Urban Governance, Crime and Cyber Security in Developing Nations: Issues and Challenges

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Abstract

According to United Nations (U.N) 1970, "Towns, industrial growth, migration, technical advances and a willingness to take risks are all indicators or reflectors of a country's level of economic and social growth. They seem to serve equally well as indicators or reflectors of crime". By the end of 20th century, growth and development are the main focus and important subject in criminological research. Modernization theories have truly given the prevailing perspective of the increase in crime. This kind of study first started by the European researcher Emile Durkheim who says that the increase in economic activities creates various unrest which increases many ways to commit crime and increases different stages crimes. This paper inspects various details of the cyber crime in the urban areas and how globalization and modernization influenced the cyber crime in developing nations and also tries to address the gap between the crimes related literature and globalization and articulating developing nation's agenda in the process of urbanization.

Keywords: Criminological, Globalization, Industry, Migration and Urbanisation.

INTRODUCTION

Establishment of the United Nations after the second world emerged as the fundamental theme main-stream globalism thinking link between crime, economics and development. Di Christina (2016) identifies few reasons and conceptions of anomie form Durkheim's work.

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- Rapid transition or transfer of economy, from agriculture-based economy to financial and industrial based economy will make new rule and regulations in the given society and tries to legitimize the new rules, which is inadequate regulation

- Sudden shift in financial development leaves people with unsatisfied aspirations and mostly desires will not be satisfied by the means available to them.

- Modern financial lifestyle again constitutes by the inadequate regulations by human desires.

- Lack of accuracy and weakening of common consciousness of the society.

- Erosion (change) of principles as form of societal regulation.

"The link between criminogenic and economic development was emerged as important subject

of global crime governance in the second U.N congress on the prevention of crime and Treatment of Offenders in 1960. An official report by Indian criminologist JJ Panakal and Egyptian criminologist AM Khalifa tiled the Prevention of Types of Criminality Resulting from Social Changes and Accompanying Economic Development in Less Developed Countries illustrates the influence of Durkheim's idea, the report states that Economic development and any basic changes in the economic structure unavoidably tend to bring the changes in organization. First it affects the economic and financial system although technology may be introduced at most basic level, it will influence the existing social patterns, values and long-established form of behaviour. In some cases, it may, affect society unfavourably and it leads to clash between the traditional way of life and newly industrial environment". Modernization is introduced in these types of disruptions. Individual may fail to adopt these type changes introduced by the modernization which is socially unacceptable norm to the him/her in extreme cases individual tend to commit crime. During this transitional period, economic development and societal transformation occurring at the same time it may give rise to few social troubles which needs to be dealt with, like result of this impact or action of new values on traditional ones. "The relation between development and crime having distinctive aspects subsequently shown on third and fourth United Nations congress on the prevention of crime and Treatment of Offenders held at Stockholm 1965 and Kyoto 1970. Manuel Lopez-Rey and Hermann Mannheim are notable scholastic participants. The congress which sought to bring criminal justice practitioners from both developing and developed nations for the purpose of articulating and spreading widely 'social defence policies' for avert and shouldering social uncertainties ascribe to economic development. American criminologists Marshall Clinard and Daniel Abbott published 'crime in developing countries' (1973) which mainly focuses on the fieldwork done in Uganda". Echoing the foregoing U.N reports widely started to accept that increases in the crime rate in number of countries and considered as the natural damage occur with the modernization. Property related crimes became more prominent in developing nations, till then post-colonial nations have very less crime rate related with property. When people in urban areas seek more and quick acquiring the property the people tend to commit the crime.

- The people who migrated rural-urban based have hard time adjusting with urban settling, in the era of rapid urbanization many of the residents are aliens to each individual.

- Many of lawbreakers are lacking of formal job opportunities in the labour market and tend to gain from any unauthorized means which are accessible.

Slums are increasing due to globalization and urbanization and most crime concentrated thorough slums. Rate of crime also depends on level of cultural homogeneity. According to 'Clinard and Abbott' (1973) suggested that modernizing nations should also consider policy related reduction of crime, while planning for growth and developing nations should be ready to bear the cost for progress increase in crime rates. Shelley (1981) Modernization theorist assumed that most of the nations in global south may observe the same transfer or changes experienced the developed countries in nineteenth century and she viewed that unofficial societal restriction was decreased through modernization, because of urbanization many disturbance arise in the urban family and traditional values; causing unavoidable disturbances which causes increase in rate of crime. But most of the Modernization Theorists and thesis considered that developing nations would develop in the same way such as the developed nations ignoring fact that they are different social conditions and they try to apply the western theories crime to developing nations. According to Soares (2004), in "Development, crime and punishment: Accounting for the international differences in crime rates" found that reporting crime was in way positively linked such as with the increase in the modernization people tend to believe in government institutions and will report crime happenings, rise in inequality is also a one of the major reason for increase in rate of crime. Liu's (2004), in "Social transition and crime in China: An economic motivation thesis," views historical methods of the development economic organisations in china showed how china modifying the cultural values creates new financial motivation to crime in few contexts. However, his analysis disagrees with views that Modernization caused the weakening of traditional institutions such as family. Currie (1997) in "Market, crime and community: Toward a mid-range theory of post-industrial violence," has viewed to the reforms formed due to the globalization have their share in increasing crime rate and violence in both development and developing nations encouraging the intense feelings of insecurities and inflicting crime

