Use of Technology and Police Monitoring in Crime Prevention: A Study of Property Related Crimesagainst Senior Citizens in Eastern India (2014-2018)

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Abstract

With the evolution of modern criminology, digital technology has undoubtedly emerged as a prime tool in the process of prevention/detection of crimes, conviction and reformation. Beginning from Bentham's project of the Panopticonwhich deliberates on the design of a prison and Michel Foucault's ensuingstudy of discipline and the Panopticon as a symbolof institutions and society, modern surveillance technologies like CCTV have today assumed a crucial role in the study of criminology. The present paper seeks to analyze property crime statistics between 2014-2018 from National Crime Records Bureau (NCRB) Crime in India, for the Eastern India states of Bihar, Jharkhand, West Bengal, Sikkim, Assam, Arunachal Pradesh, Manipur, Mizoram, Tripura, Nagaland and Meghalaya and the need for involvement of technology and other measure in crime prevention. The findings tend to indicate that although the crime rates in the Eastern India Sates if less than the rest of India, effective remedial measures in form of greater use of technology and proper police monitoring is required to avert and solve crimes.

Keywords: senior citizen, property crime, surveillance, CCTV, role of police

1. Introduction

The modern society has evolved into a juncture where the younger people study and learn, the middle-aged work and earn and the older people are retired. While in a utopian condition, the elderly ought to get care, support and comfort from their progeny, but in the modern world the concept of considering the maintenance of senior citizens as aduty is dwindling. The elderly

people these days are left to feel desolate and unwanted and they are facing several other social adversities. The senior citizens today are an easy target of criminal victimisation. Elder abuse has become a widely recognized social menace. These contemporary problems are sought to be addressed in the study of human ageing called "gerontology"[1] which is a vast and modern area of researchconsidering the fact that average human age has increasedfrom 52 years in 1960 to about 72 years in 2018 [2]resulting in a significant global population of elderly persons. In India, as per the 2011 Census of India, the senior citizen population stands at a whopping 1024.6 lacs [3].

Considering the necessity to address issues of the senior citizens, the Government of India had framed a National Policy for Older Persons in the year 1999 [4] covering many aspects concerning older persons and mainly to provide conomic security, health care and nourishment, housing, information needs, suitable concessions and discounts etc. to senior citizens and to provide and secure legal rights of senior citizens, particularly to protect their life and property. This was followed by the enactment of the Maintenance and Welfare of Senior Citizens (MWPSC) Act, 2007 which defines a "senior citizen" [5] as being a person aged 60 years of above. But irrespective of policies and laws, the fact remains that the vulnerable socio economic condition of the senior citizens makes them easy victims of various crimes and the statistics from the National Crime Records Bureau (NCRB), which is India's official repository of information on crime and criminals, confirms that thenumber of crimes against senior citizen have increased from 18,714 in 2014 to 24,349 in 2018[6].

As an attempt to further the cause of welfare of senior citizens and to prevent crimes, the Government of India, Ministry of Home Affairs had thereafter issued two thorough advisories dated 27.3.2008 and 30.8.2013 to all State Governments/UTs instructing them to take speedy measures to ensure safety and security of senior citizens firstly by creating a data base of senior citizens then by causing sensitization of police personnel regarding safety and security issues of older persons. It had also suggested that police should cause periodic visits to such identified persons using beat staff. It was also recommended to set up of toll free helpline numbers for senior citizens. Among other measures, authentication of particulars of domestic helpers, drivers etc. serving senior citizens was emphasized. [7]

There has been a growing requirement of providing effective protective measure for senior citizens considering the economic backwardness of a large section of the people in the country as various global studies have time and again shown the relation between socioeconomic conditions and property crimes [8]. The present paper therefore seeks to

analysedata from the NCRB Crime in India Reportsspecifically on crimes relating to property against senior citizens from 2014 to 2018. Prior to 2014 no separate crime statistics relating to senior citizens is available in the NCRB database. For the purpose of the study, specific reference to 11 states of Eastern India, viz. Arunachal Pradesh, Assam, Bihar, Jharkhand, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura and West Bengal has been made. These states are home to about 207.9 lacs senior citizens i.e. 20% of the senior citizen population in India as per the 2011 Census [9]. The paper also discusses the existing government policies and legal framework with special emphasis on use of technology to prevent and control crime.

