get through the database and steal data or the company gives access to their database at some cost. One way to improve the status of this is to consider the quality of data. If you are entering your name and age then a certain amount of protection is provided and if you are submitting your credit card number or even your phone number, this data will have more protection so that it is not easily accessible⁶⁶.

Data thefts are a subset of cybercrimes that pose a threat to all sorts of identities that exists on the world wide web. Cybercrimes are increasing as criminals utilize the web to steal, gain and misuse data. This may include the use of personal data, business data, government data, or even disable the device in use. Crimes may be related to target networks or devices or maybe gain access to confidential and unauthorized information for personal interests. These crimes could be targeted to property which could be stealing bank credentials and misusing them by making purchases or simply stealing money, or targeted to an individual by cyber stalking and encouraging virtual prostitution, or targeted to the government database and hacking into the confidential information of the state and drafting strategies to cause damage to the state. These attacks may be in the form of installing malware in documents that may be downloaded by the user in the future by Potentially Unwanted Programs (PUPs) or Phishing mails. Attacks on networks are generally executed by way of DDOS attacks by trafficking the network so that the website is overwhelmed with the response that it stops functioning and the network goes down.

The Cybercriminal Justice System has also been established to combat these crimes and regulate this sector as misuse of the internet information will shake every industry, every organization. To plan and execute a cybercrime it takes 200 days. Few ways you can prevent yourself from being a victim from such crimes is by updating your passwords, vigilant while browsing websites, use antivirus protection, and do not click on any unknown emails or links sent. Preventive measures will be the most effective ways to avoid cybercrimes but the

⁶⁵ Lapowsky, I. (n.d.). How Cambridge Analytica Sparked the Great Privacy Awakening. Retrieved July 11, 2020, from <https://www.wired.com/story/cambridge-analytica-facebook-privacy-awakening>.

⁶⁶ Data Theft Definition | Cybercrime.org.za | Safety & Security Guide. (n.d.-a). Retrieved July 10, 2020, from <http://cybercrime.org.za/data-theft>.

remedies provided by the justice system established is determined to protect the rights of the users and keep a check on any illegal activity reported and take required measures to combat it. Cyber health must be promoted and awareness must spread as every corner of this country, from the richest of the rich to the poor smartphones, has made its way. After the launch of Jio's strategies and policies, everybody has access to the internet. Hence cyber health must be discussed and debated upon to increase understanding of the virtual world we are living in.

Terrorism attacks have evolved with time, and have spread not only geographically but also changed their interfaces to cyber-attacks. Cyberwarfare and cyber terrorism are two grievous attacks aiming at the government and the state itself making it highly dangerous. Cyber terrorism came into light when WannaCry was exposed in the year 2017 which led to cyberattacks all over the world that targeted Microsoft office systems by inserting ransomware crypto worm and demanding money by way of cryptocurrency⁶⁷. To prevent this Microsoft came up with the 'kill switch' that made sure the prevention of the spread. The attack affected about 2,00,000 computers across 150 countries. Cyber threats are becoming more advanced these days and with businesses shifting from register records to databases it increases the risk and with highly skilled hackers and up-gradation of technology the shift is smooth and quick. Today antivirus installed would be enough for data protection but tomorrow the same antivirus may seem worthless due to the technology change and different approaches to gain unauthorized access. The shift is so swift that now cyber-attack insurances have also started that provide for the damages caused to the business due to any cyber attacks on the computer systems⁶⁸. It causes a lot of damage to the tangible and intangible assets of any company and the cyber insurance policies make sure to cover such damages for a given time period. Some companies provide for cyber solutions and guide businesses to manage their data in a way that they prevent from being victims of such attacks.

⁶⁷ Fruhlinger, J. (2018, August 30). What is WannaCry ransomware, how does it infect, and who was responsible? Retrieved July 10, 2020, from CSO Online website: <https://www.csoonline.com/article/3227906>.

⁶⁸ Wyman, O. (2017). Global Cyber Terrorism Incidents on the Rise. Retrieved July 10, 2020, from Mmc.com website: <https://www.mmc.com/insights/publications/2018/nov/global-cyber-terrorism-incidents-on-the-rise.html>.

3. World Legal Set-up

Amidst such attacks and vulnerability of data, the world has come up with legal measures to regulate and monitor this interface. A new sector of ‘Cyber laws’ came into play where regulations were passed to make demarcations of offenses online. Many countries such as the UK, Canada, and Australia have their own cyber or IT laws governing their states. India has the Information Technology Act, 2000 which governs the offenses against property, government, and individuals. With e-commerce coming up as the safest way to do business keeping the COVID-19 condition in mind, the dependence on the internet has only been increasing. This situation has led to companies to shift to the new model of work from home by way of online platforms. Schools and colleges have resorted to online classes on platforms available. Applications like Zoom, Webex, Skype, Google meet, Google Hangouts, etc. have received a lot of online downloads. Such applications or virtual platforms are utilized to transfer confidential business information, personal data, and even government-related information. Laws need to regulate and IT laws are not quite enough to combat these problems. IT or Cyber laws are primarily for the offenses committed on social media or other e-platforms, but these data storage and its protection often go unnoticed. Offenses online are generally related to misuse or breach of privacy by a wrongdoer against the victim. Data protection is more to do with the platforms that contain our information by storing the details that we share on their website, irrespective of purpose. Data protection laws are to be established in harmony with the IT laws in that country. This situation is similar to that of consumer laws and civil laws, remedies are available in both but consumer laws focus on a certain producer- buyer relationship and their rights and duties. It is equally necessary to make sure efficient regulation of the business sector. Similarly, data protection is essential taking into consideration the rate of data theft and access of people on databases and information on the world wide web.

The United Kingdom on May 25, 2018, declared General Data Protection Rules (GDPR) all across Europe to harmonize and bring everyone to the same page in regards to data privacy and rights of individuals on e-platforms⁶⁹. These are guidelines for organizations and e-commerce companies to handle the information they receive from users to protect them from abuse of it.

⁶⁹ What is GDPR? Everything you need to know, from requirements to fines. (n.d.). Retrieved July 11, 2020, from IT PRO website: <https://www.itpro.co.uk/general-data-protection-regulation-gdpr>.

It is considered to be the strongest set of data rules that exists. The core of these regulations lies ‘personal data’ that could be anything that directly or indirectly recognizes a living person⁷⁰. They also have specific categories for different sorts of information databases and higher protection is assumed for sensitive information that organizations are to maintain else huge fines will be imposed. UK also has established seven principles which consider the following aspects⁷¹:

- 1) **Lawfulness:** To obtain data from the user with full knowledge and for lawful purposes.
- 2) **Purpose Limitation:** The purpose of the collection must be informed and consented to.
- 3) **Data Minimization:** Collect the data that is needed and not anything more.
- 4) **Accuracy:** The data must be accurate and up-to-date.
- 5) **Storage Limitations:** To store data until it is necessary.
- 6) **Integrity:** The data stored must be contained with the utmost protection.
- 7) **Accountability:** The GDPR must be followed and any person collecting such data is accountable for its use.

Canada on the other hand had its data protection laws in place since the 2000s itself by the Personal Information Protection and Electronic Documents Act (PIPEDA) that governs the collection and disclosure of data by any commercial organization irrespective of whether it is government-owned or private owned⁷². These were essentially based on 10 principles of care of personal data that was established in 1996 that not only inspired the Canadian laws but also the European principles mentioned above. Here the prime limitation is commercial activities or commercial organizations. Commerce related transactions will fall under this ambit of data protection even if it is a Non-for-profit organization or political parties. ‘Personal Data’ here stands for any piece of information that is objective or subjectively signifying a person

⁷⁰ International Comparative Legal Guides. (n.d.). Retrieved July 10, 2020, from International Comparative Legal Guides International Business Reports website: <https://iclg.com/practice-areas/data-protection-laws-and-regulations>.

⁷¹ Guide to Data Protection. (2020, March 23). Retrieved July 10, 2020, from ico.org.uk website: <https://ico.org.uk/for-organisations/guide-to-data-protection>.

⁷² Andrada Coos. (n.d.). Data Protection in Canada: All You Need to Know about PIPEDA. Retrieved July 10, 2020, from Endpoint Protector Blog website: <https://www.endpointprotector.com/blog/data-protection-in-canada>.

identifiable that means it is not only about name, age, ID, etc but also about comments, opinions, views, etc. Privacy Act is codified to further make sure that personal data is protected and no breach of privacy occurs. Data protection and privacy are similar but handle different aspects of the same objective and that is the prevention of unauthorized access.

Australia has legislation on federal and state levels. Federal level is the Privacy Act, 1988 that handles the way the business entities and the government have the power to store what kind of personal data. 13 Australian Privacy Principles (APP) is mentioned under this act that establishes its origin and purpose⁷³. The state-level legislation may differ but must be in complete harmony with the Federal laws of the country. The three basic obligations that any entity handling data include health records legislation, federal legislation, and email and marketing legislation. These legislations with the Privacy Act make sure complete protection of personal data and no loopholes through which firms can escape. The definition under the Australian law for ‘personal data’ is any information or opinion that may be true or not or whether it is recorded in a material form or not, if it is enough to reasonably identify the person then it is considered personal data. The definition is quite broad and extends to most of the data as it is present on the web. One distinct feature is that the APP does not include a small business operator that is also subject to exceptions (limitations in relations to its turnover), the political party that is registered under Australian laws, a state or territory authority.

These are few countries that have pioneered in the field of Cyber and Data Protection laws and have carved the way for a better and healthier cyberspace. India inspired by these common law countries came up with the Data Protection Bill, 2019 on December 11 after two years of serious debate this bill was recommended to be presented in the joint parliamentary committee after which is likely to be passed in 2020.

⁷³ Law in Australia - DLA Piper Global Data Protection Laws of the World. (2014). Retrieved from Dlapiperdataprotection.com website: <https://www.dlapiperdataprotection.com/index.html?t=law&c=AU>.

4. Personal Data Protection Bill, 2019

The landmark case of *K.S. Puttaswamy vs. Union of India*⁷⁴ that laid down the ‘right to privacy’ as a fundamental right. Privacy is described as an inviolable space that everyone needs to be left alone. Every individual indeed needs to be conditioned by the relationships he has with the society, but this may sometimes pose as interference into personal space by raising questions against the individual’s habits or character. Such issues that come up where a line is to be drawn by the judiciary concerning the reach entities can have information about a person. These are to deal with by keeping constitutional values and liberty in mind and also bring in a pragmatic solution that will favor the basic structure established. The aspect of privacy brings in Data protection as an essential aspect that is to be worked upon to improve the security level in the cyberspace.

The bill has three prime points that it launches which is privacy as a fundamental right, the increase in the digital economy as communications as faster and easier online, necessity to have a free and fair digital economy with due respect to user’s privacy⁷⁵. The jurisdiction of this bill is to all personal data processed or shared within India, any citizen or person registered under the Union, or has any connection to the business carried out in India. It may not have jurisdiction over anonymous data. The definition of ‘Personal data’ is inspired by the United Kingdom as it is defined under Section 3(28) to be any data directly or indirectly identifiable by any attribute of a living person online or offline for profiling. The catch in this definition is ‘living person’ which means any person who ‘s dead and any entity holding secret information about him will not come under this definition. This is a little dangerous as a dead person also leaves behind a reputation of himself, it may be disturbing to receive personal information that may not be material but enough to damage the reputation. Breaking of confidentiality of the personal data is termed as a personal data breach. This may not happen is consent to publish such information is present as defined under Section 11 of the said bill. Three main elements are to be considered while processing and collection data under this bill which is : (a) it must

⁷⁴ (2017) 10 SCC 1.

⁷⁵ GROUNDS FOR PROCESSING OF PERSONAL DATA WITHOUT CONSENT 12. Grounds for processing of personal data without consent in certain cases PERSONAL DATA AND SENSITIVE PERSONAL DATA OF CHILDREN 16. Processing of personal data and sensitive personal data of children. CHAPTER V RIGHTS OF DATA PRINCIPAL AS INTRODUCED IN LOK SABHA CLAUSES. (n.d.). Retrieved from http://164.100.47.4/BillsTexts/LSBillTexts/Asintroduced/373_2019_LS_Eng.pdf.

be consented as per Section 11, (b) it must be done fairly and reasonably, (c) it must collect on a necessity basis. These regulations get its roots from the seven principles of Data protection laid down as per the European laws.

Data principals or users are granted rights of getting a conformation, correcting any incorrect data, deletion of data if required, and also access to the data generated from such collection. A right that also has been granted is the ‘right to be forgotten’ that is similar to the GDPR. It describes the option to stop the access to the data disclosure given to the data fiduciary and the erasure of the existing data.

Data fiduciary is any entity that processes or collects data and determines its purpose as under Section 3(13) of the bill. Some exceptions are laid down for the sharing of data without consent. These circumstances are as follows:

- Any function of the State or provided by law.
- Medical treatment under epidemic or other necessary emergency circumstances.
- Safety of an individual during the breakdown of public order.
- Employment-related purposes such as recruiting, termination, etc.
- Other Reasonable reasons as defined under Section 14.

These exceptions are very similar to the exceptions in the GDPR but they are framed loosely giving space to loopholes. This is dangerous as it gives criminals reasons to get away from the offenses they commit. Obligations of the Data fiduciary are also carved out such as privacy policies as per Section 22 and transparency of the use and handling of data is to be maintained. Data fiduciaries and Data processors must have security measures that will make sure to restore the integrity and prevent misuse of data. The liability of the stored data is on the data fiduciary and his responsibility of making sure that no unauthorized access takes place.

Sensitive information is transferred outside the State then the original data must be stored in the territory and there must be explicit consent of the individual. He must be made aware of how the data will be used and the purpose of it. The exemptions from this Act can be given by the Central Government in the interest of sovereignty of the state and to avoid incitement to commit an offense. Other exemptions include investigation, journalistic, domestic, and for research purposes.

The penalty that the data fiduciary is liable to pay for non-compliance of the obligations laid down is a fine to an extent of 5 crores or 2% of the worldwide turnover whichever is higher, and the violations of the regulations will call for a fine of 15 crores or 4% of the annual turnover, whichever is higher. The misuse of identification of a person without consent that is not under the broad exception of Sections 12 to 15 will invite imprisonment up to three years or fine or both.

This bill is very similar to the GDPR guidelines established by the UK government and also the 10 principles of protection of data laid down by Canada's PIPEDA. The bill also draws inspiration from the Australian Privacy Act in the section of its exceptions of State or Federal authority and small businesses.

5. Conclusion

As the world has come online and we can assume the fact that in this generation there are two societies, one is the real world and one is the virtual world. In such a situation our data must be protected and must be secure. Any unauthorized access must be reported and such necessary legal measures must be taken. As aware users, we must make sure we are responsible with what websites we visit, what content we view, what data we disclose and what we promote online. If we are cautious and ensure safe and right use of cyberspace, it will prevent us from being victims of cybercrimes and data theft.

These rules are already applied to a few e-commerce businesses as in the form of confidentiality and privacy requirements. If this bill comes to force it will be new to some firms. This bill entails essential rules that will help to keep check of data transfers and also make people aware of their rights and duties as Data principals. This bill must be passed as soon as possible keeping in mind the dependency on the internet. There was an old draft of this bill that was not passed. The few differences or rather the improvements that have been made to suit the needs of the society are the exception to government agencies, the treatment of non-personal data, criminalization of certain actions.

Some points differ from the sources of this bill. It allows the transfer of non-personal data by other entities to the government that they have collected, to improve the government services

but fails to explain how it will happen. The usage, purpose, and objective of this data remains unknown. It also brings in this point of keeping sensitive information within the territory and requires explicit consent from the individual to transfer such data. This may bring in glitches in international transactions. This will lead to less international transactions which may affect the e-commerce a lot. In a world where e-businesses are the future, this might be a huge barrier. In cases of exemptions for the government given by the GDPR, Privacy act of Australia, PIPEDA other cyber laws caught such grey areas and regulate them, but in India with the IT Act,2000, and the exceptions in this bill, the escape will be easy. The escape in the virtual world is much faster and easier and laws must be tight and clear. India must consider its position of legislation that exists and frame laws. Although this bill touches all the aspects, it is vaguely framed. For a sovereign nation like India which likes to maintain its constitutional values and make sure equality and liberty exist, it will be complicated to frame the apt laws but it is surely not impossible.

5. Darfur Humanitarian Crisis

By: P. Sailasri

Pg. No: 59-69

i. Abstract

International Humanitarian Law (IHL) came into force in the 19th century and has evolved from Hague and Geneva Conventions and lays down principles and rules to be followed during the time of armed conflicts. It has a two-fold objective; to ensure the protection of those who are victims of armed conflicts and the second is to regulate the means and methods of armed conflicts in the world. The International Committee of Red Cross (ICRC) that has been established to look into the protection of the IHL since inception has concentrated on relocating the victims back to their regular lives. However, from time to time, it has not been an easy task for the international organization to achieve its objective. Humanitarian Crisis that has been going on since 2003 in Darfur, Sudan, Africa poses one such threat to International Peace.

The Humanitarian Crisis in Darfur has been a continuous violation of International Humanitarian Law, though the international communities such as UNO, the African Union (AU), and ICRC, etc. have tried to negotiate between the parties, and nothing has turned ripe. With the increasing attention from the international community, the Sudanese government has reduced the media flow in the field of conflict, thereby increasing the worry of the international community towards those civilians who await the help of the community to lead their life in normalcy which seems unachievable.

In this paper, let us look into an in-depth analysis of the regime of International Humanitarian Law, the Darfur Crisis, and the international response towards the crisis going on for more than a decade now. The author at the end has also expressed steps that could be done to bring the situation into control.

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1. Introduction

From time immemorial, wars and armed conflicts have been the regular practice to conquer the territories in the garb of having more power to emerge as the ruler of the world. Be it from the times of Kings and Kingdoms; or to the present nations and nationals; the humans from time to time in one way or another wanted to control the whole world.

During the times of kingdoms, certain rules were laid down between the parties of the war, as to decide the place, timings, etc. to fight a war and also related to the protection of civilians and the hurt soldiers. But, when nations started emerging, these rules were overthrown by adapting principles such as secret agreements, deceit, sexual exploitation of the civilians, the killing of prisoners of war, and many other tactics, which were termed to be unfair. These unfair practices not only cause harm to the during World Wars; but also caused irrevocable damage to the rule of law, and the principles of equity, equality, and natural justice which are few ground principles on whose basis the legal systems around the globe stand on.

International Humanitarian Law, is one of the efforts of the international community to ensure that the want of power of the officials does not affect the civilians and thus, to reduce the effects of the war. Humanitarian law is the set of principles to be followed by the parties to war; these principles are obligatory and safeguard the basic rights and freedom of all even during the crisis of the war. It aims at ensuring that civilian life is not disturbed for a military gain, also to help those wounded in the war by providing medical help on the field.

The International Humanitarian Law finds its roots in the Geneva and Hague Conventions, where the concepts of medical help to wounded and sick, principles regarding the protection of prisoners of war, civilians, etc. have been discussed and rules have been laid down to protect the minimum fundamental rights of every human being popularly termed as Humanitarian Rights.

