

Achieving Urban Sustainability Through Safe City

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ABSTRACT A safe and secure urban space produces a conducive environment for the sustained growth of the city. This paper examines the role of crime in threatening the development of a smart city, and it attempts to probe whether the 'Crime Prevention through Environment Design' (CPTED) model applies to the reduction of crime in Delhi. Criminologist, C. Ray Jeffery introduced the term CPTED in 1971 and architect Oscar Newman gave CPTED a new meaning with the development of the concept of 'Defensible Space'. This study adopts the case study method and narratives have been placed theoretically for reaching a conclusion. The bank colony of northeast district of Delhi has been taken for the case study because the Government of Delhi has recently focused on infrastructural development in this area. This paper finds that crime in Delhi is increasing due to unplanned development. Crime in Delhi is place-specific, which can be checked through proper planning. Substantial investment by the Government of India should be scrutinized properly, and its focus should be brought towards efficient implementation of CPTED.

INTRODUCTION

"For a long time, urban areas have been found in a negative light as focuses of poverty and high crime" - Rio+20 Conference.

Crime and fear of crime are a perpetual problem of the urban dwellers. Fear of crime is like an endemic, which seems uncontrollable. Repeated incidents of crime have made people insensitive to them. An unsafe environment negatively affects all the development processes. Urban sustainability appears to be a distant reality in this scenario. The quality of life is quite significant to achieve safe and sustainable urban society, as this is the fact that positively influences the way people think and behave in their lives. The success and growth of an area implicitly depend on the safety of a zone. If a particular place is perceived to be unsafe, no one is willing to visit, work or reside in such an area, thus hampering the development (Colquhoun 2004). Safe and peaceful spaces brim up with a myriad of activities and lead to the growth of that area as well as enhance the quality of life of the people attached therein (Shamsuddin and Hussin

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2013). Henry (2006) has analyzed the data of New York City and found that there has been a remarkable change in the quality of life, and furthermore, there is a discernable positive change in the feeling of wellbeing and thoughtfulness among the people of New York due to reduced levels of crime in the city. However, an unsafe area fills a sense of fear among the dwellers that always try to modify their activities accordingly. Everyone is suspicious, people cannot intermingle freely, nor can they walk through different corners freely. This constant fear of crime ruins the social life of the people, as children are not allowed to play outside, and elders are not going to sit together and build social relationships. Cozen (2002) asserts that an unsafe urban area is characterized by various problems like poverty, the dilapidated physical setting of the area, high level of crime, and fear of crime. Fear of crime has a fantastically adverse impact on people and the whole society (Cordner 2010). People get divided due to a constant feeling of fear and insecurity. The weakened social relations destroy social cohesion and then it helps the offenders to settle in such areas and commit crime easily. As per Ceccato and Lukyte (2011) poverty and social exclusion influence crime and the perpetrator's dispersion in urban zones where wellbeing and security elements get to be chief human needs all through history (Cozen 2008). Human has always been a peace-loving crea-

ture that tries to create and maintain a safe and livable environment to develop and live a healthy social life. The city that is free from all types of crime and criminal dangers will have the capacity to make a community that has the quality human capital (Shamsuddin and Hussin 2013).

Crime Prevention Through Environmental Design (CPTED) is currently used to change the crime-prone spaces into a safe livable space in a city. CPTED has positively brought changes in the areas that were highly crime prone through proper planning and active community participation. Further discussion in the case study section given in the paper has elaborated this point.

Objectives of the Study

- To analyze the importance of safety issues for the development of a Smart City.
- To examine whether the Crime Prevention Through Environment Design (CPTED) model applies to the reduction of crime in Delhi.

MATERIAL AND METHODS

This paper adopts the case study method to explain the issue of safety and planning of an area. The case study of Bank Colony situated in the northeast District of Delhi has shown the effective implication of CPTED and its positive results. Before discussing about the situation of Bank Colony, it is imperative to understand the current dangerous condition of the metropolitan city of Delhi.