Data for the present paper is collected from secondary source from the NCRB database of crimes against senior citizens from 2014 to 2018 along with newspapers reporting of crimes against property involving senior citizens.

2. Crimes against property

In human nature, the acquisition of property has been an unyielding quest since the advent of society. 'Crimes against property' are those acts that affect another person's rights of ownership or possession and control. Property can be classified as moveable property and immovable property. The offences can be non-violent or at times violent like in cases of dacoity with murder. Offence against property have been always considered as a crime with prescription of punishment for the same. 'Crimes against property'[10] and the penal provisions relating to them are provided for in details in the Indian Penal Code, 1860 (Act No. XLV of 1860) beginning from Section 378 and spanning up to Section 460 of the.The major heading of offences as dealt with in the IPC are ten in number, viz. Theft, Extortion, Robbery and dacoity, Criminal misappropriation of property, Criminal breach of trust, Receiving stolen property, Cheating, Fraudulent deed and disposition of property, Mischief and Criminal trespass. Among these, the offences of extortion, robbery, dacoity and cheating only are discussed in this paper as the NCRB database for the years 2014-2018 is limited to listing of these crimes only in offence wise category.

Extortion is defined in Section 383 of the IPCputting any person in fear of any injury thereby making him to deliver any property or valuable security. The punishment for extortion is stipulated in Section 384 as being same as that for theft. Whereas robbery is a furtherance of theft or extortion as explained in Section 390 IPC. Theft is robbery if it is accompanied by voluntarily causing or attempting to cause to any person death/ hurt/ wrongful restraint, or

even the fear of instant death/ hurt/ wrongful restraint. Dacoity is on the other hand a more aggravated version of robbery. As perSection 391 IPC, when five or more persons jointly commits or attempt to commit robbery, it amounts to a dacoity. The offence of Cheating is dealt with in Section 412 to 423 of the IPC. Cheating is dishonest and fraudulent deceiving of a person to inducing him to deliver any property. Punishment for cheating is may extend to seven years and also fine. Thus, it can be seen that there are adequate penal provisions in the law to deal with property related crimes.

3. Trends of crime against property affecting Senior Citizens in Eastern India.

The relevant data from the NRCB crime report against the 11 Eastern India states within scope of the present study has been extracted and tabulated below with a view to understand the trends in such crimes. The number of reported crimes under each offense of dacoity, robbery, extortion and cheating are tabulated vis a vis a comparative figure of all India total number of such cases to highlight the frequency of cases.

Table 1- Incidence of Offence under Section 395,396,398 IPC (Dacoity)

SI.	State	2014	2015	2016	2017	2018	Total (2014-18)
1	Arunachal Pradesh	0	0	0	0	0	0
2	Assam	0	0	0	0	0	0
3	Bihar	0	0	0	0	0	0
4	Jharkhand	0	0	0	0	0	0
5	Manipur	0	0	0	0	0	0
6	Meghalaya	0	0	0	0	0	0
7	Mizoram	0	0	0	0	0	0
8	Nagaland	0	0	0	0	0	0
9	Sikkim	0	0	0	0	0	0
10	Tripura	0	0	0	0	0	0
11	West Bengal	1	0	1	1	0	3
	Easter India Total	1	0	1	1	0	3
	ALL INDIA TOTAL	40	47	39	34	35	195

Table 2- Incidence of Offence under Section 392,394, 397, 398 IPC (Robbery)

SI.	State	2014	2015	2016	2017	2018	Total (2014-18)
1	Arunachal Pradesh	0	0	0	0	0	0
2	Assam	0	0	0	0	0	0
3	Bihar	2	7	0	0	0	9
4	Jharkhand	0	0	0	0	0	0
5	Manipur	0	0	1	0	0	1
6	Meghalaya	0	0	0	0	0	0
7	Mizoram	0	0	0	0	0	0
8	Nagaland	0	0	0	0	1	1
9	Sikkim	0	0	0	0	0	0
10	Tripura	0	0	0	0	0	0