International Humanitarian Law is often mistaken as Human Rights Law, however, both the laws are wide apart in their scope as the first one deals only with the armed conflicts, while the latter one is in force throughout the war and non- war times. In the case of diversion between both the laws, the International Humanitarian Law presides over the other during the war. The International Commission of Red Cross (ICRC), along with its organs of Red Cressant and Red

Crystal work together to ensure that every human being is treated in a humane way irrespective of any discriminatory grounds present and help the victims of the war to recover, rehabilitate and re-live their life in a peaceful manner.

In this write up we will look into the birds-view of the Darfur Humanitarian Crisis and its effect on the International Humanitarian laws.

2. Darfur Humanitarian Crisis: An Overview⁷⁶

Darfur is a state in Sudan that lies in the dark continent of Africa. Ever since the pre-colonial era, Darfur has been active as a home for various ethnicities of people coming from different backgrounds such as Arabs, non- Arabs, Muslims, etc. It has been from time to time ruled by some of the strongest rulers until World War I, post which the mighty colonizer England took control over it.

It was posted this colonial era and independence in 1956, that the people of Darfur segregated themselves into various groups creating differences and discriminations between themselves to use them in the political and social movements; otherwise, the same differences were a matter of occupational identity in Darfur till then. The historical storyline of Darfur seems very similar to that in India, keeping in view the independence movements given the Hindu- Muslim conflict in India.

It can be observed that the governments formed after the independence of Sudan were mostly the Arabic dominated governments, these governments started framing laws and policies in favor of Arab and Islamic origins; with the effect of the troops from neighboring regions who settled in Darfur, such as Libya. This led to the start of rebellious outbreaks from around the 1960s in the region of Darfur.

Sudanese People Liberation Movement (SPLM/SLM) was popular in the regions of Sudan during the 1980s and worked with the motto of a ‘new Sudan’, to protect the marginalized and the vulnerable groups in Sudan aiming to convert Sudan into a state with equity, equality,

⁷⁶ (“*The World’s Worst Humanitarian Crisis*”: *Understanding the Darfur Conflict | Origins: Current Events in Historical Perspective*, n.d.).

democracy and non- discrimination. On the other hand, the National Islamic Front (NLF) sprang into action with the growing strength of the SPLM to protect and establish Sudan as an Islamic Nation. The members of NLF not only dominated the membership in armed forces, but were regarded as the economically developed nationals. This made it easier for the group to overthrow the SPLM and its members, by hook or crook, leading to a massive abuse of the Human Rights vis-à-vis degradation of economic and political stability in the nation.

Thus, this has become the base for the inter-communal dispute of the crisis in Sudan, popularly famous as Darfur Crisis, considering the important part played by the Darfur regionals, in the armies of the NLF and who made it possible to overthrow the SPLM in Sudan. Further, with the intervention of international communities and the oncoming of the Comprehensive Peace Agreement between the two groups to put an end to the bloodshed in Sudan and nearby regions, though has helped to curb the violation of human rights in the northern regions, failed to look into the awaiting crisis in Darfur, that has become one of the deadliest humanitarian crisis for the world.

3. International Attention towards Darfur Crisis⁷⁷

By 2003, the Darfur region was highly influenced by the groups of Sudan Liberation Army (SLA) and Justice and Equality Movement (JEM); though both the group on paper aim for a democratic Sudan, the actions of the groups have time and again proved different. The first renowned clash between these two groups was during mid- 2003, where the Sudanese Army was attacked by the other causing damage of about 3, 00, 000 deaths in Darfur and internal displacement of millions of people⁷⁸.

The Veto powers of the United States and China have involved themselves, by the US calling the act as genocide, while China tried to stay on good books of Sudan and increase its trade relations. The United Nations, amid threats planned to send a peacemaking committee to calculate the circumstances in the Darfur region and to restore peace; however the Sudanese government allowed only African peace-keepers into its region. The UN had to give in to the

⁷⁷ (The International Community's Failure to Protect *Darfur*, 2006).

⁷⁸ (DeWaal, 2014).

Sudanese government and negotiated to send a committee comprising of African and UN forces popularly termed as UNAMID⁷⁹, however, the committee was never formed or sent to Sudan due to lack of funds and logistics, keeping in mind the non- supportive Sudanese government towards the UN.

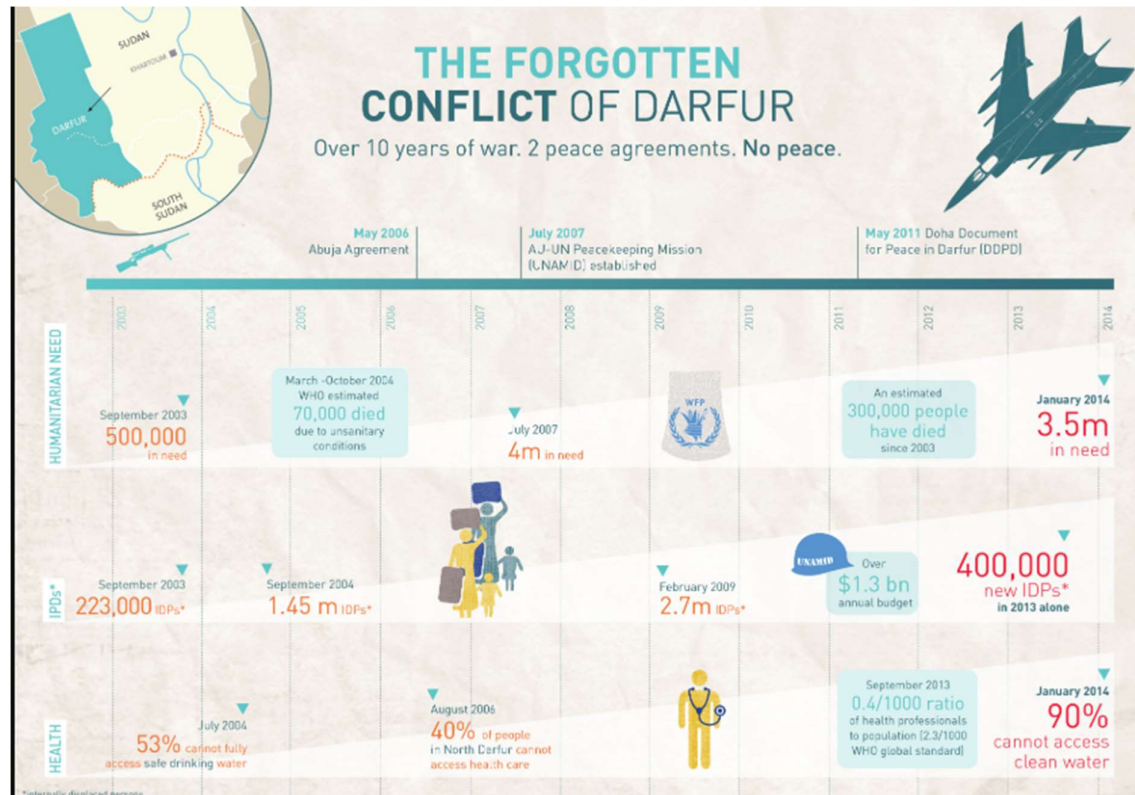


Figure 1⁸⁰- The picture depicts how the crisis in Darfur has been increasing the Internally Displaced People and their needs and health hazards since its inception in 2003.

When referred to the International Criminal Court (ICC), the crisis was indeed held to be genocide⁸¹, but the Sudanese government refused to exercise the jurisdiction of the court to execute the judgment. The Sudanese government is trying its best to cover up the crisis as a small rebellious outbreak, but largely there have been proofs against the atrocities of the government in destroying the peace in the civilian community by destroying the houses, farming lands, sexually harassing and exploiting women and children, stopping the supply of

⁷⁹ (Overview of the crisis in Darfur, n.d.).

⁸⁰ Sourced from: https://enoughproject.org/files/Forgotten%20Conflict%20in%20Darfur_0.jpg.

⁸¹ (International Criminal Court *Darfur, Sudan*, n.d.).

essentials of food to the civilians. However, the government is not ready to give in to the threats of the United Nations.

While on the other hand, the North Atlantic Treaty Organization (NATO), another powerful international organization, because of the member state of United States, though provided financial aid to the civilians to ensure that basic food requirements are met for some time; it has not sent any of the troops to the Sudan to end the crisis. Even the powerful European Union (EU) has settled itself by providing financial support to the African Union (AU) who deployed observation troops to the Sudan, to get the logistics right and has openly denied sending its forces and manpower to intervene in the Darfur region. China as aforesaid mentioned has developed trade relations with Sudan and thereby is not keen on backing the decisions of the UN against the acts of the governments terming them to be internal conflicts, where the UN has no right to intervene as per the United Nations Charter.

International Committee of Red Cross (ICRC) along with its offspring Red Crescent has been functioning in the region of Sudan and in particular in Darfur, providing assistance and relief to the civilians⁸². Though the operations are at a slow pace owing to the restrictions imposed by the Sudanese governments, there is a ray of hope to the civilians that the international community stands by them in this period of crisis and are waiting for the help to lead a normal life.

4. International Humanitarian Law and the Darfur Crisis

International Humanitarian Law from its inception has aimed to provide assistance to those affected by the war and to ensure that they lead regular lives back. However, this aim of the IHL seems far-fetched in the case of the Darfur Crisis. Several principles and rules laid down under the International Humanitarian Law as per the Geneva Conventions are overseen by the warring parties in Sudan.

The primary duty of the parties being that no civilian would be attacked; otherwise, it would result in the armed conflict being a war crime. Under Article 13(2) of Additional Protocol II of

⁸² (*Responding to the crisis in Darfur - ICRC*, 09:23:17.0).

Geneva Convention⁸³, the principle of ‘distinction’ has been laid down which propagates that the warring parties must distinguish between civilians and opponents and in any circumstance, a civilian or a civilian object cannot be attacked.

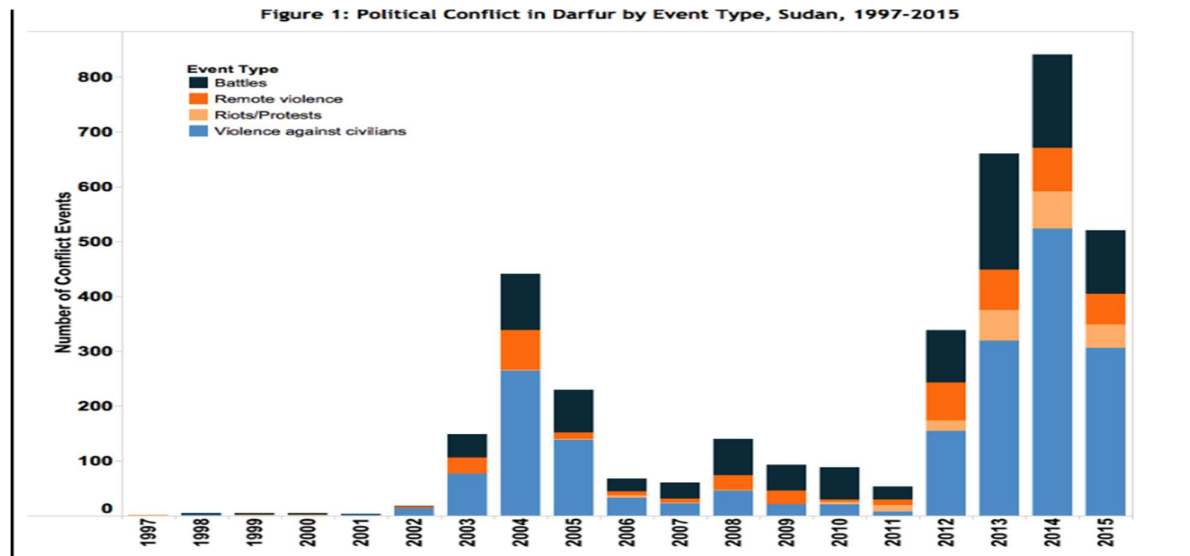


Figure 2⁸⁴ - The graph shows us the proportions of the conflicts in Darfur between 1997- 2015. We can observe that since 2003, the conflicts against civilians have been alarming; though the proportion has come down between 2006-2011; post-2011 the conflicts have again started increasing; showing no signs of an end to the ongoing humanitarian crisis.

Under Article 4(I) of Additional Protocol II⁸⁵, that deals with Non- international armed conflict, like the one in Darfur, where the armed conflict is between to internal groups of the same nation, a fundamental guarantee has been laid down that the civilians and *hors de combat* i.e., people who were a part of the war, but no longer are; shall be treated humanely in all respects; however, we can establish that this principle has also been violated in the present Darfur crisis. These are the basic norms that have to be followed by the states in case of non- international armed conflicts as the international community does not have the power to interfere, but these fundamental principles which are the standing pillars of the international humanitarian law are violated in Darfur.

⁸³ (OHCHR | Protocol II Additional to the Geneva Conventions of 12 August 1949, n.d. Art.12).

⁸⁴ Sourced from (“Updated Conflict Data Surrounding Early Darfur Crisis,” 2015).

⁸⁵ (OHCHR | Protocol II Additional to the Geneva Conventions of 12 August 1949, n.d. Art.4).

Even under the customary international humanitarian law, certain rules were laid down that are to be observed in international as well as non- international armed conflicts, but they have been violated in the present crisis. Some of them are listed as follows:

As per Rule 14, the Principle of ‘proportionality’⁸⁶ cannot be overthrown and if the possible civilian damage is larger than the military advantage then the armed conflict should be suspended. In the present case, it is clear that the act of the government and the rebel groups is unending and is only causing loss to the civilian community.

Further Rule 53, lays down that starvation as a method of warfare is prohibited, but the international media has time and again provided proof to the international community of how the food supplies are destroyed in Darfur leading to the violation of international humanitarian law⁸⁷.

The International Commission of Inquiry on Darfur, established by Security Council of the UN in 2004, has opined that “It is the responsibility of the state to guarantee the basic rights related to health, food, and house to everyone and special protection of women and vulnerable groups, such as children and displaced persons. Additional Protocol II of the Geneva Conventions evokes the protection of human rights for every human; this in itself applies the duty of the state to protect in situations of armed conflict.”⁸⁸

Thereby, the Darfur crisis has been an instance of violation of the International Humanitarian Law, and nothing has been done that could be noted in the actual field of conflict in terms of fulfilling the duty of the international community towards innocent civilians, that is being crushed in this crisis.

5. Suggestions and Conclusion

The situations in Darfur are rightly pointed out by the ICC fall under ‘genocide’; as under acts committed with the intention to destroy an ethnic group. The acts also come under the purview

⁸⁶ (*Customary IHL - Rule 14. Proportionality in Attack*, n.d.).

⁸⁷ *Ibid* at 3.

⁸⁸ (International Legal Protection of Human Rights in Armed Conflicts, United Nations, 2011, p. 119).

of Crimes against humanity as per Article 7 of the Rome Statute⁸⁹, wherein the attacks are directed against the civilian population⁹⁰.

What is now required by the international community is a strong step to help the people of Darfur, the United Nations should take up active steps in deploying help to the civilians, and internally displaced people, this would be possible only with the support of the members of the UN, especially the VETO powers who are till now in the back. The African Union should re-frame the objectives of their peacekeeping committees and should reformulate as the protecting agencies rather than just being a watchdog⁹¹.

The situation in Darfur is becoming more and more alarming as the time passes by, with increased restrictions on the media personnel by the Sudanese government, the factual circumstances are misrepresented and Darfur is being isolated to curb the rebels, who seek a democratic and a sovereign Sudan. Amidst all the chaos, it is the civilian population that looks up towards the protection against this “**Ethnic Cleansing**” and await reparation, which is their right under various international laws, which lay down that “the victims of armed conflicts are eligible for proportional reparation to the gravity of the violation and harm suffered.”⁹²

The crisis has made us realize that the better functioning of the humanitarian laws is possible only with the better exercise and implementation of the principles laid down under various treaties and conventions, it is not a set of rules that is now required but effective implementation of those rules, that can bring an end to this crisis.

⁸⁹ (Rome Statute of the International Criminal Court , n.d., p. 10 Article 7).

⁹⁰ “Report of the Preparatory Commission for the International Criminal Court” (PCNICC/2000/1/Add.2).

⁹¹ (*Sudan: Darfur Destroyed*, n.d.).

⁹² (*Protection of victims of armed conflict through respect of International Humanitarian Law - ICRC*).

6. Validity of the Citizenship (Amendment) Act, 2019

By: Anant Meera

Pg. No: 70-93

i. Abstract

This piece of work elaborately discusses the validity of the Citizenship (Amendment) Act, 2019. This recently enacted act has been a matter of dispute and uproar across the whole nation. The quarrel centers around the proviso to Section 2 of the Act, which reads as: *“Provided that any person belonging to Hindu, Sikh, Buddhist, Jain, Parsi or Christian community from Afghanistan, Bangladesh or Pakistan, who entered into India on or before the 31 st day of December, 2014..., shall not be treated as illegal migrant for the purpose of this act”*. Like the two sides of the coin, this act also has two visible sides, one picking up on its inclusionary and exclusionary nature, and accusing it of the fracture it caused to the Indian Constitution by profoundly injuring its structural blocks that make the Indian Constitution outshine from other Constitutions. While another side of the act, calls it legitimate and completely valid enacted for the welfare of politically and socially oppressed migrants residing in India for many years without any legal rights. There are other criticisms as well like, “the act is the beginning of the arbitrary rule in India”; “BJP is playing with the Constitution to establish Hindutva agenda”, etc. But unfortunately, everyone whether having the legal knowledge or not, has flocked into the wrangling taken up against the act. Very few have looked onto the brighter side or we can say onto the legitimacy of this amendment. Assumptions, mindless clustering in protests, and concentrating merely on the congested view, has turned this act, into nothing but uncertain presumptuous paranoia against its implementation. In the following research, the best of the efforts have been made to reveal and diagnose the validity of this act, which has gone latent under the chaotic layer of miscommunication and misinterpretation.

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1. Introduction

India has always been bound by the common thread of diversity. Soil of Indian land is known for absorbing, nurturing, and merging into itself every flowing stream of religion from ancient times. I would like to narrate popular Qisa -e- Sanjana, for an instance, where Jadi Rana, an Indian ruler sent a glass full of milk to a Parsi group seeking refuge in India and seeking the same, came to his kingdom. Sending a glass full of milk had a hidden message, that, his kingdom is full of the local population and thus it will not be possible to give them asylum in his kingdom. In response, the Parsi group of immigrants put sugar into the milk indicating, the way they will assimilate into the local population, just like sugar assimilated into the milk. My sheer motive is to tell how Fraternity is not just the part of Indian constitutional design but has also been a functional part of its rich diverse history in various forms.

This constitutional design or constitutional structure of India is being questioned, and debated, and is waiting on the counters of the Supreme Court since The Citizenship (Amendment) Act, 2019 has come into effect on January 10, 2019. Even after it comes into force, the Act is eager to get its stamp of validation. In simple words, if I say, the validation of the Act is being questioned based on its very nature, according to many, which is against the fundamentals of the Indian Constitution and the matter is still pending in the Supreme Court.

I have tried in this article, as a researcher by the method of Doctrinal Research, to find out how this Act has been misinterpreted and misconceived among citizens which have become the reason for uproar across the whole nation. This whole piece of work is dedicated to the microscopic research of this Act, to know-how and up to what extent it can be called completely valid and Constitutional.

