EDITORIAL BOARD MEMBERS

Copyright Reserve @ Publisher
Dr. Amit Gupta, Chairman, JIMS Group, **chairman@jagannath.org**

Editorial Office & Subscriber Service
JIMS Engineering & Management Technical Campus
48/4, Knowledge Park-III, Greater Noida, U.P. Phone #-01203819700,
jimslawjournal@jagannath.org,lawjournal.gn@jagannath.org

From The Desk of Editor

It is a matter of immense pleasure to publish Volume 4 Issue-2 of JIMS Journal of Law. The Editorial Board is grateful to all the authors who have contributed scholarly research articles on contemporary legal and socio-legal problems. This issue of JIMS Journal of Law covers one research article “Implications of Cross Border Surrogacy on Parenthood: A Study " to highlight social obligations, financial disabilities, legal restrictions for surrogacy. It covers cross border (international) surrogacy and related numerous legal, ethical, social, cultural, political, religious, and personal diversities at an international level, regarding cross border surrogacy. Another article “Regulation of surrogacy: reflections from the United Kingdom & India" is written on the development of an effective legal framework for surrogacy arrangements to ensure a balance between the objective of such a medical process and to stop the possible exploitation and human rights abuses of the surrogate mother and the child. It includes a comparative study of surrogacy in England and India. One article “Covid-19: An Opportunity to Shape Environmental Values & Sustainable Development " is written on the larger impact of COVID-19 pandemic on the environment and the climate. This article focuses on sustainable development and environmental values. It analyses those positive impacts of COVID-19 to nature and the environment. The views of environmentalists regarding the same are also discussed in this article. One article is written on “India and its inter-state water dispute”. This article analyzes the implications of international agreements between nation-states and to resolve international resource-sharing disputes. This article tries to bring out the issues revolving around bilateral and multilateral treaties for resource sharing between nation states and how the same can be mitigated. One article is written on an emerging area that is “Social Media and Society: Challenges”. This article focused on the indispensability of social media and highlights the challenges which are arising from its massive misuse. It also endeavors to underline the specific legislations that have been enacted to curtail the misuse of social media. Another article is written on “Urgent Need for Police Reforms in India”. In this article researcher has identified the reason behind the failure to implement the recommendations and directives of the commissions and the apex court given for police reform. Research tried to connect police reform with the political stability and economic progress of the country. One article is written on “Digital Health and Intellectual Property Rights: Issues and Challenges”. This article focused on the challenges of technology in the health sector.

I take utmost pleasure and privilege in presenting this scholarly, intellectually and thought provoking issue of JIMS Journal of Law to Bar, Bench and academia with a huge expectation that this issue will bring reforms in the society by raising legal awareness and achieving access to justice for all.

Prof.(Dr.) Pallavi Gupta
Thanking You

Vol. 4 Issue 2, July - December 2020 ISSN : 2581 - 6837

JIMS JOURNAL OF LAW

CONTENTS

Vol 4, Issue 2, July - December 2020

SOCIAL MEDIA AND SOCIETY: CHALLENGES

Dr. Gurjeet Singh
Assistant Professor
USLLS, GGSIP University

Dr. Ravinder Kumar
Associate Professor
USLLS, GGSIP University

ABSTRACT

Freedom of speech and expression is the cornerstone of the Indian Constitution. It would not be an exaggeration to call it the heart and soul of the Constitution. It is vital in a democracy like India that people are free to express their views and opinions. Then only a participatory democracy can be achieved. And social media has proved to be a powerful tool in the exercise of this right. However, this tool is sensitive enough to be exploited. Social media is a boon for the masses. It is a bane for society when viced with evils such as fake news, child pornography, obscenity, cybercrime against women, forgery, theft, and much more. A significant rise has been seen in child pornography and cybercrime against women. It is, thus, necessary that this unbridled horse of social media be regulated and checked so that views and opinions get disseminated and not a crime. The paper aims to shed light on the indispensability of social media. At the same time, it highlights the challenges which arise from its misuse. Further, the author endeavors to underline the specific legislations that have been enacted to curtail the misuse of social media.

I. INTRODUCTION

Right from the evolution of human civilization, free speech and expression remain the most important right zealously protected by society. Freedom of speech and expression is a powerful medium of dissemination, sharing ideas and knowledge right from the beginning of civilization. Social Revolutions in the past had been possible due to the proper application of this medium. Understanding the importance of the concept, various attempts have been made from time to time worldwide to suppress this mode or curtail the right of free speech and expression. History is witness to numerous historical facts when this attempt has boomeranged with mighty force to thwart such a system out of its place. This medium contributes to the development and evolution of society.

Continuous dissemination of ideas leads to adoption and experiment with new ideas and evolution of science and other streams. In fact, it would not be wrong to say that the genesis of evolution and progress of society is free speech and progress. Therefore, free speech and expression are the cornerstones of a vibrant democracy. This led to positive change in society. The new philosophy, new ideologies are emerging only due to this right.

Nowadays, technology plays a significant role in the fulfillment of free speech and expression. In the 20th century, we witnessed technologies that facilitated disseminating, sharing information, and connecting people with people. Before it, due to limited traditional means of technology, society's socio-economic and political development was slow. However, in the last century, due to telecommunication, information communication technology (ICT), sharing views has increased many folds. The new technology, in an innovative way, allows people to connect.

New ideas, innovations in every field of the subject are now available at home at the ease of information seekers. This forces society to change and adapt to a new change. Therefore, it is not wrong to say that new technology helps influence the mind of the reader with the changes happening around them.

II. CONCEPT OF SOCIAL MEDIA

Social Media is an innovative method of connecting people across the world. ICT makes it possible. Social media as a concept has not been defined so far due to the divergent nature and changing trends of social media. In the given scenario, it is very challenging to explain it. However, it can be said that social media are interactive computer-mediated technologies that facilitate the creation and sharing of information, ideas, career interests, and other forms of expression via virtual communities and networks. In 2019, Merriam-Webster defined social media as "forms of electronic communication (such as websites for social networking and microblogging) through which users create online communities to share information, ideas, personal messages, and other content (such as videos)".

There are various categories/nature of social media emerging; however, the general trait of social media are as follows:

1. Interactive
2. User-generated content of the nature of text or videos
3. Online streaming, online content
4. User-generated services/profile
5. Social networking.

Currently, the techno experts have broadly agreed that there are around 13 categories of social media platforms[2] available.

Social media can be accessed from different formats. Desktop, computers, and mobiles are the design recognized. These platforms allow users to access information from anywhere at any time without the hindrance of territorial boundaries. Depending on the territorial priority of the particular social media, it may be available in the vernacular language of the group. Due to the mobility of social media, the popularity of social media is high.

The above character of social media makes it different from any media. Various popular social media are as follow: Facebook, YouTube, WhatsApp, Facebook messenger, WeChat, Instagram, QQ, QZone, Tiktok, Sine Weibo, Twitter, Reddit, Baidu Tieba, Skype, LinkedIn, Viber, Snapchat, Line, Pinterest, Telegram, and Tinder. Out of the above social media platforms, Facebook is the most popular social media widely famous among the youngsters of the age group 18-24 years.

---

[1] Merriam Webster Dictionary available at https://www.merriam-webster.com/dictionary/social%20media

[2] Aichner, T.; Jacob, F. (March 2015). "Measuring the Degree of Corporate Social Media Use". *International Journal of Market Research*. **57** (2): 257–275. doi:10.2501/IJMR-2015-018. S2CID 166531788(last visited on July 10, 2021)

III. NATURE AND FUNCTION OF SOCIAL MEDIA

Internet or cyberspace is an open space that does not recognize the territorial boundary drawn by the states. This openness of space in cyberspace has glamorized the internet among stakeholders and users, creating legal implications in the real physical world. Its unique nature of functioning helps in connecting people, communities, and states. The ideas can be easily communicated to desired groups or individuals without dilution of quality and quantity of information. The whole gamut of data is uploaded on the server, making it one of the richest information resources. While the advantages of open cyberspace without any limitation are many, the side effects are equally effective in disrupting the social fabric of society. Following nature of social media makes it popular:

1. Easy accessibility to social media
2. Cross border interactions without any hurdle possible
3. Information of all types are available at the click of mouse
4. No discrimination in the name of religion or caste
5. Innovative ideas are welcomed
6. The identity of an individual can be kept secret
7. Message can be encrypted so that third party cannot misuse information
8. Information sharing becomes cheap
9. It opens space for endless opportunity
10. Major source of revenue
11. Majorly self-regulated
12. Connect to family, friends, and community

Based on the above nature, various social media are operating at this time around the world. For example, Facebook is the world's most famous and widely used social media. It has revolutionized the concept of social media. The users have to open their personal profiles that show their comments, post regularly, and update them. Users can post text, photos, multimedia of their creation and share it with friends as users. YouTube is another social media website platform sharing videos. It allows users to upload, view, rate, share, report, and comment on the video. It provides a wide variety of user-generated videos and video of songs, motion.

WhatsApp is dynamic that way, as it is a freeware, cross-platform messaging, and voice over IP (VoIP) service owned by Facebook.

It allows users to send text and voice calls, video calls, images and other media documents, and user location. The application runs on a mobile device and well as on a desktop. WeChat is a Chinese origin app developed by Tencent. It provides the facility of messaging, social media, and mobile payment. It allows users to create and disseminate text messages, hold-to-talk voice messages, broadcast (one-to-many) messages, video calls and conferencing, video games, photographs and videos, and location sharing. Instagram is a photo and video-sharing social networking media. It facilitates the users to upload user-generated pictures and videos. The app

allows it to be edited with various filters. TikTok is another mobile app of Chinese origin. It allows users to create a short video of themselves or others and may feature music or sound in the background. It facilitates editing the creation with filtering options.

The video is to be recorded for 15 seconds. This app is widely popular among youth, and misuse of the app is recorded. Twitter is an American-originated social networking service on which users post and interact with other users through tweets. These tweets were restricted to 140 characters initially, but looking into popularity on November 7, 2017, it was doubled for all languages except Chinese, Japanese, and Korean. Users need to register themselves for the post. Option of liking and retweet posts are available. In case not registered, the users can only read them. The list is a long list of various social media sites. Prominent among them are skype, LinkedIn, Snapchat, and telegram.

IV. SOCIAL FABRIC

In due course of evolution, society or civilization developed a specific value system that is an integral part of society. These value systems were very effectively regulating human behaviors in societies in the absence of laws. Over time these value systems added more respect and weight to the existing values. These rules or value systems got respect and sanctity from their people. Even now for the development of any civilization, these value systems play a significant role. Many of the time, they revolve around mythology or scientific or unscientific belief systems. In fact, these value systems become the identity of the specific society. In general, there is a common value system that developed irrespective of territorial limitations/boundaries. Apart from that, specific value systems take shape as per the geographical location of the place, as per the typical requirement of a life support system. There is a difference in living conditions, habits, and value systems of European, African, and Asian people. Therefore, the value system for those societies is shaped as per their living conditions. The classification can be made from the religious point of view also. It shall be no mistake to conclude that there are various points based on the classification of the value system. Historical development, change in the landscape of geographical conditions, the technological orientation of society, etc., are instrumental in changing the value system.

India is uniquely placed due to the historical, geographical, and technological development of the territory. Historically, India has been time and again conquered by foreign rulers. First by Muslim and then British colonial power. While these developments have a negative effect, it has added a new value system in society, a tolerant, diversified community.

The Constitution of India reflects those value systems in the sacrosanct preamble. It is the primary source of a healthy democracy, which respects the brotherhood. The preamble of the Constitution and the fundamental rights and the directive principle of states prescribe the structure of the Indian social fabric. In fact, they imbibe the value system in the Indian culture, which is so diversified due to multiple beliefs/religion/caste, etc. The value system for every religion varies, which is uniformed by the preamble of the Constitution. In case of any conflict,

the court has referred to the preamble of the Constitution for future direction. Following the importance of the preamble and fundamental rights and duties, the court has rightly pointed it out as the basic structure of the Constitution[3] Following are the specific recognised traits of the social fabric.

Regulation of Social Media

Regulation of technology is vital for the overall development of this platform. Without any regulation, the technologies are bound to be misused by the vested parties. However, regulation of the technology can be possible in the following ways:

Technological Regulations: The support of this view highlights the importance of the technologies. As per them, the best way to regulate the misuse of the technology should also come from the technology itself. It is the technology that has to provide the options of controlling or deciding the nature of using the technology.

Child pornography and obscenity issue are a nuisance for society. Social media has been used to access the content regarding it. Understanding the harmful nature of the offence, the member states have shown their willingness to control it. However, the social media website[4] have now made it possible to eradicate this problem by taking resolve to block the connection or not provide the search result regarding child pornography content online.

Fake news has been in the limelight for some time. WhatsApp has taken a call and promised to come out with technological measures to control the damage. Facebook has promised to recruit staff to do the same.

Legislative Regulation: Law enacted by Legislature has always been instrumental in regulating the nuances of various offences. Deterrent regulatory norms or mechanisms deter antisocial behavior. Laws have been framed by multiple legislations around the world to deal with the issue. Information Technology Act, 2000 and various other Acts define or recognise the objectionable behavior and prescribe punishment with a motive to discourage the nature of offensive behavior.

Information Technology Act, 2000

Social media is not defined by law as such. The nature of social media from an Indian perspective is that they are cross-border in nature. Primarily the popular social media platforms do not originate from India. The data generated by social media are not stored in India but on foreign soil. From an Indian perspective, the Information Technology Act 2000 regulates the use of

[3] Kesavananda Bharati v. State of Kerala (1973) 4 SCC 225; Minerva Mills Ltd. v. Union of India & Ors, AIR 1980 SC 1789

[4] Google and Microsoft to block searches for child porn, Available at https://www.computerweekly.com/news/2240209196/Google-and-Microsoft-to-block-searches-for-child-porn; *Net Providers to Block Sites With Child Sex, available at* https://www.nytimes.com/2008/06/10/nyregion/10internet.html (Verizon, Sprint and Time Warner Cable, Internet Service Provider resolved not to disseminate child pornography).

social media. The definition of Intermediary incorporates the concept of social media. The definition of "Intermediary" under section 2(w)[5] of the IT Act, it recognises social media as one of the intermediaries, and therefore, all legal provisions are equally applicable for them.

The Act regulates third parties and social media as intermediaries while exploring and exploiting social media. From a third-party perspective, the Act specifies the civil and criminal conduct and punishment prescribed. In case of civil breach of conduct by a third party, the Act in section 43 and 43A prescribe the penalty of compensation in following nature of cases, if the below activities are done without the proper authority of the owner or in charge of computer network or system:

1. Access/secure access to computer resources/network without proper authority;
2. Download copies /data from a computer network;
3. Cause to introduce computer virus on a computer network;
4. Damage any computer network;
5. Disrupt or causes disruption to a computer network;
6. Denies or cause a denial of access to any person[6]

Section 43A imposes compensation for failure to protect data on corporate body dealing/handling any sensitive personal data. Negligent in implementing and maintaining reasonable security practices will also make them liable for compensation if it causes wrongful loss or wrongful gain to any person.

The Act prescribes criminal prosecution in case of the misuse of the social media platform for the following activity under chapter XI of the IT Act.

- Section 66B-punish anyone who dishonestly makes use of electronic identification features of any other person. It invites punishment of 3 years and a fine up to Rs. 1 Lakh.
- Section 66D-punish any impersonation with the purpose of cheating- Punishment for three years imprisonment and a fine up to Rs. 1 Lakh.
- Section 66E-if anyone intentionally violates by capturing, publicizes the private area of a person without his consent—punishment for 3 years or fine up to Rs. 2 lakhs.
- Section 66F-anyone with intent to threat unity, integrity, security, or sovereignty of India doses any activity. Punishable with life imprisonment.

[5] Section 2(w) of Information Technology Act, 2000 defines "intermediary as "Intermediary" with respect to any particular electronic records means any person who on behalf of another person receives, stores, or transmits that record or provides any service with respect to that record and includes telecom service providers, network service provider, internet service providers, web hosting service providers, search engines, online payment sites, online auctions sites, online marketplaces, and cyber cafes "

[6] Section 43, Information Technology Act, 2000.

- Section 67A-anyone publishes sexually explicit content on social media can invite punishment. In case of first conviction, punishment for 5 years with fine up to 10 lakhs. In case of a second conviction for the same crime, invite 7 years of imprisonment and a fine of up to 10 lakhs.
- Section 67B-punish children-related sexually explicit content in electronic media. Punishment prescribed extends to 5 years of imprisonment, and fine extends to 10 lakh rupees.
- Section 67C-as per the section, intermediary/social media are supposed to retain information as prescribed by the Central Government. In case of intentionally contravening such a requirement invites imprisonment up to 3 years and fine.

However, looking from the intermediary perspective, Section 79 of the IT Act creates exemption of the following nature. As per the section, social media may be exempted from liability of civil or criminal nature if: They restrict themselves to the role of intermediary in providing access to a communication system over which information made available by third parties is transmitted or stored; Intermediary does not (a) initiate the transmission, (b) select the receiver of information, (c) select or modify information. Intermediary observe due diligence while discharging his duties under the Act[7]. The nature of due diligence to be observed by the intermediary as required by the Act is prescribed in the Information Technology (Intermediaries Guidelines) Rules, 2011. This is the basic minimum requirement of due diligence to be observed by the Intermediary. The highly sophisticated prudence rules respecting the fundamental right of freedom of speech and expression can be maintained by them to avoid any civil or criminal conduct on their platform.

Indian Penal Code

Apart from the penalties prescribed under the IT Act, 2000, certain offences are also covered by IPC regulations.

Crimes perpetrated against women

In the era of technology where the use of electronic media has bypassed all the boundaries, its use has rampantly increased in the perpetration of crime, especially against women. Cracking down upon this menace of abusive use of social media, **IPC** enshrines various provisions. Sections 292, 354C, 354D, 506, and 509 deal with cybercrimes committed specifically against women. Section 292 is umbrella legislation which deals with the publication and transmission of obscene content or sexually explicit activities involving women, children, etc. Section 354C deals with the crime of voyeurism. It makes the capture or dissemination of a photograph of a woman's private part or activities without her consent a punishable offence. The section has even covered acts of watching a woman engaged in a private act. Section 354D cracks down upon the offence of cyber-stalking. It is defined as watching a woman via electronic communication, the internet,

[7] Section 79, IT Act 2000.

or email.

Further, it covers the circumstances where a woman is disturbed by someone to communicate or contact her despite her indifference. Section 506 considers the offence of criminal intimidation and covers the threat given for chastity of a woman by electronic means. Lastly, section 509 covers cases of insulting the modesty of a woman either physically or by electronic means by uttering a word, showing a gesture, and committing an act that has the potential to harm the modesty of a woman.

Theft of data

Sections 379 and 411 of IPC deals with the theft of electronic data. Section 379 makes the theft of a mobile phone, its data, or the computer hardware a punishable offence. Section 411 is a step further which penalises the individual who gets the hold of stolen electronic data. The possession is not compulsory, and if a third party is possessing it knowing it to be others, the provision is attracted. Sections 419 and 420 enshrines the provisions for fraud committed through password theft or by the creations of bogus websites. Section 419 mainly deals with the offence of email phishing committed by assuming someone's identity demanding password.

Forgery

The provisions dealing with online forgery are Section 465, 468, and 469 of IPC. Section 465 covers the offences such as email spoofing and the preparation of false documents. And where these offences are committed for committing other severe crimes like cheating, then the provisions of 468 are attracted. However, where the forgery has been committed solely for the purpose of harming the reputation of a person, the provisions of Section 469 IPC are attracted.

Defamation

Defaming an individual via electronic media is made punishable by Section 500 of IPC.

Threatening the peace of an individual

Through email or any other electronic media, any person threatens, insults, or tries to provoke any other person with the intention to affect the peace of that individual. It is punishable under Section 504 of IPC.

Indecent Representation of Women (Prohibition) Act, 1986

The law on obscenity is codified in sections in this country-The Indian Penal Code Section 292, Section 293, and Section 294. Despite these provisions, a special law, namely, **Indecent Representation of Women (Prohibition) Act, 1986,** was enacted to curtail the publications,

especially in advertisements, of indecent representation of women or references to women which has the effect to denigrate women and derogative of women. Therefore, different legislation is necessary to effectively prevent women's indeterminate representation through advertisements, books, pamphlets, etc. The Indecent Representation of Women Act punishes women's indecent depiction, which implies a woman's image in some way; her form or body and any aspect of the woman's body, to cause immorality, degradation, or to deprave, abuse, or harm to public morality or moral standards. It states that no person shall publish or release any advertisements involving an obscene portrayal of women or agree to participate in the publication or show.

Section 5 of the Act empowers an officer to enter and search any premises and lays down the procedure for the same— the procedure is as follows:

1. "Any gazette officer approved by the State Government can, subject to such rules as may be prescribed, within the local limits of the region for which it is so authorised;
    a. He can enter and search, at any reasonable time, any place where he considers it necessary to believe that an offence under this Act has been committed or is being committed, with such assistance;
    b. He can seize any advertisement or book, pamphlet, paper, slide, film, writing, drawing, painting, photograph, representation, or figure that it believes to contravene any of the provisions of this Law;
    c. He has the power to examine and seize any record, register, document, or other material object found in any of the places referred to in Clause(a) if it has reason to believe that it can provide evidence of an offence punishable under this Act:

Given that no entry under this article is made without a warrant into a private dwelling-house: Furthermore, sub-section of this states the power to seize may be exercised in respect of any document, article, or item containing such advertisement, including the contents, if any, of such document, article or item, where the advertisement cannot be separated by reason of its being embossed or otherwise from such document, article or item without affecting its integrity, use.

2. The provisions of the Criminal Procedure Code of 1973 (2 of 1974), to the degree practicable, shall extend to any search or seizure under this Act in respect of any search or seizure carried out under the authority of a warrant issued under Section 94 of that Law.
3. Where a person seizes something referred to in Clause (b) or Clause (c) of subsection (1), he shall inform the nearest Magistrate as soon as possible and take his instructions as to his custody thereof."

Section 6 is a penalizing provision and specifies the punishment under the Act. It states that "the terms and a fine extending to ten thousand rupees and the terms if a second or subsequent prosecution occurs, the penalty may not be less than six months but may extend to five years and

may also extend, at least, to ten thousand rupees shall substitute for words or fine which may exceed two thousand rupees. The words in case of a second or later conviction to a sentence of no less than six months but which may extend up to five years and not less than fifty thousand rupees but may be extended to five lakh rupees shall, however, be replaced by the words. Their sentence shall not extend to five years."

Section 8 states that despite all the provisions of the 1973 (2 of 1974) Criminal Procedure Code, an offence punishable in accordance with this Act is to be bailable.

Section 9 does away with the liability of the Government for any action taken under the Act in good faith.

Section 10 empowers the Central Government to make the rules by notifying the official gazette. These rules cover how to seize advertisements or other objects and how to draw up and submit the seizure list to the person from whom any advertisements or other things were confiscated; any other matter that may or may be required to be prescribed. It states that "in particular, these rules can cover all or any of the following issues without prejudice to the generality of the previous force, i.e., how to seize advertisements or other objects and how to draw up and submit the seizure list to the person from whom any advertisements or other things were confiscated; any other matter that may or may be required to be prescribed. Any rule made pursuant to this Act shall be laid down before each House of Parliament as soon as possible after it has been made, while it is in session for a total period of thirty days, which may consist of one session or two or more successive sessions, and if both Houses agree to make any amendments before the end of the session immediately following the session or the successive sessions referred to above."

The Indecent Representation of Women (Prohibition) Bill, 2012, has been drafted to address the issue of female objectification. It seeks to emphasize the inclusion of women in the audio-visual and electronic communications media. Two significant changes introduced by the Bill are those on what advertisements will fall under the scope of the Bill if passed and what will lead to delivery to warrant the punitive provisions of the new regulatory framework under the amendment. The proposed regime was specified in such a way as to include print and digital media as well as electronic delivery modes for such content.

The Protection of Children from Sexual Offences (POCSO) Act, 2012

India is a signatory to UNCRC (United Nations Convention of Rights of Children, Hence the POCSO Act was enacted to ensure a child-friendly procedure right from the stage of filing the report, as well as it fulfills the constitutional mandate of Article 15 (3), which talks about protection of women and children.

Offenses and punishments

1. Penetrative sexual assault (**Section 3**) "includes penetration (of any object or body

part) into any private parts or mouth of the child, manipulating any body parts of the child, making the child penetrate the offenders or any third person's body."

2. The penetrative assault becomes aggravated sexual assault (**Section 5**) "when the abuser is in the position of authority or position of trust or if the victim is related by blood or if the victim becomes pregnant, or if the child suffers injuries or due to the penetrative assault."
3. The offense of sexual assault (**Section 7**) occurs "when the abuser fondles the private part of the child or makes the child fondle the private part of the offender. This offense is touch-based and includes the sexual intent of the offender."
4. The sexual assault becomes aggravated (**Section 9**) depending on "the relation of the abuser with the victim, nature of the assault, and impact of the assault."
5. Sexual harassment (**Section 11**) is non-touch based, sexual intent is required, there could be "sexual content shared or shown to the victim over messages or other forms of communication." Any form of vulgar or abusive gesture is considered too sexual harassment.
6. Using the child for pornographic purposes (**Section 13**), where "storing any nude pictures of the child or filming of the nude child is considered to be an offense."
7. "Abetment (encouraged to commit offense) and attempt to commit an offense under POCSO is also punishable." Abetment will be punished with the same consequences as the offender, and Attempt to Commit will be punished with half punishment compared to the offender.

The Ministry of Women and Child Development notified the Protection of Children from Sexual Offences (Amendment) Act, 2019 ("Amendment Act") on August 16, 2019. The Amendment Act modifies the Protection of Children from Sexual Offences Act, 2012 ("POCSO Act"), with a view to enhance or provide for minimum imprisonment periods for certain offences to deter the perpetrators and ensure safety and security for children – defined as any child below 18 years of age.

Below is a summary of some of the key changes:-

1. "Persons convicted of penetrative sexual assault would be subject to enhanced imprisonment of not less than 10 years, which may extend to life imprisonment and fine which should cover medical expenses and rehabilitation of the victim. If the age of the victim is below 16 years of age, imprisonment of not less than 20 years would be applicable."
2. "The definition of 'aggravated penetrative sexual assault' will now include sexual assault, which causes the death of a child or occurs during a natural calamity. Persons convicted of aggravated penetrative sexual assault would be subject to enhanced punishment of not less than 20 years, which may extend to life imprisonment, with fine to

cover medical expenses or the death penalty."

3. "Using a child for pornographic purposes: is now punishable with imprisonment of not less than 5 years, with fine."
4. "Storage of pornographic material: is now punishable with enhanced imprisonment ranging between three to five years, or a fine, or both. In addition to storage of child pornographic material, failure to delete or destroy or report child pornographic materials, or transmitting or distributing the same will also be punishable, except when done for use as evidence."
5. "Higher punishment to prevail: if an offence is punishable under the POCSO Act, the Indian Penal Code, 1860 or the Information Technology Act, 2000, the higher prescribed penalty will prevail."

SUGGESTIONS

Social media is the need of the hour. However, a little caution can save an individual from various cyber offences. While interacting with individuals on social media, one should not be friendly to a stranger and refrain from sharing sensitive and private information. Furthermore, social evils like fake news should not be promoted, and one must not access, store and disseminate obscene material. Special attention should be paid to the use of social media by the children. One can safeguard himself by taking measures such as making their Wi-Fi connectivity secure and using a strong password to protect confidential information. Self-prudence is a mechanism recognized and practiced widely. The best precaution against any harm is to keep away from participating, discussing the anti-social issue at a difficult to control platform. Some of the self-prudence rules to be applied in social media are as follow:

1. Don't be friendly to a stranger on social media.
2. Don't share sensitive, private information on social media.
3. Don't create and disseminate any controversial information.
4. Don't promote fake news.
5. Don't access the unauthentic website or sources for information.
6. Don't access, store and disseminate obscene material.
7. Children should be allowed to operate on social media only under the guidance of parents.
8. Parents should educate and be aware of the positive uses of social media.
9. Virtual games of a threatening nature are not to be allowed to children.
10. Inform the Service provider if content violate the rule of law of State
11. Wi-Fi connectivity to make it secure.
12. A strong password needs to be used for the protection of confidential information.

