

SUSTAINABLE TECHNOLOGY & HUMAN ENVIRONMENT

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ABSTRACT:

As we move ahead into the twenty-first century, especially through the unfortunate historic period of COVID-19, we see innovation assuming an undeniably significant role in each feature of the global and national existences of the individuals. The world subsequently foresees a portion of the grave issues that propels in innovation will posture for the orders of law, technology and human rights. Truth be told, it now appears to researchers who are currently taking an expanding enthusiasm for this point, while science and innovation are dashing ahead, basic human rights are looking on defencelessly from the side-lines in light of the fact that there is almost nothing a person can do to coordinate the speed of innovation and protect his private space at the same time. Law moves gradually, while innovation moves with lightning speed. The outcome is that innovation is dashing out of lawful control. In result, there can be grave harm to human rights. It is conceivable to take a gander at innovation in a sort of all-encompassing study and see that almost every aspect of our lives is being encroached by innovation and technologies. The present research article is a sincere attempt to analyse the impact of technology on human environment and basic human rights, particularly in light of the fact that we are moving into an innovation based technologically driven era.

INTRODUCTION:

The conventional conviction was that the quest for knowledge is the ultimate purpose of human existence. Scientific temperament, which was the quest for information, was the handmaiden of opportunity. The more scientific research resulted into more information for human utility. Somewhere we developed a common conscious that whatever science does is to serve humankind. This view gained momentum with time and became a conviction that picked up acknowledgment, flourished and developed. During the last few decades, scientific investigators go further and say that there are three estimations of science, three significant attributes of science. As a matter of first importance, science carries pious esteem; secondly, science is objective and is goal; and third, science is universal in nature. These were astonishing convictions. With the passage of time, without any obstacles, science surged ahead. Another goal of science has emerged: to find a way to rationally use natural resources

to guarantee their continuity and the continuity of humanity itself; an endeavor that is currently referred to as “sustainability”.¹

SCIENCE FORDIABOLIC REASONS:

Every scientific discovery or philosophy is accompanied with reasoned criticism. At one point, the scientific temperament itself carried some nagging doubts from the society in general and from religious heads in particular. The detestations of the concentration camps made the whole world see that science could be utilized for devilish purposes also. Science has not always been a companion of progression. The developed nations pursuit for power and control has shown that science could be utilized for inverse purposes also. During the late 60's, there was a lot of contemplation about this unfavorable thought. In these conversations about the impacts of science, there were two perspectives that except, if something rather exceptional is done, under the authority, or through the motivation of some piece of the logical world. The humankind will race to its devastation in obliviousness of the destiny. These were the obvious doubts were questions with regards to the advantages of science are raised frequently. Science is acceptable; however, science needs to be sustainable and in accordance with individual privacy and environmental upliftment. A study shows that, 51% of scientific knowledge of the world is being utilized for the assembling of combat hardware and weapons. Just 1% of the world's logical aptitude was utilized for tackling issues of the creating scene. Many such report, news and articles are frequently appearing and thereby creating public awareness.

EFFECTS OF SCIENTIFIC DEVELOPMENT ON HUMAN ENVIRONMENT:

Human beings have been inventing things since time immemorial. Invention of a wheel was once an invention of time. where the initial inventions contributed towards comfort and satisfaction of basic needs of us human beings. But the later technological advancements were inclined towards the pursuit of knowledge, the greed for power and money, and the need to be competitive. In the journey we not only caused a great amount of injury to planet Earth but also to ourselves. The most recent Contribution to the unfortunate and disintegrative technologies is far reaching and out of control use of computers, internet and mobile phones. These scientific developments are also termed as beast innovations by some. Results in technological advancements like these put an individual in a super productive mode and give him feeling of omnipresent. These advancements may be beneficial

¹ EMBO Rep. 2014 Sep; 15(9): 919–922, Published online 2014 Aug 18;
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4198034/> (last visited 28/05/2020)

up to some extent but Their excessive use and misuse main cause catastrophe specially in in developed and developing Nations.The table below shows the impact of technology and its impact upon environment in the past 200 years.²

