INTRODUCTION

The unplanned growth of cities and towns and the expansion of urban populations tend to overstretch the resources of the state not only in terms of services and infrastructure but also of policing services. Consequently, the police and other security and crime prevention agencies of the state sometimes struggle to reach all sections of the major cities. Information gathered from the Ghana Police Service (GPS) and other studies point to an increase in the incidence of urban crime. This is without factoring in the considerable number of cases that go unreported. A 10-year aggregate of data from the Crime Statistics Unit of the GPS, for instance, shows that armed robbery cases (the most feared crime in Ghana) increased from 1,345 for the period 1980-1989 to 12,069 for 2000-2010, with cases of assault, theft and murder doubling within the same time period.

Again, a recent victimization survey of Ghana’s four main metropolitan areas – Accra, Kumasi, Sekondi-Takoradi and Tamale, conducted by the Ghana Statistical Service (GSS) with funding from the UN Office on Drugs and Crime (UNODC), indicated that about 35 percent of respondents felt unsafe walking alone in their communities after dark, and almost 20 percent did not feel safe when they were alone in their homes after dark. The survey further revealed that almost 56 percent of respondents felt that they were likely to become victims of burglary in the 12 months after the survey.

Faced with limited police presence and a growing incidence of crime (which has resulted in a heightened sense of fear of crime), individuals and households respond by fortifying their buildings as a means of preventing crime and protecting themselves. This method of preventing and reducing crime is referred to as Crime Prevention through Environmental Design (CPTED).

This Policy Brief presents highlights of a study titled “Crime prevention through environmental design (CPTED) and built-environmental manifestations in Accra and Kumasi”. It is part of a broader study – “Exploring Crime and Poverty Nexus in Urban Ghana” – conducted with funding support from the International Development Research Centre (IDRC) and the UK Department for International Development (DFID). It involved household surveys and interviews in Ghana’s four major urban centres, namely Accra, Kumasi, Sekondi-Takoradi and Tamale. Specific objectives of this study were to:

- Map and highlight the prevalent types of crime across socio-economic neighbourhoods within urban Ghana;
- Explore the relationships between neighbourhood and household socio-economic characteristics and the occurrence rates, types and impact of crimes;
- Assess the effectiveness of strategies, both formal and informal, for addressing crime in urban neighbourhoods.
• Assess the study’s implications for neighbourhood crime mapping and law enforcement intervention.

KEY ISSUES

The fundamental idea of CPTED is that architectural form and the physical environment can either prevent or reduce opportunities for crime, fear of crime and residents’ concerns about the safety of their neighbourhoods. The design of buildings and layout of a community – in terms of how easy it is to enter and exit – can attract offenders to commit crime. Thus the focus of CPTED is eliminating these features at the design stage, or modifying them on existing estates, to reduce crime and the fear of crime.

Unlike countries in the Western world and the developed world in general, sub-Saharan Africa has seen little research on CPTED partly due to the limited attention given to urban planning and management of the urban space in general. The probable exception to this rule is South Africa. But even there, the first conscious effort to study the relationship between crime and the physical environment only started in the late 1990s.

In Ghana, households have responded to crime and fear of crime by adopting residential building designs – characterized by high walls with (or without) barbed wire; metal burglar-proof windows and doors; foreign-breed security dogs; and surveillance equipment – usually associated with ‘self-contained houses’. Buildings of such design are now a common sight in all residential neighbourhoods, especially in the middle- and upper-class residential neighbourhoods of large Ghanaian cities.

Core Principles of CPTED

CPTED rests on four core principles that inform the approach to different built environments. These are:

Target hardening: This involves the use of walls and fences, burglar-proof doors and windows, etc. to fortify buildings with the aim of making it nearly impossible for offenders or criminals to break in. Target hardening is often the first solution that occurs to residents and designers because it physically reduces the vulnerability of a potential target (building).

Natural surveillance: This requires designing buildings to allow occupants and community members to see and be seen continuously as a means of reducing neighbours’ fear of crime. There is the sense that any offender or criminal can easily be observed and arrested. Measures include placing windows and doors in ways that allow occupants to observe what goes on in their immediate compound as well as outside; street lighting and proper lighting of surroundings of buildings; and fences, walls, hedges, etc. that do not obstruct visibility from outside.