IMPLICATIONS OF CROSS BORDER SURROGACY ON PARENTHOOD: A STUDY

Dr. Mrs Sandhya Kalamdhad
Associate Professor
Department of Law
Dr. Ambedkar College, Deeksha Bhoomi,
Nagpur, Maharashtra

ABSTRACT

The desire to have a progeny is one of those basic characteristics that define humans. And today, with the technological advancement in the field of medicine, it is possible to artificially conceive a human, for those who may not be in a position to conceive naturally due to any reason. There are numerous Artificial Reproductive Technologies out there, waiting to bless one with a child. One of the most sought after and known (and scandalous) techniques is Surrogacy. Due to social obligations, financial disabilities, legal restrictions and lack of access to technology in one's country, cross border (international) surrogacy is something very common these days. But due to numerous legal, ethical, social, cultural, political, religious, and personal diversities at an international level, various hurdles need to be overcome for availing the luxury of cross border surrogacy. Perhaps, cross border surrogacy is a package full of uncommon challenges, including but not limited to: the infant's nationality and the intimacy of the relationship between the parent and the child.

This study will highlight and analyse the legal dimensions of this 21st Century socio legal problem. While simultaneously, taking into consideration the decisions given by different courts on an international scale on many occasions. The Tonic of International Heterogeneity of Law isn't brew-able in this case, due to differing political, social, legal, and cultural views at the domestic level. Nonetheless, this study will try to estimate the possibility of hatching a common solution to, if not to end, but to a certain extent, reduce the magnitude of the severity of this international impasse.

Keywords: Reproductive Technology, Cross Border Surrogacy, Parenthood, Nationality, Cross Border Reproductive Solutions.

I. INTRODUCTION

"Making the decision to have a child-it's momentous. It is to decide forever to have your heart go walking around outside your body."

-Elizabeth Stone

To have a child is an instinct of a human being. It is recognized by the law and man has been granted the right to procreate. Indeed children are the most precious and beautiful gift of God to parents. But sometimes some people are deprived of this valuable gift.

However, contemporary medical technology has in recent times made extraordinary advances in responding to the desire of women or men to have children. Today we are living in the age of science and technology where we witness extraordinary scientific advances. Medicine, particularly in the area of reproduction has brought about a revolution. This revolution first began in the 1960s with the development of contraceptives that separated reproduction from

sexual intercourse without having to be overly concerned with the possibility of causing pregnancy[1]. More recently, this revolution has involved the development of reproductive technologies that allow reproduction without the usual traditional intercourse between partners[2]. Inescapably, genetics and technology that have grown to respond to scientific advances have jumped ahead of ordinary human comprehension. Ergo, these issues cannot be left to scientists alone. They concern lawyers worldwide. The success of these technologies has today caused a plethora of vexing and controversial legal enquiries to which answers are not readily available.

Any "procedure or method designed to enhance fertility or to compensate for infertility" outside the traditional means of procreation can be labelled as assisted reproductive technology[3]. The term "Assisted Reproductive Technologies" (A.R.T.s) encompasses various procedures, ranging from relatively simple intrauterine insemination (IUI) to variants of in-vitro fertilization and embryo transfer (IVF-ET), also referred to as IVF and more commonly known as "test tube baby technology" and cryopreservation egg and sperm donation, surrogacy and more recently cloning. Since the latter half of the 20th century, these technologies have developed at a rapid pace. They have also influenced the way in which society views pregnancy, reproduction and motherhood[4]. An important factor behind the increased interest in A.R.T., especially surrogacy, is the increasing urge of human beings to have their own genetically linked children.

Today the demand to have children through surrogacy has crossed the national borders. Many people rely on cross border surrogacy due to many reasons like legal restrictions or complete denial of surrogacy for a same sex couples or single parents or demand for low cost, good infrastructure, availability of surrogate mothers, skilled doctors, easy documentation; sometimes the parents also want to keep secrecy about the artificial birth of their child and so on. The cross border demand of surrogate mothers or for gestational surrogacy brought about a plethora of vexing and controversial questions and led to many socio legal complexities, almost all over the world. This is particularly evident in cases involving legal tussles about the citizenship status of children born through transnational surrogacy arrangements[5]. Although surrogacy is by no means a new practice, courts and legislators still struggle with its legal implications[6].

Therefore, this study will highlight and analyse the legal dimensions of this 21st Century socio

---

1 R. Black and J. C. Merrick, Human Reproduction Emerging Technologies 85 (1995).

2 Andre P. Rose, "Reproductive Misconception: Why Cloning is not just another Assisted Reproductive Technology" 48 Duke LJ, 1133-1156 at 1135 (1999).

3 Supra Note 1.

4 Sama Team, "Assisted Reproductive Technologies in India: Implications for Women", Economic and Political Weekly, June 9 (2007).

5 SAMA: Resource Group for Women & Health, "The Regulation of Surrogacy in India: Questions and Complexities", The Medico Friend Circle Bulletin available on samawomenshealth.wordpress.com (23rd April 2011).

6 Courts and legal writers also have long been aware of AI use by the medical profession and of the significant legal problems associated with it. A problem involving the legal aspects of AI reached the S.C. of Ontario as long ago as 1921. *Orford V. Orford*, 58 D.L.R. 251, Ont.1921.

legal problem in respect to cross border surrogacy. The study will also review the decisions given by different courts on issues of cross border surrogacy. A more profound jurisprudential concern is whether the International legal system can deal adequately with the human problems created by present and future reproductive science and technology. The tonic of International Heterogeneity of Law isn't brew-able in this case, due to differing political, social, legal, and cultural views amongst countries. Nonetheless, this study will try to estimate the possibility of hatching a common solution to, if not to end, but to a certain extent, reduce the magnitude of the severity of this international impasse.

II. LEGAL IMPLICATIONS

It is estimated that 15% of couples around the world are infertile. Undoubtedly, these techniques provide a breakthrough in the treatment of infertile couples, same sex couples and single parents. Though the desire to have children may be universal, there is no consensus on policies adopted to regularise these practices due to varied cultures and practices all across the globe. This scientific development has got a mixed reaction throughout the globe. Therefore, the legal protection concerning access to technology as well as legal protection to the participants and children born through A.R.T. varies from country to country. Certain technologies under A.R.T. are not available in few countries like: surrogacy is completely banned in Sweden, France and Germany. Due to religious and cultural diversities some countries may deny particular category of people from availing technologies, for example, according to the recent regulation in India[7], homosexual couple and single parents were denied access to A.R.T. Apart from this, there are various challenges and issues involved due to great disparities in legal approach in different countries. There are instances where an illegal surrogacy programme has been arranged by Attorneys, duping the intended parents as well as the surrogate mother. In many cases, the children have been abandoned by the commissioning parents because of divorce between the intended parents or due to some deformities in the child. Sometimes enormous expenses may be incurred due to complexities during or before the birth of the child and as there is no pre-birth order of parentage, intended parents are unable to claim medical insurance as they are on foreign soil, leading to enormous economic pressure. Surrogate mothers may not be aware of the higher risk involved in the cross border surrogacy due to illiteracy and poverty. There might be issues regarding citizenship and recognition of parental status in their home country, where surrogacy may be illegal. However, the times are rapidly moving, affecting the way the people live, how they communicate with each other, how they spend time and even how they procreate. Accordingly, advanced technologies demand legal intervention. Therefore this paper will explore the legal dimensions and implications of International disparities on one demanding

7 Visa Rules for Surrogate Parents, 2013

treatment at International scenario i.e. Cross border Surrogacy.

III. CROSS BORDER SURROGACY: GLOBAL POLICIES AND PRACTICES

India:

India opened up to commercial surrogacy in 2002. It is among just a couple of nations including Georgia, Russia, Thailand and Ukraine and a couple of U.S. states where women can be paid to carry another's genetic child through a process of in-vitro fertilization (IVF) and embryo transfer. The low-cost technology, skilled doctors, scant bureaucracy and a plentiful supply of surrogates have made India a preferred destination for fertility tourism, attracting nationals from The Great Britain, The United States, The Australia and The Japan, to name a few. There are not any official figures on how large the fertility industry in India is. A U. N. backed study in July 2012 estimated the surrogacy business at more than $400 million a year, with over 3,000 fertility clinics across India[8]. People travel to India to commission a baby and doctors become brokers in surrogacy arrangements. Due to the relative lack of legal regulation on the issues of surrogacy, many complications arose in the past in respect to cross border surrogacy[9]. Later, in August 2009, The Law Commission of India prepared a detailed report on, "Need for Legalization to Regulate A.R.T. Clinics as well as Rights and Obligations of Parents to a Surrogacy". A Draft on Assisted Reproductive Technology (Regulation) Bill and Rules-2016, prepared by the Indian Council of Medical Research (ICMR), was introduced in the Lok Sabha in September 2020, in which a substantial section is devoted towards regulating surrogacy arrangements. The real question remains, though: When will this bill be enacted?

United States of America:

In the United States of America, there is no federal legislation in respect to A.R.T. However, most of the states now have either legislation or guidelines on the subject. In the United States of America also, like England, many States prohibit Commercial Surrogacy. The Uniform Parentage Act, 1987 of the USA Federal statute neither expressly precludes nor approves the use of AID by unmarried women. However, in some states in the USA, e.g. Connecticut, Kansas and Oklahoma the use of AID is arguably limited to husbands and wives. However, Barbara Kritchevsky, in 'the unmarried women's Right to AID: A call for Expanded definition of Family' argues that statutes that do not mention 'unmarried women' do not prohibit them from AID. Article 7 of The Uniform Parentage Act, 2000, discusses the parental status of the donor. It states that the donor is not a parent of the child conceived using assisted reproduction. Further, section 703 of article 7 of The Uniform Parentage Act, 2000, states that, 'if the husband provides sperm for, or consents to, assisted reproduction as provided in section 704[10] he is the father of the

---

[8] Nita Bhalla and Mansi Thapliyal, "India seeks to regulate its booming 'rent-a-womb' industry" Mon Sep 30, 2013.

[9] Two leading cases on this will be discussed in the later part of the paper.

resulting child[11].'

Canada:

According to the Canadian Law Reform Commission's working paper on access to A.R.T Legislation governing access to medically assisted procreation technologies should respect the right to equality. Access should be limited only in terms of the cost and the scarcity of resources. Where limitation is necessary, selection should not be based on unlawful grounds for discrimination within the meaning of provincial legislation (family status, marital status, sexual orientation and so on). Eligibility to participate in A.R.T. treatment according to the Ontario Law Reform Commission should 'be limited to stable single men and to stable single women in stable marital or nonmarital unions.' Today Canada has federal legislation in respect to A.R.T.

United Kingdom:

The British Columbia Royal Commission (Ninth Report on Family and Children Law: Artificial Insemination (1985)) proposed that the guiding standard should be an applicant's ability to 'nurture'. The Human Fertilization and Embryology Act (HEFA), 1990 does not include single or unmarried women but enjoins the physician during treatment to consider the wellbeing of the child including the presence of a father. In England, Surrogacy arrangements are legal and the Surrogacy Arrangement Act, 1985 prohibits advertising and other commercial aspects of Surrogacy. Parental Orders in UK can currently only be granted to couples, one of whom must be the genetic parent of the child, and one of whom must be domiciled in the UK, and the consent of the surrogate and her spouse (where applicable) is required[12].

Comparative Analysis of Legislative regime overseas:

The above discussion clearly states that the varying policies have been adopted by different

Country	Specific Legislation or Guidelines
America	No specific legislation. A.R.T. is regulated by a combination of state and federal government regulation. Approximately 16 states have laws that even mention human cell transfers. Most states have been content to let the industry regulated itself.

[10] S.704 of Uniform Parentage Act, 2000: (a) Consent by a married woman to assisted reproduction must be in a record signed by the woman and her husband. This requirement does not apply to the donation of eggs by a married woman for assisted reproduction by another woman. (b) Failure of the husband to sign a consent required by subsection (a), before or after birth of the child, does not preclude a finding that the husband is the father of a child born to his wife if the wife and husband openly treated the child as their own.

[11] Assisted Human Reproduction Act, 2004, available at https://laws-lois.justice.gc.ca/eng/acts/a-13.4/page-1.html.

[12] Vasanti Jadva, Helen Prosser & Natalie Gamble (2021) Cross-border and domestic surrogacy in the UK context: an exploration of practical and legal decision-making, Human Fertility, 24:2, 93-104, https://doi.org/10.1080/14647273.2018.1540801.

Country	Specific Legislation or Guidelines
Canada	Assisted Human Reproduction Act, 2004, which was earlier applicable to all the states. However the State of Ontario filed a suit before the S.C. of Canada, which left many things upto the province. But till date no state law on A.R.T.
Australia	Australia regulates A.R.T. at both the federal and state level, with the state providing the foremost regulation. The key federal law is the Prohibition of Human Cloning for Reproduction and the Regulation of Human Embryo Research Amendment Act 2006. The National Health and Medical Research Council publish Ethical Guidelines on the utilization of Assisted Reproductive Technology in Clinical Practice and Research. These general guidelines must be followed for A.R.T. centers to be accredited by the Reproductive Technology Accreditation Committee.
United Kingdom	The United Kingdom's laws on A.R.T. include the Surrogacy Arrangement Act, 1985, the Human Embryology & Fertilization Act, 1990, The Human Fertilization & Embryology Act, 2008 and the Human Reproductive Cloning Act, 2001.
India	• National Guidelines for Accreditation, Supervision and Regulation of ART Clinics in India, 2005. • Ethical Guidelines for Biomedical Research On Human Participants, 2006. • 228th Law Commission Report on Surrogacy, 2009. • Assisted Reproductive Technology Bill, 2010 • Visa Rules for Surrogate Parents,2013 • Assisted Reproductive Technology Bill,2013, 2016, 2019

countries to regulate the practices of surrogacy due to social, cultural and political diversities. This leads to many legal, ethical and social complex problems in trans-border surrogacy. This can be further elaborated by reviewing the different case laws on cross border surrogacy.

IV. CROSS BORDER SURROGACY: JUDICIAL APPROACH

Cross-border surrogacy has led to litigation in both domestic courts and within the European Court of Human Rights. The case law from both of these are shaping the developing understanding of the scope of national legislation regarding surrogacy. Cross-border reproductive tourism has put the scope of national law to the test. Judging these cases, the courts need to take under consideration not only domestic legislation, but also international

conventions the states have contracted and the principles, such as the priority of the best interest of the child, stemming from them.[13]

There are two landmark cases in the European Court of Human Rights' case law regarding reproductive tourism. The status of reproductive tourism was first established as a valid and legitimate alternative to home country services in the case of *A, B and C v. Ireland* in 2010, which was reinforced in the following year in *S.H. and Others v. Austria.*[14] According to the Austrian government, the Austrian legislation does not need to adapt to the medical advancements, because the services that are illegal in Austria can, in fact, be obtained from abroad and furthermore subsequently fully legitimized by Austrian law when returned to the country. In these cases, the European Court of Human Rights has unequivocally established medical and specifically reproductive tourism as a basis to maintain a broad margin of appreciation when it comes to restrictive legislation in a member state.

Mennesson v. France[15] was one of the two very similar surrogacy cases brought before the European Court of Human Rights almost simultaneously. The Court decided to handle the Mennesson case and the *Labassee*[16] case proceedings simultaneously.[17] Following the European Court of the Human Rights judgements in these cases, the Court of Cassation released a press release stating that henceforth 'surrogate motherhood alone cannot justify the refusal to transcribe into French birth registers the foreign birth certificate of a child who has one French parent'.[18]

The Mennesson, a married French couple, had gone to California and entered into a gestational surrogacy agreement. Surrogacy was not commercial and the compensation was paid for expenses incurred by her. The Supreme Court of California ruled that any children of the surrogate born within four months of the ruling will legally be Mennesson's children. Subsequently, the Mennesson twins were born in October 2000, and had birth certificates stating the Mennesson as their parents in compliance with the Californian court's ruling.

The applicants tried to enter the children's name into the French register of births, marriages and deaths to add the children unto Me Mennesson's passport so in order to return to France in November 2000. The consulate rejected the application suspecting that a surrogacy arrangement had taken place. Despite this, the children were able to travel to France because they had been issued with US passports where the Mennessons were named as their parents. The Mennessons complained to the European Court of Human Rights that their right for private and family life had been infringed when the State would not recognise the filial relationship legally established abroad by a relevant court, and that the refusal to legally recognise the relationship was not in the

---

13 Mary Keyes, "Cross border surrogacy agreements", available at https://core.ac.uk/download/pdf/43338789.pdf

14 S.H. and Others v. Austria [GC], 2010, para 114.

15 Mennesson v. France 2014.

16 Labassee v. France, 2014.

17 Mennesson v. France, 2014, para 3.

18 Cour de Cassation, 2015.

best interest of the children. The Court remarks that it has to take into consideration the best interests of the children. Acknowledging that with the annulment of recognition France was trying to discourage its citizens from attempting to bypass national legislation, the Court considered that the non-recognition and the uncertainty of ever gaining nationality affected the children's identities negatively, both internally and within the French society.[19] It stated that it was not in the best interests of the children not to have a totally recognised relationship with their biological father and Mrs Mennesson, since it affected the children's position in regards to inheriting the applicants.

Labassee V. France, a contingently syncing case arose in the state of France. Like Mennesons, *citoyenne* Labassee was infertile, which led the concerned to go for gestational surrogacy in the US using Mr Labassee's sperm and donor's ova. A child was born through this surrogacy agreement. More or less, similar events as in Mennesons' case happened and the French Authorities refused to register the child's birth certificate into the French Register of Births due to suspicion of the child being a surrogate child. The Court held that the child's right to respect for privacy had been infringed upon. And taking into consideration the interest of the child, asked the French Authorities to register the child's birth certificate into the French register of births, marriages and deaths.[20] The European Court of Human Rights gave an identical ruling in this case as it had in the Mennesson case, holding that there had been no violation of the right to family life under the Article 8 in regards to Mr. and Ms. Labassee but that the child's Article 8 covered right to respect for privacy had been infringed upon.[21]

D and Other v. Belgium,[22] in this case, a married Belgium couple entered into a surrogacy agreement in Ukraine. The child was born through surrogacy and the Ukraine birth certificate was issued following the Ukrainian law mentioning the applicants as the parents without stating the fact of using a surrogate. The applicant sought to issue a Belgium passport to the child from the Belgium embassy which was rejected on the basis of insufficient documents proving the relationship between the parents and the child. The parents then sought an order from the Court directing the Belgium authorities to issue the child a travel document. However, the Judge found that the paternity was not established with the DNA test. The applicant's resident permit expired and therefore they had to travel back to Belgium without their son. After three months, the relevant Belgium court was provided with sufficient evidence and the Belgian court recognised the parental relationship and the applicant received the travel documents required to fly the child from Ukraine to Belgium.

According to Belgian law[23] The Ukrainian birth certificate was not to be recognised as a sufficient basis for establishing a kinship. Hence, issuing the child with a passport, save for

---

19 Mennesson v. France, 2014, paras 96-97.

20 Labassee v. France, 2014, para 14.

21 Labassee v. France, 2014, p. 81.

22 D. and Others v. Belgium, 2014.

23 Belgian Code of Private International Law, art. 27, para 1 and idem art. 62, para 1.

situations where "there is a doubt as to the applicant's identity or nationality, the issue of the passport or other document in lieu thereof may be suspended until the person or the department has established his or her identity or Belgian nationality by means of documents or conclusive testimonies".[24] The Court concluded that the Belgian State had acted within the afforded margin of error and the measures it had taken were in proportion with the objective of protecting the rights of others. The Court declared the application inadmissible.

Another important case on Cross border surrogacy i.e. *Baby Manji Yamada V. Union of India and Another*[25] is an Indian case relating to production /custody of a child Manji Yamada. Emiko Yamada, claiming to be a grandmother of the child, has filed this petition. In this case Baby Manjiamada was given birth by a surrogate mother. The biological parents Dr. Yuki Yamada and Dr. Ikufumi Yamada came to India in 2007 and had entered into a surrogacy agreement between the biological parents on one side and the surrogate mother from Anand, Gujrat, on the other side. After birth, Baby Manji was left in limbo due to divorce of the contracted Japanese couple. The desperate situation of the few days' old Japanese baby, stuck between a surrogate mother, who was only acting under a commercial arrangement and was not keen to keep the baby, and the contracting mother who was no longer interested in the baby, and the contracting father, who wanted the baby but certain provisions of the Indian law didn't allow him to do so. When father had to go back to Japan as his visa expired, she was under the care and supervision of her paternal grandmother in the clinic in Anand. She was issued a birth certificate in the name of her genetic father by the Municipality of Anand. According to the existing laws, the birth certificate would entitle Mrs. Yamada to adopt the baby. Later, though passport had been rejected, a certificate of identification was issued to Baby Manji by the Regional Passport Authority, Rajasthan just to facilitate her transit out of the Indian Territory.[26] The Court in this case observed that, surrogacy is a well-known method of reproduction whereby a woman agrees to become pregnant to gestate and give birth to a child whom she will not raise but handover to a contracted party. In some cases surrogacy is the only available option for parents who wish to have children who are biologically associated with them. The court further explained the different forms of surrogacy practices available in India and held that commercial surrogacy is legal in India. The Court went ahead and said, "Intended parents may arrange a surrogate pregnancy because a woman who intends to parent is infertile in such a way that she cannot carry a pregnancy to term. Examples include a woman who has had hysterectomy, has a uterine malformation, has had recurrent pregnancy loss or has a health condition that makes it dangerous for her to be pregnant. A female intending parent may also be fertile and healthy, but unwilling to undergo pregnancy. Alternatively, the intended parent may be a single male or male homosexual couple."[27]

Thus, in *Baby Manji*, the Supreme Court did not rule surrogacy contracts as valid under Indian

[24] Belgian law of 14 August 1974 on the issue of passports, sec. 7.

[25] AIR 2009 Supreme Court 84.

[26] This fact was highlighted in the case of Jan Balaz *v.* Anand Municipality and Others, a decision of the High Court of Gujarat which involved the question of nationality of twins born to an Indian surrogate mother with the help of an unknown Indian donor and the sperm of the father, Jan Balaz. AIR 2010 Guj. 21.

[27] Baby Manji Yamada Vs Union Of India(2008) 13 SCC 518

law, but it did not rule against their validity either. It elaborated on the concept of surrogacy, methods of surrogacy and recognised all forms of surrogacy, including altruistic and commercial. While not really ruling on the validity or enforceability of any aspect of surrogacy contracts, the Supreme Court recognised that surrogacy arrangements existed in India for various reasons.

Jan Balaz v. Anand Municipality and 6 Others.[28] This case is a presage of the complications that may arise out of cross border surrogacy agreement and highlights the urgent need for a legislation to regulate these agreements. The father of twins filed a petition before the court. The babies were conceived through the fertilization of a donor egg with the genetic father, because the intended mother was unable to produce eggs due to health conditions. The intending parents were German nationals, working in Great Britain. The donor too was an unknown Indian female. The issue in this case was of what country the babies were going to be citizens as the German Government refused to give the citizenship to newly born babies in India through surrogacy, as the surrogacy was not recognised in Germany. However, even the Indian Passport Authority also denied Passport to the new born babies, on the ground that children are not Indian citizens and therefore, not entitled to get Passport under the Indian Passport Act. The Regional Passport Authority refused to issue passports to the twins. This was later challenged by the Petitioner on the ground that the twins were Indian citizens by virtue of their birth in India to an Indian surrogate mother and thus entitled to Indian citizenship under Section 3 of The Citizenship Act, 1955. The Counsel of Jan Balaz argued that in exceptional cases passport Authorities can issue certificates of identity as was done in the case of Baby Manu Yamada. The court ruled that the babies would be issued passports. However, India does not allow dual citizenship, therefore the babies were issued overseas Indian Passports. The Court further observed that, the babies born in India to gestational surrogates are Indian Citizens and are entitled to Indian Passports. The Court ruled that, "In the instant case, the identity of the two babies has already been established, they are born in this country to an Indian surrogate mother and hence citizens of India within the meaning of section 3 (1) (c) (ii) of the Citizenship Act."[29]

Then, the Union of India responded that India shall make all attempts to have the children sent to Germany. German authorities have also agreed to reconsider the case if approached by the Indian authorities. These are the efforts taken by the authorities as the fate of the newly born child is in question which undoubtedly needs to be resolved on an urgent basis and by taking into consideration the interest of the child. So, the babies were allowed to go home, through the adoption process by their parents. They had to complete the inter-country adoption process supervised by the Central Adoption Resource Agency.

However, the decision of the Indian Court has created confusion and many moral questions as

[28] AIR 2010 Guj. 21

[29] https://www.arcgis.com/apps/Cascade/index.html?appid=43c616cb5fa54d009061b12d7d6c3c42

the court has considered the egg donor and surrogate mother as a legal mother of the child and therefore granted nationality to the child. Does it mean the child has three mothers: the woman who has donated her eggs, the mother who carried the baby in her womb and the social mother that is the wife of the intended father?

Although in all the cases discussed above, the competent court permitted the transfer of parentage status to the intended parents, effectively affirming the parent–child legal status previously granted outside the country, not every case or country has been so flexible with its returning citizens. These uncertainties suggest the ongoing need to have a more cohesive and predictable international framework which at the same time respects the very different values and policies of many countries.

V. STEPS TAKEN AT INTERNATIONAL LEVEL FOR CROSS BORDER SURROGACY

In this regard, the ongoing Surrogacy Project of the Hague Conference dealing with the Private International Law Issues surrounding the Status of Children, including issues arising from International Surrogacy Arrangements, since 2011[30] is noteworthy. A revamping multidisciplinary conference on the topic "Cross Border Reproductive Care: Ethical, Legal and Socio-Cultural Perspectives" was held in Cambridge in December 2010. Presentations by great legal luminaries in this conference explored many of the critical issues and identified four primary categories of 'drivers' for patients seeking CRBC: (i) legal and religious prohibitions; (ii) resource considerations, such as cost, lengthy in-country waits or fewer available assisted reproduction facilities or treatments; (iii) quality, including success rates and safety concerns; and (iv) personal preferences, including patients choosing to travel abroad for cultural, family or privacy reasons.[31]

In July, 2011, the Council on General Affairs and Policy of the Hague Conference on Private International Law instructed its Permanent Bureau to consider the thorny questions arising from international, cross-border surrogacy (HCCH, 2011). The mandate 'requires the Permanent Bureau to gather information on the practical legal needs in the area, comparative developments in domestic and private international law, and the prospects of achieving consensus on a global approach to addressing international surrogacy issues' (HCCH, 2011). No proposals have been suggested to date; not surprising given the enormity of the task.[32]

---

[30] For more details, see https://www.hcch.net/en/projects/legislative-projects/parentage-surrogacy.

[31] Susan L Crockin, "Growing families in a shrinking world: legal, ethical challenges in cross-border surrogacy", https://www.rbmojournal.com/article/S1472-6483(13)00351-9/pdf.

[32] Ibid.

VI. CONCLUSION

Cross border surrogacy is a great challenge for Private International Law. It has created a lot of opportunities for many to build their families, a dream which was hitherto impossible. But, one cannot oversee the possibility of cross-border surrogacy leading to exploitation of some. There is no similarity in the legal structure of many countries which is causing a great threat to the interest of all the parties of the surrogacy agreement. Therefore, the researcher strongly believes that rather than being deterred by legal, sociological, cultural and political controversies we should have statutory instruments based on minimum consensus between the concerned countries. This shall take into consideration the ethical, social and cultural differences of the countries in this new reproductive era. At the same time one shall take serious note of the fact that as "human form" is directly involved in this technology, paramount consideration shall be given to the interest of 'woman' and 'child'. On the line of the decisions delivered by the European Court of Justice, there must be some consistency between the practices of different States.

REGULATION OF SURROGACY: REFLECTIONS FROM THE UNITED KINGDOM & INDIA

Saif Rasul Khan,
Assistant Professor
NERIM Law College
NERIM Group of Institutions

ABSTRACT

Surrogacy has emerged as a prominent alternative for assisted forms of reproduction that provides childless couples a chance to have children. Though developed in the 1970s-80s, the practice has engulfed the world owing to the popularity and widespread advertisement of surrogacy for infertile and same-sex couples. Surrogacy was introduced as a noble medical practice, however, in the last decade, a commercial form has emerged in practice. As a commercial medical practice, it is aimed towards maximising income and exploiting women in third world nations to undertake the burden of being a surrogate mother, for financial incentives. This expansion has created many commercial surrogacy hubs worldwide, particularly for foreign couples. This trend is observed mostly in nations where there is easy availability of surrogate mothers and lack of any clear law prohibiting the practice commercially. Many western nations, that guided the medical advancements, have introduced, and implemented strict laws that make surrogacy a challenge in their own nations. In most such nations, only altruistic form of surrogacy is permitted, i.e., without any form of payment. The United Kingdom is one such nation that developed a legal framework that provides for surrogacy arrangements but with limitations thereof that ensure a balance between the objective of such a medical process and the possible exploitation and human rights abuses for the surrogate mother and the child. India was a major player in the surrogacy market, however, with the introduction of the proposed legislation to regulate surrogacy, it has declined. Nevertheless, the proposed draft envisages a law that is exceptionally stringent whereby the law itself perpetuates discrimination. In light of the above, the paper shall analyse surrogacy as a means for assisted reproduction with focus on the experience in the United Kingdom. The paper shall also dwell in comparing the UK experience with India and identify possible key points that India can imbibe and learn from the UK to provide a more effective law.