Global changes caused by human activities during the past about 200 years³

Item	Causes	Sources	Consequences	Net Planetary Effects
Global Warming	CO ₂ & urban emissions	Power plants, factories, vehicles etc.	Climates' changes, other changes	Pre-industrial: 280ppm; Present CO ₂ : 400ppm
Ozone holes	Flouro-carbons	Emissions& Chemicals	Harming radius. reaching Earth	Global, partially controlled
Warming of oceans	Global warming	Climates' changes	Affects biotas	Global
Erratic weathers	Changing climates, Global warming	Loss of climatic equilibrium	Water problems., diseases, loss of farm prods. etc.	Varying globally
Rise in sea levels	Rise in ocean temp., melting ice	Global warming	Coastal flooding, many losses	- do -
Acidification of oceans	Decreasing pH, changes. in biosphere	Uptake of CO ₂ , human actions	Loss of biodiversity & fisheries	Global & destructive
Poll. of lands, waters, atmos.	Emissions, human actions	Mass productions, consumptions	Loss of health & habitats	Mainly urban & atmospheric
Mass productions, urbanization, consumerism	Misuses of technology, profiteering etc.	Greed & wasteful living	Loss of nat. resources, habitats, good health	Firstly, urban with secondary effects
Profiteering, luxuries, wasteful lifestyles	Sectorial lifestyles, lack of social balance and integrity	Greed & alienation from nature	Destruction of health, family, society & environment	Loss of human civilization, extinctions

Case Study:⁴

²<http://atozofliving.org/misuses-of-science-and-technology.html>(last visited 31/5/2020)

³<http://www.atozofliving.org/modern-dynosaurs.html> (last visited 31/5/2020)

Before the factories were built, there were many fields with vegetables growing. In 1958 the Baotou Iron and steel company started to produce the minerals. In the 1980s the local people noticed that their vegetables would no longer grow, and over time farming decreased. Most of the farmers have moved away. In just 10 years the population has dropped from 2,000 to 300 people. Residents of Baotou were inhaling solvent vapor, particularly sulphuric acid, as well as coal dust. The local population have also suffered physically.

INNOVATIONS AND LAW

We as a whole realize that innovation has become an inevitable part of human existence. In any case, its continually intriguing to see exactly what Impact these progressions are having on our up and coming generation of laborers, wealth creators and law makers. It is stunning to see how improvement in innovation have, on a very basic level, influenced use around the world. The trouble in foreseeing what Technology is going to get on, and the effect such innovation will have on society, is self-evident .However, another intriguing issue is the thing that sway innovation will have on the Law .The customary mantra is that innovation changes so quickly for the law to keep up. Governing bodies are unable to foresee mechanical changes and manage the legitimate issues that such changes make. However, at times legislators have endeavoured to predict innovative advancements regularly and regulate them.

TECHNOLOGY AND INFRINGEMENT OF HUMAN RIGHTS

With the ever-increasing technological advancements, the courts in India seems to be struggling with the issue of technicality of subject and lack of legal provisions thereto. For instance, over the most recent two decades we have seen the evolution of trans-science and is abrogating on the science. Like physical science taught us that an individual is brought into the world and made capable. But now in trans-science he is made capable and afterward conceived. Genetic engineering, also called genetic modification or genetic manipulation, is the direct manipulation of an organism's genes using biotechnology.⁵ Indian legal system covers only with the circumstance as like basic sciences. Now is the high time to investigate and enact laws more suitable to current scientific developments.

⁴Industrial Waste : Inner Mongolia, Environmental Impact Case Study; Nevena Stoilkov, The Impact of Pollution on Our Planet and Our Lives; <http://cdn.worldslargestlesson.globalgoals.org/2016/06/18-The-Impact-of-Pollution-on-Our-Planet-and-Our-Lives.pdf>(last visited 31/5/2020);

⁵Desmond S. T. Nicholl, An Introduction to Genetic Engineering, Cambridge University Press (2002)

The court in India are not all layman in adaptation and understanding to science and technology. The last few decades saw acceptance of techniques such as- lie detector tests, brain mapping, narco analysis, DNA testing, forensics, pathology etc. by the judiciary and investigating agency. These techniques have become common tools for investigation of crime causation and delivery of justice. Other scientific developments which, though unnatural, are recognised and widely accepted by the social-legal setup. Some of these are- surrogacy, test tube baby, artificial insemination, sperm bank, posthumous reproduction etc. All these advancements are quickly building up the so-called future generation. And yet these advancements likewise end up being the explanation behind disregarding the human rights and environmental degradation.