11	West Bengal	2	2	8	3	3	18
	Eastern India Total	4	9	9	3	4	29
	ALL INDIA TOTAL	1184	1294	1024	959	848	5309

Table 3- Incidence of Offence under Section 384-389 IPC (Extortion)

SI.	State	2014	2015	2016	2017	2018	Total (2014-18)
1	Arunachal Pradesh	0	1	0	0	0	1
2	Assam	0	1	0	0	0	1
3	Bihar	0	0	0	0	0	0
4	Jharkhand	0	0	5	0	1	6
5	Manipur	0	0	0	0	0	0
6	Meghalaya	1	0	0	0	0	1
7	Mizoram	0	0	0	0	0	0
8	Nagaland	0	0	0	0	0	0
9	Sikkim	0	0	0	0	0	0
10	Tripura	0	0	0	0	0	0
11	West Bengal	0	2	2	0	4	8
	Eastern IndiaTotal	1	4	7	0	5	17
	ALL INDIA TOTAL	27	94	96	70	84	371

Table 4- Incidence of Offence under Section 420 IPC (Cheating)

SI.	State	2014	2015	2016	2017	2018	Total (2014-18)
1	Arunachal Pradesh	0	0	0	0	0	0
2	Assam	0	2	3	0	0	5
3	Bihar	6	11	8	0	1	26
4	Jharkhand	0	0	1	0	0	1
5	Manipur	2	1	0	0	0	3
6	Meghalaya	5	1	0	0	0	6
7	Mizoram	0	0	0	0	0	0
8	Nagaland	0	0	0	0	0	0
9	Sikkim	0	0	0	0	0	0
10	Tripura	0	0	0	0	0	0
11	West Bengal	8	12	6	17	21	65
	Eastern India Total	21	27	18	17	22	105
	ALL INDIA TOTAL	1567	1867	1941	2017	1793	9185

The figures indicate that North Eastern State of Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim records a very low 10 number of offences during the period (2014-2018). Out of that there are 5 cases of cheating reported in Assam. The low incidence of crime can also be attributed to the fact that senior citizen population in Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim is also on the lower side. For Assam, compared to the population of senior citizen which stands at 20.8 lacs as per the 2011 census, the state has percentage wise the lowest number of crime reporting of only 6 cases during 2014-2018. The State of West Bengal leads

in the number of dacoity, robbery, extortion and cheating cases registering 94 cases followed by Bihar with 35 cases in the period from 2014-2018.

4. Surveillance and Technology in Criminology

Jeremy Bentham, a legal philosopher and social scientist conceived a social control mechanism in the late 17th century called the *Panopticon*[11]. It is a design of a prison system based on the principle to enable guarding and observation of maximum number of prisoners with the minimum possible guards. Later, Michel Foucault expanded the idea of the panopticon into a representation of social control that encompasses everyday life of all citizens and not just those lodged in the prisons [12]. Foucaultadvocates that social being internalizes authority, which is a source of power for prevailing norms and institutions. He cites the example of a driverstopping at a red light even when there are no other vehicles or policemen present in the location. Even though there are no immediate consequences, the police prevail as an internalized authority and people tend to obey the laws because of the internalization process which makes those rules become self-imposed. Hence, the role of police presence and surveillance has assumed great importance in the study of modern criminology, particularly in crime prevention.

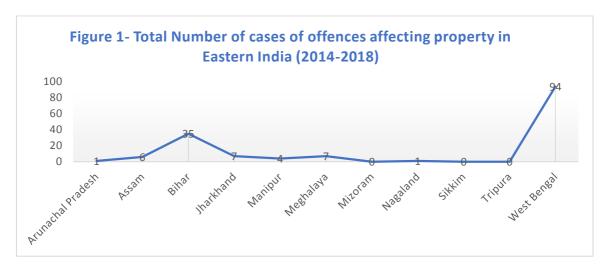
During the twentieth-century there has been a growing trend towards managing potential offenders 'pre-crime' rather than managing offenders 'post-crime' by reducing chances of commission of crime by actual and would-be offenders [13]. The 'closed circuit television' popularly known by its abbreviation CCTV has become one such effective and frequently used equipment to prevent crime as being caught on camera and possible identification acts as a deterrent to many potential offenders. CCTV records video of the site where it is installed by use of camera and video storage memory. CCTV is defined by several sociologist and criminologist like Clive Norris and Gary Armstrong [14] as a form of power that views and controls the activities and actions of people. CCTV can be set up and used by public authorities and also by individuals to watch public or private areas.