As indicated by the Indian census of 2011, the population in Delhi alone has swelled to more than 16 million people with a relating density of more than 11,000 for every square kilometer. The proportion of cops is roughly 141 to 100,000 people in 2013. As per the UN, the worldwide average is more than 350 officers for each 100,000 people. Crime in Delhi is appraised as "high". The year 2014 saw a practical multiplying of crime in Delhi, cases registered in the capital rose to 1,47,230 in 2015 from 73,902 in 2013, police statistics uncovered. Delhi saw an upward pattern regarding the cases of incidents of rape, murder, and snatching. Delhi Union Territory has the highest crime rate of 767.4 among all states and union territories in India in the year 2014. "In Delhi, 6,180 robberies, 561 murders, 745 instances of an attempt to murder, 2,069 rapes and more than 7,143 incidents of abduction and kidnapping were registered in 2014". As per N.C.R.B.'s 2014 report, the percentage contribution to all-India total crime among 53 million cities, Delhi has the highest share of 22.7 percent, followed by Mumbai at 6.5 percent, Kolkata at 4.2 percent and Chennai at 2.7 percent. Among other crimes, Delhi registered 4,034 cases of abduction and kidnapping of women in 2014, and 3,173 occurrences of cruelty by husband or relatives. Globally, one-third of all women are a victim of crime and violence (UN Women 2016). Delhi is known as the "crime capital". The crime rate of the capital is much higher than the national average. Delhi has a crime rate of violent crime at 12.1 contrasted with the national average of 11.6. Moreover, the city has a poor record in crime against children with a 166.9 crime rate, which overrides the national average of 20.1. The violent criminal acts, which incorporate risk to live, property and public property, are additionally on ascending in the capital recorded at thirtyseven percent contrasted with the national average of 21.2 percent.

Delhi is a city where an auto is stolen each one-and-a-half hour, a lady is attacked each 13 odd hours, rape and homicide are committed at regular intervals and attempt to murder a person happens every 23 hours in the national capital.

Some essential initiatives have been taken up by Delhi police in the year 2014 like beginning mobile and PC based innovations like lost report application, traffic police mobile application, police clearance certificate and Himmat (power) were started in 2014. More than 3,900 CCTV cameras were introduced in 85 areas including outskirt checkpoints. About 10,000 cameras installation was proposed in 133 areas in Delhi. Delhi police began a successful drive named "Parivartan" to demarcate Delhi into crime hotspots, crime mapping and investigate the reasons for rising crime. The Delhi Police has taken many strides to reduce crime against women (CAW). Several steps like working around the clock, a Women Help Desk with a devoted phone line, expanding the number of women helplines 1091 from 4 to 10, Thana Level Committee on ladies security, security review of paying guest establishments and girls' hostels, watch on vulnerable routes, an arrangement of ladies in PCR van, and positioning of women constables in specific territories more inclined to crime against women (CAW) were emphasized

and sharpened. The monthly discussion with Women Help Groups and ladies NGOs with an officer of the rank of Special CP additionally proceeded. All field officers were on numerous occasions coordinated to enlist the cases identified with abduction on ladies without making any jurisdictional question. Women beat constables under the plan "Parivartan" (change) proceeded with their work in the regions where criminal acts against women are for the most part widespread. Promotion of ladies helpline number 1091 was done by gluing placards on motor vehicles, public service transport and in resettlement/Jhuggi zones. Aside from this, the Delhi Police runs Community Policing Schemes like Yuva, Jan Sampark, Apka Update, Neighborhood Watch Plan, and Business Region watch group. To expand the network with general people, it has dispatched a few applications like Lost Report App, Police Clearance Certificate App, and Delhi Police Traffic application. The sad part is that the crime index has risen that diminished the personal satisfaction and expanding the general monetary budget of crime.

However, the tragic part is that still no any distinctive action has been taken at the national level to lessen the crime rate.