2. Background of Citizenship In India

History has the power to define the present and future, and in the same manner, whatever issues of validity of this Act have arisen today, must have some roots in the past. So let us dive into

the legal history of Citizenship in India, not only for the people who took birth here but also the diverse streams of people who blended effortlessly in this land coming from different cultures, religions, places, etc.

Before November 26, 1949, there was no concept of Indian Citizenship in being. After the adoption of the Indian Constitution on 26 November, the provisions relating to citizenship came into force. During the British rule, the residents of British India were British subjects governed by the British Nationality Acts. Princely states had no international personality and ‘British protected persons’ was the only status they enjoyed.

Indian Citizenship is broadly divided into two phases i.e. acquisition of Citizenship, first, at the commencement of the Constitution, and second, after the commencement of the Constitution.

Part 2 (Article 5 to 11) of the Constitution deals with the law relating to the Citizenship of India at the commencement of the Constitution i.e. on 26th January 1950. These provisions were enacted keeping in view the partition of the country in 1947 and the consequent problems, for example, migration of people.

As regards to the Citizenship of India after the commencement of the Constitution, the provisions are contained in the Citizenship Act, 1955 enacted by the Union Parliament by the power assured to it in Article 11 of the Constitution.⁹³

According to the Citizenship Act, 1955 a person can acquire Indian citizenship through birth, descent, registration, naturalization and incorporation of territory in India. Different Amendments have been made to the Act at different times like in the years 1986, 1992, 2003, 2005, 2015, and the latest Amendment of 2019.

Amendment Act, 1986 was passed by the Congress government in which the provisions of the Act were tightened. The reason for making provisions more stringent was a large influx of illegal immigrants from Bangladesh (mainly after 1971)⁹⁴ and Sri Lanka besides those from Pakistan and some African countries. Amendment Act, 1992, also passed under Congress govt., eliminated the discrimination against women and their children in the matter of citizenship.

⁹³ Constitutional Law of India by Narendra Kumar, p.54.

⁹⁴ Indo Pak War of 1971 also known as Liberation War, before the war present Bangladesh was earlier East Pakistan.

Amendment Act, 2003 passed under the then BJP government has amended Act of 1955 by introducing and defining the notion of "Illegal Migrant" and Foreigners Act and Passport Act debar such a person and provide for putting Illegal Migrant into jail or deportation.

The Citizenship (Amendment) Ordinance, 2005 was enacted for extending the scope of OCI⁹⁵ for PIOs⁹⁶ except the countries of Pakistan and Bangladesh because their countries allow dual citizenship.

Amendment of 2015, under the present government of BJP, introduced the concept of an 'Overseas Citizen of India Cardholder' (an 'OCC) that essentially replaces and merges OCIs and PIOs.

Citizenship (Amendment) Act, 2019 which is the focus of our research, has amended Section 2 of the original Act, 1955. **Section 2** states that *Hindu, Sikh, Buddhist, Jain, Parsi, or Christian from Afghanistan, Bangladesh, or Pakistan who entered into India before the 31st day of December 2014 will not be considered illegal migrants.*

3. Terminology

In the light of this topic, there are some terms which must be studied before we move further in this research. The terms which are to be discussed hereunder are: Citizen, Alien, Types of Aliens, Refugee, Asylum Seeker, and Migrant.

3.1. Citizen: A person who enjoys complete civil and political rights in the State is known as a citizen of that State. Full membership of the political community can be enjoyed by him.⁹⁷ Citizen is a legal status given to persons, who by the virtue of this status can enjoy certain rights in the State concerned. He does not just carry the rights of civil nature but also of the political nature with him. For example, Fundamental Rights enshrined in the Constitution of India is available to citizens of India only. Again, citizens alone have the right to suffrage, to hold high

⁹⁵ Overseas Citizenship of India (OCI) is an immigration status permitting a foreign citizen of Indian origin to live and work in India indefinitely.

⁹⁶ Person of Indian Origin (PIO).

⁹⁷ See *United States v. Cruikshank*, (1875) 92 U.S.542.

offices such as that of the President, the Vice President, the Governor of the State, the Judges of the Supreme Court and High Courts, the Attorney General, and the Advocate General of a State. Citizenship carries with it certain duties and obligations too, such as, the Fundamental Duties contained in Article 51-A which are addressed to the citizens of India only. Nationals are different from the citizens. Former has a narrower significance than the latter as every citizen can be the national of the country but every national may not be the citizen of India. This is because the nationals of a State are only politically members of the State and owe allegiance to the State but do not carry with them special rights that only a citizen can enjoy, for example, right to vote. A person may remain the National of a country even after residing outside the country; he may lose his citizenship without losing his nationality. The term Nationality is neither used in the Constitution nor the Citizenship Act, 1955. Thus, all citizens of India would also be regarded as an Indian National.

3.2. Alien: Term Alien means outsider, and in the context of citizenship, we can broadly say, that a person who is not a citizen of the State is an Alien. However, in the Foreigners Act, 1946, term alien is nowhere defined but section 2(a) of the Act defined the term ‘foreigner’ but after the amendment of the Act in 1957, the term foreigner is defined to mean the same as alien, i.e., a person who is not a citizen of India. There are different types of Aliens like resident aliens and non-resident aliens, enemy aliens, and friendly aliens. Here in this article, we would focus on resident and non-resident aliens only. Former one i.e. Resident aliens are foreign persons residing in the State only by the virtue of temporary title to membership of the State. They do not enjoy the same rights as enjoyed by the citizens of the State; they only have the right to protection laws. While the latter one i.e. non-resident aliens don’t have any claim to State membership and stand altogether outside the body politic.

3.3. Refugee: A refugee is a person, who has left his/her own country, fearing persecution, based on nationality, race, of a particular group, or political opinions.⁹⁸ Refugees are threatened by their government for being persecuted, leaving them unsafe in their State. U.N. Refugee

⁹⁸ *The Tribune, August 8, 2015.*

Convention, 1951 provides protection when persons are recognized as refugees. U.N. Refugee Agency (UNHCR) supports refugees with food, shelter, and safety.

3.4. Asylum Seeker: Asylum seeker, in simple words, are refugees who have not been recognized as refugees. They are seeking the status of refugees by the respective State, they have fled to, from their own country in search of International protection. Those who are not recognized as refugees and also found to not need any other form of international protection can be sent back to their home countries.

3.5. Migrant: Migrants and refugees often travel in the same way but the migrants choose to leave their own country for various reasons not related to persecution. A migrant enjoys full protection from his/her Government even when abroad. A migrant can move to another country for jobs, studying, reuniting with families, etc. whereas refugee moves to save their lives from their government.

Now, when we have gone through the basic terms related to the study of citizenship. It will be convenient for the reader to weigh the Citizenship (Amendment) Act, 2019 from a new and structural manner.

4. The Citizenship (Amendment) Act, 2019

Citizenship Bill was introduced on 9th December 2019 in Lok Sabha and the very next day on December 10 it was passed by the same house after a long debate with 311 members in favor and 80 voting against the bill. Union Home Minister, Amit Shah, remarkably made all his points clear on the Bill which were raising any type of conflict with constitutional law of the country. Prime Minister Modi while appraising Amit Shah posted on Twitter saying, “I would like to especially applaud Home Minister @AmitShah Ji for lucidly explaining all aspects of the Citizenship (Amendment) Bill, 2019. He also gave elaborate answers to the various points raised by respective MPs during the discussion in the Lok Sabha.” On December 11, 2019, it was passed by Rajya Sabha as well and was assented and signed by our President Ram Nath

Kovind on 12 December, 2019. It came into effect on January 10, 2020. Bill turned into Act in a matter of two or three days but the debates last longed for months. The questions raised on the Act must be discussed with the elaborate answers given by Amit Shah because till now no hearing has taken place in the Supreme Court although petitions related to protests have been heard. Thus discussions taken place in the Houses have to be studied meticulously.

First of all have to point our microscope towards the amendment in section 2 which has become the main cause of all ambiguities. Amendment in Section 2 of the principal Act is made by adding a proviso to sub-section 1 clause b of Section 2. Sub-section 1(b) of Section 2, Act, 1955 defines “Illegal Migrant” as a foreigner who entered into India without a valid passport or other documents or lives in India beyond the permissible period. The proviso to section 2(1)(b) added by the virtue of Amendment Act, 2019 reads as "*Provided that **any person belonging to Hindu, Sikh, Buddhist, Jain, Parsi or Christian community from Afghanistan, Bangladesh or Pakistan, who entered into India on or before the 31st day of December, 2014 and who has been exempted by the Central Government by or under clause (c) of sub-section (2) of section 3 of the Passport (Entry into India) Act, 1920 or from the application of the provisions of the Foreigners Act, 1946 or any rule or order made thereunder, shall not be treated as illegal migrant for this Act;***"

After the questions rose upon the necessity of inserting this proviso to Section 2, our Home Minister referred to two important historical pieces of works i.e., **Liaquat Nehru Pact, 1950**, and **Assam Accord, 1985** which were enthusiastically undertaken by the Congress Government but unfortunately never came into exercise properly. And to correct these wrongs and uncompleted tasks is the main objective of introducing this proviso to section 2(1) (b) by Amendment Act, 2019 according to Amit Shah in his debates while introducing the Bill in Lok Sabha and Rajya Sabha. Let us look into the work history of Liaquat Nehru Pact, 1950, and Assam Accord, 1985.

4.1. Liaquat - Nehru Pact, 1950

Due to unexpected and unwarranted partition of 1947, minorities suffered a lot of loss on both sides of the borders. But less violence was witnessed in Bengal as compared to the violence

that occurred due to population exchanges in Punjab. To check exodus on either direction a pact called the Neogy-Ghulam Mohammad Agreement of 1948 was signed by ministers of both countries for rehabilitation. But this pact failed to stop the violence in East Pakistan which subsequently resulted in riots in Kolkata at the start of 1950. The communal violence sparked the population exchange in Bengal. To protect Bengali Hindus even armed forces were deported on the borders. But later being bristled on the insinuations that Pakistan is dictating all these actions, Liaquat Ali agreed to sign a mutual agreement to look into the situation. This Pact came into being after six days of a long discussion between Jawaharlal Nehru and Liaquat Ali Khan, then Prime Ministers of India and Pakistan who met in Delhi on April 2, 1950, to discuss the rights of minorities. This is the reason this Pact is also known by the name of ‘Delhi Pact’ and ‘Bill of rights for minority communities’. On April 8, 1950, finally, the agreement was signed between both the prime ministers.

Part A. Governments of both the nations solemnly agreed to ensure the equal right of citizenship without any discrimination based on religion, with security of life, property, honor, culture, freedom of movement, occupation, worship, and speech which will be subject to morality and law. Minorities shall have equal rights of participation in the political arena, holding offices and serving their countries’ armed and civil forces as well⁹⁹. Part B included provisions regarding the disposal of property by the migrants which they have left behind. It was promised that the Rights of ownership and occupancy of minorities shall not be disturbed by Governments. It was agreed in Part C that all steps required restoring the peace of East Bengal, West Bengal, Assam, and Tripura which has been disturbed due to the unexpected migration of millions of people and also resulted in crimes against persons and property, shall be taken. Forced conversions shall be punished and all possible efforts to recover the looted property shall be made. Part D dealt with subparagraphs (1), (2), (3), (4), (5), (7) and (8) of Part C which is said to be of general scope and shall be applied to exigency to any part of India and Pakistan. Part E was about deputing representatives of minorities in both countries to restore the confidence of minorities. Part F was added to assist in the implementation of Part E by setting up minority commissions.

⁹⁹ INDIA Bilateral Treaties and Agreements, Volume 1. See <https://mea.gov.in/Portal/LegalTreatiesDoc/PA50B1228.pdf>.

The Pact did talk about the protection of minority rights on both sides of the borders, at length but it failed to protect Bengali Hindus from persecution in East Pakistan. Joya Chatterjee, a renowned historian, criticized this two-nation Pact by saying that Nehru's ideology that rehabilitation of Hindu refugees from East Bengal is unnecessary became the reason for suffering faced by East Bengali Hindus. Central Government which was preoccupied with the of resettling 7 million migrants in Punjab ignored the problems faced by East Bengali Hindus who were asked not to migrate but were left to get minority rights counting on the agreement made between the two Prime Ministers. But Bengali Hindus continued to migrate from East Pakistan to India, to get the status of a citizen, which they never got. One study by Dhaka-based economist Abul Barkat found that between 1964 and 2013, around 11.3 million Hindus had left Bangladesh.

From the above study, it seems that Amit Shah's banging on about the Liaquat Nehru Pact has a strong reason behind it and to be agreed with new Amendment of 2019 because no one with an iota of conscience of the left can ignore the situation of these migrants to India as well as persecution faced by them in neighboring countries.

4.2. Assam Accord, 1985

Assam has always remained the target of illegal immigrants, refugees, and intruders from different periods and for different reasons throughout its history. During Nehru's tour to Assam in 1937,¹⁰⁰ he came to realize that three major problems plagued the Brahmaputra Valley or Assam and these were: Sylhet, immigration, and Opium. According to him, Sylhet and immigration were more vital subjects than Opium but later he did not even address the issues which he called vital. First issue of Sylhet district from Bengal to Assam in 1874 which added to the demographic and political strength of Bengalis and Assamese. Both the communities wanted Sylhet to be returned to Bengal.

¹⁰⁰ Nehru and the North East- Jawaharlal Nehru, Discovery of India, Penguin, Delhi, 2010, originally published by The Signet Press, Calcutta, 1946, pp. 54–55. See https://web.archive.org/web/20171016015213/http://125.22.40.134:8082/jspui/bitstream/123456789/946/1/Sajal_Nag_10June_2015_final.pdf.

The second issue of immigration rose from the partition of Bengal in 1905. This partition divided Bengal into East Bengal and West Bengal to weaken the strong Nationalist Movement of Bengal. Before the partition, Bengal was one of the largest provinces which encompassed Bengal, Bihar, Orissa, parts of Chhattisgarh, and Assam, but after the partition, it was split into eastern and western Bengal. Eastern Bengal consisted of eastern districts of Bengal which were joined with Assam. Whereas western Bengal consisted of western districts of Bengal, Bihar, and Orissa. In eastern province, most of the population was of Muslims who were happy with the partition while nationalists held many protests opposing the partition of their Bengali motherland. Later, unable to end the protests the authorities reversed the partition in 1911 and reunited Bengal. Bengali spoken districts were unified once again, while provinces of Assam, Bihar and Orissa were separated from them. Immigration of farm settlers from East Bengal during the partition period encouraged by the Colonial state also added to the number of the Bengalis in Assam. This gave rise to the issues of land acquisition and land ownership for the indigenous Assamese. Line System Policy was introduced in 1927 to impose restrictions on the settlement of immigrants to specified areas. The Asomiya Samrakshini Sabha and Assam Deka Dal submitted their contentions to Jawaharlal Nehru to seek his intervention in saving Assamese Nationality from the threats of Immigrants and asked for some initiatives to be taken for this matter by the central leadership. But Nehru did not address these issues properly as he looked at them as small things on which he said, “If we waste our energies over small things we should not think of independence.”¹⁰¹ He considered the problem of immigrants in Assam as one relating to the mere measuring of wasteland and distributing it to the outsiders and did not consider it a question primarily for economists and experts.

Bengal was partitioned for the second time when the nation was divided into India and Pakistan in 1947 solely on religious grounds. Millions migrated across the borders, from the year 1946-51. There were a total of 2, 74, 455 number of refugees who arrived in Assam from East Bengal annually¹⁰² also called East Pakistan at that time.

In 1955, East Bengal became East Pakistan whereas West Bengal remained the part of independent India. Now, Pakistan after the partition of 1947 consisted of two zones, West Pakistan, which is present-day Pakistan, and East Pakistan, which is present-day Bangladesh,

¹⁰¹ Ibid.

¹⁰² Census of India, 1951, Vol. XII, Part I (I-A), 353.

with India in between. There were political disparities between east and west Pakistan because of more power concentrated with Pakistan while East Pakistan was widely ignored. There were many language controversies as well between Bengali speaking in Pakistan on the eastern front and Urdu speaking in Pakistan on the western front. On March 25, 1971, when East Pakistan political party named as Awami League won the election, it was ignored by west Pakistan-ruling establishment and as result of political discontent led to the war between these two zones and finally on March 26, 1971, Awami League leader declared East Pakistan's independence as the state of Bangladesh. The Liberation War was a consequence of Operation search Light which was undertaken in March 1971. In this operation, Pakistani Army led military pacification to curb the Nationalist Bengal Movement in East Pakistan also called East Bengal, and to make East Pakistan Bengali free by the systematic elimination of nationalist Bengali civilians, students, religious minorities, and armed personnel. There were mass killings, raids on the local population, mass deportation, genocidal rapes, etc. Although the war was fought between East and West Pakistan but it affected the geopolitical atmosphere of India as well. An estimated 10 million Bengali refugees fled to neighboring India while 30 million were internally displaced.

To protect the cultural, constitutional, and indigenous rights of people of Assam, student leaders in 1979, started a movement known as All India Students Union (AASU) and All Assam Gana Sangram Parishad (AAGSP) collectively known as Assam Movement against illegal migrants. This agitation among the indigenous Assamese led to violence across Brahmaputra valley leading to various events of protests and finally to massacres of 1983. The Khoirabari massacre which took place on 7 February 1983 was an ethnic massacre of 100-500 illegal immigrant Bengali Hindus in the Khoirabari area of Assam, which was followed by Nellie massacre in central Assam on the morning of 18 February 1983 which claimed the lives of 2,191 people (unofficial figures run over 10,000 lives)¹⁰³. The victims were mostly Muslim immigrants from East Bengal.

Keeping in view the increasing agitation of Assamese people, The Illegal Migrants (Determination by Tribunal) Act was enacted in 1983 by the Indira Gandhi Government. It was applicable in the state of Assam only to detect the foreigners while in all other states foreigners

¹⁰³ Genesis of Nellie Massacre and Assam Agitation. See <https://www.slideshare.net/umain30/genesis-of-nellie-massacre-and-assam-agitation>

were detected under The Foreigners Act, 1946. But the Act was struck down in 2005 by Supreme Court in **Sarbanda Sonowal vs. Union of India**¹⁰⁴ on 12 July 2005 because it only focused on the procedure of deportation which was a faulty one. For instance, it put the burden of proving citizenship on the accuser than the accused, unlike the Foreigners Act. Moreover, illegal migrants by simply producing a ration card could prove his Indian Citizenship. It excluded migrants from accusations of illegal migrants who entered India before March 25, 1971. This made the procedure of deporting even tough.

Finally, on 15 August 1985 **Assam Accord** was signed between the Rajiv Gandhi Government of India and the leaders of the Assam Movement. It used on protecting the Assamese cultural, economic, and political rights. But most of all, to deport the foreigners was the main aim of the Assam Accord. Assam Accord was Memorandum of Settlement (MoS) in which leaders of the Assam Movement accepted the migrants who entered into India before 1966 but those who entered after 1971 have to b detected and deported under this Act. This Act put the stoppage on the agitation spread by AASU. Assam Accord contains Foreigners Issue in **Clause 5** which is as follows:

- Making 1.1.1966 the base date and year, the foreigners will be detected and deported.
- All people who came to Assam before 1.1.66 shall be regularized and will not be considered illegal migrants including those whose names are enrolled in 1967 elections.
- Foreigners, who came to Assam after 1.1.1966 (inclusive) and up to 24th March, 1971 shall be detected in accordance with the provisions of the Foreigners Act, 1946, and the Foreigners (Tribunals) Order 1964.
- Foreigners detected will be deleted from all electoral rolls in force at that time. Such persons will be required to register themselves before the Registration Officers of the respective districts in accordance with the provisions of the

¹⁰⁴ See <https://indiankanoon.org/doc/907725>.