Other than CCTV, in an increasingly digitised world, Police forces are depending on high speed internet connectivity providing real-time access to information. Police has also started using drone technology and these unmanned aerial vehicles equipped with cameras have proven so successful in tracking criminals and criminal activities. Police forces are also using various data bases of individuals and recorded/ suspected offenders to analyse, predict and

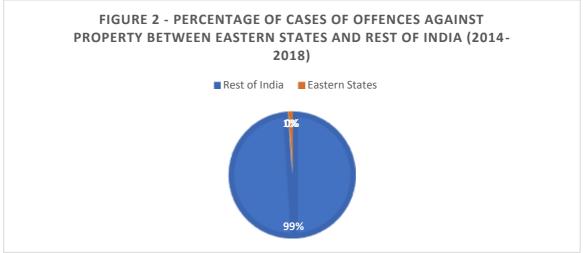
combat crime. Data complied digitally, for eg. the NCRB database itself helps not only the police by researchers to analyse and create a picture of crime patterns and trends. By creating analytical algorithms for prediction, police can spot where violent crime may happen next. Facial detection equipment also has enormous possibilities in fighting crime. Bio-metric data base of offenders make their tracing easier for the police.

5. Outcome of the study

The data from Table 1 to Table 4 above can be graphically depicted to understand the trends in the number of reported offences of dacoity, robbery, extortion and cheating committed against senior citizens in Arunachal Pradesh, Assam, Bihar, Jharkhand, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura and West Bengal from 2014-2018.



Compared to rest of India which had registered a huge number of 14906 number of cases of dacoity, robbery, extortion and cheating, the eastern states have registered only 154 such cases during the period from 2014-2018. The same is only about 1 % of the national total.



Thus, it can be seen that offences against property are significantly lesser in eastern Indian States than the rest of India. However, cases of violent crimes relating to property are not unheard of in these States. Some recent cases as reported in the media has had significant impact on the requirement of better safety standards for senior citizens. In Guwahati, Assam, the murder of a senior citizen on 7th January 2020 created sensation in the city. One Paresh Chandra Baruah (72), a retired high ranking government official was found murdered in his residence. His wife, a Doctor was away on her duty while both his children are residing outside India [15]. In another recent incident in Kolkata, West Bengal, on 12th December 2019 an elderly woman residing alone was brutally murdered with multiple stab injuries [16]. In another incident from September 2018 in Patna, Bihar, an elderly couple namely Harendra Prasad Singh (88) and his wife SadhanaDas Gupta (70) were discoveredmurdered the floor in the living room of their home. Robbery was involved, as a number of valuables were found stolen [17]. Hence, although less in numbers than the rest of India, the propensity of crime against senior citizens in the Eastern India states is equally rife.

The proper implementation of the Government of India, Ministry of Home Affairs Advisory dated 30.08.2013 on shielding of life and property of senior citizens therefore continues to assume greater important. The said Advisory had highlighted an action plan to curb crimes against senior citizens by suggesting various measure like documentation and creating of database of crime prone localities populated by older persons. Emphasis is also put in organising sensitization workshops for police personnel regarding safety and security of older persons. The registration of old persons living alone under jurisdiction of each police station and periodic updating of the same is required to identify the possible geographical location of crimes is a must. Visiting of areas inhabited by senior citizens by police beat stuff is necessary and in such an effort, the involvement and participation of local community members and NGO's is paramount. It is also provided for that Senior Citizens' Special Cell at State and District Police Headquarters should be opened to manage and monitor safety and security of older persons. Special24x7 Senior Citizens' toll free Helpline for senior citizens is also mandated by Government policy. Awareness and community participation in measures for welfare of senior citizens is of a paramount emphasis in the aforesaid policy [18].