RESULTS

A Case Study of Bank Colony (Delhi)

A small colony named 'Bank Colony' has been taken as a case study to understand the relationship between a space situated in an urban area and crime. Through the case study of bank colony it would be easier to understand how the concept of CPTED can be applied in an urban area and reduction of crime can be witnessed as its consequence. Bank Colony is situated in the northeast District of Delhi. It is placed near the Delhi-Uttar Pradesh border of the latitudinal and longitudinal extent of Bank Colony is 28°42'07.8"N 77°18'44.5"E (Fig. 1). Delhi's largest prison complex is being built adjacent to this small colony. There is a big slum (JJ Cluster) in the opposite direction of this colony across the road. The famous Grand-Trunk

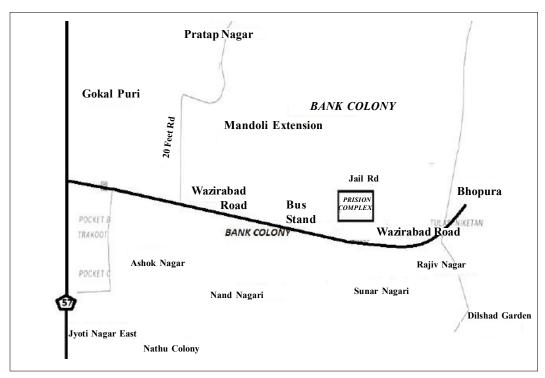


Fig. 1. Location of the study area 'Bank Colony, Northeast Delhi, Delhi'.

Source: Survey conducted by the Author

Road (GT. Road) separates the Bank Colony from the slum area. There is a bus stand in the name of this colony titled "Bank Colony Bus Stand", which is notorious for the criminal incidents regularly occurring here.

This area has been taken for the case study due to its location in the northeast district of Delhi, which comes under 'high crime' zone in Delhi as per the latest data provided by National Crime Record Bureau in the year 2015. Focused structured interview method was adopted to get information about perception of the people about the study area. The argument about safety and environmental design has been discussed with the help of field narratives.

A female respondent, who is a shopkeeper, has a sari shop in her house. She observes the day-to-day activities on the road and gets to know about nearby unlawful activity through her customers, most of them are from her colony. She says, "Though crime is prevalent everywhere and no one can find out when an incident would occur, surely certain areas are always fearful." The deserted areas like railway fatak (gate) and space near liquor shops on the other side of the road are quite fearsome. According to her, "These empty spaces help the criminals commit a crime and run away without any fear of being caught." While another respondent, a young male named Harish, says, "All the areas of Delhi with a suffix of 'puri' (area) with their name are very crime prone, as they don't have appropriate infrastructural development and basic civic amenities. These colonies emerged as a result of haphazard development without any preplanning, therefore, these work as a hub of criminals and criminal activities." He says, "Crime is very specific to places." Explaining details about nearby places, which are very unsafe, Harish says, "The area of approximately 200 meters surrounding the Bank Colony (a colony in northeast Dis*trict of Delhi) bus stand is the most crime-prone* spot near our residential colony. People are frequently beaten, robbed and murdered at any time of the day. It is an infamous place for the people living nearby." Elaborating the reasons behind such activities Harish says, "That the spatial setting of this area is critical. This spot provides the criminals very easy escape due to the presence of empty open field behind the bus stand and broad G.T. Road (Name of a road) in front of the bus stand." Behind the open fields are slums, which help the criminals in hiding well because of dense population, anonymity and uninterrupted access. Construction work is in progress on the western side of this high crime zone, which remains abandoned in the evening and works as a shelter to the perpetrators.

This unplanned and haphazard infrastructural development in this area has negatively impacted the lives of the people. Fear of being victimized is very high among the dwellers. Residents say that vagabonds from surrounding areas occupy street corners in the evenings and harass the commuters. After dark, drunken people wander in front of construction premises and tease local commuters. Complaints to the local law enforcement agencies went in vain. Increased criminal activities are often related to indifferent nature of the police (Rios 2015). The construction building of prison provides them with an undue advantage to hide and get away if law enforcement authorities try to catch them. Local people have started taking law in their hands. The colony people have begun guarding the places that remained abandoned in the night. Residents requested the police to increase police patrolling near the bus stand. The abandoned building that was empty and used for throwing garbage and filth is now being tried to convert into a pleasant park so that children and old people could use this space and criminals find it difficult to hide. Responsible people of the area have started a cleaning drive to make the place livable. These are some changes that are required to make a city crime free through intervention approach. The practice to physically transform such a place and making it safe and secure is very much required, as it would reduce the opportunity to commit a crime for the criminals. Criminologist, C. Ray Jeffery propounded the term CPTED, and architect Oscar Newman established a new idea from it, which includes considerations regarding crime prevention and neighborhood security (Jeffery 1977). This approach intends to rebuild the physical environment and lodging to be livable, and the local inhabitants control the area (Shamsuddin and Hussin 2013). The hypothesis contends that an area is safe when individuals feel a sense of association and accountability by constructing a space territory. Further, Shamsuddin and Hussin (2013) and Mohit and Aishath (2011) argued that the hypothesis of space has three essential standards to be honed keeping in mind the end