Registration of Foreigners Act, 1939, and the Registration of Foreigners Rules, 1939.

- Government of India for this purpose will strengthen the Governmental machinery.
- The names of all such persons whose names were deleted from electoral rolls will be restored after the expiry of 10 years following the date of detection.
- All persons shall be expelled who after being expelled entered into Assam again illegally.
- Those who entered on or after 25 March, 1971 shall continue to be detected, deported, and expelled according to the law, and practical and stern steps shall be taken to expel such foreigners.
- The difficulties expressed by AASU/AAGSP regarding the implementation of The Illegal Migrants (Determination by Tribunals) Act, 1983 shall be given due consideration by the Government.

In May 2005, the first tripartite discussion was held on Assam Accord after 32 years of it being signed. This discussion was held between All Assam Students' Union, Union Home Minister Rajnath Singh along with Chief Minister Sarbanda Sonowal where AASU mentioned the major issues which remain unsolved even after 32 years of Assam Accord. Rajnath Singh assured AASU leaders that Centre would take steps for preserving their rights and make Assam Accord functional. After a long hailing outcries of indigenous Assamese people deprived of their rights, Citizenship Amendment Act, 2019 according to our Home Minister Amit Shah is a way forward to make Assam Accord functional and this will help to eradicate the problems arising from communal, lingual, cultural and other issues between people of Assam and illegal Migrants who have entered into India through many events in history.

5. National Register of Citizens (NRC)

National Register of Citizens (NRC) has been another reason for heated debates and protests across the country. NRC has also been a part of various speeches given by our Home Minister at Parliament where he announced NRC to be taken up throughout the country like it was recently taken up in Assam in the year 2013 under strict monitoring of Supreme Court guidelines.

NRC can be called the soul of Assam Accord so it has the same function i.e. to identify Intruders, illegal migrants from citizens of India. In short, we can say, those who could not prove their citizenship will be deported or sent to detention camps.

Widespread paranoia in the minds of the people regarding NRC is that While CAA after its operation, will declare Muslims and other excluded religious communities, to be illegal migrants until and unless they acquire citizenship by any other methods mentioned in the original Act, 1955. And whenever NRC will be implemented, according to many critics, it will render Muslim and other religious communities to be illegal migrants and failing to prove their citizenship, they will be deported or sent to detention camps. But it seems that misinterpretation of NRC is the result of mushrooming myths regarding its functioning. To know the actual objectives and functions of NRC, let us study and discuss its background and its place in Indian history.

As we have discussed above that NRC has the same function as Assam Accord, it is to maintain a registry by the Government which will contain names and information regarding the identification of genuine Indian citizens from illegal migrants in the state of Assam only, because of the historical background of Assam which has faced an influx of migrations during a different period of times and has affected the cultural and constitutional rights of indigenous people of Assam. For the first time, NRC was prepared in India after the census of 1951 which was the first time undertaken after independence.

In 2003, Citizenship (Registration of Citizens and Issue of National Identity Card Rules) was enacted which contained rules for undertaking NRC whenever required.

After the failure of Assam Accord, 1985 and Illegal Migrants (Determination by Tribunal) Act, 1983, Pilot Project was undertaken to implement NRC in two districts of Assam namely,

Kamrup and Barpeta but within 4 weeks there was a mob attack on the office of IAS Commissioner, Barpeta that resulted in police firing killing 4 persons. Because of this, the problem of law and order the Pilot Project was aborted and it seemed that undertaking the NRC project is a huge problem and tougher than it seems.

Finally, the state of Assam started undertaking NRC upon the directions of the Supreme Court in **Assam Public Works vs. Union of India**¹⁰⁵ in 2013 by Justice Sharad Bhabde.

CJI Ranjan Gogoi and Justice Rohinton Nariman monitored the process very carefully, to make sure that Government is undertaking its exercise according to the Citizenship Act, 1955, and Citizenship (Registration of Citizens and Issue of National Identity Card Rules), 2003.

NRC complete draft was released on July 30, 2018. According to this draft, out of 3.29 crore 2,89,83,677 applications of people were recognized as citizens of India. 40,70,707 persons were labeled as illegal residents¹⁰⁶.

Supreme Court immediately after the draft was published on 31 July, warned Government authorities against taking any stern or strict action against 4 million unidentified Indian citizens as a draft of NRC on 30 July was merely a draft and not final submission.

The Centre on 14 August 2018 informed the Supreme Court about creating distinct IDs for 4 Million people filing objections and claims against the draft of 30 July. Biometric information will be put on these distinct IDs according to the Center. The petitions against the NRC draft will be closely monitored by the Supreme Court. On 31 August 2019, NRC final list was published on its website¹⁰⁷ by The Office of the State Coordinator which examined that out of 3,30,27,661 applicants 19,06,657 were to be excluded as illegal residents. Three-Judge bench including Chief Justice SA Bhabde kept on and will keep on monitoring the NRC functioning in Assam.

Some of the points to be considered for eligibility of NRC¹⁰⁸ :

- Those persons who have their names registered in NRC, 1951.

¹⁰⁵ See <https://www.scobserver.in/court-case/assam-s-national-register-of-citizens>.

¹⁰⁶ Ibid.

¹⁰⁷ <http://www.nrcassam.nic.in/index-M.html>.

¹⁰⁸ See <https://www.indiatoday.in/india/story/what-is-nrc-all-you-need-to-know-about-national-register-of-citizens-1629195-2019-12-18>.

- Those persons who have their names in any of the Electoral Rolls up to midnight of March 24, 1971.
- Above persons' descendants.
- Those persons who have entered into Assam on or after January 1, 1966, but before March 25, 1971, and are registered according to rules made by Central Government with Foreigners Registration Regional Officer (FRRO) and those who are not declared as foreigners or illegal migrants by the competent authority.
- Those who have their origin from Assam and are inhabitants of Assam, along with their descendants and children as citizens of India. Provided that registry authority has ascertained their citizenship beyond a reasonable doubt.
- According to the list of documents that are admissible for citizenship, those persons who can provide any one of the documents issued up to midnight of March 24, 1971, can be categorized as eligible persons for NRC.
- NRC is open to All citizens of India if they have moved to Assam after March 24, 1971, along with their children and descendants, and if they can prove that they are residents of India except Assam as on March 24, 1971.
- Under Clause 3(3) of the Schedule of the Citizenship (Registration of Citizens and Issue of National Identity Cards Rules), 2003, Tea Tribes' members shall also be covered under 'Original inhabitants of Assam'.
- Members considered as original inhabitants of Assam shall only be included in NRC if they can prove their citizenship, beyond a reasonable doubt to register authority.

These guidelines can be updated from time to time after the consultation with Central Government, according to **Section 18** of The Citizenship (Registration of Citizens and Issue of National Identity Card Rules) Act, 2003.

Foreigners' (Tribunals) Amendment Order, 2019 has been passed on May 30, 2019, by the Government of India which allows not only Assam but all states and UTs within the union of India to constitute their own Foreigners' Tribunals which was earlier confined to the state of

Assam only. These are made to address the question of citizenship of a person. District magistrates in all states and UTs are empowered to set up these tribunals to detect foreigners¹⁰⁹. The amendment empowers district magistrates in all states and union territories to set up Foreigners' Tribunals to detect foreigners. Following the Amendment State Government of Assam has established 400 Foreigners' Tribunals out of which 200 are made functional since September 2019.

As said earlier, people are worried especially Muslims, because according to the CAA will declare them illegal migrants and NRC will deport them. One thing which is to be made clear here is that NRC will detect and deport only and only illegal migrants and not citizens of India. Section 2 of CAA although excludes Muslims, for a particular reason (discussed later in this article), but it nowhere threatens Muslims of Indian origin, those who are already citizens of India, will remain the citizens of India and they need not to worry, stated Amit Shah during Parliamentary sessions. Moreover, every migrant has the right to get Indian Citizenship under the procedure described in the Citizenship Amendment Act, 1955. NRC in Assam, no doubt, has been implemented to detect Illegal Migrants but if it would be carried throughout India, which has yet not been decided, it will be held only to keep the record of Indian Citizens, which can be used later for undertaking various programs.

“I don't have any problem in college at personal level but in front of media they call us Bangladeshi”, said Siddique, M. Com. Student of Gauhati University and ‘they’ here refers to organizations like AASU, which are leading the Assam Movement against illegal migrants from Bangladesh. He looks up to the day when NRC will be implemented in Assam and everything will come to normal.¹¹⁰ This statement of student tells us how even the genuine citizens are facing problems because of Illegal Migrants. Illegal migrants do not include Refugees because India has a history of always giving protection to those facing various problems from their own countries, for example, refuge given to Tibetans, residing, and co-existing peacefully in India.

¹⁰⁹ See <https://www.news18.com/news/india/new-mha-order-allows-creation-of-foreigners-tribunals-gives-it-power-to-regulate-its-own-procedure-2179731.html>.

¹¹⁰ See <https://economictimes.indiatimes.com/news/politics-and-nation/national-register-of-citizens-in-assam-issue-of-illegal-foreigners-continues-to-be-a-major-political-one/articleshow/47657561.cms>.

Thus, we can conclude that the threat in the minds of people is presumptuous, and it should be considered mindfully keeping in view the turmoil situations, that people of Assam have gone through throughout their history because of Illegal migrants.

6. National Population Register (NPR)

NPR (National Population Register) is another crucial decision taken at a cabinet meeting on 24, December, 2019 which earmarked Rs. 3941 crore for NPR. The objective of NPR is different from NRC, it is to create only a comprehensive identity database of every resident of India which was carried out for the first time in 2004, then 2010, 2015 and now it will be carried out from April 2020 to September 2020 and final count will be given in February 2021 i.e along with 2020-21 census, according to Prakash Javedkar, Union Minister; which has been postponed indefinitely because of Coronavirus says, Home Minister. The basic difference between NRC and NPR is that NRC requires documents while NPR is self declaratory, other difference lies in their purpose of the exercise. Opposition calls NPR a forerunner of NRC while the ruling government calls it a step towards collecting a database of all residents (irrespective of their citizenship) of country. This skeptical view towards NPR is mindless and unreasonable because NPR is just producing the data collection to draft population register, irrespective of citizenship. Though it is well-stated fact that to carry out NRC, population register is important according to The Citizenship (Registration of Citizens and Issue of National Identity Cards) Rules, 2003 but NRC and NPR don't need to be always interlinked, NPR can be undertaken by the Government individually for other purposes as well.

7. Controversies

What makes this whole Amendment Act controversial is a series of questions like why only three countries¹¹¹ are grouped and other neighbors left out? Why only six religious

¹¹¹ Three countries are namely, Afghanistan, Bangladesh or Pakistan.

communities¹¹² are identified and leave out others like Ahmaddiyas¹¹³, Hazaras¹¹⁴, and Rohingyas¹¹⁵? Why only Christianity is chosen and other two Abrahamic religions i.e. Judaism and Muslims are left out? Why Hindus of Sri Lanka and Christians of Bhutan have been left out? Does or does not CAA violate the ruling principle of Article 14 of the Constitution¹¹⁶ i.e. equality before the law and reasonable classification¹¹⁷?

Amit Shah, while answering to similar questions frequently asked during Parliamentary sessions, said that these three countries are grouped in the act because they are Islamic countries which share their land boundaries with India, and are known to have religious persecution of the six communities named in Section 2, while Muslims are presumed not to be persecuted in these countries on the grounds of religion mainly because of their majority.

He said that various other laws regarding religious persecution of Hindus in Sri Lanka have been made from time to time and will be made whenever needed but for this

Amendment, its sole purpose lies in protecting six mentioned religious communities from persecution in only three of these countries. While answering the questions arose on the constitutionality of the Act, he said, Constitution in Part 2 gives power to the Parliament to enact a law on Citizenship, and in its power, the Parliament is doing so.

He also said violation of Article 14 has not been anywhere done because of the Reasonable Classification permitted in Article 14 and in the eyes of the government protecting the listed religious communities because they are minorities in three stated countries comes under the definition of Reasonable Classification.

¹¹² Six religious communities are namely, Hindu, Sikh, Buddhist, Jain, Parsi or Christian.

¹¹³ Ahmaddiyas Muslims belong to a sect of Islam which originated in India and spread to the world. Founder of this sect was Mirza Ghulam Ahmad, whom they believe to be the true prophet of Islam and they view themselves as leaders of propagation and renaissance of Islam.

¹¹⁴ Hazaras are said to be descendants of Genghis Khan, founder of Mongol Empire native to the mountainous region of Hazarajat in central Asia. They are primarily Shia Muslims but because Afghanistan has majority of Sunni Muslims, thus they face religious persecution in other Islamic countries too.

¹¹⁵ Rohingya people are stateless Indo-Aryan ethnic group who reside in Rakhine State, Myanmar (previously known as Burma), they are facing conflicts from Rakhine Buddhists.

¹¹⁶ Article 14 provides for equality before the law or equal protection of the laws within the territory of India.

¹¹⁷ Reasonable Classification is a doctrine in Article 14 which becomes a necessity for the society to progress for example, poor people cannot pay the same tax as paid by rich ones, thus if your object is for society's welfare, such differentia known as intelligible differentia (test for the basis of reasonable classification) is permissible.

8. Shaheen Bagh and Judiciary

Shaheen Bagh for more than 2 months has remained the epicenter for peaceful protests. Although it is peaceful and people's right to protest in Democratic India but it has also affected the rights of the people working, trading, moving, or living on Shaheen Bagh Road. And now when Coronavirus is spreading like fire, people protesting at Shaheen Bagh are not ready to wind-up the protests as according to them there is no other virus more dangerous than CAA. Petitions have already been filed in SC to look into this matter.

The voice of Judiciary in the parallel narrative of petitions against CAA by opposition parties and other organizations has remained absent at the initial part but later SC issued notice to the center for hearing on 22nd January. Total 144 petitions, 142 were against CAA and 2 were for CAA, were served on SC's table.

In the hearing of January 22, SC has refused to order any stay or postponement of CAA without first hearing about what Centre has to say. Govt. was granted with four weeks for replying to all the petitions. SC will also examine petitions related to Assam and Tripura separately from the petitions against CAA across India. The matter will be heard by a five-judge constitutional bench. SC also ordered that no High Courts will take up this matter while SC is already addressing it. On the intervening night of 22-23 February 2020 clashes broke out at anti-CAA protests at Jafraabad in North East Delhi but on SC hearing on February 26, regarding Shaheen Bagh Case, SC didn't address this present situation in Delhi. According to SC, it will limit its scope only to the question raised in Shaheen Bagh's petitions that whether it is appropriate to block roads for protests or not? It asked Delhi High Court to look into the present matters of Delhi Protests while for cases piled up against CAA, SC has taken different footing and has taken all the matter in its own hands as stated earlier. SC also gave the date for Shaheen Bagh Case hearing i.e. 23rd March, 2020.

Every Indian is now impatiently waiting for the decision to be taken up by Supreme Court on these two crucial matters firstly, against CAA and secondly, Shaheen Bagh road blockage case. There will be much more unpacking and understanding that where CAA and the Protests stand after these hearings.

9. Conclusion

Citizenship (Amendment) Act, 2019 is presumptuous, every person who criticized this Act is criticizing it based on its implementation, which has yet not been done. The Act is misconceived in so many ways for example, the term “Illegal Migrants” is mixed with refugees. Muslim citizens are put in the category of Illegal Muslim residents, by the critics. Reasonable classification empowered in Article 14 can be held on a different basis, out of which some basis are, geographical basis, historical basis, nature of persons, etc. and if we look into the Amendment, it is done on a reasonable basis only. The population of Hindus in Bangladesh has reduced steadily over the years, from 28% in 1940 to 8.96% in 2011. Two periods can be marked out when the population has declined sharply- first during the partition of 1947 and another during the Liberation War of 1971. However, after the making of Bangladesh, there has been a nearly 33% decline in the Hindu population which if seen in demographic terms, is huge and enormous. This demographic data with the dwindling population is a clear indicator of the hostile environment for Hindus that is prevalent in the country.¹¹⁸ This is just an example of one of the three countries, which have been mentioned in the Amendment, and studies tell that in the coming 30 years there will be no Hindus left in Bangladesh. This makes the CAA very important and regarding in India. The Communist Party of India (Marxist) supported NRC and is ready to welcome the final list of NRC, Assam which excluded 2 Million people.¹¹⁹ CPM, secretary of Assam, Deben Bhattacharya opined that NRC has come into exercise only after the hard labor of 52,000 employees and patience of Assamese people. He urged the Government to provide identity cards to 3,11,21,004 people been included in the list as early as possible. The party while justifying NRC Assam said, “NRC in Assam has been updated after specific political and historical circumstances”.¹²⁰ Spiritual leader Sadhguru said that, “In my opinion CAA is two little compassion coming.” Thus I conclude this research that this Amendment Act is a gate to give refuge to many communities in India, which have no other way to go, in regard with Muslims, only those who are illegal will be deported back to the countries where they have come from whereas resident Muslims having citizenship have

¹¹⁸ See <https://www.sundayguardianlive.com/opinion/may-no-hindus-left-bangladesh-30-years>

¹¹⁹ See <https://www.telegraphindia.com/states/north-east/pleased-with-nrc-outcome-assam-cpm/cid/1702388>

¹²⁰ See <https://cpim.org/pressbriefs/nrc-assam-ensure-justice-excluded>

nothing to be feared of. All those communities not mentioned in the Amendment can also get Citizenship of India by the different ways described in the principal Act of 1955. It is just that being presumptuous and misinterpreted, the Act has been wrongly put in the public, which has led to mindless acts and fear. The Act is waiting to get its validation after the Corona pandemic leaves India saving Indians from Illegal Migrants who are not just a threat to the geopolitics of India but also economic, social, and cultural threats to Indian diversity.

7. Recognition of Same-Sex Marriage

By: Athira Suresh

Pg. No: 94-108

i. Abstract

This research paper analysis “*The recognition of same-sex marriage*” in the Indian context and in a comparative study with other countries where it is legalized. Same-sex marriage is still a major issue in India even after decriminalizing homosexuality. Under the Constitution of India, the state shall not deny to any person equality before the law and no person shall be deprived of his life or personal liberty. But we know that in India, it is still not recognized to marry a person belonging to same-sex. Sexual action between same-sex individuals is illicit and same-sex marriage is still not recognized in India.

In Indian society, marriage is still something that happens only between males and females. They never consider the other group of people who wishes to marry someone of their sex. People belonging to the LGBT community are facing a very hard time in society just because they want to marry a same-sex person.

For the LGBT community, there are no official demographics. The Government of India, in 2012, submitted figures to the Supreme Court, where there were about 2.5 million gay people recorded in India according to the figures. These figures were obtained based on the individuals who self-declared to the Ministry of Health.