Keywords: surrogacy, United Kingdom, Surrogacy (Arrangements) Act, 1985, India, Surrogacy (Regulation) Act, 2019

I. INTRODUCTION

Surrogacy is one of the most important and utilised forms of assisted reproduction. It has expanded its reach and acceptability across the world. While altruistic gestational surrogacy has become the norm in most nations globally, there are differences in the requisites and conditions for a legal surrogacy. Additionally, surrogacy also has another important issue, i.e., of its commercialisation as a form of reproductive tourism. It has been observed particularly in third world nations and countries which do not have any clear law on the subject. India has gone through the same trajectory wherein commercial forms were exploited, particularly by foreigners. With time and the increasing judicial cases of custody, allegations of exploitation, bioethics, etc., surrogacy in its commercial form and for foreigners has been curbed in practice, though a law on the subject is yet to be concluded. In contrast, the British legal system passed the Surrogacy Arrangements Act, 1985 in a hurried manner in the aftermath of the Baby Cotton case

and has since amended the law as per their suitability. Both these nations have walked the same path but the differences in social customs, traditions and notions of morality create unique laws in these jurisdictions. The United Kingdom provides a law that, within the idea of altruistic surrogacy, provides a welfare legislation while the law proposed in India feels more restrictive.

II. SURROGACY: MEANING AND FORMS

The Latin term for surrogacy is "*Surrogatus*", which means a substitute *i.e.* a person appointed to act in the place of another.[1] The Merriam Webster Dictionary defines it as, *"the practice by which a woman (called a surrogate mother) becomes pregnant and gives birth to a baby in order to give it to someone who cannot have children."*[2] *"The action of a woman having a baby for another woman who is unable to do so herself"* is the definition given by Cambridge Dictionary.[3] The associated term, surrogate motherhood is defined by Encyclopaedia Britannica as *"practice in which a woman (the surrogate mother) bears a child for a couple unable to produce children in the usual way, usually because the wife is infertile or otherwise unable to undergo pregnancy."*[4]

In essence, surrogacy is the method by which a woman, who is generally unable to or incapable of rearing a child and thereby avails of a service by another woman, who shall hand over the child on birth to the intended parents. Surrogacy has different types and forms based on certain factors. There is Gestational and Traditional surrogacy, based on genetic relations[5]; Compensated and Altruistic surrogacy based on the factor of payment; Agency and Independent surrogacy based on whether professional services are availed of by the intended parents and Domestic and International surrogacy based on geography.

There are certain essential terms connected with surrogacy which are important. These include intended couple[6]; surrogate mother[7]; egg/sperm donors; in vitro

---

1 *Surrogate*, Online Etymology Dictionary, (Apr. 19, 2021 6:15PM), https://www.etymonline.com/word/surrogate.

2 *Surrogacy*, Merriam-Webster's collegiate dictionary (10th ed.). (1999). Springfield, MA: Merriam-Webster Incorporated., (Apr. 19, 2021 6:17PM), https://www.merriam-webster.com/dictionary/surrogacy.

3 *Surrogacy*, Cambridge University Press. (2008). Cambridge online dictionary, *Surrogacy* (March 30, 2018) Cambridge University Press. (2008), (Apr. 19, 2021 6:18PM), https://dictionary.cambridge.org/dictionary/english/surrogacy.

4 *urrogate motherhood,* Encyclopaedia Britannica, (Apr. 19, 2021 6:20PM) https://www.britannica.com/topic/surrogate-motherhood#accordion-article-history.

5 These two are the basic types of surrogacy in terms of the medical process involved. In Gestational surrogacy, the surrogate mother does not contribute in any way other than being implanted with the embryo of the intended couple. She does not provide her eggs in this case. In Traditional surrogacy, the surrogate mother in addition to being pregnant, also provides her eggs and thereby infuses her genetic material into the baby. In this process, there is an obvious genetic connection between the surrogate mother and the child born through surrogacy.

6 *Id.* s. 2®. Intending couple means "a couple who have been medically certified to be an infertile couple and who intend to become parents through surrogacy".

7 *Id.* s. 2(ze). Surrogate mother means "a woman bearing a child who is genetically related to the intending couple, through surrogacy from the implantation of embryo in her womb and fulfils the conditions as provided in sub-clause (b) of clause (iii) of section 4".

fertilization[8]; surrogacy clinics.[9] These terms are intimately associated with the process of surrogacy and therefore, crucial for understanding surrogacy in a cohesive manner.

Surrogacy has been successfully utilized by many around the world. It has transformed into a commercial activity growing exponentially, estimated to be around $2 billion a year business venture.[10] However, this has created difficulties in terms of its regulation and protection of surrogate mothers and their children. Numerous cases of abuse by foreign nationals, custody rights, denial of a child by the surrogate mother at the end of the term of pregnancy, exploitation by middlemen, unregulated organizational structure etc have emerged over time. Consequently, most states have banned commercial surrogacy. This resulted in creation of certain specific markets for surrogacy, India being one of them. In India, commercial surrogacy is widely practiced due to the low cost and excellent medical services. Since 2016, the government has introduced multiple legislations, aimed to regulate surrogacy and ban its commercial form. However, none have been formally passed by the Parliament.

III. SOCIO-ETHICAL PERSPECTIVE OF SURROGACY

Surrogacy is not merely a medical procedure. It encompasses the entire life cycle of birth and one which ultimately results in the creation of a new being. When one agrees to become a surrogate mother, she is not only giving her physical body but her mind and soul as well. This is a very intimate, humane and maternal process and one that creates issues due to the emotional value attached to this process of childbirth.

In a commercial setting, the surrogate mother is valued based on certain conditions like health of the surrogate, ability, care and compassion needed to raise a baby and the ability to give the baby to the intended parents when it is time etc. among others. The irony is that while the surrogate is expected to raise a baby in the manner as a natural mother, yet when the term ends, she is expected to surrender the baby and sever all ties with the new-born. Though this is not the case in all circumstances, there is this issue of emotional attachment that may give rise to issues of custody and renunciation of the infant.

On the other end of the spectrum, there are surrogate mothers who perceive this as a purely

---

8 In Vitro Fertilization is a medical process by which the egg and sperm is fertilized outside the woman's uterus. The sperm and egg of the intended parents is collected, which is then fertilized in a test tube or a culture dish and thereafter implanted into the surrogate's uterus. The sperm or the egg may be of a donor as well if the intended parents are infertile. *The Surrogacy Definitions and Important Terms You Need to Know, A bout Surrogacy*, (Apr. 19, 2021 18:25PM), https://surrogate.com/about-surrogacy/surrogacy-101/surrogacy-definition/. *See* In Vitro Fertilization, Mayo Clinic, (Apr. 19, 2021 6:28PM), https://www.mayoclinic.org/tests-procedures/in-vitro-fertilization/about/pac-20384716.

9 *Supra* note 6, s.2(zc)

10 Shannon Mathew, *The Surrogacy Bill: What it Says and What It Doesn't*, The YP Foundation, Mar. 24, 2017, (Apr. 19, 2021 6:30PM), http://www.theypfoundation.org/news-2/2017/3/24/the-problem-with-the-surrogacy-bill.

business and financial activity. For such mothers, being a surrogate is simply an activity by which they can provide basic necessities of life to their own family and children. This also raises the question of morality and ethics and whether it is right to engage services of a woman simply as a means to conceive a child, and particularly when she is undertaking the task due to the ominous circumstances in her life.

Furthermore, another matter closely related to surrogacy is the concept of assisted reproductive techniques. This forms a part of the process within the framework of surrogacy. The term essentially refers to the methods by which one can aim to enjoy the reproductive rights with medical intervention and assistance.[11] This involves aspects such as sperm and egg donations, embryo donation, egg freezing, artificial insemination etc. This applies particularly in cases of gestational surrogacy. Such modern medical advancements result in conflict with law and ethics. The commodification of reproductive objects, such as sperms, eggs, embryos etc. raises questions of coercion, exploitation, undue inducement and corruption.

IV. LEGAL REGULATION OF SURROGACY IN THE UNITED KINGDOM & INDIA

In the United Kingdom, surrogacy had developed in a prominent manner in the mid-1980s. There are two forms described under the law, namely, straight (full or traditional) surrogacy and host (gestational) surrogacy. Commercial forms also developed with the global spread of this practice. One particular case motivated the legislation to take necessary steps to address the increasing monetisation of surrogacy. This was the case of Baby Cotton, the first commercial surrogacy arrangement wherein the British surrogate agreed to an anonymous traditional surrogacy.

In its immediate aftermath, a Law Commission was formed, called the Warnock Committee[12] to review and provide analysis into the varied aspects of surrogacy and make crucial recommendations thereof to regulate it. With this review, surrogacy was recommended to be banned in practice commercially, surrogacy contracts be held to be unenforceable and that necessary precautionary measures should be implemented. Thus, the Surrogacy Arrangements Act, 1985[13] was adopted to regulate the practice and provide necessary precautions against

---

[11] The World Health Organization and International Committee for Monitoring Assisted Reproductive Technology (ICMART) defines the term 'assisted reproductive technology' as, "all treatments or procedures that include the in vitro handling of both human oocytes and sperm or of embryos for the purpose of establishing a pregnancy. This includes, but is not limited to, in vitro fertilization and embryo transfer, gamete intrafallopian transfer, zygote intrafallopian transfer, tubal embryo transfer, gamete and embryo cryopreservation, oocyte and embryo donation, and gestational surrogacy." The International Committee for Monitoring Assisted Reproductive Technology (ICMART) and the World Health Organization (WHO), *Human Reproduction*, Vol.24 No.11 Revised Glossary on ART Terminology 2683–2687 (2009), (Apr. 19, 2021 6:45PM), http://www.who.int/reproductivehealth/publications/infertility/art_terminology.pdf?ua=1.

[12] The Committee of Inquiry into Human Fertilisation and Embryology, 1984. The report was aimed 'to consider recent and potential developments in medicine and science related to human fertilisation and embryology; to consider what policies and safeguards should be applied, including consideration of the social, ethical and legal implication of these developments; and to make recommendations'.

exploitation of and violation of surrogacy and its various concerned parties.[14]

Surrogacy, as a practice, is intertwined with numerous interrelated aspects including gamete donations, freezing of embryos, etc. which are critical for engaging in surrogacy. Consequently, these aspects need to be regulated by law as well and thus, the Human Fertilisation and Embryology Act, 1990[15] was drafted thereafter to address this lacuna. Clinics that provide surrogacy are duty bound to follow the provisions of both the laws and the HFEA's Code of Practice. The broad framework established by these two laws have undergone required amendments to address the changing nature of family and to provide for the needs of a dynamic society.

The Surrogacy Arrangements Act, 1985 is the comprehensive document that details the necessary provisions regarding surrogacy, the minimum rules and obligations and penal provisions for any violation thereof. The law clearly stipulates the non-enforceability of the contract[16] and thus, the intended parents cannot sue for breach of contract even if surrogate refuses to give up the child. Additionally, the law criminalises any form of advertising of commercial surrogacy. The law, nevertheless, provides that the parties may approach non-profit organisations as listed by the government,[17] to assist and navigate them in the surrogacy process.

The crux of the law is that altruistic surrogacy shall be permitted[18] whereas its commercial practice is completely forbidden. By altruistic surrogacy, it is meant that the surrogate shall not be paid any amount greater than what is considered to be reasonable payment. The term reasonable payment is undefined, but it basically refers to the expenses to bear the costs of medical processes and the rudimentary needs during pregnancy, including insurance. However, this term has been quite controversial as it provides scope for a liberal interpretation[19] and what may be reasonable for one, may be extravagant for another.[20]

---

13 Surrogacy Arrangements Act 1985, U.K.

14 The Surrogacy (Arrangements) Act, 1985 is being reviewed in context of the present conditions and a new law is expected by the end of 2021 in the United Kingdom.

15 Human Fertilisation and Embryology Act, 1990, UK.

16 1A titled, *Surrogacy arrangements unenforceable* provides that 'No surrogacy arrangement is enforceable by or against any of the persons making it', Surrogacy Arrangements Act 1985, U.K.

17 Three prominent UK surrogacy organisations have been listed by the government in its informational brochures for surrogacy. In the section titled, 'Starting the surrogacy process', Childlessness Overcome Through Surrogacy, Surrogacy UK and Brilliant Beginnings have been cited as organisations that can facilitate the process and ensure basic safeguards for all parties concerned.

18 Section 2, Surrogacy Arrangements Act 1985, U.K.

19 If the court thinks that the IP(s) have paid more than reasonable expenses then it will need to decide whether to 'authorise' the additional payments retrospectively to make a parental order. In doing so, the court's paramount consideration will be the child's welfare. Health Ethics, Population Health, Global & Public Health, cost centre 10800, *The surrogacy pathway: Surrogacy and the legal process for intended parents and surrogates in England and Wales*, Oct. 2019 (Apr. 20, 2021 1:21PM) https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/843890/Surrogacy_guidance_for_intended_parents_and_surrogates.pdf.

The Act does not stipulate any defining eligibility conditions for the surrogate mother or the intended parents. Surrogacy is available for married couples, civil partners, including same-sex couples, live-in partners and also single parents. Under the law, the surrogate mother[21] and her partner[22] remains the legal guardian of the child, even if they are genetically unrelated. There has to be a transfer of guardianship through a parental order[23] or adoption. In case of a genetic link, parental order shall be provided and in case neither of the intended parent(s) are related, then adoption is the only process of transferring guardianship. The process of transfer is generally subject to a review by the courts after ascertaining that all the qualifications and precautions have been given due consideration during the process of surrogacy.[24]

An analysis of the law reveals that the United Kingdom has attempted to balance the conflicting aspects of surrogacy with a law that provides access to surrogacy while ensuring necessary protection to all the parties. The concept of altruistic surrogacy has been criticised and equated with free labour; however, the liberal interpretation of the law and the principle of welfare of the child, does provide ample scope to manoeuvre around the stringent provisions of the surrogacy law.

The Courts in the United Kingdom and in the ECHR have been open-minded about surrogacy. Even in cases where an excessive payment, beyond what is reasonable, has been done, the courts have been accommodating.[25] The primary focus of the courts is to ensure that the child born should be at a disadvantageous position and that the best interest of the child should be paramount. A child should not be separated from the intended parents because an unnecessary payment was made to the surrogate. Additionally, parental orders have also been interpreted liberally. Many parents, who have not been able to fulfil the essentials within the six-month

---

[20] Henry Bodkin, *Couples paying £60,000 for surrogates despite UK system of reasonable expenses only*, TELEGRAPH, Jul. 02, 2018, (Apr. 20, 2021 1:34PM) https://www.telegraph.co.uk/news/2018/07/01/couples-paying-60000-surrogates-despite-uk-system-reasonable/.

[21] Section 33 of the Human Fertilisation and Embryology Act, 2008 defines mother as 'the woman who is carrying or has carried a child as a result of the placing in her of an embryo or of sperm and eggs, and no other woman, is to be treated as the mother of the child.'.

[22] Section 35 provides that the other party to the marriage **[**or civil partnership**]** is to be treated as the father of the child unless it is shown that he did not consent to the placing in her of the embryo or the sperm and eggs or to her artificial insemination (as the case may be).

[23] Section 54, 54A, 55, Human Fertilisation and Embryology Act, 2008, U.K.

[24] The Family Courts review the payments made to the surrogate as a part of the parental order application and require detailed accounts of the expenses borne by the intended parents.

[25] Re L (Commercial Surrogacy) [2010] EWHC 3146 (Fam), 2010 the decision of the Court stated that if an amount, higher than what is reasonable has been paid, the court should keep the welfare and best of interests of the child as its primary concern and should not withhold parental order solely on that condition of excessive payment. Similarly, in Re IJ 2011, [2011] EWHC 921, the same decision was made by the court keeping in mind the best interest of the child. A reference was made to Re L in this judgement and it was observed by Justice Hedley that "the conditions in Sections 54(1) - (8) having thus been satisfied, a discretion arose in the court to make a Parental Order. For the reasons explained in RE L [2010] EWHC 3146 (FAM) that discretion is now governed by the provisions of Section 1 of the Adoption & Children Act 2002. Once again, after careful examination by CAFCASS and scrutiny of evidence, it was crystal clear that the best interests of IJ required the making of the Parental Order sought by the applicants. Hence the order made".

period after birth for filing for parenthood, have been given legal parenthood even after the expiry of the term. The aim being to ensure that the child is in custody of the parents who intended and wished to bring up the child.

In terms of access, the law is comprehensive. It provides for the changing nature of the traditional heterogenous families and acknowledges other forms of familiar structures. There is no discrimination in terms of eligibility of surrogacy, unlike in most nations of the global south, which recognize only heterosexual couples to be qualified for surrogacy. Single parents families and same-sex families have been given the choice to embrace surrogacy to conceive a child.

In India, a concrete legal development around surrogacy commenced with the 228th Law Commission Report[26] which reviewed the socio-legal conditions of surrogacy and forwarded many recommendations, one of which was for prohibiting commercial surrogacy. The Indian market on reproductive tourism had expanded exponentially with the introduction of and the expansion of the health sector. Clinics and specialists solely for the surrogacy mushroomed in different parts of the country. Recognising the demand and the profitability of the medical process, a systematic organisational structure had developed in India. This was not just limited to clinics and specialists, but also extended to middlemen, agents and a comprehensive international network. Consequently, an elaborate mechanism for both domestic and foreign surrogacy was established in India, usually with a commercial predisposition.

The first legal proposition specifically aimed at surrogacy was the Surrogacy (Regulation) Bill, 2016. Prior to 2016, the Assisted Reproductive Technologies Bill, 2014 was introduced but without it being passed by the Parliament.[27] This was a general law which provided the framework for all different types of assisted reproductive technologies, including gamete donations, embryo freezing, medical processes like IVF, artificial insemination and general conditions for surrogacy.

Meanwhile, to address the absence of legal provisions, certain guidelines were provided by the Indian Council of Medical Research called the National Guidelines for Accreditation, Supervision and Regulation of ART Clinics in India in 2005.[28] Simply referred to as the ICMR Guidelines on ART, this document provided some fundamental rules and regulations for engaging in such practices[29] including the code for ethical practice. However, these were in the

---

[26] 228th Report of the Law Commission of India (2009). On August 5, 2009 the Law Commission of India submitted the 228th Law Commission Report titled "*Need for Legislation to regulate Assisted Reproductive Technology Clinics as well as Rights and Obligations of parties to a Surrogacy"*. The Report discussed the issue of assisted reproduction, and its increasing demand in India. It also highlighted the social, moral and legal issues assisted reproduction. Furthermore, references were made to the Indian Baby M case and the case of the gay Israeli couple. The Report reviewed the Draft Assisted Reproductive Technology (Regulation) Bill and Rules, 2008.

[27] The proposed legislation aims at proper regulation and supervision of Assisted Reproductive Technologies (A.R.T.) clinics and banks in the country, and for prevention of misuse of this technology, including surrogacy, and for safe and ethical practice of A.R.T. services. The Bill has been under consideration for quite some time now and is being revised, with previous versions being presented in 2008 and 2010.

[28] *National Guidelines for Accreditation, Supervision & Regulation of ART Clinics in India*, ICMR, (Apr. 21, 2021 8:52PM) https://main.icmr.nic.in/sites/default/files/art/ART_Pdf.pdf.

form of guidelines and therefore not binding in nature. Consequently, many clinics and specialists simply overlooked the guidelines and continued with the commercial exploitation of surrogacy and other forms of assisted reproduction.

The Surrogacy Regulation Bill, 2016 provided the foundation for a legal regime in India aimed towards prohibiting commercial surrogacy and ensuring certain basic safeguards to ensure that all the parties are protected from any possible exploitation.[30] This was followed by the Surrogacy (Regulation) Bill, 2019[31] which made certain changes to the previous version, but it did not pass the test in the parliament. Finally, the Surrogacy (Regulation) Bill, 2020 was introduced which amended certain objectionable provisions in the previous versions. However, the bill is still under consideration and has to be voted on by the parliament, though it has been endorsed by the Cabinet.[32] The process of drafting the proposed law has been exhaustive and prolonged with deliberations and review at all stages to ensure that a cohesive law is passed by the parliament on the matter.

As per the latest version of the bill, surrogacy shall be in the altruistic nature,[33] extended to heterosexual couples, single women who are either divorced or widowed and the surrogate mother could be any willing woman who is ready to undertake the task of childbirth. The intended parents also need to fall within the bracket of 23-50 years for women and 26-55 years for men.[34] It extends to non-resident Indians, persons of Indian origin and overseas citizens of India.[35] Consequently, all single/unmarried persons, live-in couples and same-sex couples[36] have been excluded from the scope of the law.

As per the proposed bill, any willing woman may be the surrogate for the intended parents.[37] A

---

29 The Guidelines is one of the most comprehensive guidelines available in India. Till any concrete legislation is drafted and passed by the legislature, these guidelines provide certain concrete standards for clinics and attempts to ensure that unethical practices are avoided and persons who undergo such procedures are protected and regulated.

30 *Surrogacy Regulation Bill, 2016*, PRS India, (Apr. 21, 2021 8:55PM) https://prsindia.org/billtrack/the-surrogacy-regulation-bill-2016.

31 The Surrogacy (Regulation) Bill, 2019, Bill No. 156 of 2019. (India).

32 *Cabinet approves surrogacy Bill,* THE HINDU, Feb. 26, 2020 (Apr. 21, 2021 9:00PM) https://www.thehindu.com/news/national/cabinet-clears-surrogacy-regulation-bill/article30921456.ece.

33 *Id.*

34 Ranjit Malhotra, *Highlights and brief analysis of the Surrogacy (Regulation) Bill, 2020 and suggested potential safeguards*, International Bar Association, Jun. 26, 2020 (Apr. 21, 2021 9:01PM) https://www.ibanet.org/Article/NewDetail.aspx?ArticleUid=B5C65969-4901-49A9-82CF-8DC4C8BEB1E2.

35 *Id.* There are, however, caveats for a couple of Indian origin opting for surrogacy arrangements. They cannot have a surviving child, either biological or adopted, except when they have a child with a mental or physical disability, or who suffers from a life-threatening disorder with no permanent cure.

36 This violates the right to equality as envisaged under Article 14 and the right to privacy judgement of the Supreme Court which clearly stipulated that all individuals have the freedom to a choice in family life while preserving their dignity, liberty and equal protection. (Justice K. S. Puttaswamy v Union of India, (2017) 10 SCC 1).

surrogate shall further, not provide her eggs in this process, thus prohibiting traditional surrogacy. The intended parents shall be the legal parents and the surrogate shall not have right on the child. For surrogacy, the intended parents will have to provide evidence of eligibility and essentiality by approaching the medical authorities as stipulated in the law. No payment, beyond the medical expenses and insurance shall be provided to the surrogate mother.[38] Violation of any of the provisions of the law shall attract criminal penalty, including imprisonment and fines. The bill is yet to be passed by the Parliament and thus, may undergo changes over time. However, the changes have been positive and if the question of eligibility of the intended parents is addressed, a cohesive law may possibly be concluded on the subject.

V. COMPARATIVE ANALYSIS OF THE UNITED KINGDOM & INDIA

A comparative analysis of these two nations is pertinent as the fundamental base of the proposed law in India is reflective of the 1985 surrogacy law in the United Kingdom. The process of making laws and the fundamental criminal law framework in India is adopted from the United Kingdom and thus, the colonial outlook is clearly reflected in the current proposed law. India, which adopted British drafted the Indian Penal Code, 1860 decriminalised homosexuality in the year 2018 as against the British who did the same in 1967. Though legally decriminalised, socially, the lack of acceptance is still an issue in India. The cultural nuances between the nations vary and thus, the laws mirror that in terms of access, the question of morality and ethics and limitations thereof in the proposed law in India.

SUBJECT	**UNITED KINGDOM** [Surrogacy Arrangements Act, 1985]	**INDIA** [The Surrogacy (Regulation Bill), 2020]
Type of surrogacy allowed (Altruistic or commercial)	**Altruistic (Commercial surrogacy prohibited).**	**Altruistic (Commercial surrogacy prohibited)**
Payment to the surrogate	**Reasonable expenses excluding payment for the benefit of the surrogate mother**	**Medical expenses and insurance coverage.**

Both India and the United Kingdom address the increasing commercialisation of surrogacy by prohibiting commercial forms in its entirety. Altruistic surrogacy has been provided under both jurisdictions aimed to ensure that financial inducements do not form the core or primary motivating factor for a surrogacy arrangement. However, both laws do enumerate about the basic monetary expenses that is needed as a part of such arrangements. While the law in the U.K. uses the term, 'reasonable payments', in the proposed law in India, expenses only for medical purposes and insurance is permitted. In practice it is observed that in the UK, the term is expanded to include expenses that may be considered to be in excess. However, owing to the subjective nature of the term and of each individual pregnancy of a surrogate, the courts have adopted a liberal view in the UK, aimed at ensuring that the welfare of the child be the paramount consideration.

ELIGIBILITY CRITERIA FOR COMMISSIONING PARENT(S)		
Requirement of being married	**No. (Includes live-in partners, civil partnerships and even single persons)**	**Yes**
Citizenship and/or residency	**Permanent residence.**	**Yes**
Existence of a medical reason	**No requirement.**	**Medical indication should be proved. Certificate of eligibility and essentiality are required.**

There are major differences between the two nations with regard to the eligibility requirement of the intended parents. The surrogacy law in the U.K. is liberal in nature, ensuring that there is no discrimination or prejudice in terms of access. The law clearly stipulates that any couple, heterosexual and same-sex couples, partners in civil relationships or live-in relationships and even single persons are eligible to be intended parents. Genetic relationship with at least one parent is preferred to ensure that the parental order is transferred easily. There is no stipulation regarding any form of medical need prior to engaging in surrogacy.

In India, the proposed law lays down an elaborate list of conditions, restricting surrogacy only to married heterosexual couples and single women who are either divorced or widowed. Thus, it excludes same-sex couples, live-in partners and single parents (men and women, other than the divorced and widowed) from using surrogacy for conceiving a child. Marriage is a precondition and thus, since India does not recognise same-sex couples, they have been excluded from the scope of the law.

Additionally, two certificates are needed that establish the need for the couple prior to engaging in surrogacy. The process of this certification involves administrative interference which is invasive in nature and may violate the right to privacy of the couple. Furthermore, the law provides no provisions for any form of repeal or review in case the certificate is not issued by the authorities concerned.

ELIGIBILITY CRITERIA FOR SURROGATE MOTHER		
Age	**Not specified**	**25-35 years.**
Relation to commissioning parents	**No**	**No, any willing woman**
Requirement of being married	**No**	**Yes**
Number of own children	**No requirement.**	**At least one.**
Number of times one may be a surrogate	**No restriction**	**Once**
Consent of the partner	**Not required**	**Needed**

In case of the surrogate, while the U.K. Surrogacy arrangements Act does not specify any conditions for a woman to act as a surrogate; the law proposed in India lays down many eligibility criteria. Furthermore, there is a clear limitation in terms of the number of times a surrogate can participate in such arrangements. This is extended in the Indian law to ensure that the health of the surrogate is not affected due to multiple pregnancies. In relation to the question of consent, the British law provides autonomy to the surrogate to decide for herself if she wishes to be a surrogate, irrespective of the question of consent of her husband/partner.		
LEGAL PARENTHOOD		
Legal guardian of the surrogate child	**Surrogate is the legal guardian. Transfer of guardianship by parental orders, if one parent is genetically related to the baby and by adoption if neither parent is generally related.**	**Intending couple**
The question of guardianship varies between the two countries. India specifically provides that the child born through the process will be of the intending couple immediately after the birth. In contrast, the British law clearly states that the surrogate shall be the legal guardian in all cases, even if genetically unrelated to the child. In all cases of surrogacy, there has to be a process of transfer of legal guardianship. Parental orders should be applied for within six months of birth by genetically related parent(s). Adoption shall be permitted if neither of the intended parents are genetically related.		
PENAL PROVISIONS		
Imprisonment for engaging in commercial activity	**3 months**	**10 years**
Advertising	**Prohibited**	**Prohibited**
Advertising is prohibited in both nations. However, while the British law criminalises third party intervention in brokering or advertising surrogacy with imprisonment of maximum of three months and a fine; the proposed Indian law is far more stringent with imprisonment up to a period of 10 years. Additionally, the proposed law in India also accommodates other		

offences, including exploiting the surrogate, abandoning, exploiting and disowning the child, selling and importing of human embryos or gametes. This is a positive provision as it ensures protection to the surrogate and the child from possible exploitation. Nevertheless, there is a need for a clear comprehensive definition of the term to safeguard the extent of the right.