goal to accomplish a safe home environment, public and private space, region and control. In their perspectives, one can infer that there are two principle components, that is, territoriality and reconnaissance, as they identify with the idea of defendable space.

DISCUSSION

Criminalized Spaces

Crime and space have never been studied in a static and uniform mode. Broad research has demonstrated that events of a social issue, crime and law enforcing action tend not to be arbitrarily scattered in space, but are bunched in distinct zones (Brantingham and Brantingham 1993). Locations in diverse ranges of a city bring distinctive ways of life that change the way of crime. A few spaces are termed as crime hotspots because of their commonplace auxiliary settings that give a support ground to crime. A particular area or a region may be a favored focus for possible guilty parties. There may be certain sorts of spaces that contain an inherent quality, which makes or welcome particular kinds of crime, for instance, a bar or alcohol store (Roncek and Maier 1991), or an abandoned building (Spelman 1993), public lodging (Roncek 1981) or a secondary school (Roncek and Faggiani 1985). Also, particular businesses draw in robbery (Walsh 1986) and homes with specific qualities pull in private theft (Clarke and Harris 1992). Notwithstanding these "objective areas", crime may cluster in spaces as an after effect of routine exercises, for example, a nightlife zone (Felson 1987) or of group confusion, flimsiness and absence of political administrations in the region (Sampson 1985).

A special circumstance that gives the backdrop and often the system for the interpersonal clash is established in a place (the specific little zone) that reflects and influences the regular exercises of the members in the short run and assumes a part in the particular clash at hand (Block and Block 1995). The two-dimensional zones that contain the occasions, unusual circumstances and spatial traits common for distinct places give setting or backdrop (Brantingham and Brantingham 1993) for a particular case. Geographers contend that spaces are not just the "setting" for social interactions, but rather that, by complexity, they help shape the very

way of social communications (Gregory and Urry 1985).

Large-scale urban development projects are pulling people towards cities, and resultant hap-hazard infrastructural development is creating more problems than solutions, for example, over-crowding, and lack of infrastructure, social inequality, crime and violence (Judy 2008). The structural setting of a place has an immediate influence on the rate of crime (Lorenc et al. 2012). These physical changes, for example, the structures and the game plan of the road, and other outside spaces do influence the chance of crime that affects the communities and the nature of the city. It can be seen that poor physical ordinary design contributes to the probability of crime happening (Anastasia and John 2007).

In connection with burdened zones, the broken-window hypothesis focuses on the impact of physical incivilities on crime. It shows the apparent association between declension and increment of criminal actions (Wilson and Kelling 1982). The proposal is that a place in the state of crumbling is a site that needs control. In this way, the area is surveyed to raise fewer dangers for the criminal and builds open doors for the crime. The reasonable illustration is the broken window itself. If a living arrangement with smashed windows is found in an area and not restored, this can be taken as though none might want to assume the liability to repair the windows and the area has none who takes care or appropriates responsibility for its appearance and quality state. That can prompt more windows left broken, and nobody is assuming liability. Broken windows can transform into breakins, vandalism, thievery and more brutal law violations, as the place appears not having a condition of control, and hence dangers to be caught for a crime seem to be low. Also, such zones with physical incivilities additionally make risky emotions and build the trepidation of wrongdoing (LaGrange et al. 1992).

Urbanization and Infrastructural Development in Delhi

Infrastructural development in any urban territory must consider the wellbeing issue at the bleeding edge. Accomplishing sustainability through the safe city is just conceivable by making protected and secure urban structures (Ceccato and Lukyte 2011). The relationship of

human settlements has always hoped to suit the wellbeing, security and the success of their occupants. Security perspectives turn into a principle component of a city, which additionally influences the prosperity of a city where Cozens (2007) proposes that crime and the fear of crime undermine urban planning. A safe urban structuring and urban environment can be done by the execution of possible percept and focus on the person's needs.