This research paper mainly focuses on the challenges faced by homosexual individuals, probable solution that can be applied to solve the issue, a comparative analysis with other countries where same-sex marriages are legalized, and why it is important to recognize same-sex marriage in a country like India.

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1. Introduction

The biggest challenge faced by the homosexual community since the evolution of mankind is sexual racism. Due to the rapid modernization and growth in trend with regard to the advancement in technology, sexual racism has now taken its roots in the form of severe crimes delivered through cyber or simply we can say any electronic medium. The violence and hatred against homosexual people have been rapidly increasing in recent times. The credit to the increase in these types of violence can be given to the conservative and orthodox thoughts and religious belief. We can see that there are many instances of crimes out of hatred that is aimed against sexual minorities in every corner of the world.¹²¹ Every year on May 17th the International Day Against Homophobia, Transphobia, and Biphobia is celebrated. The LGBT community is praised and promoted by influential people. They are being given a choice to express themselves without fear of society. But even when the world is progressing in such a way to accept people belonging to the LGBT community, we know that in India individuals belonging to the LGBT community are suffering just because they are one. Especially in South India, such people and their supporters are looked down upon by the society.

Recently in a debate held in Kerala, a few trans women were present and the stories they had were truly horrifying. Their family has left them just because they are transgenders, they can't even use a public toilet because men mock them at men's washrooms and women scream on seeing transwomen in ladies washrooms. Above all these insults, all of them had one more experience in common. They all were created by someone who faked to have a relationship with them. Just because these women can't register their marriage officially, men approach them and go away with their money. Since there are no provisions to register their marriage, it is even difficult for them to get the provisions laid by the government. The only option available to them is living together under which the women can't claim any maintenance if cheated by their partner. Since same-sex marriage is not recognized some hotels hesitate to provide rooms for such couples. They are even treated as sex workers in this 21st century. People are still fighting for these kinds of things.

¹²¹ Acharya Y et al., Understanding Homosexuality: Challenges and Limitations, 1 J MORPHOL ANAT 1: 104 (2017).

We know that before 2018, Section 377 was a criminal offense under the Indian Penal Code. Section 377 deals with the unnatural offenses. According to which a person who has consensual sex with the same gender shall be punished with imprisonment for life, or with an imprisonment for a term which may extend to ten years, and shall also be liable to fine. To be liable under this offense, penetration is sufficient.¹²² After the decriminalization of Section 377 of the Indian Penal Code by the Supreme Court, a third gender was recognized and same-sex relationships became legal but the civil rights which included marriage, inheritance, or adoption, are not recognized and guaranteed to the LGBT community.

In the case *Navtej Singh Johar v. Union of India*, the petitioners have highlighted that the rights homosexual community that comprises of 7- 8% of the total population of India had to be recognized and that it has to be protected. Also, the fact that homosexuality is an essential matter for every individual's identity.¹²³ It was after 71 years of independence, in this case, Section 377 of IPC was decriminalized. Even after decriminalizing there is no recognition for same-sex marriages in India.

2. Challenges Faced and Probable Solutions

Living in an Indian society with a view different from that of the other people is the primary challenge faced by any individual. In most cases, people, male or female, are forced to the customs of the society without even thinking about their likes or dislikes. From a very young age, they are taught about the heterosexual concept of marriage. As a result, a person who differs or diverts from this conventional thinking is isolated. The scenario has indeed changed when compared to a decade before. On considering the LGBT community, decriminalizing Section 377 was their initial step that is to ensure and protect their basic fundamental right to live with someone they like without the barrier of gender. But that itself is not sufficient.

¹²² The Indian Penal Code, 1860, No. 45, Acts of Parliament, 1860 (India).

377. Unnatural offences.—Whoever voluntarily has carnal inter-course against the order of nature with any man, woman or animal, shall be punished with [imprisonment for life], or with imprisonment of either description for a term which may extend to ten years, and shall also be liable to fine. Explanation.—Penetration is sufficient to constitute the carnal intercourse necessary to the offence described in this section.

¹²³ *Navtej Singh Johar vs Union Of India*, AIR 2018 SC 4321.

Considering today's world, it is essential to have an act dealing with the LGBT community, protecting their rights, and to ensure that they live in harmony just like the straight people.

The challenges that are mostly faced by the same-sex couple are:

- 1. Isolation from Society:** Indian communities have an opinion that marriage is a heterosexual institution. The strong reaction of society is that many people deny the existence of sexual minorities in India, dismissing same-sex behavior as a Western, upper-class phenomenon. Some people still label homosexuality as a disease that has to be cured or even as an abnormality that has to be treated or also as a crime that has to be punished. Since there are no organizations in India as in the West, the victimization of sexual minorities in India is more subtle. Homosexual individuals are not accepted in the Indian society, and this leads to them being extremely closeted. But when we look into the past five years, the Indian LGBT community has flourished on a platform which has mostly been the best accepting space they could have ever wished to find- the Internet. Thus they are forming NGOs, calling up help-lines, and meeting regularly to evolve strategies for their cause.¹²⁴
- 2. Legalization of Marriage:** One of the most difficult challenges faced by homosexual individuals is that they cannot register their marriage like everyone. This means that there are no provisions in India till now to recognize a same-sex marriage. Marriage can be defined as a legal recognition of the union of two people which gives certain rights and obligations between those persons and also for their biological or adopted children.¹²⁵ Here the recognition of marriage regarding individuals preferring same-sex marriage is not mentioned.

¹²⁴ Parasar, A., 2007. Homosexuality in India: The invisible conflict.

¹²⁵ Subodh Asthana, AIBE: Concept of Marriage in Family Law, iPleaders Blog (Sep. 28 2019), <https://blog.iPLEaders.in/aibe-marriage>.

3. Adoption: As mentioned above a marriage is legalized to adopt a child. This means that a same-sex couple cannot adopt a child until and unless they are married. But since there are no provisions to legalize same-sex marriage, adoption is not possible. This is a challenge faced by the homosexual community since they have the right to adopt like anyone else and these rights are being violated.

4. Surrogacy: The Surrogacy (Regulation) Bill, 2019 does not allow single parents, same-sex couples, divorced or widowed persons, transgender persons, live-in partners, and foreign nationals being used as a surrogate mother. According to the bill, surrogacy means a practice whereby a woman intentionally bears and gives birth to a child for another couple and hands over such a child to the intending couple after the birth.

Surrogacy is only allowed to the “intending couples” who have proven infertility. The couple should be citizens of India and have been married at least for five years but have no child by any means i.e. biological, adopted, or surrogate. In the surrogate couple, the woman should be between 23 to 50 years old whereas the man’s age must be between 26 to 55 years.¹²⁶

5. Job Opportunity: It is indeed difficult for a person to get a job these days. But it is even more difficult if that person belongs to an LGBT community. In 2019, India held its first hiring consultancy firm for the members of the LGBT community in Bengaluru. Even those who have a job fight for equal pay, corporate representation, and other benefits.¹²⁷ Also, it has to be noted that these people are not provided a good education. Mainly because they are some families who leave their children when they come to know that their child is a homosexual. So finding a good and decent earning job is a difficult task.

¹²⁶ Chaitanya Mallapur, Almost Final: Surrogacy Ban For Single Parents, Homosexuals, Live-in Couple, *INDIASPEND* (Aug. 28 2019),

<https://www.indiaspend.com/almost-final-surrogacy-ban-for-single-parents-homosexuals-live-in-couples>.

¹²⁷ Rohit Vaid, India set to get first dedicated LGBT hiring consultancy, *Livemint* (Jul. 21 2019), <https://www.livemint.com/industry/human-resource/india-set-to-get-first-dedicated-lgbt-hiring-consultancy-1563683768879.html>.

The best solution to all the above-mentioned challenges is the recognition of same-sex marriage. When the legislation accepts such a marriage, it is for sure that there will be a huge impact on the citizens. Up to an extent, people will welcome the concept of same-sex marriage. It is evident from the decriminalization of Section 377 of IPC that a large population accepts something when it is legalized. It is true that in a society like ours, individuals are scared to open up themselves, to say that they have likings towards their sex. This is because they are scared of the bully that follows once they open themselves. There is bullying from both offline and online communities. Even though this has decreased since the past few years, some still have a feeling of insecurity to protect their interests.

To point out the probable solutions to the above-mentioned challenges:-

- 1. Recognition of Same-Sex Marriage:** Apart from decriminalizing Section 377 of IPC, the legislation must bring an act to protect the interests of same-sex couples. When a marriage is recognized, the couple gets the rights and obligations as a couple. They can adopt a child just like any heterosexual couple. When the marriage is recognized there is legal protection to the couples who lead a live-in relationship at present. Also, they can stand for their rights without any fear of anyone when they live in a society.
- 2. Awareness to the Society:** Even after legalizing same-sex marriage, it might be difficult for the couple to live in a society they wish to if the people look down upon them as if they are committing a crime. So the society must be given programs related to the normalizing of same-sex marriage and to avoid any form of bullying or harassment. The Government must take necessary steps to provide awareness class at all levels. Also, NGOs have a great role in promoting awareness related to the acceptance of same-sex couples to the society. The preconceived notion that same-sex marriage is a crime can be solved up to an extent by this.

- 3. Health Centers to Avoid Psychological Distress:** The people who fight for their needs are humans just like anyone. They are emotional beings and their emotional aspect must be protected and it is every one of ours duty to protect the LGBT couple from being bullied and we must also ensure that the bullied ones must be given proper care to cope with their psychological distress.

The majority of LGBT couples learn to cope with the abuse, particularly when they have the support of family and friends, and participate with LGBT organizations and social networks. However, a significant number of LGBT couples, most particularly younger LGBT couples, had to cope with stigmatization, discrimination, and harassment without support. Many people also faced stress in addition to the above mentioned. This is from experiences that include high levels of homophobic bullying in schools, physical attacks, and verbal attacks. All this stress hurts their mental health which gradually leads to the significant levels of psychological distress, self-harm and they can even have suicidal thoughts.¹²⁸

- 4. Education Programmes at School Level:** Schools and teacher education programs are crucial sites where LGBT issues and concerns need to be addressed. To encourage health and safety among homosexual youth, schools can help and encourage respect for all students. Schools should take responsibility for prohibiting bullying, harassment, and violence against all students be it homo or heterosexual students. Schools can identify safe spaces and encourage youth clubs where homosexual youth can receive support from teaching and non-teaching staff at school. Schools can even facilitate access to providing health services, which includes HIV/STD testing and counseling, to LGBT youth from experienced community-based providers.¹²⁹

¹²⁸ Chatterjee Subhrajit, Problems Faced by LGBT People in the Mainstream Society: Some Recommendations, IJIMS Vol 1, No.5, 317-331 (2014).

¹²⁹Id, at 7.

But to provide all the probable solutions, a large support from the Government is required. Same-sex couples are fighting for their basic fundamental right i.e. to live with a person of their choice. So the challenges faced by them must come to an end.

3. Comparative Analysis with Developed Nations

In 2011, the UN General Assembly passed a wide-ranging resolution on human rights, homosexuality and gender identity, expressing concern about violence towards LGBTQ people and commissioning the first-ever UN study focused on LGBTQ issues.¹³⁰ The United Nations showed so much concern at acts that involved violence and discrimination, in all parts of the world, that is aimed against persons due to their homosexuality and gender identity. It requested the UN High Commissioner for Human Rights to conduct a study that documents discriminatory laws and practices. Also, acts of violence against individuals based on their homosexuality and gender identity were to be studied. Since the violence against the LGBT community was a world-wide issue, the study was requested to be conducted in all regions of the world. The UN also asked to make a study on how international human rights law can be utilized to put an end to the violence and other human rights violations that were based on homosexuality and gender identity.¹³¹

The treatment of LGBT people varies in different countries. When compared to India, there are countries where the same-sex couple faces more hardships and there are also countries which protects the interest of such people. Some countries impose death penalties on individuals belonging to the LGBT community. India is one of the countries that have decriminalized same-sex offenses.

In 123 UN Member States, consensual same-sex sexual acts are not criminalized. Out of which 21 states are in Africa, 24 in Latin America and the Caribbean, 2 in North America, 20 in Asia,

¹³⁰HRC staff, 10 Ways the U.N. has Protected LGBTQ Human Rights, HUMAN RIGHTS CAMPAIGN (Sept. 18 2017), <https://www.hrc.org/blog/ten-ways-the-united-nations-has-protected-lgbtq-human-rights>.

¹³¹SRI Traditional values submission, OHCHR (Mar. 5 2013).

<https://www.ohchr.org/Documents/Issues/HRValues/SRI%20.pdf>.

48 in Europe and 8 in Oceania. Some of these States never had a provision criminalizing homosexuality in their Penal Codes, while others consciously removed the law when initiated within parliaments or by the imperatives set by courts of law. The countries that still consider criminalizing consensual same-sex sexual acts between adults include 32 in Africa, 9 in Latin America and Caribbean, 0 in North America, 21 in Asia, 0 in Europe, 6 in Oceania.¹³²

There are also countries among the countries that declared illegal where laws and regulations have been enacted to restrict the right to freedom of expression in relation to homosexuality issues. This can take place in the form of restrictions on expressions of same-sex intimacy and restrictions on expressions of support or positive portrayals of non-heterosexual identities and relationships. Morality codes pertaining to public discussion have long been in force in some Arabic States. However, a new legal vehicle has been employed more recently to criminalize expressions of affirmation or support for homosexuality, known as “propaganda laws”. Even in this era, some countries have recently introduced laws that criminalize even communication between individuals on same-sex dating applications and websites. There are even penalties if that communication leads to sexual encounters.¹³³

When looked into the recognition of same-sex marriages in other countries, the U.S. Supreme Court ruled on June 26, 2015, that the Constitution grants same-sex couples the right to marry, effectively legalizing same-sex marriage in the thirteen states where it remained banned. The five-to-four ruling, which extends to U.S. territories, came amid dramatic shifts in public opinion: 67 percent of Americans polled in 2018 approved of same-sex marriage, up from 27 percent in 1996. More than half of the countries that allow same-sex marriage are in Western Europe. Same-sex marriage has been legalized in the Netherlands (2001), Sweden (2009), Portugal (2010), Belgium (2003), Spain (2005), Norway (2009), Iceland (2010), Denmark (2012), France (2013), the United Kingdom (2013), Luxembourg (2015), Ireland (2015), Finland (2017), Malta (2017), Germany (2017), and Austria (2019). Italy is the largest Western European country where same-sex marriage is not legal; its parliament, however, approved civil unions for same-sex couples in 2016. In 2005, it was Canada that legalized same-sex marriage making it the first country in the Western Hemisphere. It was followed by Argentina in 2010, Brazil and Uruguay in 2013, Mexico in 2015, Colombia in 2016, and Ecuador in 2019.

¹³² Lucas Ramón Mendos, *State-Sponsored Homophobia*, 13th ed. ILGA 23, 175-231 (2019).

¹³³ *Id.*, at 8.

New Zealand and Australia are the only Pacific Rim countries in which same-sex marriage is legal. The legality of same-sex marriage was in May 2019 in Taiwan. It was declared as a result by the legislature to rule the top court issued two years earlier. In most of the parts in South and Central Asia, same-sex relations are still illegal, including in Bangladesh and Pakistan. Apart from India, countries like Bangladesh, Nepal, and Pakistan allow people to register as a third gender in official documents. Same-sex relations are illegal in much of the region and are punishable by death in Iran, Saudi Arabia, and Yemen. South Africa is the only sub-Saharan African country where same-sex couples can marry.¹³⁴

In short, India is one of the countries that have just begun recognizing third gender. Many countries in Asia are yet to decriminalize same-sex relations. Compared to those countries India is far better but when compared to European countries and the USA, India is far behind and it is essential to recognize same-sex marriage for the welfare of society.

4. Conclusion

In the case *Navtej Singh Johar v. Union of India*, it was observed that: section 377 of the IPC involves the characteristic of unreasonableness. It is indeed a weapon in the hands of the majority to seclude, exploit and harass the LGBT community. Section 377 of IPC harms the lives of the LGBT community in criminality and constant fear affects their joy of life. They are constantly faced with social prejudice and disdain. The LGBT community is also subjected to the shame for being natural, that is they are abused for being themselves. Thus, an archaic law that is incompatible with constitutional values cannot be allowed to be preserved.

It was also observed that the prejudiced and homophobic attitudes deprive of positive human qualities for the LGBT community by repudiating their dignity, personhood, and above all, their basic human rights. It is essential to understand that identity and homosexuality isn't something that has to be silenced by maltreatment. Liberty, being one of the main terms in our

¹³⁴ Claire Felter & Danielle Renwick, Same-Sex Marriage: Global Comparisons, CRF (Oct. 29 2019), <https://www.cfr.org/backgrounders/same-sex-marriage-global-comparisons>.

constitutional values, enables people to define themselves and to express their identity. It is important that a person's identity has to be accepted and respected by everyone without any criticisms.

In the case, it was noticed that the very existence of Section 377 IPC that criminalizes transgenders shows a great symbol of oppression and it is discriminated against a class of people. This stigma, oppression, and prejudice were to be removed and the transgenders have the right to recover from their narrow "claustrophobic spaces" that is to just survive in hiding with their isolation and fears that lead to the deprivation of enjoying the richness of living out of fear with a full understanding of their potential and equal opportunities in all walks of life. The objectives enshrined in the Constitution can be attained only when every person is allowed and enabled to participate in the social mainstream. Every person should experience the journey towards attaining equality in all spheres, to have equal opportunities in all walks of life, equal freedoms and rights. Moreover, every individual must have equitable justice.¹³⁵

This highlighted the need for decriminalizing Section 377 of the Indian Penal Code. That means why it was necessary to identify a third gender. But why is it needed to recognize same-sex marriage in India? In a country like India with a population of 1.3 billion, almost 8% of them are identified as the people belonging to the LGBT community. Now there are many more who shut their dreams just because they are scared to open up and till their interests. It is important to recognize the needs of these citizens because just like anyone else they should have their rights and duties like a normal couple.

In the case *Naz Foundation v. Government of NCT of Delhi and Others*, the Court highlighted certain rights of individuals who are of different homosexuality in this respect by referring to the Yogyakarta Principles under which the term "homosexuality" and "gender identity" means every person's ability for profound attraction to animate and intimate. It also includes the sexual relations with persons of a different gender or the same gender or more than one gender under the definition of gender homosexuality and gender identity. In this case, the Court declared that by criminalizing consensual sexual acts of homosexual adults in private, Section 377 of the Indian Penal Code, 1860, violates Articles 14, 15 and 21 of the Indian Constitution.¹³⁶ But in

¹³⁵ Id, at 3.

¹³⁶ *Naz Foundation v. Government of Nct of Delhi and Others*, (2009) 160 Delhi Law Times 277 (India)

the case, *Suresh Kumar Koushal & Anr vs Naz Foundation & Ors*, the Supreme Court struck down the decision by the High Court in the Naz Foundation Case.¹³⁷

In 2017 a ‘progressive’ Uniform Civil Code, suggesting for same-sex marriage and transgender marriage, was submitted to the Law Commission of India. In the draft, it was given that in case of homosexual marriages, prohibition due to customs is not a valid reason to bar a marriage and the registration of such marriages will have to be solemnized by the registrar of the marriage.