VI. CONCLUSIONS AND RECOMMENDATIONS

Surrogacy as a medical practice is aimed at a positive process with a positive aim of giving childless couples a chance to be parents. Genetic relationship is an essential component for many family structures and thus, surrogacy provides that, particularly for same-sex couples and single parents. Infertility is a global issue and with changes in lifestyle and customary practices, such alternatives are essential. Infertility should be addressed with a multitude of options, including surrogacy. Commercial forms need to be forbidden as it devalues human life and reduces the status of both the surrogate and the baby. The commodification of the child can be harmful and thus, preventive measures are needed. However, at the same time, there should be a broader acknowledgement that surrogacy had developed with a larger purpose and that such medical processes are needed in society. Curbing such practices in the form of a blanket ban can be potentially dangerous as it may create illegal and underground markets wherein the chances of exploitation and abuse will be higher. An analysis of these jurisdictions presents an interesting path and possible lessons for India to ensure that while commercialisation needs to be addressed, perhaps a more liberal law aimed at welfare is needed. Thus, to that end, the following recommendations are forwarded:

1. Surrogacy needs to be regulated by law, with the complete ban of commercial forms, including advertising of surrogacy as an aspect of reproductive tourism. The economic factor is the singular cause for the global expansion of surrogacy, particularly in third world nations wherein surrogates are enticed with expectation of financial incentive and a better life.

2. While commercial forms should be prohibited, some form of compensation should be given to the surrogate as seen in case of the United Kingdom, wherein reasonable payments encompass the basic requirements for a surrogate to be able to undergo the medical process while ensuring that she does not suffer any disadvantage in the process. The stringent restrictions in the nature of eligibility for the surrogate should also be reviewed in the Indian context to ascertain the question of bodily autonomy and independence of a woman to make decisions as she finds suitable.

3. The restrictive access of the law in India needs to be revised and amended. The proposed law in India excludes sections of people simply because of cultural factors that have been addressed judicially. Same-sex couples and live-in relationships, both have been duly

acknowledged by the Supreme Court in India to be legal forms of relationship. Simply because a section of the lawmakers does not agree with the changing nature of family structures, the Surrogacy (Regulation) Bill, 2020 bars them from engaging in such arrangements. Additionally, the discrimination inherent in the access violates the basic principle of equality, as envisaged in the Constitution of India and is a fundamental human right under international law. In the United Kingdom, there was a similar experience but the law as it currently stands, has extended the access of altruistic surrogacy to heterosexual couples, same-sex couples, single persons and domestic partnership, without any discrimination.

4. India can accommodate the participation of non-governmental organisations into the sector, thereby ensuring that the parties who participate in such assisted forms of reproduction are protected and that their legal rights are safeguarded. The UK system is extremely efficient in that regard and with the involvement of the non-governmental sector, the law in the UK is effectively implemented. India can adopt the same to systematise the area and thereby give the parties a sense of protection when entering in a surrogate arrangement. Additionally, legal recourse may also be provided at the initial stages to ensure that the parties comply with the regulations and that no party is at any form of disadvantage during the process. These services can be provided by organisations outside of the government control at a minimum cost to create suitable conditions for surrogacy.

Surrogacy should be seen as a medical advancement that can afford a positive purpose for many who wish to have a child. Surrogacy should not be reviewed from a moral perspective of right and wrong but should be recognised as a medical process that can provide hope to childless couples. A blanket ban shall not serve the purpose and the existing clinics and organisational structures may continue working beyond the scope of law. Such conditions may prove to be far more detrimental for all parties and thus, a balanced law is needed. The lawmakers should find a middle ground by which surrogacy is practiced but with certain fundamental restrictions to ensure that no party faces any form of abuse, discrimination or exploitation. References to experiences in developed nations like that of the United Kingdom can ensure that India learns from the experiences of such nations to prevent the same from happening within local jurisdictions. Along with the proposed surrogacy bill, the general law on assisted reproductive technologies should also be passed, and preferably before the surrogacy specific law. A clear pathway should be identified by virtue of which surrogacy can be practiced in a regulated environment that ensures the basic human right of all persons to form a family.

COVID-19: AN OPPORTUNITY TO SHAPE ENVIRONMENTAL VALUES & SUSTAINABLE DEVELOPMENT

Dr. Juri Goswami
Assistant Professor
J.B. Law College, Guwahati

ABSTRACT

The loss of habitat and biodiversity is one of the reasons for the outbreak of many pandemics globally. The economic development which is carried out by humans by sacrificing their environment and nature results in transmission of various diseases. The environment, mainly the forests, is a hub of various wildlife and other creatures. The increasing population of humans has compelled them to make dwelling houses by causing mass destruction to the forests. In this process, they have come into contact with a variety of exotic wildlife species which carry unknown viruses and transmit them to the humans. When humans carry on deforestation, a number of wildlife species lose their habitat and as usual they search for a new host. In that course, they come in contact with humans and they act as carriers of many diseases and viruses. The wet market which sells meats of various wildlife species are also responsible for the spreading of viruses as is seen in the spreading of coronavirus in the present time. Coronavirus or COVID-19 which has been declared as pandemic by the World Health Organization has a larger impact on the environment and the climate. It is getting devastating day by day causing major disruptions in the human activities. As the virus is transmitted from humans to humans therefore the governments of the major parts of the world have advised their people to stay at home in order to prevent its spreading. People are in quarantine and observing social distancing to protect themselves from being infected from the deadly virus. All possible measures are being taken by respective governments of the countries to protect their people. The global measures which are adopted to fight against the virus like lockdown, shutdown of industries, traffic halts has resulted in several benefits to the climate and the environment. There has been a change in the quality of air, crystal clear waters in the rivers and seas, animals roaming freely in the roads which were once used by humans before the pandemic. There have been lesser emissions of the greenhouse gases as human life is at halt. It can be said that due to social distancing and quarantine measures adopted by humans, the positive impact of this pandemic situation can mainly be seen on the environment and the climate. Hence, the article throws light on sustainable development and environmental values. It mainly analyses those positive impacts which COVID-19 has gifted to nature and the environment. The views of environmentalists regarding the same are also discussed in this article.

Keywords: COVID-19, Sustainable Development, Environment, Values, Pandemic.

I. INTRODUCTION

Mahatma Gandhi once quoted, *earth provides enough to satisfy every man's needs but not every man's greed*. Humans are considered to be the perfect and finest creation in the whole universe. Humans can be distinguished from the other creatures since they possess analytics and capacity to form rational opinions through proper reasoning. Humans have the power to do wonders to the world through their intellects which other living creatures can seldom do. Thus, it can be said that humans are a gift to this universe. They have been assigned many roles to be played by them in this universe and one of them is to protect and preserve the environment in which they are living. They have a moral duty to respect the environment and take all possible steps to safeguard it. They have been given the right to exploit the elements present in the environment but how far the

right to exploit has been judiciously exercised has become a matter of question which has attracted the attention of many noted environmentalists. As our environment has an abundance of resources which are necessary for humans, their exploitation becomes essential for their survival. Humans are not the only creatures on earth to use the natural resources for their own; there are other living creatures too who are dependent upon the environment for their survival. So it is not fair on the part of the humans to think that the environment is their sole property and they can exploit the environment in the way they want. They have to make sustainable use of the natural resources present in the environment. Meaning thereby, the present generations must use the natural resources in such a way that their successive generations can get the benefit of the same. Hence, exploitation of natural resources is necessary but it's over-exploitation cannot be welcomed because the present generations must try to hand over the environment in the same way to their future generations as the way they had acquired it in order to keep the human race alive. But in spite of having intelligence to think and reason, humans have proved to be the destructor of the environment and not its preserver. For the sake of development and to fulfil their unlimited wants, humans are exploiting the resources of the environment in such a way that their use and exploitation has led to severe loss to the environment which is not possible on their part to compensate. Over usage of the natural resources is in some way or the other causing humiliation to Mother Nature and as a result of it, today humans are forced to face various natural calamities like floods, volcanic eruptions, forest fires, hurricanes, tornadoes etc. Such natural calamities are nothing but the wrath of nature towards human beings as those calamities bring added problems for humans in the form of various infectious diseases like diarrheal diseases, acute respiratory infections, malaria, measles, dengue fever, viral hepatitis etc. Thus, it is seen that principles like maintaining sustainable development, holding environmental values are gradually disappearing from amongst humans.

II. ENVIRONMENTAL VALUES

To keep nature intact, certain core values of the environment to be practiced, which one can term as environmental values. In order to set an environmental target, a direct and indirect trade-off between values is required. Environmental values cannot be avoided while formulating an environmental target towards which the environmental policy aims. There is relevance between the environment and human behaviour in present times. Every action needs to be analysed as how it is going to have an impact on the environment. Now the main question is how humans should utilise the environment and other scarce natural resources?[1]

Human activities are always affected by their values. It is very much evident that today's environmental crisis is the outcome of human activities. It can be said that the environmental

[1] J. Fredrick Holstein, *Envrionmental Values-What's the Point? Essays on Compliance with Environmental Regulations and on the Meaning of Environmental Values*, SWEDISH UNIVERSITY OF AGRICULTURAL SCIENCES (May. 04, 2020, 12:01 PM), https://pub.epsilon.slu.se/2205/1/Holstein_F_091215.pdf.

crisis is in fact the crisis of values. Therefore, it is high time that humans should realise the core values of the environment and act ethically towards life and nature which is vital for their own survival.[2]

III. CULTURAL VALUES *VIS-A-VIS* ENVIRONMENTAL VALUES

The cultural values are created by humans only taking natural values as the base. In fact, it was believed that the environment did not have any values; it was only the humans who had values. It is indeed wrong to only recognise cultural values keeping aside the environmental values. It is also seen that the cultural values of humans are recognised by causing damage to the environmental values. Such human activities have caused severe loss to environmental values and harm to the natural values on which the cultural values are created. All these have resulted in the rising of non-sustainability in the environment. Under such circumstances the question of preserving and practicing environmental values arises.[3]

IV. IMPORTANCE OF ENVIRONMENTAL VALUES

Any kind of material resources are not produced by humans. Humans use technology to produce which changes the form of materials in order to make them usable. This process is called transforming nature into civilization. In the process of transformation, nature plays an active role by participating and supporting the creation of civilization. Humans have made many achievements and the price for such is paid by the environment and nature. But now, humans are losing the support of nature because for the sake of development, humans have started losing environmental values and as a result, harm is being faced by human culture. Development of human civilization can only be possible with the help and support of environment and nature and if the environment does not support the process of civilization then human cultures will be at stake and it will be difficult for them to exist without nature's contribution to mankind. Therefore, it is very important to recognise and practice the values of the environment.[4]

V. ENVIRONMENTAL VALUES AND COVID-19 PANDEMIC

It is proved from the present pandemic situation of 2020, that environment, social and economic well-being, mental health, political vibes and security are all inseparable and are incompatible. It all started with the locust invasion in Kenya and now the Covid-19 which has brought the entire world to its knees. The whole world has stepped ten times backward due to the effect which the disaster has had on human lives. This has a greater impact on the marginalised sections of the

[2] Mouchang Yu & Yi Lei, *Environmental Values and Ethics,* EOLSS (May 04, 01:07 PM), eolss.net/Sample-Chapters/C/E4-25-07.pdf [hereinafter referred to as Mouchang Yu & Ye Lei].

[3] *Id.*

[4] *Id.*

society as they are suffering from food insecurity. Farmers and small scale traders are also suffering and are about to lose their livelihood. The increased stress on social distancing has also threatened our cultural values of brotherhood. Hence if humans do not give priority to environmental values and make environmental protection their personal commitment, nature will compel the world to standstill and halt. The conscience of humans will get a jolt and they will be forced to adopt sustainable lifestyles and habits without causing any harm to the environment. If the States are not willing to re-think and re-evaluate their developmental models keeping intact their environmental values , then the world should keep itself ready to face tougher times in future.[5]

VI. SUSTAINABLE DEVELOPMENT

Humans should recognise and preserve environmental values because the future of human's depends upon the change in their values. Humans should desist from the ways they produce; their lifestyles which sacrifice natural values at the cost of cultural values. Humans through their intelligence and creativity should neither cause destruction to natural values that realise cultural values nor should they diminish cultural values in order to protect and preserve natural values. Instead they should strive to achieve both the ends. This is termed as Sustainable Development.[6]

The concept of sustainability has been advancing as developmental strategies since the Bruntland Commission Report in 1987. A number of stakeholders are working to achieve the Sustainable Development Goals by 2030 which are formulated by the United Nations. Undoubtedly, the steps taken by the Government, to control the current pandemic will definitely bring some positive change towards the natural environment especially over the air quality and natural habitat.[7]

VII. WHETHER COVID-19 REPRESENTS NATURE TAKING REVENGE FROM HUMANITY?

Well, for the last few decades, humans are certainly facing various forms of virulent diseases that have migrated from other living creatures to humans like Ebola, Bird Flu, Mers etc. and humans could possibly escape from such diseases by developing anti-viruses through high technological medical research. But as developmental activities in the name of civilization are taking place in the world's wilderness, humans will have to face more and more biological forces which will be out of their control. Nature has put the alarm bell on which has been ringing for decades; giving a

---

5 Eva Maria Anyango Okoth, *When Nature Speaks, We have to Listen: COVID-19 and Environmental Values,* Apr. 2020, NATURAL JUSTICE (May. 04, 2020, 10:26 PM), naturaljustice.org/when-nature-speaks-we-have-to-listen-covid19-and-environmental-values/..

6 Mouchang Yu & Ye Lei, *supra* note 2.

7 Dimitrios Diamantis, *What is the Impact of COVID-19 on Sustainability?* HOSPITALITYNET™ (May 04, 2020, 11:02 PM), hospitalitynet.org/opinion4098063.html.

warning to mankind as news of deforestation in the tropics, loss of flora and fauna due to forest fires, the bleaching of coral reefs and the impacts of pollution is not far away from human knowledge.[8]

Few decades ago there was a general perception that tropical natural forests with numerous and abundant wildlife harbours the viruses and pathogens that lead to new diseases in humans like Ebola, HIV and dengue. But researchers across the world believe that it is the destruction caused to the environment by humans which is also responsible for the creation of new viruses and diseases in the society and thereby causing great impact on health, economy and environment worldwide.[9] Environmentalists claim that the present pandemic of Covid -19 is a curse of nature to maintain a balance with the destruction caused towards nature. It can be said that various human activities in the nature of development like hunting, mining, deforestation, triggers various epidemics. Humans are occupying and attacking various tropical forests which harbour so many animals and plants and within those creatures there exists so many viruses which are unknown to mankind.

David Quammen, author of Spillover on *Animal Infections and the Next Pandemic*, wrote in the New York Times: 'We cut the trees: we kill the animals or cage them or send them to markets. We disrupt ecosystems and we shake viruses loose from their natural hosts. When that happens, they need a new host. Often, we do it.'[10]

There has been a rise in the sudden happening of animal-borne diseases such as Ebola, Sars, Bird Flu and recently Covid-19 caused by novel coronavirus as suggested by various researchers. Pathogens are crossing from animals to humans rapidly. The USA Centres for Disease Control and Prevention has estimated that three quarters or emerging diseases that infect humans have an origin from animals. Centuries ago, plague and rabies caused from animals. Marburg is another disease which is thought to be transmitted from fruit bats is still uncommon. The current outbreak of coronavirus disease 2019 (Covid-19) which emerged in Wuhan, China originally came from an animal, likely a bat. Other diseases include Lassa fever was first identified in 1969 in Nigeria, Nipah from Malaysia and Sars from China which took lives of millions of people in different parts of the world came from aimals.[11]

Kates Jones, Chairman of Ecology and Biodiversity at UCL calls emerging animal-borne infectious diseases an 'Increasing and significant threat to global health, security and economics'. Jones further links environmental change and human behaviour with the zoonotic diseases. Due to frequent logging, mining, road building through remote places, rapid

---

8 Herbert Girardet, *Is Nature taking revenge?* ECOLOGIST-THE JOURNAL FOR THE POST INDSUTRIAL AGE, Apr. 2020 (May 04, 2020, 02:25 PM), theecologist.org/2020/Apr/15/nature-taking-revenge.

9 John Vidal & Ensia, *'Tip of the Iceberg': Is our destruction of nature responsible for COVID-19?* THE GUARDIAN, Mar. 2020 (May. 04, 2020, 02:47 PM), theguardian.com/environment/2020/mar/18tip-of-the-iceberg-is-our-destruction-of-nature-responsible-for-COVID-19-aoe.

10 *Id.*

11 *Id.*

urbanisation and growth in population has caused environmental disruption mainly in the forests. This has brought the humans come in close contact with the species of animals which they never have been before. Jones further says that the resulting transmission from wildlife to humans is now 'A hidden cost of human economic development. There are just so many more of us, in every environment. We are going into largely undisturbed places and being exposed more and more. We are creating habitats where viruses are transmitted more easily and then we are surprised that we have new ones.' Jones studies how changes in the land use have contributed to the risk. She further says that 'We are researching how species in degraded habitats are likely to carry more viruses which can infect humans. Simpler systems get an amplification effect. Destroy landscapes and the species you are left with are the ones humans get the diseases from.'[12]

Eric Fevre, Chairperson of Veterinary infectious diseases at the University of Liverpool's Institute of Infection and Global Health says, 'There are countless pathogens out there continuing to evolve which at some point could pose a threat to humans. The risk of pathogens jumping from animals to humans has always been there.' Fevre points out that disease are likely to spring up in both urban and natural environments. 'We have created densely packed populations where alongside us are bats and rodents and birds, pets and other living things. That creates intense interaction and opportunities for things to move from species to species' Fevre added.[13]

Thomas Gillespie, an associate professor in Emory University's Department of Environmental Sciences says that, 'Pathogens do not respect species boundaries. He says, 'I am not surprised about the coronavirus outbreak. The majority of pathogens are still to be discovered. We are at the very tip of the iceberg.' He says that humans are reducing the natural barriers between host animals in which the virus is circulating and thereby they are creating the conditions which are likely responsible for the spread of diseases. There is a high expectation of human mortalities in the coming future.[14] He says that, 'Major landscapes changes are causing animals to lose habitats, which means species become crowded together and also come into greater contact with humans. Species that survive change are now moving and mixing with different animals and with humans.'[15]

Richard Ostfeld, a distinguished senior scientist at the Cary Institute of Ecosystem Studies in Millbrook, New York points that, rats and bats are strongly linked with the direct and indirect spread of zoonotic diseases. When we cause disruption in the natural habitats, rodents and bats thrive and they are mostly responsible to promote transmissions of pathogens. If we keep on disturbing the nature, forests and habitats, we will be in more danger.[16]

---

[12] *Id.*
[13] *Id.*
[14] *Id.*
[15] *Id.*
[16] *Id.*

Many informal markets provide fresh meat to the ever growing population throughout the world where animals are slaughtered and sold on spot. It is argued by disease ecologists that several viruses and pathogens are also likely to be transmitted from these places. The 'wet market' in Wuhan, China which was known to sell numerous wild animals including wolf pups, salamanders, crocodiles, scorpions, rats, squirrels, foxes etc. is thought by Chinese Government to be the place where the current Covid-19 pandemic took its form first. The wet market in Lagos is like a nuclear bomb waiting to happen.[17] Fevre and Clleague Cecilia Tacoli, principal researcher in the human settlements research group at the International Institute of Environment and Development argued that it will be wise to have a look upon the increasing trade in wild animals rather than pointing fingers at wet markets. They wrote, 'It is wild animals rather than farmed animals that are the natural hosts of many viruses. Wet markets are considered to be a part of the informal food that is often blamed for contributing to spread disease. But evidence shows the link between informal markets and disease is not always clear cut.'[18]

There is no evidence that SARS-CoV-2 was made in laboratory or was otherwise engineered in the Wuhan city of China. According to Kristian Anderson, an associate professor of immunology and microbiology at Scripps Research has stated in his research paper that by comparing the available genome sequence for known coronavirus strains they can firmly determine that SARS-Cov-2 originated through natural process.[19]

VIII. POSITIVE IMPACTS OF COVID-19 ON ENVIRONMENT

Most of the people around the world are still caged in their homes as COVID-19 is spreading rapidly. It has been months that schools, colleges, universities have remained closed. Amidst lockdown some people are battling to earn their livelihood as their life has become miserable. There have been imposed restrictions on the issue of visas and several borders have been tightened. Now-a-days, the new norm in everyone's life is work from home and social distancing.[20] As the virus is spreading rapidly, governments are bound to take drastic measures like shutdown of factories, commercial establishments and vehicular movements. However, all these have resulted in giving a positive impact to the environment. As the pandemic has caused obstruction in various industrial activities, the world is witnessing a drop in pollution levels in the environment. It seems that Mother earth is rejuvenating and refreshing itself. Blues skies are clearly visible, increased activity in the marine life is seen, animals and birds are freely moving on their own.[21]

---

[17] *Id.*

[18] *Id.*

[19] COVID-19 CORONAVIRUS EPIDEMIC HAS A NATURAL ORIGIN, sciencedaily.com/releases/ 2020/ 03/ 200317175442/html. (last visited May 30, 2020).

[20] Roshni Balaji, *Blue Skies, clean air: how the coronavirus lockdown is rejuvenating our environment,* SOCIALSTORY (May 10, 2020, 02:38 PM), https://yourstory.com/socialstory/2020/04/coronavirus-lockdown-environment-air-pollution-covid-19 [hereinafter referred to as Roshni Balaji].

[21] *Id.*

The positive aspect of COVID-19 is that it has given the planet a boon. It has compelled billions of people to stay at home and all those people who are staying at home seem to have relieved the burden of global environment.[22]

IX. REDUCTION IN POLLUTION LEVELS

As the whole world is under lockdown, several unintended consequences have resulted which has created a global experiment in reducing pollution in some of the world's busiest cities. In the north-eastern part of the United States, nitrogen dioxide pollution has been dropped by 30%. Similarly, Rome has witnessed a decrease in the air pollution levels by 49% in between March and April.[23] Countries like China, Italy, UK, Germany and other countries have experienced a fall of 40% in nitrogen dioxide and carbon dioxide for which the air quality has substantially improved thereby reducing the risks of several ailments like asthma, heart attacks and lung diseases. In UK, road traffic has fallen by 70%. According to the report of seismologists, there has been lower vibrations' arising out of cultural noise than it was before the pandemic. In between early February and mid-March, China which is the biggest source of carbon emission was decreased by 18%.[24] The fossil fuel industry is hit by this pandemic. The prices of oil have fallen with fewer drivers on the roads and planes in the air. Many people across the globe are using teleconferencing methods to communicate with each other whether it is a business meeting or online classes in schools and colleges or informal talks with family, friends and relatives.[25]

As per the estimates of the World Health Organisation (WHO), every year about 3 million people die due to the diseases caused by air pollution. The figures from the European Space Agency's Sentinel-5P satellite shows that the levels of nitrogen oxide over cities and industrial areas in Asia and Europe were much lower during the late January and early February,2020 which reached to 40% when compared with last year. In United Kingdom's, two weeks after the nationwide lockdown, pollution in some cities has dropped by 60% compared to the same period in 2019. It has been revealed by NASA that nitrogen dioxide pollution over New York and other metropolitan areas in the north-eastern USA was 30% in March 2020, compared to past years.[26]

---

[22] Eric Mack, *On Earth Day 2020, coronavirus shutdowns are a gift to the environment*, CNET (May 10, 2020, 03:01 PM), https://www.cnet.com/news/on-earth-day-2020-coronavirus-shutdowns-are-a-gift-to-the-environment [hereinafter referred to as Eric Mack].

[23] Conrad Duncan, *World Earth Day: How coronavirus lockdowns changed the world's most polluted cities,* INDEPENDENT (May 10, 2020, 03:19 PM), https://www.independent.co.uk/environemt/coronavirus-lockdown-pollution-earth-day-climate-change-india-italy-us-a9477801.html [hereinafter referred to as Conrad Duncan].

[24] Jonathan Watts, *Climate Crisis: in coronavirus lockdown, nature bounces back-but for how long?* THE GURDIAN (May 10, 2020, 03:34 PM), https://www.the guardian.com/world/2020/apr09/climate-crisis-amid-coronavirus-lockdown-nature-bounces-back-but-for-how-long [hereinafter referred to as Jonthan Watts].

[25] *Id.*

[26] Paul Monks, *Here's how lockdowns have improved air quality around the world,* WORLD ECONOMIC FORUM (May10, 2020, 08:19 PM), https://www.weforum.org/agenda/2020/04/coronavirus-lockdowns-air-pollution.

India is under lockdown from March 24, 2020 and still it is going partly in the different parts of the nation. Due to this lockdown, India is also witnessing how its air quality is changing day-by-day. The drop in various environment pollutants ranged from 0% to 50%.[27] People from Punjab say that they can now see the peaks of Himalayas which have been blocked by air pollution for decades. New Delhi alone has recorded a 60% drop in fine particulate matter which is the world's deadliest air pollutant.[28] Cities like Rajasthan and Gujarat have also witnessed some dust storms coming from Middle-East; Central India has experienced more open fires. The fall in air pollution is clearly seen in satellite feeds over the Indo-Gangetic plain. As per the data provided by NASA, there has been improvement in the PM 2.5 and nitrogen dioxide levels by 50%.[29] Moreover, the water quality of river Ganga has been classified 'fit for drinking' which is a remarkable success for the Indian government which several schemes could not do for years even after spending crores and crores of money for its cleaning.[30]

X. IMPACT OVER MARINE LIFE

The lockdown due to COVID-19 is only essential and imperative for people; animals seem to be unafraid and fearless about the same. As the streets are quiet, parking lots are empty and parks have no longer any visitors, more power is upon the nature to exercise control. In Venice, due to reduction in tourism and motorboats, waterways have become cleaner.[31] The water in the canals of the city of Venice which has a fame of being stinky is now clear with plenty of fish and even jellyfish are seen swimming and swans are roaming around due to peace and tranquillity prevailing in the urban areas.[32] The lockdown is also providing a perfect condition for olive ridley turtles to lay eggs in Odisha's Gahirmatha beach and Rushikulya's rookery.[33]

XI. IMPACT ON WILDLIFE AND BIODIVERSITY

Several reports have come to surface highlighting the return of many species to their natural

---

[27] Sarath Guttikunda, *Part II: How Did Lockdown 2 change the pollution over India's cities?* SCIENCE THE WIRE (May10, 2020, 08:26 PM), https://science.thewire.in/environment/coronavirus-lockdown-india-air - pollution-pm25-so2-no2 [hereinafter referred to as Sarath Guttikunda].

[28] Emma New Burger & Addam Jeffrey, *Photos show impact of temporary air pollution drops across thye world from coronavirus lockdown,* CNBC (May10, 2020, 08:31 PM), https://www. cnbc.com/2020/04/23/coronavirus-photos-show-effect-of-air-pollution-drops-from-global-lockdown.html

[29] Sarath Guttikunda, *supra* note 27.

[30] Neelanshu Shukla, *Lockdown impact: Ganga water in Haridwar becomes 'fit to drink' after decades,* INDIA TODAY (May10, 2020, 08:44 PM), https://www.indiatoday.in/story/lockdown-impact-ganga-water-in-haridwar-becomes-fit-to-drink-after-decades-1669576-2020-04-22 [hereinafter referred to as Neelanshu Shukla].

[31] Roshni Balaji, *supra* note at 20.

[32] Eric Mack, *supra* note 22.

[33] Roshni Balaji, *supra* note 20.

habitats ever since the coronavirus pandemic has struck across the globe.[34] While humans are under temporary retreat during this lockdown, the emptiness has been filled by the wildlife and other species. The roads of UK alone takes the lives of countless hedgehogs, deer's, badgers, foxes as well as barn owls and many other wild species. But due to this lockdown, this year will almost see a lower toll for road kills of animals. The grasses on the road side verges which are the habitat for wildlife flowers which provide more pollen for bees have not been trimmed and shaped by the councils for long.[35]

In San Francisco, Coyotes have been spotted on the Golden Gate Bridge. A few miles from the White House near Washington, deer are also seen grazing. In Italy, wild boars are becoming daring and bolder. Peacocks and goats have been found wandering in Bangor and Llandudno, while sheep have been filmed in a deserted playground in Monmouthshire.[36]

In India too, during April, 2020, a Nilgai was spotted walking freely on the road of Noida, which is one of the busiest cities of New Delhi. Similarly, Malabar Civet, which has become endangered, was found walking on the roads of Kozhikode in Kerala during that time of complete lockdown.[37]

The extra space which has been abandoned by humans is mostly enjoyed by the leatherback turtles. The highest number of rare reptiles' nests is now being seen in the beaches of Thailand. Some wild species that were relying upon humans for food are now becoming more daring. In Japan's Nara Park, deer that were being fed by the tourists who used to visit the park have now come up to the streets, searching for food, as tourists are longer visiting the park. Similarly, local monkeys who use to rely on tourists for food have gathered in the town searching for sustenance.[38]

XII. AMAZON WILDFIRE AND IMPACT OF CORONA VIRUS ON THE REGION

Experts warn that a trigger in the forest clearance puts the Amazon on course for a severe fire season which could worsen the deadly impact of Covid-19 in the region. According to preliminary satellite data from the space research agency INPE, in Brazilian Amazon, deforestation rose to 51% compared to last year from January to March this year. According to Amazon Environmental Research Institute, forest clearance creates conditions for rampant wildfires when it gets combined with a low rainfall. Alongside with opening up of the rainforest to loggers, ranchers and miners, the covid-19 pandemic is spreading fast through Amazonas capital Manaus and indigenous communities. The smoke from the forest fires can be more lethal as it contains pollutants that have been connected to the intensifying risk of Covid-19. Paulo

---

[34] *Id.*
[35] Jonthan Watts, *supra* note 24.
[36] *Id.*
[37] Roshni Balaji, *supra* note 20.
[38] Eric Mack, *supra* note 22.