The above advisory is however silent on the use of electronic surveillance by installation of CCTV or other technologies. It must also be realised that installation of residential CCTV by private individuals belonging to economically weaker section may not be feasible in a country like India. However, for a large section of the Urban senior citizen population, use of such technology has become a necessity today. It would also be advisable for the Government to

take steps to install more and more surveillance devices in public areas and streets to monitor

any criminal activity. But in the ground reality of our socio-economic position, the

technological surveillance has to be backed up by a stronger program of sensitisation and

physical monitoring by the police.

6. Recommendations for combatting property crime against elderly through

surveillance technology

Based on the outcome of the study, the following measures can be suggested:

•Toinitiate educative programmes for senior citizens, aimed at reducing their susceptibility to

abuse and for reinforcement their awareness of their rights and the access to help to enforce

their rights. Information and education material relevant to the senior citizens should be

published widely as suggested by the mandate of the Maintenance and Welfare of Senior

Citizens (MWPSC) Act, 2007 [19].

•There should be a 'senior citizen cell' in each police headquartersto deal with the special

cases of crimes relating to senior citizens. Each police station should maintain proper

information and database for schemes for protection of elderly as per the local requirements

with regular patrolling both during day and night.

•Each police station should have a data base about elderly population in their jurisdiction. The

same should be interactive with feedback from the senior citizens. Police officers should also

be given special training for dealing with and taking care of elderly. The investigation and

trials of cases involving senior citizens should be fast tracked.

• There should be detailed credential verification of domestic helps and other staffs who are

in service of senior citizens. Such staff should also be imparted with trained skills for taking

care of elderly.

• National Crime Record Bureau should elaborate their data base of crimes to include

statistics about other property crimes including cybercrimes committed against senior citizen

as financial embezzlement by use of technology is a growing concern particularly with

digitisation and movement towardsa cashless economy.

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•Continued research and data gathering on problems of senior citizens should be encouraged

with Government funding to study and solve the problems faced by the elderly.

•NGO's and Government agencies should organise periodic and regular programs to sensitize

the senior citizens to follow advisories concerning safety and security matters. Volunteer

groups/ organisations involving persons from professions like medicine, law, security etc. can

be formed to benefit the senior citizens.

•Each neighbourhood should createtheir own Senior Citizens associationtopromote and

protect the interest of the elderly.

• Government should explore the possibility of subsidizing purchase and installation of

CCTV equipment's for senior citizens to make the use of technology more financially viable.

• Literacy among senior citizens for using smart phones to take picture of criminal activities

and raising alerts to SOS services and the police should be encouraged.

• Installation of proper street lighting, metal detectors etc. can screen potential crimes.

• Maintaining of digital bio-metric database of offenders and using facial recognition

software in conjunction with CCTV is to be promoted.

•The use of latest technologies to monitor communications through phone, mail, internet etc.

to and from possible targeted senior citizens should be explored as crime is often preceded by

threats and such monitoring can help in detection of possible crimes.

7. Conclusion

This paper has attempted to study crime trends relating to offences against property with

senior citizens being victims by analyzing recorded data in the NCRB for the years (2014-

2018) for the Eastern Indian States of Bihar, Jharkhand, West Bengal, Sikkim, Assam,

Arunachal Pradesh, Manipur, Mizoram, Tripura, Nagaland and Meghalaya vis some vis the

trends in the rest of India. Although crime incidents in these eastern Indian States are

comparatively lower, even sporadic incidents of crimes are enough to generate fear of crime

in the elderly. Several research done on the issue of fear of crime has often found that elderly

people are more afraid of crime as they are more vulnerable to crimes [20]. The situation

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assumes greater importance because the social and self-imposed isolation of the senior citizens from the other members of a community makes them more emotionally vulnerable [21]. To dispel the fear and to make the senior citizens feel more safe and secure, implementation of measures to curb and solve crimes and to provide assistance to the elderly victims is necessary. Proper implementation of the Advisory of the Ministry of Home Affairs regarding safety and security of senior citizens by effective police and social monitoring has to be ensured. The potential of use of technology to curb and control crime has to be optimized by use of both hard and soft technology [22]. Use of technology like CCTV in residential premises which involves expenditure should be encouraged by giving special discounts for senior citizens. Digitisation of crime databases should be made more expansive to predict crime and also to apprehend offender. As technology continues to develop rapidly, law enforcement agencies should keep themselves updated about the infrastructure and techniques that are intendedspecifically to enhance public safety and apprehend criminals, thereby promote a more lawful and peaceful society for all including the senior citizens.