In the draft, regarding the issue of adoption is provided for all married and in a partnership, couples to adopt a child irrespective of their sexual identity. The Law Commission began considering the public views and requests on the issue in March 2018. In late May, the Commission sought the views of religious groups. It was found that Muslim groups are against such a uniform civil code draft because implementation such a code would ban triple talaq, polygamy, and also it would not be based on the Sharia law which governs Indian Muslims.¹³⁸

Homosexuality is usually regarded as a taboo subject by both Indian civil society and the Government. The fact that sexuality in any form is rarely discussed openly suppressed the idea of public discussion of homosexuality. However, in recent years there has been a change towards the attitudes with regard to homosexuality. To be specific, there have been more discussions of homosexuality in the news media and by Bollywood. The legalization of same-sex marriage has become a religious subject rather than a political one.¹³⁹

In January 2020, the Kerala High Court asked the Centre and State government to respond to a petition demanding recognition of same-sex marriages. The petition was because it amounted to discrimination and also violates the fundamental rights guaranteed under the Constitution of

the Yogyakarta Principles define the expression "homosexuality" and "gender identity" as follows: "sexual orientation" is understood to refer to each person's capacity for profound emotional, affectional and sexual attraction to, and intimate and sexual relations with, individuals of a different gender or the same gender or more than one gender.

¹³⁷ Suresh Kumar Koushal & Anr vs Naz Foundation & Ors, Civil Appeal No.10972 of 2013 (India)/

¹³⁸ Recognition of same-sex unions in India, WIKIPEDIA (May 4 2020, at 14:26),
https://en.wikipedia.org/wiki/Recognition_of_same-sex_unions_in_India.

¹³⁹ Anil Trehan, Legal recognition of same sex marriages in India: An Overview (2011) PL June 36.

India. In Navtej Johar’s judgment in 2018, the apex court, though decriminalized homosexuality did not get into the civil rights issues of the people belonging to the LGBT community. The Supreme Court dismissed a petition in April 2019 which sought civil rights such as marriage, adoption, and surrogacy. In the same month itself, the high court of Madras recognized a marriage between a man and a transwoman.¹⁴⁰

It is true that India when compared to many other Asian countries is much more developed when it comes to the LGBT community since we have recognized a third gender. But we know that there is a long way ahead and recognition of same-sex marriage is one of the important steps in it. By recognition of same-sex marriage, a same-sex couple gets the right to adoption, inheritance. Moreover, the bully and harassment faced by them in the society will decrease up to an extent.

¹⁴⁰ Dhruvo Jyoti, Plea in Kerala High Court seeks recognition for same-sex marriages, HINDUSTAN TIMES (Jan. 28 2020 12:45 AM),

<https://www.hindustantimes.com/india-news/plea-in-kerala-hc-seeks-recognition-for-same-sex-marriages/story-usG9x12oM4urkZPQK99aHP.html>.

8. Big-Data and Smart Cities: Exploring Futuristic Opportunities

By: Srishti Arora

Pg. No: 109-121

i. Abstract

Technology has made the expansion and development of countries easier, and the approach has completely changed in the past few years. Big Data technology was introduced in the early 2000s and has helped to store and analyze large amounts of data. The evolution of the Internet of Things (IoT) has contributed to the feasibility of smart city initiatives. Governments are exploring the opportunities to provide better facilities to its citizens. The combination of the Internet of Things and Big Data is an unexplored area and can be exploited for achieving the goal of futuristic cities. India has also declared various cities to become smart cities soon and is considering adopting new concepts in the cities and implementing big data applications to achieve sustainability to provide better living standards.

Future smart cities will utilize multiple technologies to improve the health, transportation, education, and provide better management of resources leading to higher levels of life of citizens. Big data analytics will have a huge impact in shaping the smart cities. Digitization has become an essential part of our everyday lives and Big Data has become the key factor for various businesses. This research will discuss Big Data technology in detail and how it can be used in the smart city projects. It also discusses the challenges that will be faced like the issue of privacy and the need for smarter laws. The research shows that several opportunities are available that are waiting to be explored for utilizing big data, but it can only be successful if all the entities involved work in collaboration for the betterment of the society.

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1. Introduction

Technological advancement is seen to play a key role in the growth of the nations and overall global economic structure. Technological changes are creating immense transformations in the way corporations and nations have started to organize data of all the individuals and using it to organize production, provide better facilities, aid in economic development, provide goods and services as per consumer needs among other things. A large amount of data is generated in big cities which are stored in a pattern that can be used effectively for the betterment of the society. An integrated system of managing and analyzing this data can lead to a better perspective of the society and can also answer several questions relating to policymaking, planning, general governance, and business operations to support decision making which will enable a smarter environment.

According to a survey, almost 50% of the world's population lives in urban areas, which is likely to increase to nearly 60% by 2030¹⁴¹. High levels of urbanization are more prominent in developing countries and it will also increase in the near future¹⁴². Increased urban population can strain the limited resources available with a city leading to many challenges like scarcity of resources which makes the governance difficult. Furthermore, good sustainable development, economic growth, and effective management of natural resources in the urban areas require better planning and collaboration between the different organizations at the urban level. For this purpose, innovation is required, that can provide integrated information for better urban management and governance with the available resources.

In June 2015, in India, the Centre launched a project named '100 Smart Cities Mission'. The cities under this project included major Indian cities like Pune, Jaipur, Kochi, and Jabalpur and as per the mission these were supposed to have better infrastructure, housing facilities for all, open spaces, among other things.¹⁴³ Cities in India put up nearly 31% of the total population

¹⁴¹ . Mutizwa-Mangiza ND, Arimah BC, Jensen I, Yemeru EA, Kinyanjui MK (2011) Cities and climate change: Global report on human settlements. In: Global Report on Human Settlements, p.250. UN-HABITAT.

¹⁴² European Environment Agency (2006) Urban sprawl in Europe - the ignored challenge. Technical report, European Commission. ISBN: 92-9167-887-2, http://www.eea.europa.eu/publications/eea_report_2006_10/eea_report_10_2006.pdf [Last accessed: 21st January, 2015].

¹⁴³ Varun B Krishnan, What is the status of Smart City projects in India?, JULY 15, 2019, <https://www.thehindu.com/data/what-is-the-status-of-smart-city-projects-in-india/article28441952.ece>, last accessed on 16.05.2020.

and contribute 63% to the GDP (2011 Census). By 2030, the urban areas are anticipated to house 40% of the total population and contribute to 75% of the GDP. To accommodate such a huge population, the urban areas will require a thorough development of physical, institutional, social, and economic infrastructure because these are essential in improving the quality of life and attracting more investment for growth and development. The development of smart cities is a step towards this growth¹⁴⁴. The ‘Smart Cities Mission’ initiative will aid economic growth and improve the overall quality of life of people by local development which will generate smart results for the citizens. The smart city project is perceived as a means of solving urban issues through the effective use of information technology.

2. Big-Data

Big Data is the usual data but it is a term used to describe a huge collection of data. Such kind of data exists as a collection and grows exponentially with time. The data is so large and complex that it is not possible to process it using traditional methods. The accessing and storing of large amounts of data for analytical purposes has been done for a long time now, but ‘Big Data’ as a concept gained popularity in the early 2000s. In 2001, an industry analyst Doug Laney had come up with 3 V’s of big data which have now become a part of its definition:

Volume: It refers to the huge amount of data that is generated every day through both online and offline sources. The amount of data needs to be assessed for relevance to provide better options. All organizations collect user data from their personnel or through social media and storing such large amounts of data becomes an issue as conventional methods of storage will not satisfy the purpose of collecting this data, it can only be utilized if stored effectively for future use. Facebook for example has more than 2.6 billion active users while Twitter has almost 330 million active users per month, and every day these users add on to the already existing data in the form of images, videos, posts, tweets, etc. Such huge volumes of data are produced every minute and it presents a challenge because to process such volumes a proper structure of storage is to be prepared.

¹⁴⁴ Smart Cities Mission, National Portal Of India, <https://www.india.gov.in/spotlight/smart-cities-mission-step-towards-smart-india>.

Velocity: It refers to the pace or speed with which data is being produced every minute through different sources. By the use of social media itself, millions of photos and videos are uploaded in an hour and this is like an explosion of data. Big Data technology enables an organization to control the flow of data and simultaneously process it to prevent any issues that might be experienced later. The advancement in internet technology is the reason behind the inflow of data at an unprecedented speed that must be handled promptly. Normally, the high-velocity data is stored directly into memory and all the data needs to operate in real-time for evaluation and action.

Variety: It refers to the diverse structured and unstructured data that is generated by both humans and machines. Unstructured data are difficult to deal with but still are an important aspect of Big Data. Variety is the classifying ability of the incoming data into various categories. The data rarely comes in a perfect order which can be processed without any changes. Sources of data are diverse and therefore the diversity or variety in the data received. The reason for the variety in data could be the use of different software versions by different people to communicate data, withholding of parts of information, different browsers send different data, and it is also most common to expect error and inconsistency when information is expected to be entered by humans¹⁴⁵. The use of big data processing is to separate the useful information from the variety of unstructured data and store it in an orderly manner.

Therefore, Big Data involves a Large Volume of data coming in at a high Velocity in a Variety of forms. Data is being generated every second of every day; nothing can stop the data inflow from various sources. This data is what is currently known as Big Data. Data sources are around us everywhere, right from the smartphones we use to the computer systems and environment sensors. Various websites have contributed to accelerating data generation in the past few years¹⁴⁶. There is no single definition of Big Data as different definitions provide different perspectives but all point to the same concept. Big Data is stored at different places and it is owned by different entities, yet most of it goes unused. The potential for use in Big Data is very high but it is so much in volume and unstructured that a lot of time is spent on sorting the

¹⁴⁵ Edd Dumbill, Volume, Velocity, Variety: What You Need to Know About Big Data, Jan 19, 2012, <https://www.forbes.com/sites/oreillymedia/2012/01/19/volume-velocity-variety-what-you-need-to-know-about-big-data/#411928fb1b6d>.

¹⁴⁶ Khan Z, Anjum A, Kiani SL. Cloud Based Big Data Analytics for Smart Future Cities. In Proceedings of the 2013 IEEE/ACM 6th International Conference on Utility and Cloud Computing. IEEE Computer Society; 2013. pp. 381–386.

relevant information from the immense pool of information. If proper technique is used, the data can be sorted at the source itself and insights can be obtained through analysis, data intelligence, and data mining. Now, Cloud technology has also become a huge part in supporting big data analytics. It provides an efficient solution to store large amounts of data and is good for intensive applications.

3. Application of Big Data to Smart City Projects

The practice of turning cities into smart cities has suddenly gained momentum and governments are trying everything possible to provide a better living. A city becomes a ‘smart city’ because of various reasons like better water and waste management, good transportation, safety, and welfare of all residents among other things. A smart city can promptly respond to the needs of its citizens. Governments are starting to embrace smart city ideas to improve the standard of living by implementing Big Data applications as the information is utilized in developing better infrastructure and facilities for the residents. Big data can transform every sector in a city to make it a smart city. To start the process of developing a smart city, various areas should be first identified that need to be worked up on to provide quality life.¹⁴⁷

A smart city will employ different technologies relating to artificial intelligence and machine-based algorithms to process the huge volume of data inflow that will be made available to a person for processing using their sense of judgment. These programs will make use of rapid improvements in computing and networks in the coming years.¹⁴⁸ The technical development of smart cities is proceeding very quickly due to developments in Big Data, Cloud technology, and the Internet of things, but the governments still lack a cohesive understanding of the concept of the smart city as a whole. The technology has its downside; with varied complex units and operations for creating good opportunities, the government will have to face many challenges.

¹⁴⁷ Bhushan Aher, How Big Data Impacts Smart Cities, Apr. 20, 18, <https://dzone.com/articles/how-big-data-has-the-biggest-impact-in-smart-cities>.

¹⁴⁸ THE SMART CITY STORY IN THE 21ST CENTURY, October 02, 2018, <https://publicpolicy.wharton.upenn.edu/live/news/2632-the-smart-city-story-in-the-21st-century>.

Few of the benefits of smart cities and technology are:

1. **Efficient utilization of resources:** The resources available with a nation are not sufficient to provide for the fast-growing population; scarcity of resources can already be seen and therefore, there is a need for effective solutions to control the use of resources. The data collected from smart cities will help in realizing the need and then the proper allocation of the resources to different sectors. It will promote sustainable development and aid in growth without compromising with the future.
2. **Data-driven decision making:** The decisions made for the development and welfare of citizens will be based on the data provided by the citizens themselves. The decisions will be supported by the facts and figures and the government will not be able to make any arbitrary decision. The data will show the existing scenario clearly and the use of the software will provide what can be done to address the issues or what can be done for the betterment of the citizens.
3. **Better quality of life:** As the majority of the population resides in urban areas, the smart city projects will be able to provide a better quality of life to most of the citizens of the country. Better services, an efficient work environment, and better amenities will all be possible with the Big Data used for smart city projects. With the available information, informed discussions will be made and better planning of living/workspaces will be possible.
4. **Transparency and openness:** Big Data will lead to a higher level of transparency as all the possible data will be store at a fixed location for analysis. Also, the same information will be accessible at all levels of the management. Information and resource sharing will become the new norm. The need for better management and control of smart cities will drive the interoperability and openness to a great extent. The transparency in information will encourage collaboration and free communication between all entities involved in the smart city project that will further enhance the output and there will be even better facilities for the people.

Big data applications used can serve many sectors in a smart city to provide better customer experiences by which businesses will achieve better performance. Healthcare system can also be improved drastically by the improvement in care services, diagnosis, and treatment, with

the use of records. User information will help in optimizing the transportation system as per the needs; route and schedules can be adjusted for varying demands and it can be made more environmentally friendly.

Use of Big Data applications require Information and Communication Technology (ICT) infrastructure. It is essential because it provides unique and useful solutions for better use of data. The large amount of data generated in cities is in various formats and from various sectors; this data is collected in massive amounts and offers a real-time view of the ongoing task at different places in the city. Big Data technology allows utilization of this data by providing suitable tools, which properly structure the data into desired categories so that it can be used for the development of a smart city. Advanced software with data management features are required that can easily recognize the formats and sources of data and also provide for scalable handling of massive data for offline applications.

4. Challenges

While the Big Data technology offers a lot of benefits and is a futuristic approach, it comes with its challenges. Big Data allows for an in-depth analysis of the information received by forming patterns and such information is widely used in a lot of projects and businesses. There has been a lot of investment for Big Data research and infrastructure because of its benefits. But lately, the researches point out the legal issues of privacy, government regulation, international access of stored data, and increased criticisms of digital information gathering¹⁴⁹. Also, Big Data is so huge in volume that even though new technologies are continuously being developed for its storage but the rate at which its volume increases, it is difficult to keep up with it. There are so many systems sending data at the same time and failure of even one can affect the whole system.

Organizations somehow manage to store the data, but storing is not enough as it needs to be curated into something valuable. Sorting the data requires a lot of work and for a smart city

¹⁴⁹ Cayce Myers, BIG DATA, PRIVACY, AND THE LAW: HOW LEGAL REGULATIONS MAY AFFECT PR RESEARCH, June 11, 2018, <https://instituteforpr.org/big-data-privacy-and-the-law-how-legal-regulations-may-affect-pr-research>.

project; the amount of data generated will require a lot more effort. The Big Data technology is also evolving rapidly, analysts need to keep up with the latest technology as well¹⁵⁰. In a survey, it was found out that data scientists generally spend 60% of their time in cleaning and organizing the data collected and 19% on collecting the data sets; it means they spend around 80% of their time on preparing and managing data for analysis. ‘Data Munging’ was a term popularized by data scientist Mike Driscoll in 2009, which means the “painful process of cleaning, parsing, and proofing one’s data”¹⁵¹. The evolution of smarter cities presents many challenges for local governments as well as IT professionals. As cities become more reliant on technology than ever before, IT professionals will be exponentially more important. The introduction of new technology will have to be braced with the development of new skills.¹⁵²

Security Concerns: The data collected for the smart city projects will contain private and sensitive information of individuals, therefore, it is required by the authorities to ensure that the maximum level of security and privacy mechanisms are in place. The information if leaked, can pose several threats to the individuals. Because of possible illegal access, the safety, wellbeing, and privacy of individuals is at stake. Malicious attacks by hackers are now common because technology advancement has made that possible as well. Such attacks can lead to catastrophic results affecting the lives of individuals as well as the infrastructure developed under the smart city project. Big data application developers must ensure the utmost levels of security and develop privacy policies and procedures as an essential part of their design. Clear guidelines and strict laws should also be made by the government to ensure the security of its people.

Since smart cities require large volumes of data and such analytical models to achieve the desired goals, data security experts have continuously warned against the effects that hacking, data loss, and technical glitches can pose in a smart city. This concern is not unfounded because the system that will be the center will be based on cloud computing technology and all the

¹⁵⁰ What Is Big Data?, <https://www.oracle.com/big-data/what-is-big-data.html>.

¹⁵¹ Gil Press, Cleaning Big Data: Most Time-Consuming, Least Enjoyable Data Science Task, Survey Says, Mar 23, 2016, <https://www.forbes.com/sites/gilpress/2016/03/23/data-preparation-most-time-consuming-least-enjoyable-data-science-task-survey-says/#4cb53df16f63>.

¹⁵²WORLD DEVELOPMENT REPORT 2016,

http://documents.worldbank.org/curated/en/896971468194972881/310436360_201602630200228/additional/102725-PUB-Replacement-PUBLIC.pdf.

information will be stored on it and the smart city will heavily rely on this for the storing of data. Although cloud computing technologies are continuously developing, yet their usage for smart city integration introduces various threats that are to be considered for security management¹⁵³.

Privacy is too valuable for everybody that it cannot be compromised with. Every individual or organization involved in a smart city project will have to understand and acknowledge what data privacy means. Smarter cities can easily be made, but in doing so, all aspects need to be considered equally otherwise there is no benefit of developing complex systems.

Smarter Laws: It is very important to bring necessary changes in India's existing legal framework to help in sustainable urbanization and the development of smart cities in the country. New laws are necessary to make the government's Smart Cities Mission successful and to implement it as intended. The cyber law in our country has been amended continuously to suit the needs but it is not yet sufficient to provide for data privacy which is required for Big Data technology. As cities are developed, they utilize new and disruptive technology; all types of data is gathered and stored, from a person's location to their daily activities – all this to develop a smart city. Such data collection gives rise to several legal questions on the issue of responsibility for the protection of this data, its exploitation, and how the citizens can be protected from all possible threats and also who is responsible for providing such protection. The issue of consent is also equally important; consent needs to be there before capturing and processing data of individuals.

The laws are not well equipped to protect the specific uses of data that mobile apps and other sources used for smart cities. Personal information of an individual belongs to him only but can be shared or accessed legally if the individuals or organization receiving it have a legitimate reason to do so. Generally, companies, local authorities or councils are viewed as data controllers and are expected to comply with all the associated obligations to ensure data privacy. Current laws were not made to deal with smart cities or other futuristic approaches, so regulators should issue more guidelines to make the process transparent and suggest how individuals can protect themselves against inappropriate use. Unfortunately, as technology is

¹⁵³ Chris Giarratana, How City Engineers will Address Big Data Challenges in Smart Cities, February 17, 2019, <https://www.trafficsafetystore.com/blog/how-city-engineers-will-address-big-data-challenges-in-smart-cities>.

advancing, those looking to exploit loopholes are often looking for inventive techniques to obtain users' data¹⁵⁴.