Mounthino who is a senior scientist at Amazon Environmental Research Institute, told Climate Home News from Brazil that 'Covid-19 and deforestation are the two crises that are entirely connected.' According to the Coordination of Indigenous Organisations of the Brazilian Amazon, at least twenty-six indigenous people have died due to Covid-19. Long term exposure to PM 2.5 air pollution which is mainly produced by wildfires is linked to higher death rate from Covid-19 as recently confirmed by Harvard University School of Public.[39]

XIII. ROLE OF LAW *VIS-A-VIS* COVID-19

In order to combat, Covid-19, the nationwide lockdown has been crucial to the government's strategy. Where the lockdown has helped certain community spread on the other hand, a legal and legislative audit of this exercise has eluded scrutiny so far. It is all-important for us to assess the cardinal legislative soundness of the lockdown.[40]

Under the National Disaster Management Act, 2005, covid-19 has been declared as pandemic. The Act mandates disaster authorities from national, state and regional levels as well as Central and State governments to coordinate among themselves and take appropriate measures to curb and mitigate the pandemic.[41] From the guidelines issued by the National Disaster Management Authority and National Executive Committee, various State governments have taken suggestions and they have exercised powers under the Epidemic Diseases Act, 1897 in order to issue further directions. For instance, on March, 23, 2020, the Health and Family Welfare Department of Tamil Nadu issued an order imposing 'social distancing and isolation measures which directed suspected cases and foreign returnees to remain under strict home quarantine and people to stay at home and come out only for accessing basic and essential services and strictly follow social distancing norms.'[42] The common law remedies which are available for enforcing quarantine have been adopted by India long ago. Such remedies have also proved to be effective in times of epidemics and pandemics. For instance, the precedents can be taken of US Supreme Court case ***Gibbons v. Odgen,* 22 U.S. 1 (1824)**, where it was held that in cases of health emergencies, dangerous diseases and viral infections, the powers of state to enact quarantine laws and impose health regulations was held to be justified. The Indian Penal Code (IPC), 1860 which deals with offences affecting the public health, safety conveniences, decency and morals can be divided into two major parts- one part deals with the public nuisance and the other deals

---

[39] Chloe Ferand, *Amazon faces 'perfect storm' of forest clearance, coronavirus and wildfire,* CLIMATE HOME NEWS (May10, 2020, 10:40 PM), https://www.climatechangenews.com/2020/05/05amazon-faces-perfect-storm-forest-clearance-coronavirus-wildfire/.

[40] Manuraj Shunmugasundaram, *India needs to enact a COVID-19 law,* THE HINDU (May11, 2020, 12:27 AM), https://www.thehinducom/opinion/lead/India-needs-to-enact-a-covid-19-law/article31529036.

[41] Amit Sibbal, *Covid-19 must not be used as an excuse to ignore environment protection,* INDIAN EXPRESS (May 11, 2020, 12:06 AM), https://indianexpress.com/articles/opinions/colums/covid-19-pandemic-environment-pollution-amit-sibal6393959 [hereinafter referred to as Amit Sibbal].

[42] *Id.*

with quarantine rule. The IPC, 1860 is further augmented by the Epidemic Diseases Act, 1897 which was enacted to tackle the outbreak of the bubonic plague in Mumbai by the British India. At present, Sections 6(2) (1) and 10(2) (1) of the Disaster Management Act, 1897 in invoked for the quarantine law enforcement and protection of health.[43]

The quarantine provisions of IPC, 1860 are one of the most crucial segments of containment of public nuisance. The relevant provisions are, Sections 188, 269, 270 and 271 of IPC, 1860 and Section 133 of the Code of Criminal Procedure (Cr.P.C), 1973. The above sections embrace vital significance in the present situation of the COVID-19 pandemic and lock-down orders. Section 269 of the IPC, is a relevant provision relating to negligent act likely to spread infection of diseases dangerous to life. It states that whoever unlawfully or negligently does any act knowingly to spread the infection of any disease dangerous to life shall be punished with imprisonment of six months and fine or both. Further, Section 270 of the Code states that any malignant act likely to spread infection of disease dangerous to life shall be punished for the imprisonment of two years. If any person disobeys any quarantine rule then he/she shall be subjected to imprisonment of six months as provided under Section 271 of the Code.[44]

Section 133 of Cr.P.C, 1973 is eased when the IPC, 1860 is applied with it. Section 133 of Cr.P.C, 1973 provides for the powers of District Magistrates to issue conditional orders for the removal of nuisance. The Magistrates can *suo moto* take such evidence as he seems fit. In such cases, the magistrates are not dependent on police reports or on other sources of information.[44]

In contrast it is seen that U.K. has enacted the Coronavirus Act, 2020. It is a very comprehensive and detailed legislation which deals with all issues which are in some or other way related with COVID-19. It includes provisions for emergency registration of healthcare professionals, temporary closure of educational institutions, audio-visuals facilities for criminal proceedings, powers to restrict gatherings and financial assistance to industries. In the same way, Infectious Diseases Regulations, 2020 has been passed in Singapore which contains provisions for issuance of stay orders which can send 'at-risk individuals' to a government-specified accommodation facility.[45]

In India, under Article 47 of the Constitution, the State has a primary duty for securing the nutrition of the people, raising the standard of living and improvement of public health. The Supreme Court of India, in the case of ***Municipal Council v. Vardichand,*** **AIR 1980 SC 1622,** has ruled that in the exercise of such power, the judiciary must be informed by the broader principle of access to justice. However, before the enforcement by the State, the courts have the right to intervene on the ground of reasonableness and procedural preparedness. However, in

---

[43] Tarique Faiyaz, *COVID-19 and current challenges of quarantine law enforcement in India,* JURIST (May11, 2020, 12:53 PM), https://www.jurist.org/commentary/2020/04/tarique-faiyaz-covid-19-quarantine-india# [hereinafter referred to as Tarique Faiyaz].

[44] *Id.*

[45] Amit Sibbal, *supra* note 41.

Alakh Alok Srivastava v. Union of India, **Writ Petition (s) (Civil) No (s). 468/2020**, which is a continuing case at the Supreme Court of India on the above question of law. A writ was filed before the Supreme Court which mentioned about the plight of thousands of migrant labourers who were walking hundreds of kilometres from the work place to their villages along with their family by challenging the present COVID-19 lock down order. There are no means of transportation for the jobless and migrant workers and they are helpless. However, the actions taken by police under Section 188 of the IPC are justifiable but are against morality because it has resulted in abuses against the people who are in shortage of their basic needs. Moreover, as the state borders have been sealed it has caused massive disruption in the free movement and supply of essential goods.[46]

Public Health is listed under the State List, Seventh Schedule of the Indian Constitution. Therefore, in matters relating to public health, state governments have the discretion to make regulations in this matter. With respect to Covid-19, Indian States have adopted many regulations which are in furtherance of the Epidemic Diseases Act, 1879. For instance, the West Bengal Epidemic Disease COVID 19 Regulations mandates to have influenza-like illness and fly corners for the screening of suspected COVID-19 cases in all government and private hospitals. Under the 2020 regulation, imposition of social distancing has also been made. Similarly, in Maharashtra, the State Integrated Disease Surveillance Unit and District Collectors have been entrusted with certain duties and obligations to fight and combat COVID-19 under Maharashtra Regulations for Prevention and Containment of Coronavirus Disease. In order to detect and trace COVID-19, the Delhi Coronavirus Regulations has empowered the surveillance personnel to enter such premises. Such entry has been declared to be legal under the regulation. Covid-19 has been declared as notified disaster by the Indian Government by taking recourse to Disaster Management Act.[47]

XIV. VIEWS OF ENVIRONMENTALISTS ON COVID-19

A question is now revolving in the minds of all people across the globe that whether this lockdown will become a long term trend in human life? The Global pandemic coronavirus has acted as an eye-opener and showed us how the world might look like if we live sustainably and conserve the resources of our environment. Sunita Narain, who is a renowned environmental activist and the Director General of the Centre for Science and Environment, says that the environmental restoration which is the result of coronavirus outbreak is just a phase and it might not have a long term impact. She says that 'Right after this health crisis subsides, it is imperative

---

[46] Tarique Faiyaz, *supra* note 43.

[47] Chiradeep Basak, *India is in need of an Inclusive Public health Care to combat pandemic,* JURIST ACADEMY COMMENTARY (May 11, 2020, 02:05 PM), https://www.jurist.org/commentary/ 2020/04/chiradeep-basak-public-health-law-india/

to get the economy back in shape. People need to get back to work and continue leading their lives. This is just a phase. People can learn from it. We need long-term solutions like that of utilisation of clean energy, conservation of forests and efficient waste management systems in order to see the real impact.'[48]

R. Ramamurthy who is an environmental activist has been at lead in cleaning several water bodies across India. He has opined that 'Covid-19 has been an eye-opener. It has shown people how mother earth can bounce back to life if humans allow for it. But unless the society cares for the environment and changes its attitude, all of it is bound to get back to square one.'[49]

Stuart Pimm, a conservation scientist at Duke University, North Carolina said, 'This is giving us an opportunity to magically see how much better it can be.' Berry Lefer, an atmospheric scientist at NASA, has said when a NASA satellite started measuring nitrogen dioxide levels; air from Boston to Washington in the US is seen to be its cleanest level since 2005. The UN Secretary-General, Antonio Guttress has urged the world to prevent the planet's unfolding environmental crisis and to move towards a greener future by suing the recovery from COVID-19. He said that 'Biodiversity is in steep decline. Climate disruption is approaching a point of no return.' He further said that, 'We must act decisively to protect our planet from both the coronavirus and existential threat of climate disruption.'[50]

'Air pollution has plunged in most areas. The virus provides a glimpse of just how quickly we could clean our air with renewable.'said Rob Jackson, the chair of Global Carbon Project.[51]

BD Joshi, who is an environmental scientist and professor, said that 'The remarkable level of purity is due to the absence of any industrial pollutants and garbage. It is after a long time the water quality of the Ganga River has become good for ritual sipping (achaman). In some stretches, the water has also become fit for drinking after its quality has been tested at different parameters. Such a remarkable improvement has not been witnessed in the past 30-40 years.'[52]

Jadav Payeng, who is popularly known as Forest Man of India, has awarded Padma Shri for his commendable work of transforming a barren sandbar of about five hundred and fifty hectares into a lush green forest by planting trees in and around Majuli areas of Assam. He has urged the people to plant more trees in order to regulate and stop soil erosion and save the planet. He further said that only concerted and noble efforts can save our environment which in turn will save us from natural disasters like floods as for the regulation of environment forest and wildlife are of utmost importance by which human beings are in some way or the other are directly or

---

[48] Roshni Balaji, *supra* note 20.
[49] *Id.*
[50] Conrad Duncan, *supra* note 23.
[51] Jonathan Watts, *supra* note 24.
[52] Neelanshu Shukla, *supra* note 30.

indirectly affected. He advised and urged the people to plant trees and save the environment.[53] Considering the present situation, Payeng has appealed to the masses to observe a seven-day lockdown as an annual festival. 'If citizens observe a lockdown festival yearly, it will be a big step towards rejuvenating Mother Earth', Payeng added.[54]

XV. CONCLUSION

The chances of development of new diseases with changing temperature and rainfall are increasing day-by-day. However, this gets intensified when it gets combined with the stress of wild animals who are facing challenges with regard to their habitats. They have now come in contact with humans for which several diseases are getting transmitted from the wild animals to humans. Covid-19 has made humans realised that protection of environment and natural resources is not a matter of choice but it is a matter of emergency. The Covid-19 pandemic gives us the opportunity to think what the value of development is if we do not take the environmental factors into consideration.

Covid-19 has disclosed the strengths and weaknesses of every country and has taught life lessons to humans. Covid-19 can be successfully tackled by humans if we have a look to the countries who have successfully been able to tackle not the pandemic totally but at least its spread. In fact, the countries who took Covid-19 as a serious issue has seen a less damaging impact than those who took it casually. Along with that, public cooperation is very much indispensable to fight such pandemics. Awareness has to be spread about the seriousness of the issue. Infectious diseases pass more rapidly to humans through deforestation and through trafficking of wildlife.

However, if compared with other developed countries of the world, COVID-19 is of recent origin in India and unlike developed countries, India does not have adequate means to combat the virus. It is suggested to have proper surveillance of the infected individuals and their reporting must be done in an authentic and transparent way. A contingency plan is required to be adopted by the governments and international organizations to limit the spread of deadly virus until and unless its vaccine is available. Immediate quarantine measures, declaration of national disasters and nationwide lockdown is fine in their place and is really appreciable on the part of the government but still we see there is a need for an effective legal mechanism and contingency plan to face and combat the challenges which have been imposed by COVID-19 throughout the world.

---

[53] Maksam Tayeng, *Arunachal: Forest man Jadav Payeng participates in plantation drive along Siang River at Borguli*, ARUNACHAL24.IN (May 10, 2020, 11:35 PM), https://arunachal-forest-man-jadav-payeng-participates-in-plantation-drive-along-siang-river-at-borguli/.

[54] Neelim Akash Kashyap, *Jadav Payeng moots annual weeklong lockdown celebration*, THE TELEGRAPH, Apr.22, 2020.

The pandemic has shown us how the future might look with less pollution in the cities. It has challenged governments and businesses to consider how things can be done in alternative ways after pandemic, relying on information technology in order to hold on improvements in our environment. We are indeed getting a glimpse of what might be the consequences if we start switching of non-polluting cars, work from home, online shopping, etc. , which will definitely help in reducing the pollution in the atmosphere. Planting more and more trees will also provide shelters to many wildlife creatures where they can be in their own world and they need not encroach upon human dwellings for the want of food and shelter. Thus, Radhanath Swami has correctly quoted that, 'To be conscious, to enrich the environment and not pollute it, is a spiritual principle and a social responsibility.' Thus God has created the Mother Nature in order to satisfy everyone's needs so that all can survive in this planet for long. The environment is ours. We should fight together to protect it. We should embrace it and appreciate its value.

INDIA AND IT'S INTER STATE WATER DISPUTE

Ms.. Nivedita
Advocate at Delhi High Court

ABSTRACT

Resources are best managed and shared along trans-boundaries with the help of institutionalized mechanisms. Both bilateral and multilateral treaties and conventions are very effective in sharing of resources, specifically water resources internationally. UN Convention on International Watercourse is also playing a vital role in sharing of transboundary watercourses, although it hasn't come into effect yet. Conflicting interests of up- and down-stream riparian is the problem over the Ganges water sharing between India Pakistan (east) initially and now between India and Bangladesh. The potential clash between the nations has set the stage for attempts by both nation states to resolve conflicts which are ineffective. Through this paper the author proposes to analyze the implications of international agreements between nation-states and the role they play in resolving international resource-sharing disputes. The author brings out the issues revolving around bilateral and multilateral treaties for resource sharing between nation states and how the same can be mitigated. Further, for a better understanding of the same, the author analyses the effect of water sharing treaty between India and Bangladesh.

Keywords: Treaties, bilateral, international treaties, water sharing, resources, conventions, conflict, nation-states.

INTRODUCTION

This project is to analyze the implications of international agreements between nation-states and the role they play in resolving international resource-sharing disputes. A study of the importance of resource sharing for the welfare of the international community. Examination of the role of bilateral and multilateral treaties between nation states in tackling the problems of resource sharing between them. Detailed analysis about the existing treaties with regard to water sharing between India and Bangladesh, effectiveness of various treaties entered into by the nations and its outcomes for the betterment of the two nations. Critical evaluation of the same. Also this paper attempts to suggest innovative means to solve the lacuna in management of resource sharing.

Resources are best managed and shared along trans-boundaries with the help of institutionalized mechanisms. Both bilateral and multilateral treaties and conventions are effective in sharing of resources, specifically water resources internationally. International resource sharing like information, exploration and proliferation, measures for environment protection, technology, human resource, developing agriculture, and so on. States need to collaborate in good faith and on the basis of good neighborliness to open channels of communication to secure areas of cooperation agreed upon by all parties. For easy understanding of impact, need and use of sharing resources this paper analyzes sharing of trans-boundary water sources in detail. Other than the multilateral and bilateral treaties, the UN Convention on International Watercourse is also playing a vital role in sharing of trans-boundary watercourses management. International agreements and negotiations related to navigational watercourses and non-navigational watercourses for not only demarcation of boundaries but overall economic, political and social

and trans-boundary nations.

Conflicting interests of up- and down-stream riparian is the problem over the Ganges water sharing between India- East Pakistan initially and now between India and Bangladesh. Internal political dynamics in both India and Bangladesh have led to distancing despite the fact that the two nations have ample opportunities for cooperation, especially over water issues. The conflict has remained unsettled for a long period simply because of ineffective management of conflicting interests. This potential clash between the nations has set the stage for attempts by both nation states to resolve conflicts which are ineffective. The relation between those two countries has also turned severe. The ways to solve the dispute can be- unilateral, bilateral and multilateral.

1. BILATERAL AND MULTILATERAL TREATIES

Treaties are one of the sources of international law. If there would have been no treaties, all the aspects of international law would have been very ambiguous. A treaty defines, provides rights and obligations to its parties in a codified form. All the provisions are explicitly mentioned in a treaty. As compared to other sources of international law there is less scope of existence of any ambiguous provisions. Under international law there are mainly two kinds of treaties. They are bilateral and multilateral treaties.

For sharing of resources internationally most of the states resort to either bilateral or multilateral treaties. These treaties help the states to share their resources equitably with cooperation. They also help in eliminating the chances of dispute and provide guidance for settlement of dispute.

Bilateral treaties also called bipartite treaties is a very important social phenomenon in today's world. It is entered into by two contracting parties i.e., states in order to reinforce their trade relations.[1] It is similar to a contract therefore it is called a contractual treaty. Bilateral treaties for sharing of watercourses benefits only those states who are party to it and not all riparian states who are subject to that particular watercourse. Due to this nature of bilateral treaty, though watercourses are shared peacefully between the parties to it, it lacks some of the features that is required for sharing of watercourses internationally.[2] There are a lot of examples of bilateral treaties entered into by co riparian states to resolve their water dispute. Some of them are, Indus River Treaty,1960 entered by India and Pakistan was for exclusive use by India of Ravi, Beas and Sutlej rivers before they enter Pakistan and, similarly, exclusive use of Jhelum, Chenab and Indus river by Pakistan before they enter India. Regarding this treaty, the UN said that it had

---

[1] John Shijian Mo, Bilateral and Regional Trade Agreements, LAST MODIFIED: 23 MARCH 2012, Accessed July 7th 2021, Oxford bibliographies, http://www.oxfordbibliographies.com/view/document/obo-9780199796953/obo-9780199796953-0019.xml

[2] Gangesh Sreekumar Varma , A Bridge Over Troubled Waters Legal Principles of River Sharing and Framework for Management of Transboundary Rivers, First Published, 2013, Accessed: July 8th 2021. http://www.icwa.in/pdfs/SPHGangesh.pdf

survived two wars.[3] Also there is Ganges Water Treaty, 1996 which was signed by India and Bangladesh regarding the construction of Farakka dam and flood and drought caused due to it in Bangladesh.[4]

Multilateral treaties are treaties to which three or more sovereign states are parties.[5] It is usually a treaty between many states.[6] Multilateral treaties play a very important role in sharing of watercourses internationally. It favors the whole community of riparian states which are subject to one single watercourse. It is more effective in sharing of watercourses as it keeps in mind the need of all riparian states which is not so in bilateral treaties. For example, the Ganges Water Treaty, 1996 which was entered into by Bangladesh and India is a bilateral treaty and benefits only these two countries. But there are other riparian states that are subject to this watercourse with whom one or the other dispute keeps on arising. Therefore, if there would have been one multilateral treaty governing all the riparian states there would be fewer chances of water dispute between these states. Some of the examples of multilateral treaties are Nile Basin Initiative (NBI), Mekong River Commission (MRC), UN Convention on International Watercourses etc.[7] All of these treaties have helped in sharing of watercourses internationally with keeping in mind the interest of all riparian states.

1.1 Treaties and Conventions Related to Watercourses – an analysis

The law related to international watercourses can be divided into two parts. They are, law related to navigational watercourses and law related to non-navigational watercourses. Law relating to navigational watercourses is codified and accepted in a better way than law related to non-navigational watercourses. The main reason behind this is, with the development of the human race more and more navigational watercourses were discovered and subsequently the law governing tem came into existence. The Industrial Revolution of Europe has also contributed to its development as there was no other mode of transportation of goods and materials for industrial purposes. But by the end of the Second World War, the use of watercourses as a tool for navigation declined due to the development of other modes of transportation. With the help of

---

3 The Indian express, Indus Waters Treaty between India, Pakistan survived two wars: UN official, Accessed July 9th 2021, http://indianexpress.com/article/india/india-news-india/indus-waters-treaty-between-india-pakistan-survived-two-wars-un-official-3045575/

4 Brianna Besch Macalester College – St. Paul, Sharing the Ganges: Water Conflict Between India and Bangladesh, Accessed: July 2nd 2021. http://www.macalester.edu/academics/environmentalstudies/students/projects/waterscience/sharingtheganges.

5 Anthony Aust (2000). Modern Treaty Law and Practice (Cambridge: Cambridge University Press) p. 9.

6 Cornell university law school, Multilateral Treaty, Accessed: July 9th 2021. https://www.law.cornell.edu/wex/multilateral_treaties

7 Gangesh Sreekumar Varma , A Bridge Over Troubled Waters Legal Principles of River Sharing and Framework for Management of Transboundary Rivers, First Published, 2013, Accessed: July 9th 2021. http://www.icwa.in/pdfs/SPHGangesh.pdf

various other inventions, the use of watercourses began for non-navigational purposes. It was mainly used for generating hydro-electricity and construction of dams. With these developments various disputes arose between the riparian states for sharing of watercourses. These disputes led to the development of law relating to non-navigational use of watercourses. There are various treaties and conventions that govern sharing of watercourses internationally.[8]

There are more than 260 international watercourses which contribute to the social, economic and environmental well-being of more than 70% of the world's population. International law provides rules that govern the sharing of transboundary watercourses. Duty to cooperate is the main pillar of sharing of watercourses internationally. The UN has provided three key instruments which guide sovereign states in settlement of their dispute. It said that when there are no treaties governing states that are party to dispute, they should resort to customary international law. The treaties relating to transboundary watercourses must explicitly mention the core element of scope, substantive and procedural rules, institutional mechanism and dispute settlement. The ability of sharing of watercourses internationally increases when more and more institutionalized mechanisms come into existence, get support and are fully functional.[9]

The International Law Association (ILA), Institute of International Law (IIL) and International Law Commission (ILC) have made attempts to codify non-navigational use of watercourses since the middle of 20th century. Helsinki Rules was their 1st attempt at the codification of law on non-navigational use of watercourses internationally. Subsequently it made attempts to fill the gaps of Helsinki Rules through the UN Convention on International Watercourse, 1997 and the Berlin Rules, 2004. All these treaties and conventions have made great contributions in the international legal jurisprudence on law of non-navigational use of watercourses internationally. They govern all the states of the world whenever it is necessary. The purpose of such codification is to bring all the states of the world into one roof so there is peaceful sharing of watercourses among them through equitable use of resources in accordance with the concept of no substantial harm.

The WWF (world wide fund) is an international non-governmental organization founded in 1961 that promotes conventions because national laws fail to provide for settlement of disputes "across the river".

In India, there was no substantial laws related to sharing of transboundary watercourses. But in 1956 the Inter-State Water Dispute Act was adopted. This act provides for establishment of tribunals in adjudicating matters related to inter-state watercourse disputes. This provision has also been used in a few cases. This act also mentions procedures for settlement of disputes which

---

[8] Gangesh Sreekumar Varma , A Bridge Over Troubled Waters Legal Principles of River Sharing and Framework for Management of Transboundary Rivers, First Published, 2013, Accessed: July 8th 2021. http://www.icwa.in/pdfs/SPHGangesh.pdf

[9] Global Water Partnership, International Law:Facilitating Transboundary Water Cooperation, Accessed: July 8th 2021. http://www.gwp.org/Global/ToolBox/Publications/Policy%20Briefs/14%20International%20Law.%20Facilitating%20Transboundary%20Water%20Cooperation.PDF

could not be solved through negotiations. The Constitution of India has empowered the union to legislate in matters related to adjudication of inter-state water disputes.[10]

But municipal laws are non-existent and outdated which cannot resolve dispute related to international watercourses completely. Conventions and treaties provide for transparency and accountability. It fosters common language and understanding. These treaties and conventions provide for knowledge and information exchange between riparian states for better sharing of watercourses. Also there is a great need for global legislation relating to international watercourses because most of the existing agreements do not govern all the riparian states.[11] All the bilateral and multilateral treaties have also contributed to a great extent in sharing of transboundary watercourses.

Today, there exists various treaties and conventions related to international watercourses at different levels of the world. There is a UN Watercourse Convention at global level that is yet to come into force. There is UNECE at the regional level in Europe. All the existing treaties and conventions have proved to be very effective in sharing of transboundary watercourses.

1.1.1 Nile Basin Initiative (NBI)

River Nile is the world's largest river that is shared by ten states. They are Burundi, Ethiopia, Sudan, Tanzania, Egypt, D. R. Congo, Kenya, Rwanda and Uganda. It lies in the region of extremes. Its riparian states are the poorest states of the world. Climate change has also made the area of the Nile River Basin vulnerable. Only 15% of the population of its riparian states get electricity. Except in Egypt and Sudan, less than 10% of irrigable land gets irrigation facilities in all other riparian states. Also there is high rainfall variability across the basin.[12]

The Nile Basin Initiative (NBI) was founded in February 1999. It was guided by a shared vision program. The shared vision program focuses on the interest of all riparian states of the Nile River Basin. Its primary objective is to build trust and capacity among riparian states. Also it helps in building an environment for cooperative investment and has helped in getting grants up to $100 million. It acts as the technical foundation of river basin management. The objective of the Nile Basin Initiative is to facilitate sustainable socio- economic development among the riparian states though equal use of Nile river water and benefit of all riparian states. The Nile Basin Initiative acts as a regional institution to develop cooperation between riparian states. It is a multilateral treaty that has been entered into by the riparian states for uplifting their common interest. The NBI has also provided intellectual capital, various programs and strategies for the

[10] adi_pouranik5195, The Water Law Framework in India: An Overview, Accessed: July 10th 2021.