REFERENCES

- [1] Harris, D.K. (1988), Dictionary of Gerontology, New York: Greenwood Press. pp. 80
- [2]https://data.worldbank.org/indicator/SP.DYN.LE00.IN
- [3] https://www.censusindia.gov.in
- [4] National Policy for Older Persons (1999), Government of India, Ministry of Social Justice and Empowerment. pp.2
- [5] Section 2(h), Maintenance and Welfare of Senior Citizens (MWPSC) Act, 2007
- [6] NCRB, Crime in India, 2014, 2015, 2016, 2017 and 2018 Report

Sosa-Malabanan, Sophronia. "Privileges and Benefits Granted by Philippine Laws to the Senior Citizens in Calabarzon." *International Journal of Environment, Ecology, Family and Urban Studies (IJEEFUS) ISSN (P)* (2016): 2250-0065.

- [7] https://www.mha.gov.in/sites/default/files/Advisory_040913.pdf
- [8] Socioeconomic Conditions and Property Crime: A Comprehensive Review and Test of the Professional Literature, Ralph C. Allen, *The American Journal of Economics and Sociology*, Vol. 55, No. 3 (Jul., 1996), pp. 293-308

Ahmed, Ayesha Sultana, and P. Radha Rani. "A Study on Health Problems Among the Elderly Residing in Selected Oldage Homes of Hyderabad City." *International Journal of Medicine and Pharmaceutical Science (IJMPS)* 8.1 (2018): 19-24.

- [9] https://www.censusindia.gov.in
- [10] Ratanlal's and Dhirajlal's, Law of Crimes, 25thed, pp.1904-1905
- [11] Bentham Papers 119a/119. UCL Press. p. 137
- [12] Mitchel Foucault, Discipline and Punish, Routledge, 1991, p. 203
- [13] https://www.ukessays.com/essays/criminology/surveillance-technology-and-monitoring-criminology-essay.php

JOLDEN, TSERING, and TASHI DOLKAR. "CHANGE IN THE AUTHORITY AND STATUS OF THE AGED: EMERGING CHALLENGES AND ISSUES." International Journal of Humanities and Social Sciences (IJHSS) 6.1, Dec - Jan 2017; 1-8

- [14] Gary Armstrong, Clive Norris, The Maximum Surveillance Society: The Rise of CCTV, Berg Publishers, 1999, p.134-140
- [15] https://www.sentinelassam.com/guwahati-city/senior-citizen-murdered-at-dispur-law-college-road-in-guwahati/
- [16] appst

BASKARAN, M., and R. CHANDRASEKARAN. "Study on the significance of economical planning for retirement community." *International Journal of Business Management & Research* 6.3 (2016): 23-34.

- [17] https://www.dnaindia.com/india/report-senior-citizen-couple-found-murdered-in-home-in-bihar-s-buddha-colony-near-patna-2660214
- [18] Annexure to Government of India, Ministry of Home Affairs Notification No. 15011/129/2010 (CF-104307) SC/ST dated 30.08.2013
- [19] Section 21, Maintenance and Welfare of Senior Citizens (MWPSC) Act, 2007
- [20] Hanslmaier, M., Peter, A. & Kaiser, B. Vulnerability and fear of crime among elderly citizens: what roles do neighbourhood and health play?. *J Hous and the Built Environ* 33, p.575–590
- [21] Cook, F., Cook, T. (1976). Evaluating the rhetoric of crisis: A case study of criminal victimization of the elderly. Social Service Review, 50, p.632–646.
- [22] James Byrne and Gary Marx, Technological Innovations in Crime Prevention and Policing. A Review of the Research on Implementation and Impact, Cahiers Polities Studies Jaargang 2011-3, p. 17-40