Involvement of private entities: A successful smart city project will require effective horizontal and vertical coordination between all departments of the central and state governments as well as the private entities involved. The project will involve different institutions offering different services, and proper implementation will have to be done for various issues like distribution of finances, best practices, and service delivery processes. In any country, various private vendors are also involved in a project, so is the case in India. It will be a challenge to handle all the components from different vendors and bring them together to produce the desired result¹⁵⁵. In big projects, government agencies and private sector organizations are often reluctant to share information easily amongst each other. The information contains sensitive data and can be related to common networks, tools, or infrastructure; if shared properly, it can be used to prevent external attacks and aid in better amenities.

The government can create stakeholder groups of service providers to encourage them to share information, and also try to offer them incentives to encourage open collaboration. A common digital infrastructure can be built to support intelligence-led policing, which will allow agencies to monitor data, establish patterns, and get insights. Private organizations should treat the city as their valued customer, and this way they can also collect information about other players in the smart city market and make potential future partners in effective ways and promote convergence of all smart city stakeholders. Building smart easy is not an easy process, a lot of challenges are faced and it must be viewed as a long-term infrastructure project by all the stakeholders. Immediate needs should be addressed by short term solutions to simplify the ever-increasing and digital complex world. Smart cities' potential can be maximized by the trust of citizens, combined with private businesses and governments that should aim to prioritize safety, sustainability and welfare of the society¹⁵⁶.

¹⁵⁴ Stuart Pearson, Smart laws: exploring data and privacy regulation in smart cities, 17 December 2018, <https://www.intelligenttransport.com/transport-articles/74198/smart-laws-data-privacy-regulation>.

¹⁵⁵ Pratap Padode, The top 10 implementation challenges for smart cities in India, Jul 21, 2015 02.35 PM IST, <https://realty.economictimes.indiatimes.com/realty-check/the-top-10-implementation-challenges-for-smart-cities-in-india/776>.

¹⁵⁶ Mike Beevor, 6 Challenges Smart Cities Face and How to Overcome Them, Dec 5 2018, <https://statetechmagazine.com/article/2018/12/6-challenges-smart-cities-face-and-how-overcome-them>.

5. Conclusion

Developing a smart city is not just about new technologies, but it is about but it is more about implementation, finding the solution to the real-life problems, and improving the general city operations while equally focusing on the civic quality of life. Futuristic smarter cities will put forth numerous new questions, concerns, and possibilities that will have to be considered. The smart city projects are on such a large scale that they will require resource management at a different level and accordingly actions will have to be taken by the authorities to ensure a properly integrated system.

Many cities are competing to become smart cities to reap some of the economic benefits and benefits to the environment and society in general. For this purpose, they are trying to make the most out of the opportunities generated by the applications working on Big Data technology. The actual potential of Smart Cities can only be realized by the development of proper governmental framework and economic models in the beginning. Economists and governments mainly view smart cities as a technological problem only, or which a technical solution is sufficient, but technology is not a single issue as it gives rise to other issues as well. To make a city smarter, a focused and forward-looking approach is to be taken which will help in the long run.

Online and offline sources of information will continuously transmit an individual's information to the central database where it will be analyzed and processed. Algorithms will be formed to help in creating a smarter city and better facilities will be available for all. With the development of more smart cities, the government is enacting different policies that ensure that the goal is achieved without compromising with anybody's personal information. Technology will continue to advance making more and more cities smart, therefore systems need to be developed and modified as and when the need arises. The government needs to devise a comprehensive smart city plan to overcome all the existing and probable future challenges to mitigate any sort of risk that might arise.

9. Forensic Science and its Role in Rape Cases

By: Radhika Singla

Pg. No: 122-133

i. Abstract

It is necessary to ensure the administration of justice, by following the principles of natural justice. The procedure and handling of the case should be undertaken fairly and properly, and every minute and important details and evidence should be examined properly. With the advancement in technology, the evidence is needed to be analysed carefully, and Forensic Science comes as a rescue with the more profound and advanced technologies and tests, and resolve the matter, by providing the accurate and reliable reasoning and reports. Forensic Science plays a major role, primarily act as a HERO in the heinous crime cases, which are vulnerable for our society, as such is the role and collaboration of the effectiveness and functioning of the Forensic Science Evidence and Medical evidence in Rape cases, bring out the guilt of the accused and providing justice to the victim.

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1. Introduction

Evidence is a very ‘important key’ and ‘aspect’ in solving the dispute in civil cases, and to determine whether the suspect is guilty or not and what circumstances and presence of reasoning which led the criminal act to be in effect in case of criminal proceedings. As mere facts in issue, would not lead the way to final judgement, the court requires a solid and evident proof, which includes *testimony, documents, photographs, videotapes* etc, which confirms the facts and situation prevailed.¹⁵⁷

As the court of law deals with various types of cases, particularly the variety of cases, and it is obvious that court is not expertise in every field, they require the help of the experts of a particular field as in to reach final order. Therefore *section 45 of the Indian Evidence Act 1872*, enumerates on the ***Opinion of the experts or experts evidence***. An Expert is a person, who pose *skilful and special knowledge in a particular field and with practice and training has acquired ability to express an opinion*¹⁵⁸ and the opinion of these experts, who pose special skills in *foreign law, science, art, handwriting and finger impressions are relevant and considerable and they are not ordinary witnesses*. These experts are not to party to suits, as they are not connected to the case in any; situation, their main task is to assist the court.

2. Forensic Science and its Role in Rape Cases

When the person is giving his testimony, it is important to note and consider that testimony sole itself will not have an impact and will be subjectively admissible. Therefore, it is important that a solid, well proof and admissible evidence to be in support while providing testimony, as it will act as Assurance and reliable source to court. On one of the most important players in all the testimonies is ‘Forensic Evidence’.

In this era of scientific progress and developments, the commission of unlawful acts are becoming more *sophisticated, critical, advanced-digital and controlled*. Therefore, it is

¹⁵⁷ Amoolya Narayan, ‘Indian Evidence Act: In Nutshell’ (Last Access : March 24,2020 21:12pm) <https://blog.ipleaders.in/indian-evidence-act-nutshell>.

¹⁵⁸ Bal Krishna Das Agrawal v. Radha Devi and Ors AIR 1989 All 133.

necessary to have a special type of science, ‘which applies the scientific principles in relation to answering the questions which are of large legal interest, and it is called Forensic Science’ and this application of science is applied to both civil as well as criminal law cases. Forensic Science deals with the application of ‘*Knowledge*’ and ‘*methodology*’ of various parts of sciences or disciplines such as *physics, chemistry, biology, computer science to the matter of legal interest, for the evidence analysis.*¹⁵⁹ The scope of forensic science is broad and significantly play a major role in solving the issues and mystery concerned. Forensic Science is an old concept, but the developments and techniques adopted by forensic science department is commendable, as they deal in-

1. **Forensic Odontology:** Helps in the identification of the victims when the body is not in a recognizable state, and the examination took place through the examination of the teeth, alignment and overall structure of the mouth.
2. **Forensic Anthropology:** Deals in examining the age, height, gender and ancestry of compromised human remains, and also to identify and establish the time of death.
3. **Forensic Pathology:** It helps to determine the cause of death by the examination of the corpse. Forensic Pathologists Experts also draws the inferences in matter as in whether the death is natural, criminal or accidental.
4. **Cyber Forensics:** This is used in the investigation of cybercrimes. It involves the analysis of evidence found in computers and digital storage media, eg- pen drives etc.
5. **Ballistics:** It is a specialised forensic science which deals with the motion, angular movement, etc of bullets, missiles. This is used mostly in criminal investigation.
6. **Forensic Biology:** It includes fingerprint analysis and also the major accepted development all over the world, which is DNA profiling, commonly used in criminal investigation. It helps in the identification of unidentified person or for the elimination of suspects from the list of accused.
7. **Trace Evidence:** This evidence plays a great role in establishing the link between suspect and victim. The evidence which can be traced is- hair, soil, fibre etc.

¹⁵⁹ ‘Forensic Science plays pivotal role in the Legal System’ (Last Access : March 24,2020 22:13pm)
<https://ifflab.org/the-importance-of-forensic-science-in-criminal-investigations-and-justice>.

3. Role of Forensic Science in Criminal Investigation

Forensic Science has and plays a major role and contribution in criminal cases. As criminal justice system comprises a set of bodies and institutions, whose aim is to protect the social interest. The administration of criminal justice system rest primarily on police, prosecution court and prisons. An organised society depends on good and effective criminal justice system. Although, the Magistrates and courts, are those functionaries, who play an essential role, for determining the accountability and culpability of the offenders, and determining the grave act committed by them and adequately determining the punishment. Court can position the truth, only and solely based on firm and sound foundation of evidence. Today, the time is of technology advancement, and this technology has caused a breakthrough in crime investigation as now criminals also have easy access to technology and this result as a drawback in the investigation purposes as the police utilize scientific tools and techniques to detect the crime. This can result in a problem in the efficiency and effectiveness of criminal justice functioning, as to the mere reason of technological advancements.¹⁶⁰ Forensic Science is considered as significant characteristics of criminal justice system Forensic science plays a vital role in the criminal justice system by providing scientifically based information through the *analysis of physical evidence, the identity of the culprit through personal clues like a fingerprint, footprints, blood drops or hair, mobile phones or any other gadgets, vehicles and weapons*, associating with the objects of the criminal thought left by him at the crime scene or with the victim. There are many stances, when sometimes false case is also made up against someone, who is innocent, thereby Forensic Science also saves the innocent and bring the main culprit. During the criminal investigation, evidence is gathered from the location of the crime or from the person (*who is eye witness*), then examined in the crime laboratory and then the final results are produced and reported in the court of law.¹⁶¹

¹⁶⁰ Sakhawat Sajjan Sewat, 'The Importance of forensic Evidence in our Justice System' , (Last Access : March 25, 2020 10:00 am)
<https://www.thedailystar.net/law-our-rights/law-analysis/news/the-importance-forensic-evidence-our-justice-system-1755037>.

¹⁶¹ 'Applicability of Forensic Science in Criminal Justice System in India with special emphasis on Crime Scene Investigation' (Last Access : March25,2020 12:12 pm)
<https://legaldesire.com/applicability-of-forensic-science-in-criminal-justice-system-in-india-with-special-emphasis-on-crime-scene-investigation>.

Legal Provisions and Case Laws as to forensic science and Criminal Investigation

Article 20(3) of the Indian Constitution, states that no accused should be compelled to be a witness against himself. The protection against self-incrimination is embodied in this article. This right has been taken to ensure that a person is not bound to answer any question or produce any document or thing if that material would tend to expose the person to the conviction for a crime. But the court has the power to direct any person including accused, as for the finger impressions to be taken, as per to section 73 of Indian Evidence Act.

As in *State of Bombay v. KathiKaluOghad & Others*¹⁶², Court held that providing thumb impression, specimen signature, blood, hair etc by accused, does not amount to witness and accused has no authority to refuse for DNA examination. In *Dinesh Dalmia v State*¹⁶³, Court held that subjecting the accused to narco analysis does not result in testimony by compulsion. In *Anmolsingh Swarnsingh Jabbal v. The State of Maharashtra*¹⁶⁴, because of forensic evidence, as in reliance place on DNA evidence and additional, the murder of young lady engineer was solved, and it was her colleague, and life term was upheld.

4. Pivotal Role of Forensic Science in Rape Cases

Rape is one of the most frequent and violent crime, and it has been observed that this violent crime is under-reported. Rape is a very heinous crime, and as a matter of fact and concern, crime investigation authorities have a very heavy responsibility to bring them justice and put the accused behind the bars. Investigation of rape cases is not a mere cup of tea, as in everything requires a careful and proper analysis, whether it is material available at the crime scene, the examination of rape victim body, witnesses testimonials, weapons used if any etc.

¹⁶² AIR 1961 SC 1808

¹⁶³ 2006 Cri. L. J 2401

¹⁶⁴ 2014 SCC Online Bom 397 : 2014 (2) Bom CR (Cri) 361 : MANU/MH/0352/2014

Therefore, forensic science is required in the examination of rape cases, so the adequate result could be present. As per to Indian Evidence Act, Forensic Report is considered as a ‘Belief’ and ‘reliable’ proof, given by the expert.

The offence of rape is grave in nature, and it also has a high impact on the victim as well as on the society at large. For proving the offence of rape, there is a crucial need for medical as well as forensic evidence, as their analysis and findings and interpretations, will bring a valuable insight in the court, and this evidence becomes more valuable, especially in those cases where there are no other witnesses to the incident.

Medical evidence also plays a vital role in the matter of rape cases. Medical examination of the victim, always plays the very important. As there are many instances, where there is no other witness of the act, and ultimately accused and the victim will provide information as per to their interest only. So Medical and forensic evidence is the best way to determine and figure the fact. According to *Section 53 of Criminal Procedure Code*, medical examination of the victim has been made mandatory, but after the amendment in the act, as per to *Section 53-A*, now the medical examination of the accused is also mandatory.

Though victim is the most important medical evidence, and it is required to conduct the medical examination on time, otherwise with the passage of time, it may lead to non-appearance of some minor or major injuries like redness or swelling. Most importantly, the medical examination of the victim should be done with her consent. Evidence and analysis attained through medical examination like- *Injuries caused with forcible rape, or because of resistance, torn clothes (they might carry semen, fibres, blood stains, saliva stain from culprit), stain on the body (especially on thighs and private parts), age, physical health, any venereal disease etc.*

Forensic Science and Medical Evidence have to identify, analyse and prepare a report on every possible evidence collected. They have to consider every possibility during the happening of the rape incident, as in if SMEGA is present or not, any venereal disease if the culprit is suffering, to trace the dust, dirt, flora or fauna from the scene, especially in outdoor cases etc. As there are various sources of evidence, and in crucial and serious type cases like of Rape, every aspect and source of evidence should be tested and analysed.

1. Semen or Spermatozoa

The spermatozoa are present in the vagina after intercourse mostly for 9 days in the vagina and 12 days in the cervix. In-*State of Maharashtra v. Chandraprakash Kewalchand*¹⁶⁵, the court stated that the presence of semen on the clothes of the prosecutrix, instead of vagina, will not be a doubt and it will be considered as evidence. In case of Married women, the presence of semen on her clothes or her genitals will not be sufficient evidence of rape.¹⁶⁶ It is a strong piece of circumstantial evidence, but not a conclusive one.¹⁶⁷

2. Examination of Hymen

Rupture of the hymen is not necessary, and in such cases, medical evidence proves the charge of conviction.¹⁶⁸ Although, the statute only requires medical evidence of penetration, even if hymen remains intact

3. Capacity of Accused

A boy less than seven years of age is immune from any sort of criminal liability¹⁶⁹, but who is above seven years of age but below 12 years of age, can be charged for criminal liability, if the judge is satisfied as to his maturity and understanding.¹⁷⁰ Impotency cannot be the reason as in to discharge from the commission of rape, as there is no requirement of penetration.

4. Signs of Struggles

The body should be examined carefully and properly for marks of violence, such as scratches, bruises etc , especially on the breast, wrist, chest, inner aspect of thigh and back etc. But absence of resistance marks is not a proof to disbelieve the case of rape.¹⁷¹

5. Examination of Clothes

Clothes which were worn by the victim during the happening of the incident should be carefully kept, and to be examined carefully, as there could be the presence of blood or seminal stains.

¹⁶⁵ 1990 (1)SCC 550.

¹⁶⁶ Bhonriv. State, AIR 1955 NUC 473.

¹⁶⁷ Ali Khan v. State, AIR 1962 Cal641.

¹⁶⁸ Narayanamma v. State (1994) 5 SCC 728.

¹⁶⁹ Indian Penal Code, 1860, Sec. 82.

¹⁷⁰ Indian Penal Code, 1860, Sec 83.

¹⁷¹ Gurdip v. State, 1975 Cut LR 20.

6. Injuries on Private Parts

In case there was no presence of injuries on the body of the victim, it is not evident or crystal clear every time, that the act or incident took place with her consent.¹⁷²

7. Age of the Victim

As in the exact age cannot be determined through developed secondary characters of sex. In *Laxman Dan v. State of Rajasthan*¹⁷³, radiology report was not considered as a conclusive proof for deciding and determining the age of the victim, in case the birth certificate was also not available.

Relationship of Forensic science and victim:

The process of investigation and prosecution of criminals in judicial proceedings, determines and establish the relationship between Forensic Science and Victim. In Rape cases, there is no chance of the availability of direct evidence at any cost, and circumstantial evidence is required to establish the case and to prove the guilt of the accused, as in beyond any reasonable doubt. Medical evidence and forensic evidence can provide a better result of the incident, as they go hand in hand together. If the medical evidence gives adequate and more accurate and complete then the victim information will be more clear in the context of crime, as in during forensic science investigation. The forensic examiners' role is very vital, as they need to examine evidence and reports through the scientific method and render conclusions regarding victimology. As forensic science helps in determining time and place of occurrence of crime, and medical evidence determines as in how the crime took place and how heinous it is. Forensic Science findings also help in detecting criminals through *fingerprints, footprints, etc, and in sex-related offense cases, criminals could be traced out by examination of bloodstain, saliva, semen, etc.*

¹⁷² Mahesh Chand v. State of Rajasthan, 1998 Cri. LR 102 at p. 168 (Raj).

¹⁷³ AIR 2003 SC 698.

5. Case Studies

5.1. Delhi Gang Rape Case

Forensic Science played a very important role as in the Bus was detected from the recordings of the highway CCTV and also with the help of a description made by the victim about that vehicle. The Seized metal rods and victim's clothes were sent for examination, and as a result of the examination, it was found out that the victims were beaten with an iron rod, by examination of bloodstain found on the rod. The act of rape was committed, by examination of blood, semen, tissues of accused persons and vaginal secretions and also the clothes of the victim.¹⁷⁴

5.2. Shimla Rape-Murder Case

It took good nine months for CBI to solve the rape case. It was founded that the sixteen-year-old girl was kidnapped, raped, and murdered brutally. Her body was found in the dense forest of Himachal Pradesh, as in the body could not be recognised only. But with the help of advanced forensic tests, the suspects of the crime and the identity of the body was able to figure out. The evidence which was available on the scene was collected carefully and properly, which include liquor bottle, semen- blood samples etc. To determine the identity of the body and also to know the suspects of the crime, blood samples of 250 people residing nearby area was collected, as in to match the semen and DNA When the CFSL, started matching the DNA of 250 people with the semen of accused, initial results were negative. Then, CFSL conducted '*Percentage Test*' and '*Lineage Test*' of all 250 samples and it matched with that of the sample. The sample matched with one of the family residing in Kangra. It was found out that one of

¹⁷⁴ Reetesh Kumar Jeena, 'Forensic science and victims: Indian scenario', International Journal of Applied Research 2017
<http://www.allresearchjournal.com/archives/2017/vol3issue2/PartE/3-2-6-648.pdf>.

the members of the family is missing since 2016. Then the samples matched with that particular family member. This gave an assured and clear way to CBI to find out the suspects.¹⁷⁵

6. Conclusion

Forensic Science is one of the crucial and vital aspects to ensure the administration of justice. Forensic Science is required in every sort of case, whether criminal or civil, irrespective the case is serious or not. In the case of Rape, the forensic science and medical evidence collaboration in determining the evidence and analysing the situation is of paramount importance. This science provides aid to those scientific methods of police in collecting the evidence, with the help of well-developed technologies and methodologies, and as a result, maintains high quality and accuracy in the results. The Medical and Forensic Science Evidence finds the utmost place in providing justice to the victim, and also to enable the court of law to reach the finding with the principles of natural justice. It is considered that forensic science evidence follows a positive approach towards the administration of justice and there is no chance that the innocent get punished, there will always be the fair ruling of FAIR JUSTICE DELIVERY.