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reduction policies. He identified few criminogenic components of market societies:

- Continuous destruction of traditional income sources, increase in the gap of income and economic equality and unavailability of basic things.

- Privatization of public manufactures and services affects large portion of the urban resident. Lack of information, chaos, over prized private basic goods cause unrest in particular areas.

- Increasing the commercialization and consumerist views towards society, notified cultural shifts, increase the informal medium scale industries can led to violence and crime.

- Individualistic approach rather group or community led approach.

- Currie anticipates that "rise in crime would be huge because foundational adjustments and other rigorous policies would be aggravating the harm trigger by mercerization. Inversely he justifies that these rises would happen more solely in nations throughout the developed nations because of their accustomed and industrialized culture of societal welfare that try to govern the social crimes caused by market policies and iatrogenic influence of rough and ineffective justice systems, has also furnish to increase violence across the world (Jarrett Blaustein, 2018)".

Owing of fact that outspread of colonialism in the past centuries and spread of modernization and globalization mostly to every territory of the world. Spread of colonial globalization and modernization, made newly advanced world structure of criminal justice started expand to developing nations. This newly formed world structure of criminal justice stretched out in various degrees and depths from Honduras to Hong Kong, Jamaica to Jakarta, Kenya to Calcutta. "New criminal justice in the developing world was the extension of modern criminal justice in developed nations like France, England, Netherlands, and Germany (Ward, 2000)". New criminal justice was introduced in colonial nations by destroying the medieval criminal justice, new law institutions and law enforcements were formulated. (Nijhar, 2009). New model judiciary were formed, structure of prison and punishments were modified research and advancement of criminology started to increase. "New common laws were started to emerge colonization like Government of India Act 1858, Indian code of Criminal Procedure of 1898,

Indian Evidence Act of 1872, Indian police Act of 1861, Indian Penal Code of 1860, Indian Code of Criminal Procedure 1882, by these documents of British colonial India criminal justice system remains unchanged nearly one hundred and fifty years in British colonized India presently Pakistan, Bangladesh, and India". Some of above laws are still followed by the developing nation to the present day. Due to Globalization and modernization in last few decades many crimes have increased around the globe and in between the transnational boundaries like Human trafficking, sex tourism, trading of illegal drugs, illegal trading of weapons, black marketing cultural artefacts, cyber-crime and terrorism. 'Golden Crescent' in Afghanistan and 'Golden Triangle' of Myanmar, Thailand, and Laos, are the gateways of transnational criminal gangs in South Asia. In criminology, research between space and crime, urban growth and crime have been an oldest tradition. Calhoun in 'Population Density and Social Pathology' found that shortage of space generates unpleasant group interactions, and unpleasant group interactions are tended to create hassle and tension. In the intelligent world of shred criminal tends to look suitable place to commit crime which most densely populated areas or urban areas (Shahidullah, Crime, Criminal Justice, and the Evolving Science of Criminology in South Asia, 2017).

Significance of the Study

The study, in order to understand the importance of rapidly growing dependence on the internet and interest related things, digital technologies became convenient to the people but it also brings some major problems and challenges .Today the internet has become one of the many integral parts of human life and these revolutionary changes made it more convenient and more dangerous as well, everything depended on the internet and all these together formed cyberspace as a very effective domain. Human relations, survival and economic growth of any country can't be seen without the internet and without being dependent on the internet. All our critical information such as banking systems, water supply, power grids, transportation and communication systems depend on this digital field. In cyberspace attribution is also a major problem meanwhile many fraudulent actors are trying to intrude into our networked systems to cause damage and disrupt the activities of individuals and governments. In cyberspace actors might be individuals or groups of people. Countries also try to dominate their adversaries

by using this cyberspace effectively, for that they are developing cyber defences as well as offensive capabilities in order to prove their dominance and all these developments can lead to a war in this new battlefield. Generally cyber defensive techniques were there but countries like the USA and China started focusing more on developing cyber offensive capabilities. The future war definitely will be in cyberspace only because without its involvement there is nothing going to happen so this paper analyses the possibilities of applying deterrence in cyberspace and its consequences, how these capabilities benefit them and how it helps in becoming the superpower in cyberspace.