WEAPONS, SCIENTISTS AND LAW

Majority of the scientific brains today are working with one common object i.e. to strengthen their nation or organisation and to suppress and surpass others. One of the ways of achieving this object is by working in the area dominating the world like- weaponry, medicine, communication and data analysis etc. though the scientific achievements are appreciated and promptly accepted, the same are criticised for causing harm to environment and human rights, irrespective of degree of interference. Different types of weapons cause different types of pollution. Atomic and Nuclear weapons discharge various types of vitality. The huge impact (stun) wave, the extreme warmth beat, and the infiltrating radiation. The natural effects of these discharges are thought of, particularly the consequences for the world's outside layer, the stratosphere and earthly biological systems. Chemical and biological weapons are exemplified by CS gas for a substance annoying specialist, VX for a deadly manufactured operator, botulinum poison for a synthetic operator of biotic cause, Bacillus anthracis bacillus for a bacterial operator, and yellow fever infection for a viral operator. The natural impacts of each are devastating. Geophysical and ecological weapons are equally dangerous and can cause severe human and property loss.⁶

INTERNET & ABUSE OF HUMAN RIGHTS:

Development in science and technology give chances to elevate human rights and to forestall circumstances where rights are damaged. For instance, some human rights protection organisations are utilizing the Internet to report misuses and fabricate popular feeling;

⁶Arthur H. Westing, Weapons of Mass Destruction and the Environment, Taylor & Francis ISBN 0-85066-132-3 (1977)

satellite images or surveillances can be utilized to distinguish indications of terrorist activities, decimation, refugee movement and exile developments; new genetic innovations have genuine human right improvements; and expanded utilization of computerised databases with individual data have suggestions for the privilege to privacy.

FORENSICS AND HUMAN RIGHTS:

Forensic science established upon great science and practice, give an innate protect to human rights. Professionals are all around set to maintain major and longstanding rights, for example, 'the privilege to a reasonable hearing'. Our capacity to grasp other rising rights, in any case, is less clear. The expanding ambit and remit of measurable science is a reason for expanding social, legitimate and moral concerns. Besides, there is an intrinsic strain between the thought of 'significant worth free logical technique' and the clashing directs of government strategies, which look to perceive and secure more prominent strict, ethnic and social opportunities while being progressively dependent upon legal science in the recognition, anticipation and arraignment of guiltiness. Forensic science alongside logical techniques is used for documentation and investigation of criminals and survivors of abominations. Even the apparatuses are the causative factor for infringement of human right. Forensic environmental sciences are the use of faultless logical techniques to deliver addresses identified with discharge of contaminations in environment. In the two boundaries, the compound state of nature i.e. the foundation or pattern, is a focal piece of any examination. Demonstrating the core innovation execution of a scientific situation on data configuration is a decent beginning stage with respect to the fundamental prerequisites for a forensic lab innovation work out. Extra thought should be given to the worldwide and individual workspace components of innovation arrangement unequivocal to the requests of an information criminological activity.⁷

SOCIO-LEGAL AWARENESS ABOUT VIOLATION OF HUMAN RIGHTS:

Though the idea of human rights is ancient to Indian civilisation, it got recognition and is developing more than a few hundred years in the western society. Today, worldwide, territorial, and national laws, understandings, and affirmations have been received to secure and advance human rights. With the assistance of new innovations, consciousness of human rights mishandles has expanded, and open affectability to individuals has developed.

⁷Computer Forensics in Today's World, The Official CHFI Study Guide (Exam 312-49), 2007;
<https://www.sciencedirect.com/topics/computer-science/forensic-environment> (last visited 31/5/2020)

Simultaneously, there has been an exponential growth in the number of nations causing torment, abuse, and different types of human rights infringement, as indicated by the human rights organisations like Amnesty International. The enquiry of who controls and utilizes on choices about the utilization of new technological advancements is integral to understanding their human rights protection and requires investigating the duty of researchers, governing bodies, and the general population. There is a developing number of gatherings attempting to protect human rights. Human Rights Internet, an association that has followed human rights non-administrative associations (NGOs) for more than 20 years.