Organized development of the city may be associated with changing of capital from Kolkata in 1911 by the British. Imperial Delhi Community was framed in March 1913 to manage the development and administration of Civic Affairs of the New Capital. In 1916, it was recommended as Raisina Municipal Committee under the Punjab Municipal Act of 1911. In March 1927 this Municipal Committee was designated as the New Delhi Municipal Committee. In 1932 this board was redesigned as the First Class Municipal Committee. Urbanization process in Delhi paced up following 1951. This urbanization procedure has changed over the rural areas into urban with the quick pace of development in the urban population of Delhi. This urbanization process has decreased the number of towns from 300 in 1961 to 112 towns in 2011 in the national capital territory of Delhi. The rural populace went down from 38.1 percent in 1951 to 2.5 percent in 2011. As DDA could not deal appropriately with the fast growth of urban populace in NCT of Delhi, it came about into development of spontaneous, unplanned colonies. The Urban Development situation of Delhi may be seen with the kind of living spaces or dwellings present in the national capital including Urbanized Village, Jhuggi Jhoppari Clusters, J.J Resettlement Colonies, Ghetto Rehabilitation Colonies, Regularized-Unauthorized Colonies, Sanction/Planned Colonies, Unapproved Colonies, and Walled City/Notified Slum Areas. With the development of impromptu settlements/environments, the Delhi government needs to bear the weight of higher expense of giving Civic Services in such unplanned settlements. It is apparent from the way that an amount of INR 561.09 crore has as of now been put amid eleventh five-year plan in giving basic civic services in 567 unapproved regularized colonies. Further, Delhi government has contributed an amount of INR 251.98 crore amid eleventh five-year plan in providing essential municipal services in J.J Resettlement Colonies. Indeed, even after regularization of unapproved colonies in 1977, the rise of individual unplanned settlements precedes at present 1,600 such unapproved colonies. Delhi government has contributed INR 2,596.77 crore amid eleventh five-year plan in giving basic civic services in these unauthorized colonies.

Safe City: The Challenging Need

Urban areas have influenced both the physical surroundings and its residents significantly. However, this influence has negatively impacted the security, wellbeing, and life of ordinary people. There has been a causal relationship between crime and range with poor monetary, social and physical action (Cozen 2008). Cities today are facing paced growth of urbanization that has pulled maximum concentration of people. However, this rapid expansion is not right, as it links to so many problems like destitution, illness, overcrowding and crime. Shamsuddin and Hussin (2013) stated that a safe city asserts its positive image that further helps it garner support from all other sectors specifically the investment industry. Safety and security of people have become an essential obligation for governments to the world. It suggests the responsibility and task of the state guarantee the wellbeing of its residents, associations and establishments against dangers to their prosperity and additionally the essential elements of peace. With more than a significant portion of the global populace today living in urban regions, safe city is progressively being viewed as crucial in guaranteeing secure living and thriving. Wrongdoing, roughness and apprehension in the towns posture critical difficulties. The fundamental standards of proper administration must locate an immediate application in any public safety approach, intended at decreasing and averting regular issues of danger and crime.

The primary motivation behind implementing a safe city is to lessen crime and encourage a sentiment of security among people. It likewise plans to discourage by creating trepidation of effect in the offenders. Thus, while considering the likelihood of actualizing a safe city project, the essential component is the crime rate, which is the number of criminal acts carried out per individual. The NCRB information mirrors a high rate of crime all through the nation. Safe city, through observation systems, can enhance

the circumstance. The project of the safe city that have prompted an extensive reduction in crime rates over the world include a marked lessening of 12.5 percent and thirty-three percent in thefts and vandalism separately within first six months of the commencement and 12.5 percent decline in significant criminal incidences in Mexico. According to Habitat Agenda on Human Settlements (Habitat II 1996), the United Nations started a progression of methodologies and systems to decrease adequately and wipe out crime and violence in the urban areas, adopted at the Istanbul Conference (ASSOCHAM 2013). The point of the UN-Habitat Safer Cities system is to fortify individual security and lessen fear by enhancing wellbeing services and responsibility to the group (UN-Habitat 2016). The Safer Cities system has these building blocks of building urban safety through urban vulnerabilities reduction, creating urban security through urban planning and improving the control of security. Building urban safety through reducing vulnerabilities, planning and control of the safety are the pillars of safe city (ASSOCHAM 2015).