Research Problem

A lot has been researched, discussed, debated and reviewed about the future wars and current cyber-attack happening around the globe. These highly advanced technologies have changed the nature of warfare. Amidst all these current situations each and every country started developing their defensive capabilities to protect themselves from impending attacks, At the same time countries also trying to Establish offensive capabilities to deter their enemies to do against their will. However, this paper studies the entire scenario keeping in mind the changing nature of the wars and how it influences countries, the implications of any cyber-attack will be unpredictable and not precise. One of the main reasons for this study is that these cyber weapons codes and malware have the power to cripple any country's economy and the number of actors is growing every day because it contains anonymity. Future of cyberspace will be occupied with cyber wars and these wars impose large effects on society. In the game of power, competitiveness among the nation states will lead to cyber war. This paper analyses the growing importance of cyber domain and explains the deterrence which tries to reduce harm.

Objectives of the Study

Keeping everything above mentioned all focus areas in mind, the objective of the research is:

To understand the relevance and core concepts of cyber security in the civil and military domain as well to review the latest research done on cyber security, cyber war and cyber warfare and identifying what reasons for committing attacks and critically analyse India's position in cyberspace and India's policies and preparedness. To examine and assess whether or not credible cyber

deterrence is applicable in cyberspace. To analyse the implications of deterrence in cyberspace and finding the operational challenges existing in cyberspace.

Research Questions

The present study tries to answer and analyse the following research questions:

1. What made governments to concern more or prioritise cyberspace as the most significant domain of warfare in future.

2. What will be the both positive and negative impacts of applying deterrence in the cyber domain?

3. Why cyber warfare has been assumed as the greatest threat to a nation's critical infrastructure and more dangerous than other domains of warfare.

4. What measures should be taken to tackle the high costs of cyber-attacks and what allows governments to make international common laws.

Hypothesis

On the basis of available literature on this topic of the study, a few assumptions can be made. The very fundamental rule of deterrence is to reduce the risk by rewards but ethical cyber warfare can't be established in this dynamic constantly changing circumstances. It becomes difficult to trace out the origin of any attack because it doesn't show any geographical location and when it is cheaply available everywhere then different actors use it for different purposes. It is very complicated to negotiate with the intruders for any compromises. Deterrence in cyberspace is far different from deterrence in other domains because in nuclear Deterrence we can estimate something by situational awareness but in case of cyberspace it becomes very difficult. Nothing can be decided in favour of anyone in this virtual field because everyone is unaware of others capabilities. Cyber-attacks might be motivated politically and economically; these result in acquiring a greater position in the international community.

Methodology

For the purpose of the study which is qualitative in nature, descriptive and analytical methods are used and the analytical method involves the analysis of secondary resources and readings. All available

readings including reputed journals, newspaper reports and previous thesis related to the topic have been referred and cited. Keeping everything in mind cyber warfare is an interdisciplinary subject, journals from other disciplines like law and international relations and defence studies are also used and also very commonest internet search engine such as Google has been used to search for cyber related words.

Global Cyber-security Agenda (GCA): GCA is a worldwide system for dialogue and global collaboration to facilitate the universal reaction to the increasing challenges to cyber-security and to upgrade certainty and security in the Information world. It expands on existing work, activities, and associations with the target of proposing worldwide procedures to deliver the present moves identified with building certainty and security in the utilization of ICTs. Global cyber-security agenda has few goals base on five important areas:

- Legal Measures
- Technical and Procedural Measures
- Organizational Structures
- Capacity Building
- International Cooperation.

The battle against cybercrime needs a more diverse approach. Given that specialized estimates alone can't avert any crime, it is important that law-making authority is permitted to research and indict cybercrime adequately.

Cyber Security is ensuring the internet including basic data framework from assault, harm, abuse, and financial secret activities. cyberspace: A worldwide area inside the data environment comprising of the reliant network of data innovation frameworks, including the Internet, media communications systems, PC, and installed processors and controllers. Cyber-security cannot be ignored because lack of cyber-security lead to problems of various kinds like, Individuals Photos, recordings, and other individual data shared by a person on long-range informal communication locales can be improperly utilized by others, prompting genuine and even dangerous episodes; Companies have a great deal of information and data on their frameworks. A cyber assault may prompt loss of serious data, (for example, licenses or unique work), loss of representatives/clients' private information bringing about complete loss of open trust on the respectability of the association. State or Local government keeps up a gigantic measure of private information identified with the

nation (geological, military-vital resources, and so on.) and residents. Unapproved access to the information can prompt dangers to a nation. The following few types of Cyber Attacks:

- Malware
- Phishing
- Denial of service attacks
- Man-in-the-Middle (MitM) attack
- SQL Injection
- Cross-Site Scripting (XSS)
- Social engineering

The International Telecommunication Union is a specific organization of the U.N which assumes main role in the normalization and improvement of e-communications and cyber security issues. Budapest Convention on Cybercrime: It is a worldwide arrangement that looks to address the Internet and crimes (cybercrime) by blending national laws, improving analytical strategies, and expanding collaboration among countries. It came into power on 1 July 2004. Internet Governance Forum (IGF): It unites all partners for example government, private area, and common society on the Internet administration banter. It was started from October–November 2006. ICANN: It is non-profit association liable for organizing support to a few databases identified with the namespaces and numerical spaces of the Internet, guaranteeing the system's steady and secure activity. It has its central station in Los Angeles, U.S.A.

Status of Cyber Security in India

Post-1990, Information Technology (IT), power, and telecom part have seen enormous speculations by the private. Infrastructure improvement utilizing private ventures is being sought after in many developing nations including India. India in the 21st century with the advent of the globalization is moving towards different dimensions of development. Development if multi-faceted and should encompass large participation. Novel initiatives have moved towards digitalisation of India, with a dream to inculcate the database of the larger population into digital records. Post 2000 the world has undergone steady transition with transformation into the internet world. The era of cyber space came into existence enabling and supporting legal infrastructure and everyday life simpler. Through the lens of law, cyber laws govern the cyber space of respective states. Cyber space can be defined as larger ecosystem comprising of

interactions between varied networks functions including computers, network, and software data storage devices, internet, e-mail, websites, digital currencies, online money transaction and the devices that enable them function accordingly.

India as a developing nation towards the globalised world with the flow of goods and services around the world, looked through a different angle can be visualised where the high confidential data base also circulates with the click of a keypad. There are numerous tensions arising with the expansion of cyberspace in highly internet consumed population of Indians. In the arena economics and finance, the advent of cyber space and its techno trends has been beneficial in free flow of digital data in high speed but on the other side the challenges of ever-increasing cyber-attacks are not latent rather pro-active.

India is one of the very active global users of internet in the everyday life just beside U.S.A and China. "India has participated in the UN GGE process, where it advocated developing a common understanding on responsible state behaviour in cyberspace and the adoption of confidence building measures by states to address the cyber threats, cyber terrorism and cyber-crimes."India has participated in many conventions, supports the non-governmental efforts such as the global conference on cyberspace, the global commission on the stability of cyberspace to combat the threats of cyber crimes and forming norms on cyber-security. There are various perspectives in managing the cyberspace the facilitation of internet governance, thrust on the capacity building, upgrading the digital economy, elevating knowledge economy onto the cyber dais.

India government through the campaign of 'Digital India' works as a tool to empower the Indian population to digitally enhanced society where the present and coming generation become the torch bearers of knowledge economy. This visionary is not limited within a single section rather covers multi departments and sectors. The vision to encompass the mass population includes the biometric data base of the public AADHAR to the opening of zero balance account 'Jan Dhan Account', covering various initiatives and programmes through the E-governance. India has preferably shown few signal towards the management of internet governance by supporting the requirement of multi state holder in the proper functioning and regulating. The emphasis off digital economy in highly vulnerable economy like India was challenging at the beginning but with the passage of time, proficient programmes and initiatives the public indulged and maximum participation ensured.

The concern elevates with the cyber-threats cringing the cyberspace arena. Here the thrust should be on maximum capacity building. Handling cyber-security is not cakewalk today, the regulation of cyber-affairs and handling of digital database should be confidential and expert handled the threats of cybercrimes in the form of hacking whistle blowing, cyber staking, online fraud and other forms of phishing scams. The victims of these cyber-attacks are never confined to a particular section of India-society rather the digital data prone vulnerability determines the cyber-attack from unseen cybercriminals. India has in order to counter the situations initiated many capacity-building programmes and training programmes. India has initiated cyber diplomacy programmes through bilateral cyber dialogues with several countries and organisations

CONCLUSION

Development and growth involved in taking risks at several levels. Social and economic growth led to have increase in the crime rate. Prevailing perspectives of crime is given by the modernization theories are beneficial in wide range of urban studies. Since 1960 United Nations focused on the reduction crime and congress of United Nations has taken a few preventive measures towards the increasing crime through the framework of prevention of crime and treatment of offenders. It is to be noted that reporting of crime has increased with modernization and development. Globalization tried to bring the changes in the changes in the fundamentalism; the market force which tries to interfere with the traditional values through the rigorous policies has triggered increase in crime rate. Most of the established criminal justice system in developing nations is to be considered as the extension of modern criminal justice from the developed nations.

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