LAWFUL PROVISIONS FOR HUMAN ENVIRONMENT & SUSTAINABLE TECHNOLOGY:

The Indian legal system has enacted some specific statutes and incorporated some provisions in existing statutes for the protection of human privacy and to regulate technological advancements. Law has given some established arrangements managing certain standards for assurance to the human rights. The six laws related to environmental protection and wildlife IN India are- The Environment (Protection) Act, 1986, The Forest (Conservation) Act, 1980, The Wildlife Protection Act, 1972, Water (Prevention and Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution) Act, 1981 and The Indian Forest Act, 1927.⁸ Apart from these special statutes, the Indian legal system also contains certain provisions relating to sustainable development and human environment in some general statutes like the Constitution of India and the Indian Evidence Act.

Article 20(3) of Indian Constitution ensure that "No person accused of any offence shall be compelled to be a witness against himself".⁹ Simultaneously, Art. 21 of the constitution ensure, "No person shall be deprived of his life or personal liberty, except according to procedure established by law".¹⁰ So Indian constitution is extremely clear with respect to the self-implication.

Indian Evidence Act contains, the standards with respect to evidence to be taken and its incentive in the eye of law. Sec. 45 of the Act, speaks about expert opinion as- "when the court has to form an opinion upon the point of Foreign law, or on science, or on art or as to identify handwriting or finger impression, the opinion of any particular person especially

⁸ Anupam Chakravartty, Six environmental laws to be amended soon, DownToEarth (07 July 2015); <https://www.downtoearth.org.in/news/governance/six-environmental-laws-to-be-amended-soon-49317>

⁹ Article 20, The Constitution of India

¹⁰ Article 21, The Constitution of India

skilled are relevant facts”¹¹. This section presents the fact the court may rely upon the scientific skills and opinion of an expert while deciding the case. Sec. 112 of the Act, raises an assumption in regards to legitimacy of marriage, if a child is conceived within 280 days of disintegration of marriage, mother staying unmarried, it tends to be indisputable evidence that he is an legitimate child of that man, except if it very well may be demonstrated that the spouses had absolutely no contact with one another when the child would have been conceived.

CONCLUSION:

The object of science and technology is to offer support to humankind and has always touched this expectation. However, at the later stage, the scientific development has also been misused and encroached into the very fabric of human privacy and environmental cycles. This can be demonstrated by the experience looked by those individuals who for all intents and purposes were or are the piece of current science tests or the innovative tests. The pace with which scientific progression is taking place, it is causing alarm in the general public. The human rights violation is skipping the eye of law and order on account of the difference in measurements of human rights. The security of human rights is not asserted, as they are not characterized in accordance with the current scientific developments. Consequently, it is a high time to re-evaluate the existing socio-environmental provisions with special reference to the use of technology for human satisfaction, pious or otherwise.

Contaminations, a worldwide temperature alteration, biodiversity extinction, obliteration of living spaces, urbanization, serious diseases and so on are brought about by polluting ventures, large scale production houses, profiteering, industrialism and oppressive approaches and policies of various areas of economics and governments. Riches amassing by people, commercial organizations and countries and their strategies and projects to continue the financial and domineering powers are essential explanations behind these worldwide shades of malice. Abuses of sciences and innovations by numerous specialists, organizations, organizations and countries are fundamental driver of the over two worldwide improvements which changed (and still change) ways of life, propensities, living spaces, wellbeing, residents and societies. Socially fit and sound life cannot be dangerously fast and needs to be slow and gradual. Universal and complex nature of this worldwide breaking down is disturbing and many had anticipated worldwide catastrophise. One such catastrophe that we

¹¹Section 45, The Indian Evidence Act, 1872.

see today is COVID-19. Blindfolded or fanatic mentalities of legislators, pioneers and governments are compromising life, privacy, biological systems of present and future generations. Dangerous changes to atmospheres and biotas began around 50 years back and may cross recoupable levels within next 20-25 years. The vulnerabilities are natural and unavoidable because of worldwide disarray and this itself requires dire activities. Mass terminations and annihilation of human civilisation is anticipated by numerous researchers, futurologists and moralists. The pitiful truth is that these are brought about by people through their liberal and super-quick ways of life, social and administrative disorder and coming about disasters.

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