¹⁷⁵ Munish Chandra Pandey, ‘Advance forensic tests help CBI solve Shimla rape, murder case’ (Last Access: March25, 2020 19:56 pm)
<https://www.indiatoday.in/india/story/advance-forensic-tests-help-cbi-solve-shimla-rape-murder-case-1219899-2018-04-25>.

10. Need of Gender-Neutral Rape Laws in India

By: Arushi Agarwal

Pg. No: 134-145

i. Abstract

Indian law is based on the belief that a victim of rape can only be a woman. There is a belief in the society that rape is a crime committed by men against women. India has a patriarchal mindset which negates the male victimisation. There are many incidents of rape of females as well as transgender, but there is less reporting of these cases. This has resulted in no specific data of male rape in India. There have been many efforts to make gender-neutral rape laws, but still, India does not have gender-neutral rape laws. There is a pressing need to recognize that women can and do rape men. The constitution of India envisages the fundamental principle of equality and we must strive to give effect on the principle of equality in sexual offences, to ensure justice to all.

In this research paper, the author has tried to critique the idea of gender specificity in Indian rape laws. We should have a human rights approach towards the gender-neutrality of rape laws. We must strive to negate the role of gender in identifying the perpetrators and victims in rape. Under Section 375 and 376 of the Indian penal Code, 1860, only the man is the perpetrator of committing rape and only women can be the victim. The researcher has tried to analyse the situation of gender-neutral rape laws in other countries and have also traced the rape law reforms that have taken place in India. The author has tried to provide a solution to the problem of gender-neutral laws against sexual offences in India.

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1. Introduction

In India, the rape laws are based on the belief that only women can be the victims. This arises from the assumption that rape is an act of sex alone¹⁷⁶ to satisfy the sexual desire of the perpetrator. But, there is a need of awareness that sexual assault is not only an act of lust and desire but also a manner of showing dominance or superiority of one caste, class, religion, community over the other and are acts of power and humiliation.¹⁷⁷

The Law Commission in its 172nd Report submitted in 2000 has recommended that the rape law must be gender-neutral.¹⁷⁸ The principle of equality before the law and equal protection rights as enshrined in fundamental rights of our constitution must be applied here as well.¹⁷⁹

We cannot deny the fact that there is no rape of males. The gender-neutral laws of sexual assault would result in protection of all identities.

2. History of Rape Laws in India

We can trace back the history of rape laws in India from 1980 where reformation of rape laws in India was started by Indian women's movement. Women's group have for a long time struggled to broaden the definition of rape.¹⁸⁰ Before the 2013 amendments¹⁸¹, rape has been restricted to only penile-vaginal form of penetration.¹⁸²

The Mathura rape case¹⁸³ is a landmark case which reformed the rape laws in India. In this case, a young girl named Mathura was raped by a policeman in Maharashtra. The sessions court

¹⁷⁶Narrain, A. (2013). Violation of Bodily Integrity. *Economic and Political Weekly*, 48, (No. 11). Retrieved from <http://www.epw.in/commentary/violation-bodily-integrity.html> on January 5, 2014.

¹⁷⁷ *Id.*

¹⁷⁸ Agnes, F. (2002). Law, Ideology and Female Sexuality. *Economic and Political Weekly*, 844-847.

¹⁷⁹ *Id.*

¹⁸⁰ *Sakshi vs. Union of India*, AIR 2004 SC 3566.

¹⁸¹ The Criminal Law (Amendment) Act, New Delhi: The Gazette of India (2013).

¹⁸² Shweta Kabra, *Gender Neutral Laws- How Needful in India?*, Published in Articles section of www.manupatra.com.

¹⁸³ *Tuka Ram and Anr vs State of Maharashtra*, 1979 AIR 185.

held that she had sexual intercourse while at the police station but rape had not been proved and that she was habituated to intercourse.¹⁸⁴ The sessions court acquitted both the policemen.

The High Court reversed the order of acquittal. When the case reached the Supreme Court, it overturned the High Court verdict saying that “the intercourse in question is not proved to amount rape”.

The apex court said no marks of injury were found on the girl after the incident and “their absence goes a long way to indicate that the alleged intercourse was a peaceful affair”.¹⁸⁵ Court held that the absence of injuries implies consent.

This case led to a movement shifting the burden of proof regarding consent to the accused. Also, this case led to the reformation that rape trials should be held in-camera proceedings and the victim’s name should not be published. The victim sexual history should not be seen while deciding the case. This case has brought various reformation and amendments in the Indian rape laws.

3. Reforms in Indian Rape Laws

3.1. The Criminal Law (Amendment) Act, 1983

The Criminal Procedure Code was amended to provide for in-camera rape trials.¹⁸⁶ There was an amendment in Section 228 of Indian Penal Code, 1860 and it became an offence to disclose the identity of a rape victim.¹⁸⁷ Under Section 376(2), enhanced punishment was made for custodial situations. There was an amendment in the evidence act also that made a presumption of the absence of consent in certain situations.¹⁸⁸

¹⁸⁴ Soibam Rocky Singh, *Explained: The laws on rape and sexual crimes, December 17, 2019*, The Hindu, https://www.thehindu.com/news/national/what-are-the-laws-on-rape-and-sexual-crimes/article30233033.ece_

¹⁸⁶ The Criminal Law (Amendment) Act, Section 327 (1983).

¹⁸⁷ Indian Penal Code, 1860, Section 228-A

¹⁸⁸ India Evidence Act, 1871, Section 114-A.

3.2. The Indian Evidence (Amendment) Act, 2012

The Indian Evidence (Amendment) Act of 2002 prohibited the defence from putting questions in cross-examination of the prosecutrix about her general moral character and sexual history.¹⁸⁹

3.3. Reports

The 172nd Law Commission Report, 2000 recommended to make rape laws in India gender-neutral to protect the male victims also. The Justice Verma Committee Report recommended a gender-neutral law for the victim but a gender-specific law for the offender.¹⁹⁰

3.4. The Criminal Law Amendment Act 2013

The Delhi Gang Rape led to many reformations in the rape laws in the Indian Penal Code. There was amendment under Section 375 of the Indian Penal Code, that made the definition of rape more broadened. It not only included penile-vaginal penetration but oral, anal, and insertion of any object into vagina, urethra or anus of a women as well.¹⁹¹ The punishment for rape was enhanced in aggravated and non- aggravated situations.¹⁹²

¹⁸⁹ Satish, M. (2013). Virginity and rape sentencing, Times of India, the crest ed., retrieved from <http://www.timescrest.com/society/virginity-and-rape-sentencing-9566> on January 8, 2014.

¹⁹⁰ Supra Note 7.

¹⁹¹ The Criminal Amendment Act, 2013, Section 375.

¹⁹² The Criminal Amendment Act, 2013, Section 376.

4. Position Regarding Rape of Males in Different Countries

In the UK, under the **Criminal Justice and Public Order Act, 1994**, for the first time rape of males were recognized. Later **Sexual Offences Act, 2003 (England and Wales)**, includes even non-consensual penetration through the mouth.¹⁹³

In Scotland, the “**Sexual Offences (Scotland) Act, 2009** brought changes into the rape laws. It redefined the rape as “*The intentional or reckless penetration of the penis (to any extent) into the vagina, anus or mouth of another person, without that person consenting and without any reasonable belief that consent was obtained*”.¹⁹⁴

In South Africa, a study found out that 9.6% of men reported male-on-male sexual violence victimization and 3.0% of them reported rape perpetration; 3.3% had been raped by another man, and 1.2% of them were perpetrators of male-on-male rape. Also, homosexual men were over nine times more likely to have been raped and are four times more likely to report the crime as opposed to heterosexual males.¹⁹⁵

In the USA, through a study, it was found out that approximately 25,000 males in the United States were subjected to an aggravated form of sexual abuse or rape in the year 2009.¹⁹⁶

5. India’s Response to Gender Neutrality of Rape Laws

In India, it is considered that the offences of sexual assault or rape cannot be committed against men. The definition of rape is very narrow and it is considered that only a man can commit these offences against women. The gender neutrality of rape laws in India is not considered.

¹⁹³ The scope of male rape: A selective review of research, policy and practice, ResearchGate, https://www.researchgate.net/publication/317729028_The_scope_of_male_rape_A_selective_

¹⁹⁴ *Id.*

¹⁹⁵ KL Dunkle, R Jewkes, *Consensual male-male sexual activity and male-male sexual violence: prevalence and associations with HIV infection from a population-based household survey in South Africa*, 10(6) *PLOS MED*, (2013), <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3708702>.

¹⁹⁶ National Institute of Justice & Centers for Disease Control & Prevention, *Prevalence, Incidence and Consequences of Violence Against Women Survey* (1998), available at <http://rainn.org/get-information/statistics/sexual-assault-victims>.

In the case of *Sudhesh Jhaku vs KC Jhaku*¹⁹⁷, the issue of gender neutrality of rape laws was first raised. The Delhi High Court has to determine whether the pre-2013 definition of rape includes non-penetrative sexual acts. The court went beyond and also considered the issue of gender neutrality of rape laws in India. Justice Jaspal Singh opined that there is a need for gender-neutral terms in the offence of rape.

In 1997, a Delhi-based group, Sakshi, filed a writ petition before the Supreme Court of India requesting it to reconsider the question that had arisen in the case of **Sudhesh Jhaku vs KC Jhaku**.¹⁹⁸

In 1997, in the case of *Sakshi v Union of India*¹⁹⁹, the court framed the “precise issues” to be considered by the Law Commission of India. Then in the **172nd Law Commission Report**, there was a recommendation that the offence of rape should be substituted by a completely gender-neutral offence of “sexual assault”.²⁰⁰

In the **Criminal Law (Amendment) Bill, 2012** the recommendations of the Law Commission Report was proposed.²⁰¹ But, in the opening statement of Ms Indira Jaising to the Justice Verma Committee (JVC), labelled this move as unacceptable since rape was to be always characterized as a crime constitutive of patriarchy, and therefore, gendered.²⁰² The government did not take into consideration the suggestions of JVC. The committee in its recommendation suggested that the right to sexual orientation is a human right guaranteed by the fundamental principles of equality.²⁰³

Article 14 of the Indian Constitution states that the State shall not deny to any person equality before law or the equal protection of the laws within the territory of India.²⁰⁴ Article 15(1)

¹⁹⁷ Sudesh Jhaku v K C Jhaku 1998 Cri LJ 2428.

¹⁹⁸ Harshad Pathak, *Beyond the Binary: Rethinking Gender Neutrality in Indian Rape Law*, Asian Journal of Comparative Law, 11 (2016), pp. 367–397.

¹⁹⁹ *Sakshi v Union of India* (1999) 6 SCC 591

²⁰⁰ Law Commission of India, 172nd Report: Review of Rape Laws (New Delhi: Ministry of Law and Justice, Government of India, 2000) at para 7.2.

²⁰¹ Section 5, Criminal Law (Amendment) Bill, 2012 (India).

²⁰² Supra note 23.

²⁰³ Justice J.S.Verma, Justice Leila Seth and Gopal Subramaniam, REPORT OF THE COMMITTEE ON AMENDMENTS TO CRIMINAL LAW, 416, (2013)

<http://www.prsindia.org/uploads/media/Justice%20verma%20committee/js%20verma%20committe%20report.pdf>.

²⁰⁴ Article 14, Constitution of India, 1948.

states that state shall not discriminate against any citizen on grounds only of religion, race, caste, place of birth or any of them.²⁰⁵

However, Article 15(3) states that nothing in this article shall prevent the state from making any special provision for women and children.²⁰⁶ But this provision does not restrain the government to make laws to protect the lawful interests of the male community and that's where the state fails to perform its obligations to provide equal protection of law to every citizen of the country.²⁰⁷

In the case of *Bodhisattwa vs Shubhra Chakraborty*²⁰⁸, the court opined that rape violates the basic human rights enshrined in the Indian Constitution.

India is a signatory to the International Conventions related to Human Rights, and therefore, being so, the State has an obligation to protect the human rights of all the human beings residing within its territory.

Human Rights are owned by States to all the individuals within their jurisdictions and in some situations also to groups of individuals. The principle of universal and inalienable rights of all human beings is thus solidly anchored in international human rights law.²⁰⁹

India is a party to several international covenants on the rights of individuals, such as The Universal Declaration of Human Rights, 1948, The International Covenant on Civil and Political Rights, 1966 and The International Covenant on Economic, Social and Cultural Rights, 1966. Every person is equal before the law and is entitled to equal protection of the law without any differentiation.²¹⁰

²⁰⁵ Article 15(1), Constitution of India, 1948.

²⁰⁶ Article 15(3), Constitution of India, 1948.

²⁰⁷ Arjit Mishra, *Gender Neutral Rape Laws: Need of the Hour*, The Criminal Law Blog, National Law University, Jodhpur, May 1, 2020, <https://criminallawstudiesnluj.wordpress.com/2020/05/01/gender-neutral-rape-laws-need-of-the-hour>.

²⁰⁸ *Bodhisattwa vs Shubhra Chakraborty* 1996 AIR 922.

²⁰⁹ Chapter 1, International Human Rights Law and the Role of the Legal Profession: A General Introduction.

²¹⁰ Article 7, Universal Declaration of Human Rights, 1948.

One of the main reason of not having gender-neutral rape laws in India is the argument that this would result in complaints of rape by women being met by counter-claims resulting into building pressure on them to withdraw their complaints.²¹¹

On July 2019 KTS Tulsi, a senior lawyer and Parliamentarian in the Rajya Sabha also brought a gender-neutral bill (“Criminal Law Amendment Bill, 2019”) before parliament to make the rape laws gender-neutral in India. As per him:

*“Law needs to be balanced. The balance has been disturbed. All sexual offences should be gender-neutral. Men, women, and other genders can be perpetrators and also victims of these offences. Men, women and others need to be protected.”*²¹²

The gender-specific words like “any man” and “any woman” mentioned in Section 354A, 354B, 354C, 354D, 375 and 376 of Indian Penal Code should be replaced gender-neutral words like “any person”.²¹³

There should be protection to all genders i.e. women, men, transgender. There is a pressing need to have gender-neutral laws for sexual offences.

6. Arguments Against Gender Neutrality of Rape Laws

Many arguments are against the gender neutrality of rape laws in India. They are:

²¹¹ TNN, *Activists join chorus against gender neutral rape laws*, THE TIMES OF INDIA, (March 9, 2013), http://articles.timesofindia.indiatimes.com/2013-03-09/india/37580560_1_gender-human-rights-groups-women-activists.

²¹² Aneesha Mathur New Delhi July 13, 2019UPDATED: July 13 & 2019 23:44 Ist, *Bill to make sexual crimes gender neutral introduced in Parliament*, India Today, <https://www.indiatoday.in/india/story/bill-to-make-sexual-crimes-gender-neutralintroduced-in-parliament-1568504-2019-07-13>.

²¹³*The Criminal Law (Amendment) Bill, 2019 and Gender-Neutral Sexual Offences in India*, The Criminal law Blog (2020), <https://criminallawstudiesnluj.wordpress.com/2020/03/27/the-criminal-law-amendmentbill-2019-and-gender-neutral-sexual-offences-in-india>.

6.1. Lack of Statistical Evidence

There are no official statistics to evidence that non-females are raped in India or that women can rape another person.²¹⁴ There is less reporting of non-female rape cases. However, this does not eradicate the possibility of such incidents. There is a belief in the society that it is still men who are raping and women who are being raped.²¹⁵ In India, several attempts have been made to address the aforementioned concerns, and limit the frequent references to gender-based stereotypes.

As noted in the JVC Report, “evidence of the victim of rape is on the same footing as the evidence of an injured complainant or witness. Her testimony alone is sufficient for conviction.”²¹⁶ According to sociological studies, there is a tendency of blaming the victims for their experience of rape, notwithstanding whether the victim is male, female, or transgender.²¹⁷ It is argued that the general belief persists that either man cannot be raped, or if they are, so few men are raped that it becomes a freaked occurrence.²¹⁸

6.2. Gender-neutral rape laws would result in counter complaints

Gender-neutral rape laws will allow men to file a false case of penetrative sexual assault against women.²¹⁹ There might be counter complaints of rape by men for every complaint of rape by women. The JVC opined that “there is, naturally, a certain degree of institutional bias against women. Their complaints are not taken seriously by the police. On account of the patriarchal

²¹⁴ Supra note at 23.

²¹⁵ *Id.*

²¹⁶ Supra note at 28.

²¹⁷ Phil RUMNEY, “*In Defence of Gender Neutrality Within Rape*” (2007) 6(1) Seattle Journal for Social Justice 481 at 485.

²¹⁸ MICHAEL SCARCE, “*MALE ON MALE RAPE: THE HIDDEN TOLL OF STIGMA AND SHAME*” 8–9 (1997).

²¹⁹ Submissions to Justice Verma Committee by All India Democratic Women’s Association (AIDWA) and Women’s Groups”, 4 January 2013.

structure, the male police officers do not take complaints of rape seriously.”²²⁰ This will result into increase in fake counter complaints.

7. Conclusion

There is a dire need for gender-neutral rape laws in India. There is an urgent need that we recognize sexual violence against males and transgender community. India has a patriarchal mindset which negates the consequences that men can be raped too. The researcher has concluded that there can be sexual violence against males and transgender. The presence of rape of males and transgender cannot be denied. However, we cannot ignore the increase in misuse of gender neutrality of rape laws. This might result into increase in fake counter complaints.

Justice Verma Committee in its report has suggested a midway solution to make the victim gender-inclusive while the perpetrator remains gender-specific.²²¹ This will help in protecting rape against male and transgender. There is a need to have legislation that will protect all persons against sexual offences. We must also have a strong law against false complaints and misuse of law. Inclusion of words like “any person” will ensure gender neutrality.

There is a pressing need to reform the old archaic laws and it is high time for the society to normalise the male victimisation. There should right to equality in rape laws also as envisaged under the Indian Constitution. Article 14 guarantees to every person equality before the law and equal protection under the laws. There is a need to reconsider the definition of rape. Every person deserves to have their rights protected, and that all persons are subjected to the crimes of sexual offences irrespective of their genders, must have recourse to the law to achieve their well-deserved vindication.²²²

²²⁰ Supra note 28.

²²¹ *Id.*

²²² Joshita Jothi, Keshavdev JS, *Rethinking Rape: Should the Law Still Continue to the Paradigm?*, 2(1) NLUJ Law Review 56 (2014).