[11] Lesha Witmer, UN Water Courses Convention (and related conventions) as tools for sustainable water resource management, Accessed: July 10th 2021. http://www.swedishwaterhouse.se/wp-content/uploads/Lesha_Witmer.pdf

[12] Building a Cooperative Future, Water Week, The Nile Basin Initiative (NBI), February 2009, Accessed: July 9th 2021. http://siteresources.worldbank.org/EXTWAT/Resources/4602122-1213366294492/5106220-1234469721549/33.1_River_Basin_Management.pdf

peaceful sharing of water throughout the basin. It also helps in getting necessary funds for carrying out its objective.[13]

Apart from Shared Vision Program ("SVP"), there are also Eastern Nile ("ENSAP") and Nile Equatorial Lakes ("NELSAP") programs that help in carrying out the function of NBI. The function of ENSAP and NELSAP is to support NBI cooperative investment program. ENSAP is governed under Eastern Nile Council of Ministers (ENCOM). It includes Egypt, Ethiopia and Sudan. It established Eastern Nile Technical Regional Office (ENTRO) in 2001. ENTRO is based in Ethiopia and it manages and coordinates ENSAP projects. NELSAP includes Burundi, Democratic Republic of Congo, Tanzania, Kenya, Rwanda, Uganda and Egypt. It established a coordination unit in 2001 in Uganda. This unit is known as NEL-CU and facilitates preparation of projects and their implementation. A goal of NBI has been to establish a "cooperative framework agreement (CFA)" in order to make NBI a permanent Nile River Basin Commission and replace former bilateral treaties. In 2010, except Egypt and Sudan, seven member states agreed to open for signature of CFA. But despite the disagreements CFA was opened for signature on 14th May 2010.[14]

1.1.2 Mekong River Commission (MRC)

The Mekong River Basin is the land area that surrounds all the rivers and streams flowing into the Mekong River.[15] The lower Mekong Basin is very important for earning the livelihood of more than 60 million of its inhabitants. More than two thirds of the population of its riparian states are dependent upon agriculture and fishery. The water from the Lower Mekong Basin plays a very crucial role for them. It also has a great potential for transport, tourism and energy.[16]

The Mekong River Basin is an international organization which came into existence by the collective efforts of Thailand, Vietnam, Cambodia and Laos. It was established for governing the proper allocation and utilization of Mekong river water by these four riparian states. This commission came into existence on 5th April 1995 in accordance with the Agreement on Cooperation for Sustainable Development of the Mekong River Basin. It is also known as the "1995 agreement". Heads of Thailand, Vietnam, Cambodia and Laos met on 5th April 2010 and adopted the Hua Hin Declaration, reaffirming their commitment to implement the 1995 agreement. China and Myanmar who are riparian to the Upper Mekong Basin did not sign the

---

[13] Building a Cooperative Future, Water Week, The Nile Basin Initiative (NBI), February 2009, Accessed: July 11th 2021. http://siteresources.worldbank.org/EXTWAT/Resources/4602122-1213366294492/5106220-1234469721549/33.1_River_Basin_Management.pdf

[14] International Waters Governance, Nile River Basin Initiative, Accessed: July 11th 2021.

[15] Richard Paisley, International Waters Governance, Mekong, Accessed: October 10th 2016 http://www.internationalwatersgovernance.com/mekong.html

[16] Mekong River Commission (MRC), Transboundary water management with the Mekong River Commission, German Federal Ministry for Economic Cooperation and Development (BMZ), Accessed: July 11th 2021, https://www.giz.de/en/worldwide/14435.html

1995 agreement. But in 1996 they became the dialogue partners which means they can send their representatives to Joint Committee and Council meetings where they can participate as members.[17]

The challenges faced by the Mekong basin are population growth and more and more demand for water, need for extracting minerals from river bed, intensive agriculture, ongoing expansion of hydropower, logging etc. This area is also vulnerable to the impacts of climate change. Today, frequent flooding of this area has increased the vulnerability of a majority of the population living on its banks drastically.[18]

The functions of MRC to in order to tackle these problems are:

The council of MRC makes policy decisions on behalf of member states in order to facilitate the successful implementation of the 1995 agreement. It also approves the Joint Committee's rules of Procedure, rules of water utilization and diversions of inter basin to be proposed by the Joint Committee. It also approves major basin development programs and settles disputes brought by any Council member or any member states or Joint Committee on matters that come under the 1995 agreement. The Joint Committee on the other hand performs all the tasks and implements all the policies that are asked by the Council. In particular, the Joint Committee is responsible for formulating a basin development plan and joint development projects and programs; updating and exchanging information and data necessary to implement the 1995 Agreement; conducting environmental studies and assessments to maintain the ecological balance of the Mekong River Basin; supervising the Secretariat; and seeking to resolve disputes that may arise between regular sessions of the Council that are referred to it by any Joint Committee member or Member State on matters arising under the 1995 Agreement, and when necessary referring matters to the Council.[19]

The Secretariat is the "central coordinating and logistical body to the [MRC] under the direct supervision of the [Joint] Committee." The Secretariat renders technical and administrative support to the Council and the Joint Committee.[20] These functions of MRC carried out by its different organs shows that the objectives of this international organization are carried out in a very effective way. It can be said that a multilateral treaty like MRC plays a very effective role in sharing of watercourses internationally

These functions of MRC carried out by its different organs shows that the objectives of this international organization are carried out in a very effective way. It can be said that a multilateral

---

[17] Richard Paisley, International Waters Governance, Mekong , Accessed: July 11th 2021.

[18] Mekong River Commission (MRC), Transboundary water management with the Mekong River Commission, German Federal Ministry for Economic Cooperation and Development (BMZ), Accessed: July 11th 2021, https://www.giz.de/en/worldwide/14435.html

[19] Richard Paisley, International Waters Governance, Mekong , Accessed: July 9th 2021 http://www.internationalwatersgovernance.com/mekong.html

treaty like MRC plays a very effective role in sharing of watercourses internationally.

1.1.3 UN Convention on International Watercourses

The International Law Association (ILA), Institute of International Law (IIL) and International Law Commission (ILC) are non-governmental international organizations of the UN. These organizations play a very important role in the development of international legal jurisprudence. Various attempts have been made by these organizations to codify laws relating to non-navigational uses of international watercourses.[21]

Prior to the codification of the UN Convention on International watercourses the Helsinki Rules on the Uses of the Water of International Rivers, 1966 was in practice. Helsinki Rules was the first attempt for the codification of law on non-navigational uses of international watercourses. It governed all the states relating to any international watercourse except those that were governed by some other legislation. It focused on equitable sharing of water resources internationally. It also kept in view the interest of all the riparian states. The customary usage of resources by nations was taken into consideration and Helsinki Rules also made recommendations for resolving disputes related with sharing of water by states.

But the Helsinki Rules proved to be inadequate in governing all the aspects of sharing of watercourses internationally. Therefore, the ILC made an attempt to remove the inadequacies of Helsinki Rules through codification of the UN Convention on International Watercourse. The attempt to codify it began as early as in 1970 but it was adopted by the United Nations General Assembly (UNGA) in 1997. Till now the UN Convention on International watercourses has not been enforced because it says that it shall come into force on19th day after the 35th instrument of ratification, acceptance or approval has been submitted to the Secretary General of UN. As of now there are 30 contracting states. At the time of its voting India along with twenty- three other states abstained from voting for it. The reason behind India's abstinence from voting for it was due to certain ambiguous and vague provisions of the Act. India mainly disagreed with articles 3, 5, 32 and 33. These articles provide that:

Article 3

In the absence of an agreement to the contrary, nothing in the present Convention shall affect the rights or obligations of a watercourse State arising from agreements in force. Parties to agreements where necessary, should consider harmonizing such agreements with the basic principles of the present Convention. Watercourse States may enter into one or more "watercourse agreements", which apply and adjust the provisions of the present Convention.

---

[20] Richard Paisley, International Waters Governance, Mekong , Accessed: July 9th 2021 http://www.internationalwatersgovernance.com/mekong.html

[21] Gangesh Sreekumar Varma , A Bridge Over Troubled Waters Legal Principles of River Sharing and Framework for Management of Transboundary Rivers, First Published, 2013, Accessed: July 11th 2021. http://www.icwa.in/pdfs/SPHGangesh.pdf

Where a watercourse agreement is concluded between two or more watercourse States, it shall define the waters to which it applies. Such an agreement may be entered into with respect to an entire international watercourse or any part thereof or a particular project or use. Where some but not all watercourse States to a particular international watercourse are parties to an agreement such agreement shall not affect the rights or obligations of watercourse States that are not parties to such an agreement.[22] India's stand on this article was that it took away the right of self-determination of the contracting state.[23]

Article 5

Deals with Equitable and reasonable utilization and participation. Watercourse States shall in their respective territories utilize an international watercourse in an equitable and reasonable manner in view of attaining optimal and sustainable utilization thereof and benefits therefrom, taking into account the interests of the watercourse States concerned, consistent with adequate protection of the watercourse. Watercourse States shall participate in the use, development and protection of an international watercourse in an equitable and reasonable manner.[24] India's stand on this article was that the meaning of the term sustainable utilization was ambiguous.

Regarding article 32 the representative of India said that it presupposed the idea of regional integration. This was not possible for India due to its position as a riparian state. Also sharing watercourses without any regional mechanism in accordance with provision of this article was not possible. India's stand on article 33 was that requiring a compulsory third party dispute procedure was not needed for the present convention and was irrelevant.

Although the UN Convention on International Watercourses has not come into effect, it has codified almost all the aspects of law on non-navigational use of water. The main substantive pillars of this convention deal with equal and reasonable utilization of watercourses by riparian states, No significant harm to be caused by any riparian state to the watercourse or other riparian state, all the riparian states have general obligation to cooperate with each other, duty to exchange information regarding any risk or any other matter related to the watercourse with riparian states, duty to notify, it is the duty of riparian states to consult and negotiate with each other for carrying out any project on watercourse.[25]

The present convention at the time of dispute would firstly act as a tool for prevention of dispute and secondly as a dispute resolution mechanism. It attempts to prevent disputes by highlighting the flaws of municipal laws, by providing consistent policy guidelines. It would support the

---

[22] Convention on the Law of the Non-navigational Uses of International Watercourses 1997, Available at: http://legal.un.org/ilc/texts/instruments/english/conventions/8_3_1997.pdf

[23] Gangesh Sreekumar Varma , A Bridge Over Troubled Waters Legal Principles of River Sharing and Framework for Management of Transboundary Rivers, First Published, 2013, Accessed: July 12th 2021. http://www.icwa.in/pdfs/SPHGangesh.pdf

[24] Convention on the Law of the Non-navigational Uses of International Watercourses 1997, Available at: http://legal.un.org/ilc/texts/instruments/english/conventions/8_3_1997.pdf

work of bilateral and multilateral treaties and foster political stability of riparian states. It would help in maintaining a healthy relation between riparian states by making it mandatory that minimum substantive and procedural rules are to be followed by them.

When there is a dispute between states regarding their customary law and the provisions of this convention the minimum standard to be followed by the states, arrived after exhaustive discussions will prevail. The present convention focuses on prescribing a minimum standard to be followed by all states and to provide a common ground for interpretation of its provisions. This makes it clear for the riparian states to understand their rights and obligations in relation with the watercourse and other riparian states. In cases where the customary law is ambiguous and facilitates upper riparian states to exercise control over lover riparian states such that the lower riparian state is not in a position to negotiate, the provisions of the convention would prevail over custom and it would see if the provision environmental law and human rights are being violated or not.[26]

The present convention also plays an important role in cases where regional watercourse agreements have been entered by states. It looks into the failings of regional treaties that may cause serious obstacles to cooperation. It does not set aside the provisions of regional agreements, but only supplements them if any gaps are found.

The scope and main provisions of the UN Watercourse Convention are:

- It asks states to cooperate in adopting and implementing the agreements that supplement the convention is special circumstances (article 3).
- Participate equitably and actively in development and protection of watercourses (article 5, 8, 9, 25).
- Avoid causing significant harm and diligent steps to eliminate or mitigate such harm (article 7).
- Follow procedure of consultation, negotiation, data exchange before implementing any program that may cause adverse effect on other riparian states (article 11-19).
- Act jointly or individually for preservation of ecological balance of watercourses along with estuaries (article 20-22).
- Prevent, reduce and control pollution in international watercourse (article 21).
- Take all steps to prevent and mitigate harmful conditions related to watercourses, address emergency by notifying states (article 27-28).
- Seek peaceful settlement of disputes (article 33).[27]

---

[25] Gangesh Sreekumar Varma , A Bridge Over Troubled Waters Legal Principles of River Sharing and Framework for Management of Transboundary Rivers, First Published, 2013, Accessed: July 13th 2021. http://www.icwa.in/pdfs/SPHGangesh.pdf

[26] UN WATERCOURSES CONVENTION, Online Users Guide, Frequently Asked Questions, Accessed: October 8th 2016 http://www.unwatercoursesconvention.org/faqs/

1.2 Measures for better administration of treaties and convention

We know that treaties and conventions are very effective in sharing watercourses internationally. These help the riparian states to share the watercourses by cooperating with each other and avoid dispute as far as possible. But almost all the treaties and conventions related to sharing of watercourses have some or the other lacunae in it. If these lacunae are filled, then there are chances that there would be no dispute related to sharing of international watercourses at all.

The existing treaties and convention between two states it is seen that it does not facilitate the whole riparian community. Therefore, all bilateral treaties and conventions should be transformed into multilateral treaties between all riparian states. This will enable all the parties to the treaty to get information about the watercourse and whether all the states are using the watercourses equitably or not. This would also promote cooperation between the riparian states. All the multilateral treaties shall also be made more stringent so that acts of all the parties are checked and their obligations are fulfilled by them.

The mechanisms that govern the sharing of transboundary watercourse must be institutionalized. It provides greater functionality and transparency between the riparian states. The institutionalization of water sharing mechanism is not free of problems but it facilitates in tackling disputes to a great extent.

If the international law on sharing of watercourses is made more stringent then no riparian states would ignore their obligations towards other riparian states and transboundary watercourses. This would eliminate the chances of dispute between states and would also promote the provisions of international law.

All states should have expertise in water law so that they can come up with better treaties and legislation. They should also give continuous support to various programs of the United Nation related to water.

2. INDIA AND BANGLADESH WATERCOURSE DISPUTE RESOLUTION

2.1 Background of conflict:

The Ganges runs 2,500 miles with a basin of 9,243 miles shared between India, Bangladesh, Nepal and China.[28] The source of the Gangues lies in the Himalayas. It is fed mainly by glacial melt from April to June. India lies within the flood plains of three most significant

[27] Flavia Loures, Dr. Alistair Rieu-Clarke, Marie-Laure Vercambre, Everything you need to know about the UN Watercourses Convention, Published on: January 2009, Accessed: July 11th 2021, http://www.unwater.org/downloads/wwf_un_watercourses_brochure_for_web_1.pdf

intercontinental rivers - The Ganges, the Brahmaputra, and the Meghna (GBM) all of which run throughout the country and drains into the Bay of Bengal. Bangladesh lies in the lowest riparian of the region, a unique location for 57 trans-boundary Rivers among which 54 are united with India. The GBM basin encompasses approximately 1.7 million sq km, including Bangladesh, Bhutan, India, Nepal, and Tibetan China. The average runoff is around 1200 cu. The region lays 64% in India, 18% in china, 9% in Nepal, 3% in Bhutan and only 6% in Bangladesh. Although India holds much of the power of the river basin, the three major rivers fall into Bay of Bengal through a single passage, known as Meghna Estuary. It is the easternmost sector of the Ganges delta and the catchment area is 1,520,000 sq. km..

While blessed with an abundance of water resources, much of the management problems of the Indian subcontinent come about from the dramatic seasonal variations in rainfall. This management problem is compounded with the creation of new national borders throughout the region.[29] As soon as the British India was divided in 1947, the struggle started as Bangladesh (the then East Pakistan) was in the lowest riparian in the GBM system.[30] Internal political dynamics in both India and Bangladesh have led to distancing despite the fact that the two nations have ample opportunities for cooperation, especially over water issues.[31]

In order to improve the navigability of Calcutta port Farakka Barrage was proposed in 1951 to redirect 40,000 causec of water from Ganges into Hoogly-Baghirati River to flush silt and keep Calcutta harbor operational during the dry season, which consequently started the conflict. On October 29, 1951, Pakistan first officially called for India's attention on regards of the building of Farakka Barrage. Indian government responded on March 8, 1952 that the project was only under preliminary investigation, and that Bangladesh's concern was only hypothetical. The following years several meetings took place in the alternative capitals of both countries and on 1960 an Expert level meeting held between India and Pakistan which brought no success. While the meetings were still in progress, India informed Pakistan on January 30, 1961 that construction had begun on the Farakka Barrage. In 1963, the two sides agreed to have one more expert-level meeting to determine what data was relevant and necessary for the convening of a minister-level meeting. The meeting at which data needs were to be determined, the fifth round

---

[28] Brianna Besch Macalester College – St. Paul, Sharing the Ganges: Water Conflict Between India and Bangladesh, Accessed: July 11th 2021. http://www.macalester.edu/ academics/environmentalstudies/students/projects/waterscience/sharingtheganges.pdfMN

[29] Aaron T. Wolf and Joshua T. Newton, Case Study of Transboundary Dispute Resolution: The Ganges River controversy, Accessed: July 15th 2021. http://www.transboundarywaters.orst.edu/research/case_studies/Ganges_New.htm

[30] THE LAW ESSAY PROFESSIONALS, Ganges Water Dispute India Bangladesh, LawTeacher , Accessed: July 16th 2021. http://www.lawteacher.net/free-law-essays/international-law/ganges-water-dispute-india-bangladesh-international-law-essay.php

[31] Dhanasree Jayaram, India-Bangladesh River Water Sharing: Politics over Cooperation, 20 DEC 2013, Accessed: July 15th 2021. http://intpolicydigest.org/2013/12/20/india-bangladesh-river-water-sharing-politics-cooperation/

at the level of expert, was not held until May 13, 1968. In 1968,[32] with no course of action Bangladesh took the matter before the United Nations General Assembly and till 1976 the discussions continued in that forum.[33]

In 1988 the last agreement lapsed and till the year 1996 no agreements were in place between India and Bangladesh. During this time, India granted Bangladesh only a trivial portion of the flow of the Ganges, with no minimum flow guaranteed, and no special provisions for drought years. Regional schemes were proposed, often providing benefits not only to India and Bangladesh, but also to Nepal, landlocked but with tremendous hydro-power potential which might be traded for access to the sea. In December 1996, a new treaty was signed between the two riparian's, based generally on the 1985 accord, which delineates a flow regime under varying conditions.

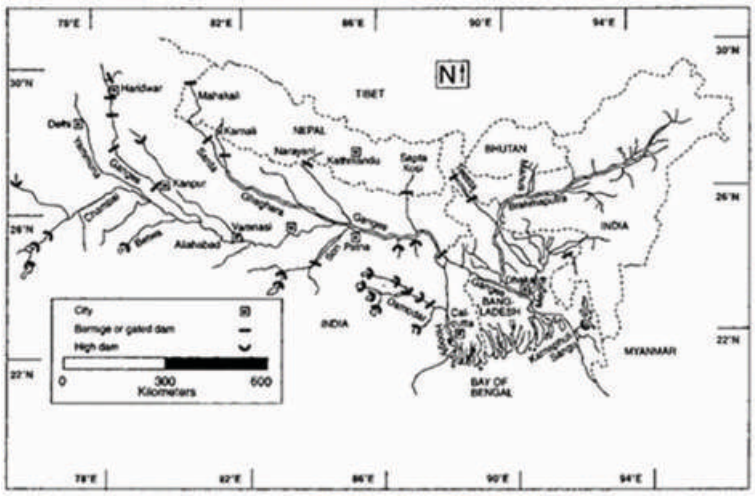
Outcome of all efforts in principle resulted in the Ganges Water Agreement which covers measures for sharing the waters of the Ganges at Farakka and finding a long term solution for augmentation of the dry season flows of the Ganges. The Agreement would initially cover a period of five years. It could be extended further by mutual agreement. The Joint Rivers Commission was vested with the task of developing a feasibility study for a long-term solution to the problems of the basin, with both sides re-introducing plans along the lines described above. By the conclusion of the five-year life of the agreement, no solution had been worked out.

Figure 1.0

[32] Aaron T. Wolf and Joshua T. Newton, Case Study of Transboundary Dispute Resolution: The Ganges River controversy, Accessed: July 15th 2021. http://www.transboundarywaters.orst.edu/research/case_studies/Ganges_New.htm

[33] THE LAW ESSAY PROFESSIONALS, Ganges Water Dispute India Bangladesh, LawTeacher, Accessed: July 15th 2021. http://www.lawteacher.net/free-law-essays/international-law/ganges-water-dispute-india-bangladesh-international-law-essay.php

Figure 1.1



2.2 Current controversy:

Flow is severely seasonal. Heaviest flows occur during monsoon months, June to October, which bring 85% of all rainfall to the area. Bangladesh experiences widespread flooding during the monsoon season. Droughts are common in the dry season when the Ganges' flow into Bangladesh is only 55,000 ft^3/s. Water is desperately required in the dry season for crop irrigation.[34]

The river Ganga flows through northern India and enters Bangladesh where it becomes the Padma River. Once the Padma reaches the center of Bangladesh, it joins with the Brahmaputra, or Jamuna, as it is known in Bangladesh, where the two join and form the Meghna River. The Meghna River then branches into a set of distributaries which eventually drain into the Bay of Bengal.[35] There are two lines to augmenting Ganges flow at present, which defines the negotiating stance for years: (1) augmentation that storage facilities within the Ganges basin should be improved, proposed by Bangladesh, and (2) augmentation through diversion of water from the Brahmaputra to the Ganges at Farakka by a link canal for better use of water, proposed by India.

The struggle for sharing Ganges waters is conflicting interests of up- and down-stream riparian's. India, as the upper riparian, developed plans for water diversions for its own

[34] Brianna Besch Macalester College – St. Paul, Sharing the Ganges: Water Conflict Between India and Bangladesh, Accessed: July 15 2021. http://www.macalester.edu/academics/environmentalstudies/students/projects/waterscience/sharingtheganges.pdfMN

[35] Madeleine Lovelle, India, Bangladesh and the Farakka Barrage, 10 MAY 2016, Accessed: July 12 2021. http://intpolicydigest.org/2013/12/20/india-bangladesh-river-water-sharing-politics-cooperation/

irrigation, navigability, and water supply interests. Initially Pakistan, and later Bangladesh, had interests in protecting the historic flow of the river for its own down-stream uses. India has always argued for lack of sufficient and correct data and denied the proposal of Wide-Ranging agreement. Expert level meeting held between India and Pakistan have drawn no success. Each side kept roughly to its positions with little room for compromise. Unequal power relationships create strong dis-incentives for cooperation. Long-term dispute resolution strategies are not facilitating to resolve the issue. The potential clash between up-stream development and down-stream use set the stage for attempts at conflict management lasting till date. India's Mega River Linking Project have added to the issue over low flows to Bangladesh during the dry season. India's proposal to link dozens of rivers throughout India to transport water from the Ganges River to parts of southern and eastern India that are prone to water scarcity.

2.3 Attempts to resolve watercourse dispute: a gist

In 1951 India announced intentions build a Barrage across the Gangues 10km from the Bangladesh border. Pakistan first time officially called for India's attention on regards of the building of Farakka Barrage. In 1968, with no course of action Bangladesh took the matter before the United Nations General Assembly and till 1976 the discussions continued in that forum. But India and Bangladesh were unable to reach a water agreement 1976. An Indo-Bangladesh Joint Rivers Commission (JRC) is was formed and functioning since 1972. It was established with a view to maintain contact in order to ensure the most effective joint effort in maximizing the benefits from common river systems. The JRC is headed by Water Resources Ministers of both the countries, but it always stayed unproductive. In 1977 a five year water sharing treaty was reached according to this treaty Bangladesh would receive 80% of Ganges flow during the dry season. This was followed by two memorandums of understanding lasting through 1988, these did not include a minimum flow into Bangladesh. Further the Barrage was commissioned in April 1975 which gave India control over Ganges flows into Bangladesh during the dry season. In the spring of 1975 India withdrew 40,000 of the 55,000 ft^3/s of water from the Ganges which led to disastrous consequences on Bangladesh. No further agreements were reached from 1988-1996. India withdrew 40-45,000ft^3/s from the Gangues every dry season of this period. In 1996 the two countries reached a 30 year treaty which dictates that Bangladesh should receive a minimum flow of 35,000 ft^3/s from January to May.

The relationship created by the 1996 treaty resulted in further agreements between India and Bangladesh.[36]

[36] Brianna Besch Macalester College – St. Paul, Sharing the Ganges: Water Conflict Between India and Bangladesh, Accessed: July 11th 2021. http://www.macalester.edu/academics/environmentalstudies/students/projects/waterscience/sharingtheganges.pdfMN

2.3.1 Ganges Water Treaty, 1996

The government of the people's republic of Bangladesh and the government of the republic of India entered the bilateral treaty determined to promote and strengthen their relations of friendship and good neighborliness. On the basis of sharing resources, by mutual agreement the waters of the international rivers flowing through the two countries and of making the optimum utilization of the water resources of their region for the mutual interests of the peoples of the two countries. Being hopeful of finding a fair and just solution without affecting the rights and entitlement of either country other than those covered by this Treaty, or establishing any general principles of law or precedent.[37]

Specific provisions of the treaty, described as not establishing any general principles of law or precedent, include:

Art. I. The quantum of waters agreed to be released would be at Farakka.

Art. II. The dry season availability of the historical flows was established from the recorded flows of the Ganges from 1948 to 1973 on the basis of 75% availabilities. The shares of India and Bangladesh of the Ganges flows at 10-day periods are fixed, the shares in the last 10-day period of April (the leanest) being 20,500 and 34,500 cusec respectively out of 55,000 cusec availability at that period.

Art. III. Only minimum water would be withdrawn between Farakka and the Bangladesh border.

Art. IV-VI. Provision was made for a Joint Committee to supervise the sharing of water, provide data to the two governments, and submit an annual report.

Art. VII. Provisions were made for the process of conflict resolution: The Joint Committee would be responsible for examining any difficulty arising out of the implementation of the arrangements of the Agreement.

Any dispute not resolved by the Committee would be referred to a panel of an equal number of Indian and Bangladeshi experts nominated by the two governments.

If the dispute is still not resolved, it would be referred to the two Governments which would, "meet urgently at the appropriate level to resolve it by mutual discussion and failing that by such other arrangements as they may mutually agree upon.

Art. VIII: The two sides would find out a long-term solution of the problem of augmentation of the dry season flows of the Ganges.

---

[37] THE TREATY OF 1996, http://www.mtholyoke.edu/~ahmad20m/politics/treaty96text.html

[38] Ganges Water Treaty, 1996

[39] Mohammad Abul KawserEmail author and Md. Abdus Samad, Bandung: Journal of the Global South2016, Political history of Farakka Barrage and its effects on environment in Bangladesh, Bandung: Journal of the Global South2016, Accessed: July 15 2021. ,

Both nations were able to cooperate in harnessing the water resources- the treaty also permits the construction of barrages and irrigation projects and thus preserving the environment, natural and economic resources. Inspired by the common desire of promoting the well-being of their peoples.[38]

2.4 Analysis of outcomes of the attempts

Wholly the outcomes before the 1996 agreement has majorly been unproductive. The analysis of the Ganges water treaty gives a clear indication about the impact of construction of the farraka barrage.

Bangladesh is sensitive to diversion of Ganges water through Farakka barrage which adversely affected its ecology and economy. 37 per cent of the total area and 33 per cent of the total population of Bangladesh is dependent on Ganges basin. As a result of reduced flow of Ganges, Bangladesh has faced problem in the arena of agriculture, industry, fisheries, navigation, salinity and ecology, etc., in the south western region. About one-third of the total area of Bangladesh is directly dependent on the Ganges basin for their livelihood. In these circumstances water diversion at Farakka is bound to have an impact as it was an attempt to introduce a new ecological system against the usual course of nature. The ever decreasing dry-season flow has aggravated the excessive river bed situation on the Bangladesh side which has been instrumental in increasing the number of devastating monsoon floods in flood-prone Bangladesh. Increased salinity of soil and water, decline of soil quality and crop yields, shrinking fish population, decline of fishing villages and loss of livelihoods, decline of mangrove forest causing increased erosion rates and sedimentation. Immediately after the Water Sharing Treaty of 1996 it was discovered that the flow of the Ganges River at Farakka was far less than anticipated in the treaty. The water released to Bangladesh in 1997 and 1998 was less than the quantity fixed by the treaty Due to the effect of freshwater withdrawals at Farakka the over-exploitation of fishing and forestry resources is a widespread problem in Bangladesh in the post 1996 period.[39]

The treaty does not include the flood period. No allocation of minimum share for Bangladesh. Does not address the water quality issue and also the allocation as E-flow for sustaining the health of the river ecosystem. There is no provision for arbitration nor definite time frame for reaching sharing agreements on other common rivers. The quantum of flow received by Bangladesh under the provision of the treaty is not sufficient to meet its requirements. Moreover the availability at Farakka was lower than the historical and calculated flow in many occasions.[40]

2.5 Proposal for innovative methods of resolution:

https://bandungjournal.springeropen.com/articles/10.1186/s40728-015-0027-5

The Agreement should inter-alia provide scope for basin management of common rivers for mutual benefit and jointly developing and financing projects in power sector and water resources management harnessing advantage for sub regional cooperation. India being the stronger party both geo-strategically and hydro-strategically, has little incentive to reach agreement with Bangladesh. Hence, without strong third-party involvement, such as that of the World Bank or ICJ between India and Bangladesh, the dispute has gone on for years. Unequal power relationships, lacking strong third-party involvement, create strong dis-incentives for cooperation. This technique is generally used in Indian municipal laws to solve disputes, which is to involve the central government or the judiciary when trans-boundary disputes cannot be resolved. Agreeing on the minimum data necessary for a solution, or delegating the task of data-gathering to a third party may speed the pace of negotiations. Likewise, insisting on bilateral negotiations, as opposed to multi party consultations or watershed-wide negotiations, favors the party with greater power. This should be avoided to sidestep the dominance of powerful nations over the trans-boundary nations. Early agreements on the appropriate diplomatic level for negotiations is an important step in the pre-negotiation phase as this is the most time consuming stage as well. Short-term settlements which stipulate that the terms are not permanent can be useful in long-term resolutions. However, a mechanism for persistence of the temporary agreement in the absence of a long-term agreement is crucial.[41] A fair and workable agreement between India and Bangladesh can bring peace, trust, friendship and benefits not only for both countries but also for the whole South East Asia region.[42] Bilateral cooperation might also be enhanced by developing early warning systems for floods and droughts. Alternative methods of co-operation must be employed to ensure that the interests of both countries are achieved while reducing the potential for conflict.[43]

CONCLUSION

Even though having a great source of natural resources still it is badly developed and neglected. As such, the need to regulate and monitor this resource sharing is of utmost importance. This process however, is not complete even with speedy communication channels that exist between

---

[40] Mir Sajjad Hossain Member, Joint Rivers Commission, Bangladesh Ministry of Water Resources ; Ganges Water Treaty between Bangladesh and India, 1996 and its prospects for sub-regional cooperation, Accessed: July 15 2021. http://www.mrcsummit.org/presentations/track3/1.3-b-Conges-water-treaty-MirSajjad.pdf

[41] Aaron T. Wolf and Joshua T. Newton, Case Study of Transboundary Dispute Resolution: The Ganges River controversy, Accessed: July 15 2021. http://www.transboundarywaters.orst.edu/research/case_studies/Ganges_New.htm

[42] THE LAW ESSAY PROFESSIONALS, Ganges Water Dispute India Bangladesh, LawTeacher, Accessed: July 14 2021. http://www.lawteacher.net/free-law-essays/international-law/ganges-water-dispute-india-bangladesh-international-law-essay.php

the nations. Even the mere existence of experts to monitor the same is also not enough to solve the problem. There is a need for more effective and efficient implementation of the measures taken. The logistics to do the same must also be provided for. Hence, the effectiveness of both multilateral treaties and bilateral treaties is dependent on transparency of nations about their efforts.