The execution of the idea of public security in the town or city has been one of the fundamental motivations in developing nations today. Without the thought on the safety viewpoints, living in an urban range will be more troublesome for the prosperity of people. A city that is free from a wide variety of physical dangers, social and mental issue is shielded from any propensity that could undermine the welfare of society and will contribute to making a prosperous, secure and agreeable environment. In the twentieth century, the urbanization procedure has seen the advancement of a city to be to a greatly unplanned and developing like mushrooms without legitimate administration of the nearby powers. A city ought to be a secured and safe place to live, play and work. Colquhoun (2004) asserted that three perspectives are identified with one another that impact the success of a city and a community that possess the houses and other public amenities like educational institutions, shops and urban environment that affects the conduct of the residents.

Crime Prevention through Environmental Design in Indian Context

Wellbeing and planning are keys to developing a crime free and sustainable locale. "Ur-

ban planning indulges a seeing not just of the physical space where we live, but also fundamental cultural, social, political, and monetary scenes." The practice of crime prevention utilizes the standards of the already examined theories to lessening crime opportunities and decrease motivators for the crime. The theory of defensible space propounded by Newman (1972) stands on the fundamentals of the 'crime prevention through environmental design' (CPT-ED) idea. It works on the basic premise of counteractive action through the original configuration of the targeted spaces. CPTED relies on the rationale of visibility and regulation and proposes an arrangement of the principal natural intercessions in space, which can diminish the chances for criminals and bring the sentiment of possession of own surroundings back to the original operators (Newman 1972). The operations in the urban environment are to deter criminals from perpetrating crime in that particular spot. CPTED is connected to the neighborhood environment, as it proposed connections, targeted for diminishing crime at the small-scale level, for example, built up area, stations and roads.

However, the implementation of safe city projects is not an easy way when a government tries to execute these plans at central or the state level in India. Individual policy challenges that surface amid the implementation period of the project, and which require prompt consideration are as per the following, that is, high estimation of expense obligations on importing security types of tools, fund prerequisites by the state and the central government for putting resources into the safe city. Lack of trained labor inside of the state police forces, measures, for example, lessening in tax duties on importing security instruments, new recruitment to cover the employment gap. Policymakers and additionally different partners must work towards raising the level of responsiveness amongst residents towards such safe city ventures. The idea applies many implementation parts out of which, access control, territoriality, and surveillance are the most grounded. The initial two focus on restricting crime prospects through adjustment of the urban environment, and the latter aim at the strengthening of spots by social control.

Several cases given by CPTED to enhance public surveillance are the expansion of passerby movement, position of windows to permit

casual surveillance, spotlighting along ways and pedestrian territories and light up vulnerable areas, placing of CCTVs, and increment of social movements. For access control estimations have been recommended as utilizing (landscape) planning to offer characterized purposes of entry and exit, using doors and controlled access, control movement, executing obstructions in the type of shrubberies, small fences, boundaries, and wipe out designs that permit access to the rooftops (Uittenbogaard 2013). For creating a safe environment, connection to a place can be enhanced by expanding the feeling of proprietorship and control. Signage can be set up that effort to establish safety warnings (like the statement, "You are under CCTV surveillance"). The areas should be kept clean and minimizing substantial target hardening efforts like fixing spikes or security fencing, which shows an absence of constant on location control (Newman 1972; Cozens et al. 2005). The execution of CPT-ED has proven to be quite efficacious in decreasing crime by the application of concepts of environmental design (Cozens et al. 2005). Grönlund (2012) introduced the instance of a recently created neighborhood in Stockholm, which partially adopts CPTED standards, albeit not deliberately taken as an essential choice in the planning decisions. The results demonstrate that the area had great private-public divisions and semi-private territories permitting social control, gave significant parts of surveillance from shops, windows, homes and excellent overviews of open spaces. Besides, the territory was effortlessly accessible, indicated significant movement of traffic, application of robust designs, and gave space for various activities. In numbers, the area demonstrated to have lower rates of crime and a greater feeling of security and safety of occupants than other similar territories in Stockholm.