On the basis of natural surveillance, short and ‘see through’ walls and fences are preferred compared to solid, tall and opaque walls which prevent visibility from both inside and outside of buildings.

Natural access control: This is meant to limit opportunity for crime to be committed by clearly delimiting points of entry and exit of buildings as well as placing walls/fences, lighting and landscape in a careful manner in order to limit easy access to buildings or control flows of people to and from buildings. Care must be taken when implementing natural access control measures so as not to compromise the natural surveillance of buildings.

Natural territorial reinforcement: This involves restructuring of the physical environment of communities to allow residents to control the areas around their homes, including the streets and grounds outside their buildings through the promotion of community bonding and social cohesion. This encourages a sense of ownership of and responsibility for community space and allows residents to identify with the space.

These core principles – and others such as the maintenance of property and community infrastructure as well as open spaces – are at the core of CPTED strategies, strategies that make it possible to lessen or prevent the incidence of crime. The key question, however, is to what extent do building designers, planners and local governments (Metropolitan, Municipal and District Assemblies [MMDAs]) in Ghana give any consideration to CPTED as part of their work? And can target hardening be applied in urban Ghana without undermining important Ghanaian social values?

Evidence from field studies conducted as part of this research study indicate that target hardening or fortification of houses is the dominant CPTED principle applied in urban Ghana. Prominent among these target-hardening measures are the use of metal burglar-proof windows and doors, and high fence walls with (or without) barbed wire. These features have become associated with houses in middle and upper-class residential areas (see Figures 1 and 2).
Fortified Houses with Target-Hardening Structures:

Tall and opaque walls do not allow occupants to see activities taking place outside their walls and also prevent outsiders from seeing activities within houses, leading to the non-application of CPTED principle of natural surveillance. Obviously, the extent to which the physical environment of communities is restructured to allow residents to control the streets and grounds outside their buildings with respect to natural territorial reinforcement is in question. More importantly, the ‘fortress houses’ associated with the self-contained housing in middle- and upper-class residential areas especially raise questions of social inclusion and social integration, and the creation of a sense of community.

Implications of Target Hardening

When target hardening – involving mainly tall and opaque fence walls with (or without) barbered wire – obstructs lines of sight or provides havens that cannot be surveyed (or prevents natural surveillance, access control and territorial reinforcement), the measure is unlikely to be an effective crime prevention tool. This form of crime control has many adverse consequences that need to be considered and weighed against the possible benefits:

- Fortification or target hardening has exclusionary tendencies as it tends to weaken communal and social bonds and relationships, and undermines the fight against crime.
- Target hardening does not totally prevent crime as it only delays the entry of the criminals. ‘If you do not get help from neighbours or the police, the criminals will eventually break in and attack you and your family’.
- It only creates limited ‘fortified enclaves’ or ‘islands of security zones’. This is because members or occupants of fortified households are vulnerable to attacks just outside their homes or behind their walls.
- It reinforces a sense of segregation as high walls separate neighbours and divides communities.

CONCLUSION AND RECOMMENDATION

As Ghana’s urban population continues to increase, crime rates rise, and traditional policing, crime prevention and security measures become increasingly inadequate, Crime Prevention through Environmental Design (CPTED) is necessary to create and maintain safer built environments.

As noted earlier, target hardening or fortification of houses is the CPTED principle most widely applied in urban Ghana. While not discounting the positive effects of target hardening, an effective and sustainable way of dealing with crime and security concerns of households needs to take into account the role of communities and architecture. Architecture and building designs should enhance community bonding and social cohesion rather than weaken them. Metropolitan, Municipal and District Assemblies (MMDAs) and other agencies, in approving building designs, should take into account the extent to which buildings and the built environment promote crime prevention through social cohesion.

*A full version of this paper titled ‘Crime prevention through environmental design (CPTED) and built-environmental manifestations in Accra and Kumasi, Ghana’, is forthcoming in the journal of Crime Prevention and Community Safety.
REFERENCES


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