To meet the enormous challenge of balancing economic demand against environmental realities in every part of the world, the international community has a duty to assist and to ensure that the use of resources is sustainable and the degradation of the environment is stopped.[44] Resource sharing among states is very significant in international order as it not only helps determine the territorial resources of a country but also impacts the international relations it has with other nations. International law is required through treaties and joint bodies to harmonize cooperation on the utilization of trans-boundary natural resources.

REFERENCES

- Gangesh Sreekumar Varma , A Bridge Over Troubled Waters Legal Principles of River Sharing and Framework for Management of Transboundary Rivers, First Published, 2013, Accessed: October 8th 2016. http://www.icwa.in/pdfs/SPHGangesh.pdf
- The Indian express, Indus Waters Treaty between India, Pakistan survived two wars: UN official, Accessed October 9th 2016, http://indianexpress.com/article/india/india-news-india/indus-waters-treaty-between-india-pakistan-survived-two-wars-un-official-3045575/
- adi_pouranik5195, The Water Law Framework in India: An Overview, Accessed: October 9th 2016. https://www.scribd.com/document/42985981/The-Water-Laws-

[43] Madeleine Lovelle Published by Future Directions International Pty Ltd, India, Bangladesh and the Farakka Barrage, 10 MAY 2016 Accessed: July 14 2021. http://www.futuredirections.org.au/publication/india-bangladesh-farakka-barrage/

[44] THE LAW ESSAY PROFESSIONALS, Ganges Water Dispute India Bangladesh, LawTeacher, Accessed: July 15 2021. http://www.lawteacher.net/free-law-essays/international-law/ganges-water-dispute-india-bangladesh-international-law-essay.php

Framework-in-India

- Building a Cooperative Future, Water Week, The Nile Basin Initiative (NBI), February 2009, Accessed: October 9th 2016. http://siteresources.worldbank.org/EXTWAT/Resources/4602122-1213366294492/5106220-1234469721549/33.1_River_Basin_Management.pdf
- Convention on the Law of the Non-navigational Uses of International Watercourses 1997, Available at: http://legal.un.org/ilc/texts/instruments/english/conventions/8_3_1997.pdf
- UN WATERCOURSES CONVENTION, Online Users Guide, Frequently Asked Questions, Accessed: October 8th 2016 http://www.unwatercoursesconvention.org/faqs/
- Brianna Besch Macalester College – St. Paul, Sharing the Ganges: Water Conflict Between India and Bangladesh, Accessed: October 2nd 2016. http://www.macalester.edu/academics/environmentalstudies/students/projects/waterscience/sharingtheganges.pdfMN
- THE LAW ESSAY PROFESSIONALS, Ganges Water Dispute India Bangladesh, LawTeacher, Accessed: October 4th 2016. http://www.lawteacher.net/free-law-essays/international-law/ganges-water-dispute-india-bangladesh-international-law-essay.php
- Mir Sajjad Hossain Member, Joint Rivers Commission, Bangladesh Ministry of Water Resources ; Ganges Water Treaty between Bangladesh and India, 1996 http://www.mrcsummit.org/presentations/track3/1.3-b-Conges-water-treaty-MirSajjad.pdf

DIGITAL HEALTH AND INTELLECTUAL PROPERTY RIGHTS: ISSUES AND CHALLENGES

Atul Jain
Research Scholar, Amity Law School
Amity University, Haryana

ABSTRACT

In today's tech savvy world Artificial Intelligence (AI) is gaining a substantial amount of recognition and prevalence. Artificial Intelligence is the ability of a digital computer or computer controlled robots to perform tasks commonly associated with intelligent beings. AI systems are capable of handling complex tasks with minimal or no human intervention. "Stephen Hawking articulated that there is no deep difference between what can be achieved by a biological brain and what can be achieved by a computer."

Recently AI techniques have sent vast waves across healthcare, even fuelling an active discussion of whether AI doctors will eventually replace human physicians in the future. We believe that human physicians will not be replaced by machines in the foreseeable future, but AI can definitely assist physicians to make better clinical decisions or even replace human judgement in certain functional areas of healthcare (eg, radiology). The increasing availability of healthcare data and rapid development of big data analytic methods has made possible the recent successful applications of AI in healthcare. Guided by relevant clinical questions, powerful AI techniques can unlock clinically relevant information hidden in the massive amount of data, which in turn can assist clinical decision making.

This new and increasing technology trend has posed several questions to the actual intellectual property law. One of the ongoing debates in the intellectual property sector is the ambiguity that AI inventions have in terms of its inventorship. In the majority of the cases, AI is a technology that either helps the inventor create the product or forms part of it. In this sense, AI inventions are not necessarily different from other inventions assisted by computers, such as customer relationship management software's. However, it seems obvious that given the nature of AI, this technology is able to create inventions independently. This paper tries to find the amicable solution to the challenges posed by the IP law.

Keywords: Patent, Artificial Intelligence, Technologies, Healthcare.

I. INTRODUCTION

Artificial intelligence (AI), in varying forms and degrees, has begun to appear in a wide spectrum of technologies, from the phones we use to communicate to the supply chains that bring goods to market. It is transforming the way we interact, consume information, and obtain goods and services. Health care is no exception. In health care, the impact of AI, through natural language processing (NLP) and machine learning (ML), is transforming care delivery. As is the case in other industries, it is expected that these technologies will continue to advance at a rapid pace over the next several years.[1]

[1] The future of artificial intelligence in health care, available at https://s3-prod.modernhealthcare.com/2019-12/us-lshc-artificial-intelligence.pdf, accessed on 22nd March,2021.

The emerging use cases of Artificial Intelligence (AI) in the healthcare sector can be seen as a collection of technologies enabling machines to sense, comprehend, act and learn so they can perform administrative and clinical healthcare functions, as well as be used in research and for training purposes.[2] Unlike legacy technologies that only complemented human skills, health AI today can significantly expand the scope of human activity. These technologies include, among others, natural language processing, intelligent agents, computer vision, machine learning, expert systems, chatbots and voice recognition.[3] These technologies can also potentially be used to compensate for a physician's cognitive biases (such as "recency bias,"[4] where one is more likely to allow the last case one treated to inform the course of treatment for the next patient.)[5] This use and adoption of AI can be seen at varying levels across the healthcare ecosystem. Machine learning can be used to address the issue of reporting in siloed Electronic Health Records (EHRs) and instead redirect these reports toward analysis and predictive modelling.[6] This technology can also be applied to preventative health programs. Machine learning can be used to merge an individual's omic (genome, proteome, metabolome, and microbiome) data with other data sources such EHRs to predict the likelihood of developing a disease, which can then be addressed through timely interventions such as preventative therapy.[7]

Artificial intelligence (AI), the technology that has captivated multiple sectors, is being hailed as a tool that will help provide access for all to quality medical care, including through the development and improvement of diagnostics, personalized medical care, the prevention of illnesses and the discovery of new treatments. Within the next five years, the use of AI in medicine is expected to increase tenfold.[8]

The case for examining the potential opportunities and risks of implementing AI systems for healthcare purposes has been given new importance by the outbreak of the COVID-19 virus,

---

2 Ma Si, New partnership to leverage AI technology in medical fields, available at, http://www.chinadaily.com.cn/business/tech/2017-04/20/content_29013915.htm, accessed on 20th March, 2021.

3 A. Ericson, Health AI Mythbusters: Separating Fact from Fiction, available at https://www.accenture.com/us-en/blogs/blogs-health-ai-mythbusters-separating-factfiction, accessed on 20th March,2021.

4 Recency bias is a cognitive bias that favors recent events over historic ones. Recency bias gives "greater importance to the most recent event"

5 K. Safavi, The AI Will See You Now, available at, https://www. accenture.com/us-en/blogs/blogs-intelligence-transform-healthcare, accessed on 22nd March,2021.

6 Jennifer Bresnick, available at, https://healthitanalytics.com/news/can-artificial-intelligence-relieve-electronic-health-recordburnout, accessed on 20th March,2021

7 R. Eubanks, Artificial Intelligence and the Healthcare Ecosystem – Part One, available at,Retrieved January 5, 2018, from https://www.capgemini.com/2017/10/artificial-intelligence-and-thehealthcare-ecosystem-part-one/ , accessed on 20th March,2021.

8 Perry, P, How Artificial Intelligence will Revolutionize Healthcare', Big Think, 10 May 2016, available at, https://bigthink.com/philip-perry/how-artificial-intelligence-will-revolutionize-healthcare, accessed on 20th March,2021.

which plunged the world into a public health crisis of unprecedented proportions from early 2020. AI systems could help overburdened health administrations to plan and rationalize resources, and to predict new COVID-19 hotspots and transmission trends, as well as provide a critical tool in the search for drug treatments or vaccines.

II. WHAT IS ARTIFICIAL INTELLIGENCE

AI can be defined as the use of coded computer software routines (algorithms) with specific instructions to perform tasks for which a human brain is normally considered necessary. Such software can help people understand and process language, recognize sounds, identify objects and make use of learning patterns to solve problems. Machine learning (ML) is a way of continuously refining an algorithm. The refinement process involves the use of large amounts of data and is done automatically, allowing the algorithm to change with the aim of improving the precision of the artificial intelligence.[9] Put simply, AI enables computers to model intelligent behaviour with minimal human intervention, and has been shown to outperform human beings at specific tasks. In 2017, for instance, it was reported that deep neural networks (a branch of AI) had been used successfully to analyse skin cancer images with greater accuracy than a dermatologist, and to diagnose Diabetic Retinopathy (DR) from retinal images.[10] However, the definition of AI is evolving. As well as the more technical definition given above, AI is also perceived as something resembling human intelligence, aspiring to exceed the capabilities of any of the individual technologies. It is conceived as a technology interaction that gives a machine the ability to fulfil a function that 'feels' human. The ability of a machine to perform any task that can be achieved by a human has been termed Artificial General Intelligence (AGI). AGI systems are designed with the human brain as a reference. However, AGI has not yet been achieved; experts recently forecast its emergence by 2060.[11]

III. KINDS OF ARTIFICIAL INTELLIGENCE IN HEALTH SECTOR

The use of AI in the healthcare industry is diverse across sub-sectors. The uses of AI in healthcare can be categorized into the following broad categories as: Descriptive, Predictive and Prescriptive AI.

---

[9] Zandi, D., Reis, A., Vayena, E. and Goodman, K. (2019), 'New ethical challenges of digital technologies, machine learning and artificial intelligence in public health: a call for papers', Bulletin of the World Health Organization, 97(1), pp. 1–72, available at, https://www.who.int/bulletin/volumes/97/1/18-227686/en/, accessed on 20th March,2021.

[10] The Lancet 'Artificial intelligence in health care: within touching distance', The Lancet, 390(10114), available at https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(17)31540-4/fulltext, accessed on 20th March,2021.

[11] Joshi, N, 'How Far Are We From Achieving Artificial General Intelligence?', available at, https://www.forbes.com/sites/cognitiveworld/2019/06/10/how-far-are-wefrom-achieving-artificial-general-intelligence/#8f678606dc4d, accessed on 20th March,2021.

Descriptive AI is the most widely used in healthcare technology today, and holds the most promise in terms of short-term potential19. It quantifies events that have already occurred and uses this data to gain further insights, such as detecting trends and minor changes that may otherwise escape detection by medical professionals. For instance, such technology can be used to identify patterns in fracture detections and skin lesions. Additionally, these technologies have been shown to outperform humans in detecting subtle wrist fractures.[12]

Predictive AI uses descriptive data to attempt to make predictions about the future. AI is used by medical professionals to provide insights and suggest actions in a predictive manner can perform the functions of a clinician, possibly substituting for human labour. Large parts of India presently face a shortage of primary care clinicians.[13] Artelus[14] seeks to use AI to help in primary screening in rural areas that are understaffed. Apps such as Wysa[15] are able to monitor and predict mental health issues.

Prescriptive AI furthers the purpose of predictive AI, and not only detects trends that may not be predicted by humans, but also suggests possible treatments based on nuances in the diagnosis. This decision-making ability makes prescriptive AI the most interesting and the most controversial use case in the near term.[16] Prescriptive AI can potentially be mobilized as a cognitive agent that mimics the brain to reduce cognitive load on humans. Healthcare is one of the most knowledge-intensive of all industries. AI-powered smart agents can search, find, present and apply the most current clinical knowledge in partnership with physicians, nurses, and researchers, significantly improving clinician efficiency and capacity, and quality of care.[17]

IV. ROLE OF PATENT IN ARTIFICIAL INTELLIGENCE DRIVEN HEALTHCARE SECTOR

Artificial intelligence (AI) is pushing the boundaries of possibility in many industries, and healthcare is no exception. AI has the potential to deliver healthcare more efficiently, at a faster pace, and at a lower cost.As ageing populations and complicated comorbidities continue to put pressure on healthcare budgets, the potential for self-management and preventative medicine

---

[12] Descriptive, Predictive & Prescriptive Analytics: What are the differences? by University of New South Wales, Sydney 9/10/2020,available at https://aibusiness.com/author.asp?section_id=796&doc_id=763806, accessed on 19th March,2021.

[13] Ibid

[14] Artificial Learning Systems., available at,http://artelus.com/products.php, accessed on 19th March, 2021.

[15] Wysa - AI coach for behavioural health,available at https://www.wysa.io/, accessed on 19th March,2021.

[16] Supra note 9.

[17] F. Dare, Can High Tech Be High Touch In Healthcare?, available at, https://www.accenture.com/us-en/blogs/blogs-high-tech-high-touch-healthcare, accessed on 19th March 2021.

will grow in importance, and new technologies can play an important part in enabling this change.[18]

The healthcare industry in India is made up of a number of segments. Through a review of companies developing AI solutions for health, health practitioners using AI, and researchers looking into the potential of AI and health, it was found that AI is employed in a variety of ways across the different segments including:[19]

Hospitals: These include government hospitals, including healthcare centers, district hospitals and general hospitals; and private hospitals, which include nursing homes and mid-tier and top-tier private hospitals. From a review of solutions adopted it appears that hospitals in India are employing descriptive and predictive AI. For instance, the Manipal Group of Hospitals has tied up with IBM's Watson for Oncology to aid doctors in the diagnosis and treatment of 7 types of cancer. Watson for Oncology is used across its facilities, where more than 2.00,000 patients receive cancer care each year.[20]

Pharmaceuticals: The most common use of AI in pharmaceuticals is in drug discovery, where AI is mobilized to scan through all available literature on a particular molecule for a drug (e.g. targeted molecule discovery), which would otherwise be impossible for even a group of people to manually carry out.[21]

Diagnostics: These comprise businesses and laboratories that offer analytical or diagnostic services. In addition to bigger companies such as Google and IBM, India is also host to startup companies that specialize in harnessing AI to diagnose disease. From a review of solutions adopted it appears that diagnostics in India are employing descriptive and predictive AI.[22] According to the WHO, India is home to over five crore Indians suffering from depression, and is a major contributor to global suicides.[23] However, seeking help for mental health issues is still stigmatized, firms are addressing this issue by using technology to help deal with mental health issues, usually in the form of Chabot[24] that offer counselling while maintaining privacy.

---

18 Pharmaphorum,Intellectual property's vital role in healthcare's AI-driven future(2nd November,2018), available at https://pharmaphorum.com/views-analysis-digital/intellectual-propertys-vital-role-in-healthcares-ai-driven-future/, accessed on 23rd March,2021.

19 TCS,Getting Smarter by the Sector: How 13 Global Industries Use Artificial Intelligence. Available at, http://sites.tcs.com/artificial-intelligence/#, accessed on 20th March, 2021.

20 Manipal Hospitals, Watson for Oncology Report, available at https://watsononcology.manipalhospitals.com/Manipal-Hospitals-Watson-Sample-Report.pdf, accessed on 20th March,2021.

21 Reuters, Pharma turns to AI to speed drug discovery, available at http://www.thehindu.com/business/Industry/pharma-turns-to-ai-to-speed-drug-discovery/article19198759.ece, accessed on 20th March,2021.

22 PTI, Over 5 crore people suffer from depression in India: WHO, available at http://www.livemint.com/Specials/Ysja8QtaVqjRpKg7eAFJfL/Over-5-crore-people-sufferfrom-depression-in-India-WHO.html, accessed on 20th March,2021.

23 Ibid.

24 A chatbot is a type of software that can automate conversations and interact with people through messaging platforms.

Telemedicine: Telemedicine utilizes electronic communications and software to remotely provide clinical services to patients. It is frequently used for follow-up visits, management of chronic conditions, medication management, specialist consultation and other clinical services that can be provided remotely via secure video and audio connections.[25] This bypasses barriers of time and space and serves to provide isolated communities with speedy delivery of medical expertise.[26]

Another burgeoning area of innovation is the world of healthcare apps which have the potential to make a real difference to outcomes. However, protecting the IP in apps, like algorithms and artificial intelligence innovations, is something that often greatly benefits from early advice from a specialist in the field to maximize the likelihood of obtaining strong protection. However, generally speaking, the apps most likely to be patentable will be those that find solutions to technical challenges.[27]

AI and big data are becoming ever more central to the creation of models to assist the relevant professionals in making diagnoses and for predicting the efficacy of treatments in the long and short-term. The potential for further innovation is huge.

V. CHALLENGES TO ARTIFICIAL INTELLIGENCE

AI applications, along with technologies such as big data and robotics, are expected to have transformational and disruptive potential within the healthcare sector across various areas such as hospitals and hospital management, pharmaceuticals, mental health and well-being, insurance, and predictive and preventive medicine. The introduction of new technology also brings challenges but the potential rewards for those devising the innovations that overcome those challenges can be significant and protecting innovation in this space with intellectual property (IP) will be vital.[28]

Curated data, analytics and artificial intelligence (AI) have been driving innovation across many sectors. The Covid-19 outbreak has triggered an acceleration in its use in the development of digital health, from modelling the outbreak and predicting patient demand, to drug development and diagnosis.[29] AI is poised to be a critically impactful technology, and its development will be deeply affected by existing social and legal institutions. Intellectual property (IP) is a broad and

---

[25] Chiron Health, What is Telemedicine?, available at https://chironhealth.com/ telemedicine/what-is-telemedicine/, accessed on 20th March,2021.

[26] V. Dalmia, India: Telemedicine In India - Legal Analysis, available at, http://www.mondaq.com/india/x/221258/food+drugs+law/Telemedicine+In+IndiaLegal+Analysis, accessed on 20th March,2021.

[27] Supra note 20.

[28] Ibid.

[29] Worldwide: AI And IP – Driving Innovation And Digital Health available at, https://www.mondaq.com/patent/968944/ai-and-ip-driving-innovation-and-digital-health , accessed on 19th March,2021.

flexible concept, referring to creations of the mind that are eligible for protection through law. Today, companies are using a mix of patents, trade secrets, and open-source licensing[30] agreements to protect their AI-related inventions.

VI. CONFLICT BETWEEN ARTIFICIAL INTELLIGENCE AND IPR

AI systems are growing at an exponential rate today, with more sophisticated forms of software being incorporated into them. The IP industry is the most noteworthy market where AI could have a profound effect. With the clear visibility of remarkable extent of creativity and knowledge exhibited by AI, concerns pertaining to IP protection ought to be there in the minds of those enforcing the rights associated with the intellectual property.[31]

Intellectual property has always had a symbiotic relationship with the development of new technology and in turn policy has needed to adapt to keep pace with the technology and cultural changes. AI technology has the potential to shake up the IP system, raising fundamental questions from inventorship and authorship to ownership and infringement.

A fundamental objective of the patent system is to encourage the investment of human and financial resources and the taking of risk in generating inventions that may contribute positively to the welfare of society. As such, the patent system is a fundamental component of innovation policy more generally. Does the advent of inventions autonomously generated by AI applications call for a re-assessment of the relevance of the patent incentive to AI-generated inventions

VII. PATENTS AND ARTIFICIAL INTELLIGENCE

AI Machine better known as thinking machines are going to shape the future of creativity and innovation. Recent use of these machines in diagnosis, drug molecule identification, treatment and drug development would mark a new era of medical innovation.[32] The main issue from an intellectual property/ patent perspective iswhether AI inventions can/should be considered as patent eligible subject matter.

A look at patent laws of major jurisdictions sheds some light on the current state of affairs.[33] A string of recent decisions by the U.S. Supreme Court interpreting section 101 of the Patent Act,

---

30 World International Patent Organization. "What is Intellectual Property?" available at, https://www.wipo.int/about-ip/en/, Accessed on 20th March,2021.

31 Vaishali Singh, Mounting Artificial Intelligence: Where Are We On The Timeline? Practical Lawyer, available at https://amity.edu/UserFiles/aibs/0dba2019%20AIJJS_123-end.pdf, accessed on 22nd March,2021.

32 DPS Parmar,Products of artificial intelligence: Thinking aloud creativity and innovation, available at https://www.asialaw.com/NewsAndAnalysis/products-of-artificial-intelligence-thinking-aloud-creativity-and-innovation/Index/326, accessed on 22nd March,2021.

33 How is the patent world responding to the AI revolution? Available at https://www.remfry.com/wp-content/uploads/2020/04/Article.pdf, accessed on 22nd March,2021.

which governs patentable subject matter, has made it very difficult to patent black box algorithms.[34] In Mayo Collaborative Services v. Prometheus Laboratories, Inc., the Supreme Court repeated its longstanding statement that laws of nature cannot be patented.[35] However, the Court applied that rule to a diagnostic test that used the measurement of a metabolite level in a patient's blood to adjust the dosage of a drug, which many, including the Federal Circuit below, had thought to be a patentable application of such a law. The Supreme Court used very broad language to invalidate the patent: "Well-understood, routine, conventional activity previously engaged in by scientists who work in the field is normally not sufficient to transform an unpatentable law of nature into a patent-eligible application of such a law."[36] Where underlying information about the biological world is the heart of the invention, merely using that information to guide medical treatment is unpatentable.

The real challenge, nevertheless, will be to capitalize on the healthcare data we are all producing daily, and hone the innovations which can deliver the next generation of healthcare tech, developing products that patients can trust. Intellectual property has a huge role to play in accelerating the economic viability of AI and will be central to meeting those challenges.[37]

VIII. CONCLUSION & SUGGESTION

The world of artificial intelligence is no longer just science-fiction; in fact, we're well into it. Existing legal frameworks are starting to run into issues when it comes to ownership and intellectual property rights regarding complex AI cases. At the present time, a paradigm change is being observed, with engineering principles and product-process design becoming the main principle guiding development and manufacturing in the healthcare sector.[38] This implies that adopting a pattern of thinking and using AI for diagnosis, prevention and treatment processes are simultaneously and quantitatively being considered. AI space exists for the implementation of innovative healthcare operations; further work is definitely required, particularly at the interfaces between the manufacturing, research, regulatory compliance and protecting intellectual property and software engineering, in order to make substantial contributions to the successful operation of the healthcare industries. AI systems are becoming more advanced following which the number of "inventions" created by such systems is bound to increase in the

---

[34] Rebecca S. Eisenberg, Diagnostics Need Not Apply, 21 B.U. J. Sci. & Tech. L. 256 (2015).

[35] Mayo Collaborative Servs. v. Prometheus Labs., Inc., available at https://casetext.com/case/mayo-collaborative-servs-v-prometheus-labs-inc, accessed on 20th March,2021.

[36] Ibid.

[37] Supra note 20.

[38] Rajeev Kumar and Pankaj Musyuni, AI in the healthcare sector: Indian & pandemic perspective, available at, https://www.lexorbis.com/wp-content/uploads/2020/05/CTC-Article.pdf, accessed on 20th March, 2021.

future. This offers a wide scope for the framing of suitable legislation in order to provide adequate legal safeguards. More importantly, there is a need to formulate clear and widely accepted guidelines with respect to the application of regulatory and intellectual property laws to AI. The global healthcare sector, particularly pharma and bio pharma industry, is on the cusp of an exciting era, as rapid developments in AI present the opportunity to make more effective drugs and provide faster and cost-effective healthcare services to patients. Developing an appropriate AI strategy is beset with challenges and will require pharma companies to work in new ways and to collaborate more closely than ever before. Governments are also seeking to shape IP systems that incentivize innovation around AI while also protecting their national security interests. India must adapt its patent regime to ensure that the country remains an opportunity for innovators.

"Strategic thinking is the call of the hour if we want to successfully tackle the forces of AI disruption and innovation that will shape our future"

URGENT NEED FOR POLICE REFORMS IN INDIA

Mr. Baidya Nath Mukherjee
Research Scholar
Christ (Deemed to be University) NCR Campus

Dr. Bhupinder Singh
Associate Professor
Christ (Deemed to be University) NCR Campus

ABSTRACT

Police is one of the important pillars of the criminal justice administration and if it is not improved the other organs may collapse. So, it needs to be reformed, restructured and revamped. As India has gone through transition from a colonial state to an independent nation, it needs to get rid of the age-old legislation regulating the police force of the country. The Indian Police Act 1861 was enacted by the Britishers with intent to demur every protest or revolution participant in British India. Thus, the act does not satisfy the best interest of today's democratic society. Through this paper the author has tried to identify the reason behind the failure to implement the recommendations and directives of the commissions and the apex court. It is high time to understand that police reforms are directly linked with the political stability and economic progress of the country. A weak law and order hinders the economic growth of the country. Police reforms have always been at limelight, as when it comes to delivery of service and its image, the police have always been at the receiving end. Further, through this paper an effort has also been made to analyze the instances of human rights violations by the police force and suggest ways to put a check on it.

Keywords: Authority, Commission, Human Right, Internal Security, Police Reform.

"*... Serious internal security challenges remain. Threats from terrorism, left wing extremism, religious fundamentalism, and ethnic violence persist in our country. These challenges demand constant vigilance on our part. They need to be tackled firmly but with sensitivity.*[1] (PM's Speech at the Conference of CMs on Internal Security, 2012)"

I. INTRODUCTION

In 1902 the Fraser commission,[2] led by Donald M Fraser recorded that "the police force is far from efficient, it is defective in training and organization, it is inadequately supervised, it is generally regarded as corrupt and oppressive, and it has utterly failed to secure the confidence and cordial cooperation of the people".[3] Shockingly, the 115 years old observation stands true even today for the Indian police.