Nowadays, several urban approaches echo the requirement for long-term arranging and peaceful living with the point of securing the personal satisfaction for the future. The prosperity and sustainability of a society and a decent nature are firmly identified by the degree of crime and violence in the city (Raco 2007). Wellbeing influences all measurements of urban sustainability.

CONCLUSION

Achieving the target of sustainable cities and safety is the key element in the develop-

ment plan of an urban area. In this line Crime Prevention through Environmental Design (CPT-ED) is a vital concept for creating a safe and secured urban territory. This idea of creating and maintaining a safe environment should be a regular process wherein appropriate evaluation of safety measure should be taken into consideration. Engagement of the people particularly women, youth and urban poor is very much essential to achieve the target of an inclusive, sustainable and safe city. In India, more specifically in Delhi, one might not get desired success while implementing this concept of CPTED in the initial phase as the crime rate is very high in Delhi, but with time it will indeed show good results. While implementing the safe city projects in India, the government must take safety as the primary objective to make cities in India safe and sustainable. The programs for crime reduction need to be developed gradually, and several other civic agencies should work together including the residents of targeted areas to make it successful.

RECOMMENDATIONS

To accomplish urban sustainability, implementation of crime prevention programs is pertinent that will help in handling crime and fear of crime at each level in Indian urban communities. Security perspective must be the chief measurement of urban sustainability. The Government of India is focusing on massive investment in building smart and sustainable cities. Proper scrutiny of this money and efficient implementation of CPTED would be vital. Providing a safe and secure environment to urban people takes a lot of government money, and effective implementation of CPTED can dramatically reduce it. Both the implementers and the citizens are required to be aware of the efficacy of CPTED approach in mitigating the incidents of crime and adopt a proactive and participatory approach for achieving Urban Sustainability.

A reliable system of information and technology connection and digitization should be established along with other critical infrastructural amenities like water, electricity, cleanliness and housing, to provide quality of life. Such programs will certainly help India be a country where cities would be sustainable, safe and crime free shortly.

REFERENCES

- Assocham 2013. Safe Cities. From http://www.pwc.in/en_IN/in/assets/pdfs/industries/government/safe-cities-the-india-story.pdf (Retrieved on14 April 2017).
- Assocham 2015. Safe Cities Architecture for India. From https://www.pwc.in/en_IN/in/assets/pdfs/publications/2015/safe-cities-architecture-in-india.pdf (Retrieved on 14 April 2017). Block RL, Block CR 1995. Space, place and crime: Hot

Block RL, Block CR 1995. Space, place and crime: Hot spot areas and hot places of liquor-related crime. Crime and Place, 4(2): 145-184.

Brantingham PL, Brantingham PJ 1993. Environment, routine and situation: Toward a pattern theory of crime. In: RV Clarke, M Felson (Eds.): Routine Activity and Rational Choice. New Brunswick, NJ:

Transaction, pp. 259-294.
Ceccato V, Lukyte N 2011. Safety and sustainability in a city in transition: The case of Vilnius, Lithuania.

Cities, 28: 83-94.
Clarke RV, Harris PM 1992. Auto theft and its prevention. Crime and Justice, 16: 1-54.

Colquhoun I 2004. Design Out Crime: Creating Safe and Sustainable Communities. New York: Routledge.