Police is one of the most important and largest state agencies responsible for protecting human rights and enforcement of laws. But this image of the protector of Human Rights takes a beating,

---

1 Press Information Bureau, Government of India, Prime minister's Speech at the Conference of CMs on Internal Security dated 16 April 2012, 10:51 IST URL https://pib.gov.in/newsite/PrintRelease.aspx?relid=82276 last accessed 10-02-2021

2 The police commission established for police reforms under Sir Andrew Frazer and Lord Curzon.

3 Indian Police Commission., Fraser, A. H. L. (Andrew Henderson Leith). (1965). *Fraser report: report of the Indian Police Commission, 1902-03*. Karachi: National Institute of Public Administration.

when the protectors themselves are accused of violating them. The incident of 2nd July 2020, where eight policemen of Uttar Pradesh cadre were shot dead by an associate of a leading criminal of that state, have brought into limelight the linkages between police, politician and criminals.[4] Similar instances have manifested a clear structural interaction between police, politician and criminal, which in a way or the other affects the socio-legal rights of the ordinary people. The alarming rise of human rights violations demands an urgent police reform. The clamors of police reform are not recent, but its origin can be traced decades back. Several notable committees and commissions like the National Police Commission,[5] Ribeiro Committee,[6] Padmanabhaiah Committee[7] did came up with numerous observations and recommendations and even after the notable observations of the apex court in the Prakash Singh case[8] Police reform remains a distant dream. In the past years the crime rate has also witnessed a notable hike. As per the statistics of National Crime Records Bureau, Ministry of Home Affairs the crime rate in metropolitan and non-metropolitan cities are gradually increasing. The recent happenings in Hatras Case[9] as well as death of Father and Son due to police torture in Tamil Nadu[10] are also worthy of mention worthy. Police malfunctioning seems to have become a daily episode. Moreover, accusation against a single individual is understandable because no organization is free from its scapegrace, and departmental actions could be taken against them. But, at times the entire police organization is painted with the same black brush and this harsh reality needs to be faced and rectified.

Even after Independence, the Indian Police System was governed by archaic and colonial legislation. The Police Act 1861[11] is a British legislation and it was the aftermath of the 1857 mutiny. Through this legislation the Britishers proposed to establish a police force that would help in crushing every demur in the colonized nation. Police structure of almost all the Indian States is being regulated by this age-old legislation. Despite policing being a state subject[12] of the Indian Constitution, most of the Indian states have not passed a new regulation act, and those passed are heavily influenced by the old legislation. Today's India, which has undergone a

---

4 Prakash Singh, 'Thoothukudi to Kanpur: The police are in the dock. Reforms must start with the political system' https://indianexpress.com/article/opinion/columns/tamil-nadu-custodial-deaths-up-vikas-dubey-encounter-police-brutality-6504199 ; last accessed 12-02-2021

5 Duration of the commission: 1979-1981

6 Duration of the committee: 1998- 1999

7 The committee established in 2000

8 Prakash Singh and Ors V. Union of India and Ors [(2006) 8 SCC 1 : (2006) 3 SCC (Cri) 417]

9 B.L. Vohra , 'Killing Vikas Dubey doesn't end crime. For that, parties must let go of control over police' https://theprint.in/opinion/killing-vikas-dubey-doesnt-end-crime-for-that-parties-must-let-go-of-control-over-police/458597/ last accessed 15-02-2021

10 Arun Janardhanan, 'Explained: How Tamil Nadu Police's brutal act of revenge claimed lives of a father and son' https://indianexpress.com/article/explained/explained-tamil-nadu-police-custodial-torture-father-son-killed-thoothukudi-6479190/ last accessed 20-02-2021

11 Enactment date: 22-03-1861.

12 Under 7th Schedule, List II, Entry II.

transition from being a colonized nation to a sovereign nation, needs new legislation to regulate policing. The need for police Reform in India is not new and have been recognized long back. There have been debates and discussions for over decades and numerous high-power commissions have given the directions for police reforms but India remains encumbered by the outworn laws.

II. LEGAL MATERIAL AND METHODS

The paper strives to highlight the dire need to bring reform in the Indian Police System. This paper also emphasizes on the lacunas of the state and central authorities in implementing the recommendations of the commissions. This article draws upon two kinds of doctrinal research as legal methodology:

1. Analysis of different reports of commissions on Police reforms, constitutional provisions, penal provisions and other related academic documents constituting the role of police officers as protectors of human rights.
2. Analyzing the records on crime rates with special emphasis on Human Rights violation by police personnel.

The stimulant role played by the apex judiciary has highlighted the covert prejudice prevailing on the society due to unreformed police structure. The paper further aims to identify the reasons behind non implementation of the recommendation and directives as well suggests further necessary changes needed to strengthen the Indian Police System.

III. RESULT AND DISCUSSION

Efforts for Reform: Post Independence

After Independence the Government has adopted several initiatives to uphold the integrity, accountability and transparency of the police system of India.[13] Post-Independence the nation has witnessed several committees and commissions to inspect the various aspects of police administration and suggested several remedial measures. The first committee was the Gore committee, appointed in November 1971, under the chairmanship of Prof. M. S. Gore, a renowned social scientist, to assess the existing police reforms program and recommend the possible ways to improve the effectiveness of police personnel. The committee made notable recommendations on aspects of training and mentioned that training is necessary to inculcate necessary knowledge and skills, develop appropriate attitude and help to evolve effective decision-making ability among the police personnel.[14]

---

[13] PRS Legislative Research, Policy discussion paper, Police Reforms in India, < https://www.prsindia.org/policy/discussion-papers/police-reforms-india> last accessed 22-02-2021

[14] The Gore Committee Report on police training, Ministry of Home Affairs, Government of India, https://police.py.gov.in/Police%20Commission%20reports/THE%20GORE%20COMMITTEE%20REPORT%20ON.pdf> last accessed 25-02-2021.

The next commission i.e. the National Police Commission (NPC) appointed in 1977 by Government of India, in the wake of flagrant misuse of police power by the political superiors during the 1975 emergency. The Commission tabled eight reports during 1979 to 1981 and suggested wide ranging reforms in the existing police structure and recommended a new police Act.[15] Thereafter, the Shah Commission of Enquiry in 1978 published its report in three volumes totaling 525 pages on police atrocities and excesses committed during the period of emergency.[16] In 1996, following the PIL filed before the apex court[17] against non-implementation of the significant recommendations from the Nation Police Commission, the government set up the Ribeiro Committee[18] under the leadership of J.F. Ribeiro, Former Chief of Police. The committee placed two reports. The first report released in October 1998 addressed the apex court's specific concerns like the procedures on recommendations on State Security Commissions, Appointment of Police Chiefs and separation of Investigation and Law and order functions of the police. The second report was more general and addressed other related concerns. In January 2000 the Government of India appointed another committee under the Chairmanship of Shri. K. Padmanabhaiah to examine the challenges and thereby suggest changes in the police setup to meet those challenges in the new millennium. Malimath Committee on Reforms in the Criminal Justice System[19] appointed to examine the fundamental principles of Criminal Law and restore confidence in the criminal Justice System. The committee placed few recommendations on police reforms like suggesting separating the investigation and Law and Order branch, establishment of National Security Commission and State Security Commission and quality investigation. In August 2005, the Government of India for the purpose of revamping the public administrative system, appointed a commission for enquiry called the Second Administrative Commission.[20] The 4th Chapter of the report submitted by the committee dealt with the core principles of Police Reforms since police reforms are the fundamental requirements of a democratic state. The commission aimed to outline the overarching principle of reforms in police administration and the criminal justice system and thereby create a linkage between the two facets which will further help to evolve the reforms in an integrated manner. The commission suggested eight principles as the bedrock of criminal justice and police reforms.[21]

---

15 The Report National Police Commission, https://police.py.gov.in/Police%20Commission%20reports/3rd%20Police%20Commission%20report.pdf last accessed 01-03-2021.

16 Report on Shah Commission of Inquiry, https://www.mines.gov.in/ViewData/OldArchives?mid=1333 Last Accessed 03-03-2021.

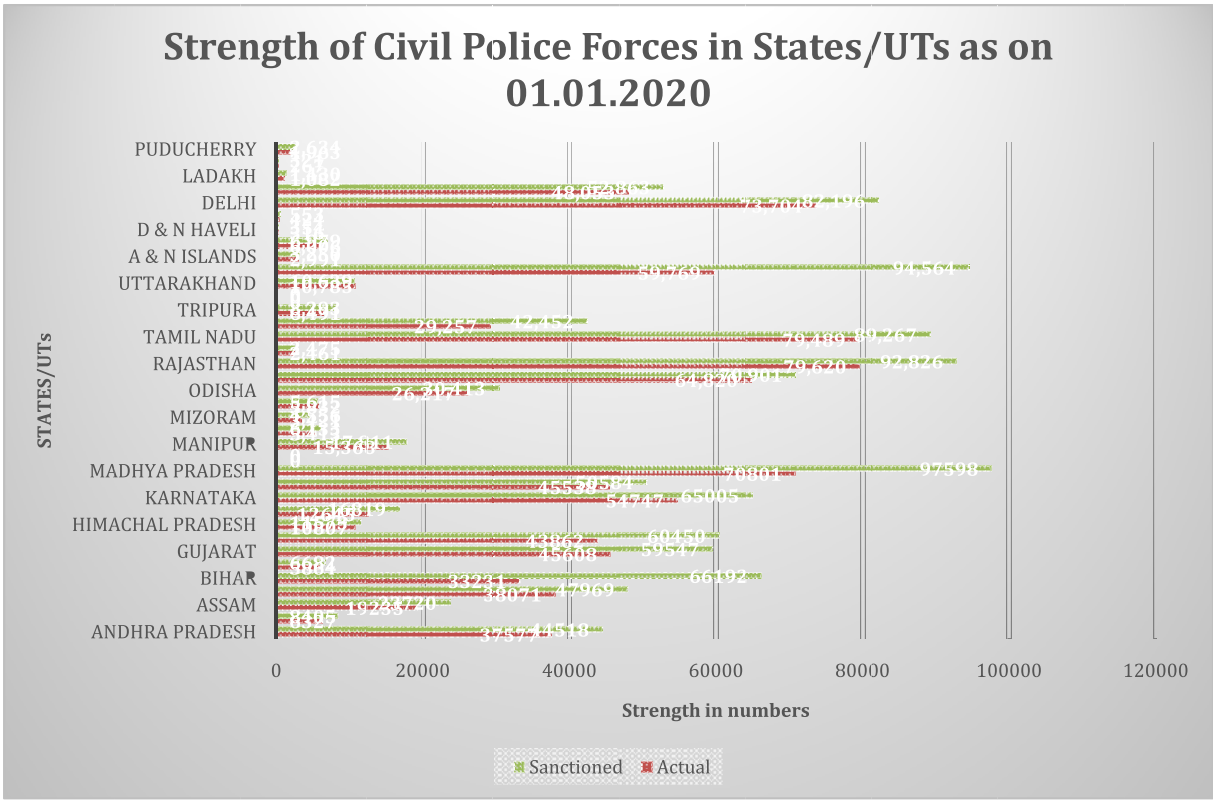
17 Prakash Singh and Ors V. Union of India and Ors [(2006) 8 SCC 1 : (2006) 3 SCC (Cri) 417]

18 1998-1999

19 2002-2003

20 Second Administrative Reforms Commission Report, https://darpg.gov.in/arc-reports Last accessed 04-03-2021.

21 Second Administrative Reforms Commission Report, https://darpg.gov.in/arc-reports



Inadequate Resources and Lack of Infrastructure

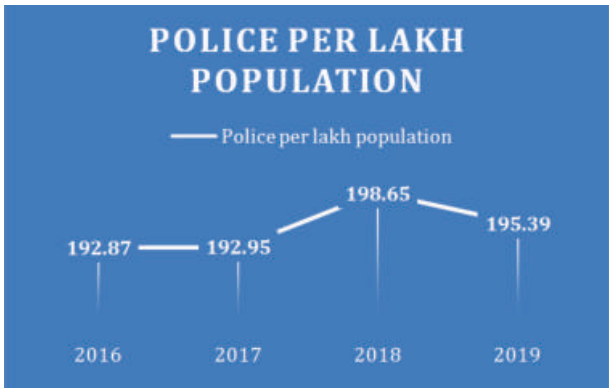
Data on Police organization 2020 published by the Bureau of Police Research and Development (BPR&D) clearly shows that the actual strength of the Police force in the country is less by almost 20 per cent as compared to the sanctioned strength. Data reveals that the sanctioned strength of state police force is 26.23 Lakhs whereas the actual strength is 20.91 Lakhs i.e. state police forces have around 20% vacancies as in January 2020.[22] The United Nations recommended standard of police per lakh person is 222, whereas the India's strength of police per lakh person in the year 2019 is 195.39, making it as one of the weakest police force in the world.[23] The states with police force which meet the international standards are that of insurgency affected states i.e. North-east and Punjab.[24] The major reason behind the resource crunch being the decreased spending on police in recent years. Research shows that the expenditure on police accounts for only about 3% of the state and central government budgets.[25] An overburdened and under resourced police force

[22] Data on Police Organizations, Ministry of Home Affairs, Government of India, <https://bprd.nic.in/WriteReadData/userfiles/file/20210101120101164836 4DOPO01012020.pdf> last accessed 05-03-2021.

[23] *Ibid.*

[24] Sriharsha Devulapalli, Vishnu Padmanabhan, 'India's Police Force among the world's weakest' (2019), Mint <https://www.livemint.com/news/india/india-s-police-force-among-the-world-s-weakest-1560925355383.html> Last Accessed 06-03-2021.

means a weak police structure,[26] and thereby compromising in both core police activities (enforcing daily law and order) and exorbitant delay in criminal investigations.[27] Exacerbating this as the biggest issue of accountability and responsiveness within the police force. A survey conducted by a team at Centre for the study of Developing Societies (CSDS) revealed that less than 25% of the Indians trust the police as compared to 54% for the army[28] (CSDS, 2019). Main reason behind this distrust being the unwelcoming attitude of the police, which may be the result of an overburdened police force. The rule of law is the cornerstone of a civilized democratic state. It needs an effective and fair criminal justice system, where police have a central role to play. Police stations are the first stop for every citizen at a time of crisis. People need a strong police system which is competent enough to protect their life, rights, and liberties and maintain law and order in the society. For the effective performance of these duties the police force requires both contemporary and adequate infrastructure as well as sensitive and well-trained personnel.[29] The capacities of the police personnel need to be built for not only upholding the law but also for compassionately handling the crisis involving all sections of the citizens.



Police Torture and Abuse: Human Rights Violation

Police torture and atrocities are recognized reality, so much so, that any confession made to a police officer is not admissible before the court of law under Indian Evidence act.[30] Recently we are witnessing an exponential increase in incidences of police torture and atrocities across the country. The brutal custodial torture and killings of father and son (Jeyaraj and Bennix) in Thoothukudi, Tamil Nadu[31] in June 2020 have once again thrown light on the impunity with which the police system works across the country. The brutality in any way, or by any stretch of

---

25 PRS Legislative Research, Government of India, https://www.prsindia.org/policy/discussion-papers/police-reforms-india Last accessed 07-03-2021.

26 *ibid*

27 Sriharsha Devulapalli, Vishnu Padmanabhan, 'India's Police Force among the world's weakest' (2019), Mint <https://www.livemint.com/news/india/india-s-police-force-among-the-world-s-weakest-1560925355383.html> Last accessed 07-03-2021

28 Common Cause and CSDS 2019, Status of Policing in India Report 2019

29 Kushwah Vikrant Singh, Why 'India Needs Urgent Police Reforms' (2018), Observer Research Foundation https://www.orfonline.org/expert-speak/why-india-needs-urgent-police-reforms-46003/ Last accessed 08-03-2021.

30 Section 24,25 and 26 of the Indian Evidence Act 1872

31 Arjun Janardhanan, 'How Tamil Nadu Police's brutal act of revenge claimed lives of a father and son', The Indian Express, 2021 1.

imagination, does not seem proportionate to the proposed crime in this case.While many instances of police brutality take place regularly, some of them are highlighted in the media or witness public outrage. Another such instances of police malfunction and irregularity can be witnessed in 2020 Hathras gang rape and murder case, where a 19-year old Dalit woman was alleged gang-raped by four upper caste men. This case witnessed an unusual reaction from the Uttar Pradesh Police and administration. Initially the police denied any incident of rape and allegedly forcibly cremated the death body of the victim without the consent of her family.[32]

Later, on 19th December 2020, CBI in its charge sheet mentioned severe lapses on part of Uttar Pradesh Police. The number of cases registered against state police personnel for human rights violation in India is considerably rising.[33] The highest number of cases of human rights violation registered during 2016-2018 is 209 in the year 2016, of which only 50 police personnel were charge-sheeted and no police personnel convicted (Indiastat, 2021). Even the instances of police brutality which comes in lime light or witness public outrages, once the initial phase of public outrage tides over – alleviate through enquiries, investigation and arrest – very rarely the police personnel are prosecuted or punished for the heinous act of violence. This flagrant human rights violation cannot be allowed to happen in any civilized society. Study reveals that, Indian police force use violence as a shortcut to justice. It is the marginalized section of the society who bears the scar. Lack of manpower along with insufficient modern amenities, woeful training and political pressure altogether means confession under compulsion and torture and often the only way to resolve crime cases.

Apex Court on Police Reforms

Two former police officers Prakash Singh and NK Singh, joined by an NGO, in 1996 approached the honorable apex court of the country urging police reform, stating about the police abuse and misuse of powers. The demand was to bring the police in line with the needs of the democratic society governed by rule of law, alleging non-enforcement or discriminatory and biased application of laws. After 10 years in 2006 the Hon'ble Court passed the judgement, issuing various directions to the center and state. The court inter alia states that there is a convergent view on need to have[34] (Prakash Singh & Ors vs Union Of India And Ors, 2006):

[32] Anuj Kumar, 'Hathras gang rape: Victim cremated without consent, says family', The Hindu, 2020 1.

[33] As per report of NCRB.

(i) State Security commission at state level,

(ii) Police Establishment Board at state level to decide on transfer, posting and promotion of officers below the rank of DSP and recommendations on the above stated matters to the state government for officials of higher rank,

(iii) Police Complaint Authorities at state and district level,

(iv) Transparent appointment procedure for DGP and other key officers and desirability of giving minimum fixed tenure,

(v) Separating the investigating police from law and order police,

(vi) A new police act which will reflect the demands of the modern democratic society.

The court directed the State government, Central government and Union Territories to comply with the directives latest by 2006 and file the compliance affidavit by January 2007. However, the period for compliance was extended by a couple of weeks, though apparently that was of no use. Considering the reluctant approach of the government, the apex court on May 16, 2008 set up a Monitoring committee to evaluate upon the compliance of the directives by the governments.[35] The committee in 2010 tabled its finding stating that particularly no state has fully complied with the court's directives.[36] The monitoring committee expressed its dismay over total indifference to the issues of reforms in the functioning of police personnel being exhibited. Again, after two years in 2012 the apex court again asked the governments to file an affidavit stating how far the directives of the 2006 Prakash Singh case have been complied with. In August 2013, three states raised objection against the Supreme Court's interference claiming that the whole matter is within the executive powers and functions alone.[37] Today when we are again about to observe the 15th police reforms day on 22nd September 2021, the apex court's directives are yet to be implemented in letters and spirit.

Compliance to the Supreme Court Decision on Police Reforms: A Reality Check

Researches by the International Non-profit Common Health Human Right initiative have found that no states in India have fully complied with the Supreme Court directives for police reforms. The set of seven directives passed by the apex court, which initiated reforms in the Indian police structure, was the result of the PIL filed in 1996. Only two states, namely Andhra Pradesh and Arunachal Pradesh have complied with highest number of directives i.e. three and four out of

---

[34] Prakash Singh and Ors V. Union of India and Ors [(2006) 8 SCC 1 : (2006) 3 SCC (Cri) 417]

[35] The Hon'ble Apex court in May 2008 set up a three member Monitoring Committee, headed by Justice K. T. Thomas- retired judge Supreme Court of India.

[36] Common Wealth Human Rights Initiative, Compliance with Supreme Court Directives on Police Reforms, https://www.humanrightsinitiative.org/publication/police-accountability-too-important-to-neglect-too-urgent-to-delay-supreme-court-directives-on-police-reforms Last accessed 10-03-2021.

[37] Mahapatra Dhananjay, 'SC pushes for police reforms', The Times of India, 2010 1.

five.[38] The data revealed clearly reflects the inadequacy and ineffectiveness on the part of the state governments. This analysis graded the States and Union Territories on compliance of the five directives. Directive four and directive seven have not been considered as because, assessing the compliance of separation of investigation and law and order function under directive four will require an empirical study whereas directive seven i.e. set up of National Security Commission falls within the purview of the centre.

STATISTICS ON COMPLIANCE WITH SUPREME COURT DIRECTIVES ON POLICE REFORMS[1]

Non-compliant, partially compliant and compliant

←Directives→

	1	2	3	5	6a	6b
	State Security Commission	S&T of DGP[2]	S&T of other officers[3]	Police Establishment Board	SPC Authority[4]	DPC Authority[5]
Andhra Pradesh	Partial	Partial	Compliant	Partial	Compliant	Compliant
Arunachal Pradesh	Non-compliant	Compliant	Compliant	Compliant	Compliant	Non-compliant
Assam	Non-compliant	Non-compliant	Non-compliant	Non-compliant	Partial	Non-compliant
Bihar	Non-compliant	Non-compliant	Non-compliant	Non-compliant	Non-compliant	Non-compliant
Chhattisgarh	Non-compliant	Non-compliant	Non-compliant	Non-compliant	Partial	Non-compliant
Goa	Non-compliant	Non-compliant	Non-compliant	Non-compliant	Partial	Non-compliant
Gujarat	Non-compliant	Non-compliant	Compliant	Non-compliant	Non-compliant	Non-compliant
Haryana	Non-compliant	Non-compliant	Non-compliant	Non-compliant	Partial	Partial
Himachal Pradesh	Non-compliant	Non-compliant	Non-compliant	Non-compliant	Non-compliant	Non-compliant
Jharkhand	Non-compliant	Non-compliant	Non-compliant	Partial	Non-compliant	Non-compliant
Karnataka	Partial	Non-compliant	Non-compliant	Compliant	Non-compliant	Non-compliant
Kerala	Non-compliant	Non-compliant	Compliant	Non-compliant	Non-compliant	Non-compliant
Madhya Pradesh	Non-compliant	Non-compliant	Compliant	Partial	Non-compliant	Non-compliant
Maharashtra	Non-compliant	Non-compliant	Non-compliant	Non-compliant	Non-compliant	Non-compliant
Manipur	Non-compliant	Non-compliant	Compliant	Partial	Non-compliant	Non-compliant
Meghalaya	Non-compliant	Non-compliant	Non-compliant	Non-compliant	Partial	Non-compliant
Mizoram	Non-compliant	Non-compliant	Non-compliant	Non-compliant	Partial	Partial
Nagaland	Non-compliant	Compliant	Compliant	Non-compliant	Partial	Non-compliant
Odisha	Non-compliant	Non-compliant	Non-compliant	Non-compliant	Non-compliant	Non-compliant
Punjab	Non-compliant	Non-compliant	Non-compliant	Non-compliant	Non-compliant	Non-compliant
Rajasthan	Non-compliant	Non-compliant	Non-compliant	Non-compliant	Non-compliant	Non-compliant
Sikkim	Non-compliant	Non-compliant	Non-compliant	Non-compliant	Non-compliant	Non-compliant
Tamil Nadu	Non-compliant	Partial	Non-compliant	Non-compliant	Non-compliant	Non-compliant
Telangana	Non-compliant	Non-compliant	Non-compliant	No information	Non-compliant	Non-compliant
Tripura	Non-compliant	Non-compliant	Non-compliant	Non-compliant	Non-compliant	Non-compliant
Uttar Pradesh	Non-compliant	Non-compliant	Non-compliant	Non-compliant	Non-compliant	Non-compliant
Uttarakhand	Non-compliant	Non-compliant	Non-compliant	Partial	Partial	Partial
West Bengal	Non-compliant	Non-compliant	Non-compliant	Non-compliant	Non-compliant	Non-compliant

[1] Source: Commonwealth Human Rights Initiative url: https://www.humanrightsinitiative.org/publication/assessment-of-compliance-with-supreme-court-directives-on-police-reforms-state-compliance-note (Last Accessed: 16/01/2021)
[2] Selection and tenure of Director General of Police
[3] Selection and Tenure of other officers
[4] State Police Complaints Authority
[5] District Police Complaints Authority

State Security Commission (SSC): Directive one recommends for the establishment of state security commission and the states which have not complied with the norms have been marked as non-compliant. Out of 28 states only Andhra Pradesh and Karnataka have made the composition of the state security commission binding. The commission serves the purpose of ensuring unwarranted ascendancy or impact on state police personnel by the state government. In India 1:3 police personnel experience political pressure during investigations and noncompliance to the pressure leads to transfer.[39]

Selection and Tenure of Director General of Police: 93% of states do not comply with the

[38] Commonwealth Human Rights Initiative, Government Compliance with Supreme Court Directives on Police Reforms: An Assessment (2020) < https://www.humanrightsinitiative.org/publication/assessment-of-compliance-with-supreme-court-directives-on-police-reforms-state-compliance-note> Last accessed 11-03-2021.

[39] CSDS, C. C. (2019). *Status of Policing in India Report 2019.* New Delhi: Common Cause & Lokniti – Centre for the Study Developing Societies (CSDS).

directive mandating minimum tenure for DGP. Only Arunachal Pradesh and Nagaland fully comply with the directive. In a recent case before the apex court, Senior Advocate Raju Ramachandran mentioned that states are taking advantage of the court's direction to favor officers of their choice. Senior Advocate KK Venugopal further pointed out that in some cases officers are appointed as DGP on an interim basis and on the last day of their service they are made permanent and thereby extending their service for additional two years. The court then upheld that the DGP must have two-year tenure irrespective of the retirement age. The apex court further noted that the police officers empanelled for the post of DGP shall be a residual period of retirement of at least six months.[40]

Selection and Tenure of Other Officers: Most of the Indian states have complied with directive 3 which deals with minimum tenure of two years for Inspector General of police and other officers.[41] The minimum tenure of two years has been introduced to ascertain operational autonomy and limit political interference.

Police Establishment Boards (PEB): Police establishment boards are to decide on transfers, postings, promotions and other service related matters of police offices. All states except Telangana have constituted PEB but Arunachal Pradesh and Karnataka fulfil the criteria of composition, function and power of board.[42]

Police Complaints Authority (PCA): PCA at state level and district level inquiries into public complaints against police officers. Ten states have made PCA recommendations binding of which Andhra Pradesh and Arunachal Pradesh fulfils the criteria of composition, function and power of the authority. Eight states have specified a selection panel for the selection of independent members of PCA. The recent incidents of police torture and abuse have forced us to rethink on the role and importance of PCA in India.

The Union Territories, except Delhi have non-complied with most of the directives. The Ministry of Home Affairs has constituted one state security commission for Delhi and another separate for all the Union Territories. Furthermore, since the abrogation of Article 370 in 2019 the center has not issued any order for the implementations of the directive of the apex court.[43]

IV. CONCLUSION AND SUGGESTIONS

---

[40] Times, H. (2019, March 01). 'Minimum 6-month residual period of retirement a must': Supreme Court. *Hinduatan Times*. Retrieved January 17, 2021 from https://www.hindustantimes.com/india-news/minimum-6-month-residual-period-of-retirement-a-must-supreme-court/story-MwsYzaakRZUEYcORxBYnsO.html Last accessed 13-03-2021.

[41] CSDS, C. C. (2019). *Status of Policing in India Report 2019.* New Delhi: Common Cause & Lokniti – Centre for the Study Developing Societies (CSDS).

[42] *ibid*

[43] CSDS, C. C. (2019). *Status of Policing in India Report 2019.* New Delhi: Common Cause & Lokniti – Centre for the Study Developing Societies (CSDS).

The Internal Security of the country and protection of rights of the people are of utmost importance and cannot be compromised with. An effective police force is needed to tackle all such threat. And for that, the police force needs to be efficient, effective and technologically well-equipped. Contemporary progressive egalitarian society also demands an independent police force. While it cannot be denied that political interference is the bane of independent police functioning. The panacea to this problem is the "Police Reforms", which have been debated without any effective results. Despite recommendations of several committees, no substantial change can be noticed. This reflects the lack of political will and adamancy on the part of the bureaucracy in implementing the directives. Neither the bureaucrat nor the politicians want to do away with the control over the police. The lack of clarity in control over the police under the Police Act 1861, enables the politicians to use the police force for their vested interest. This concern needs an immediate address by both the state and central government. We all need to understand that this ramshackle condition of the police force may have a severe impact on the security and integrity of India. This is the high time to transform from "Ruler's Police to People's Police".[44]

[44] Singh Prakash, 'Listen to Supreme Court: Police Reforms are necessary to change it from a colonial to people-friendly force', Times of India, September 19, 2018.

NOTES

NOTES

NOTES