- Cordner GW 2010. Reducing Fear of Crime: Strategies for Police. Washington, DC: Office of Community Oriented Policing Services, US Department of Justice.
- Cozens P 2002. Sustainable urban development and crime prevention through environmental design for the British City: Towards an effective urban environmentalism for the 21st century. Cities, 10: 129-137.
- Cozens P 2007. Planning, crime and urban sustainability. In: A Kungolas, C Brebbia, E Beriatos (Eds.): Sustainable Development and Planning III. 1st Edition. Southampton: WIT Press. pp. 187-196.
- tion. Southampton: WIT Press, pp. 187-196. Cozens P, Saville G, Hillier D 2005. Crime prevention through environmental design (CPTED): A review and modern bibliography. *Property Management*, 23: 328-356.
- Cozens, P 2008. Crime prevention through environmental design in Western Australia: Planning for sustainable urban futures. *International Journal of Sustainable Development and Planning*, 3: 272–292
- Felson M 1987. Routine activities and crime prevention in the developing metropolis. *Criminology*, 25: 911-932
- Gregory D, Urry J 1985. Social Relations and Spatial Structures. London: Macmillan.
- Grönlund A, Albinsson L 2012. Managing electronic services: A public sector perspective. Springer Science and Business Media, 57.
- HABITAT II 1996. United Nations Conference on Human Settlement (Habitat II). Istanbul, Turkey: Habitat II.
- Henry VE 2006. Compstat management in the NYPD: Reducing crime and improving quality of life in New York City. *Resource Material Series*, 68: 100.
- Jeffery CR 1977. Crime Prevention through Environmental Design. Beverly Hills, CA: Sage Publications. Judy LB 2008. Urban poverty: A global view, urban papers for the International Bank for Reconstruction and Development. The World Bank Justice, 21:
- LaGrange RL, Ferraro KF, Supancic M 1992. Perceived risk and fear of crime: Role of social and physical

- incivilities. Journal of Research in Crime and Delinquency, 29: 311-334.
- Lorenc T, Clayton S, Neary D, Whitehead M, Petticrew M et al. 2012. Crime, fear of crime, environment, and mental health and wellbeing: Mapping review of theories and causal pathways. *Journal Health and Place*, 18: 757-765.
- Loukaitou S, Anastasia, Eck JE 2007. Crime prevention and active living. *American Journal of Health Promotion*, 21: 380-389.
- Mohit MA, Abdulla A 2011. Residents' crime and safety perceptions in gated and non-gated low middle income communities in Kuala Lumpur, Malaysia. Journal of Architecture, Planning and Construction Management, 1: 71-94.
- Newman O 1972. Defensible Space. New York: Macmillan.
- Odierno G, Hanlon M 2017. Urban Security is National Security. Brookings: Brookings Institution. From https://www.brookings.edu/blog/order-from-chaos/2017/03/16/urban-security-is-national-security-(Retrieved on 23 May 2017).
- Raco M 2007. Securing sustainable communities citizenship, safety and sustainability in the new urban planning. *European Urban and Regional Studies*, 14: 305-320.
- Rios V 2015. How government coordination controlled organized crime: The case of Mexico's cocaine markets. *Journal of Conflict Resolution*, 59: 1433-1454.
- Roncek DW 1981. Dangerous places: Crime and residential environment. *Social Forces*, 60: 74-96.
- Roncek DW, Faggiani D 1985. High schools and crime: A replication. The Sociological Quarterly, 26: 491-505
- Roncek DW, Maier PA 1991. Bars, blocks, and crimes revisited: Linking the theory of routine activities to the empiricism of "hot spots". *Criminology*, 29: 725-753.
- Sampson RJ 1985. Neighborhood and crime: The structural determinants of personal victimization. *Journal of Research in Crime and Delinquency*, 22: 7-40.
- Shamsuddin SB, Hussin NA 2013. Safe City Concept and Crime Prevention through Environmental Design (CPTED) for urban sustainability in Malaysian cities. American Transactions on Engineering and Applied Sciences 223-245
- Applied Sciences, 223-245.

 Spelman W 1993. Abandoned buildings: Magnets for crime. Journal of Criminal Justice, 21: 481-495.
- Uittenbogaard AC 2013. Clusters of Urban Crime and Safety in Transport Nodes. Stockholm: KTH Royal Institute of Technology.
- UN Women. 2016. Facts and Figures: Ending Violence against Women. UN Women Report. New York. From www.unwomen.org/en/what-we-do/ending-violence-against-women/facts-andfigures (Retrieved on 23 May 2017).
- UN-HABITAT 2016. World Cities Report 2016. Urbanization and Development: Emerging Futures. UN Habitat Report. Nairobi: UN-Habitat.
- Walsh D 1986. Heavy Business: Commercial Burglary and Robbery. London: Routledge and K. Paul.
- Wilson JQ, Kelling GL 1982. The police and neighborhood safety: Broken windows. Atlantic Monthly, 249: 29-38.

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