Securing the urban space: on whose terms? Insights from poverty and crime baseline survey in Tamale, Ghana

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Abstract

Typically, the interaction of official security policies, the urban tissue, and individual characteristics largely underpin the liveabiliy of cities as centres of social interaction which invoke residents' sense of place attachment, social cohesion, and quality of life. Studies in advanced countries have contributed significantly to understanding these synergies, but there remains a large gap in knowledge in rapidly urbanizing countries. Ghana presents an interesting case study, as the security landscape appears motivated more by ideology than rationality, with what 'works' increasingly becoming populism rather than responsibility. Moreover, the limited researched criminology literature has focused mainly on the larger cities, neglecting medium-sized cities such as Tamale. Based on extensive fieldwork involving 450 household heads, ten key informant interviews (KIIs), and three focus group discussions (FGDs) from three socio-economic communities in Tamale, this paper examines how security arrangements in the city's various neighbourhoods reflect and connect the urban fabric with residents. We advocate for a more geographically sensitive and nuanced understanding of each neighbourhood's concerns and a re-consideration of security interventions, in order to reflect not only the broad spectrum of safety demands of the affluent but also those of the socially excluded and more economically disadvantaged groups in society.

Keywords: neighbourhood; socio-economic status; police–population ratio; informal crime control; Ghana

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Introduction

The notion of a secured and sustainable city has long been part of the theoretical toolkit of most city planners, whose responsibility it is to design healthy, safe cities where people can thrive, communities can grow, and the environment can flourish (Cahill, 2011; Alexander & Pain, 2012). Conventionally, the actualization of public safety, peace, and social justice has always been the mandate of the state through its formal institutions: the police, military, judiciary, paramilitary organizations, and other law enforcement agencies (Hopkins, 2007; Owusu et al., 2015). To this extent, successes in controlling crime in cities in developed countries have depended on the use of innovative analytical techniques developed in response to needs identified at the local level (UN, 2007). Successful crime control techniques involve cutting-edge strategies to gather and use knowledge, often in collaboration with actors such as municipal planners and civic leaders (Doyle, 2006; Lippert, 2009). Nonetheless, urban governments in developing countries, unable to cope with the realities of today's world—a globalized and competitive world, which is being shaped by the rapid urbanization of mega-agglomeration—lag behind in the pursuit of securing urban spaces (Adu-Mireku, 2002; Tankebe, 2008; Ceccato & Wikstrom, 2012; Haining, 2012).

The inability of city authorities to plan for increasing population growth has resulted in unplanned and poorly managed cities, with increasing development and expansion of slums and informal settlements (Obeng-Odoom, 2010; Songsore et al., 2014), exposing inhabitants to a number of potentially detrimental social vices such as crime. The growing inability of state institutions to adequately provide for the safety of all citizens in the face of the growing incidence of crime has heightened people's sense of fear of crime (Adu-Mireku, 2002; Badong, 2008). Consequently, some individuals and households respond by employing unconventional methods such as magic and superstition in dealing with peace, security, and justice (Badong, 2008). Others also resort to the 'fortification' of their buildings as a means of protecting themselves (Owusu et al., 2015). Such tendencies raise questions about socio-economic inequality and the marginalization of the securitization of the urban built environment (Pain, 2008; Alexander & Pain, 2012).

The inequality in providing peace, safety, and justice within the entire built environment has created ambiguity as to who benefits from the limited state security apparatus and how the underserved respond to their security challenges, a subject which is too often omitted from overarching accounts of urban safety. Our paper seeks to carefully unravel and resolve this ambiguity from three main perspectives: first, we seek to analyse who the actual beneficiaries are of the services provided by the Ghana Police Service—the service constitutionally mandated to provide internal security for all—as a way of clarifying the negativity inherent in mainstream conceptualizations of security. We achieved this by a detailed examination of the capacity of police personnel officially assigned to each jurisdiction against the UN's prescribed standard of one police personnel to every 500 residents (Arthur, 2012). We acknowledge that during police operations a unit can call for re-enforcements from other units when there are patrol teams which complement the services provided by the individual stations. Without discounting the importance of such operational arrangements, we still believe that the number of on-site personnel significantly reflects the actual strength of the station. Secondly, we

evaluated the public's perception of police performance; and lastly, we ascertained the role of non-state actors in complementing the provision of urban security, and we highlight their relationship with state actors as well as some of the challenges in addressing urban safety.

The paper is organized in five sections. The next section presents theoretical and empirical research on securitization of urban space, highlighting the longstanding role criminologists from developed countries have played in the development of such literature (empirical evidence) and the paucity of research in developing countries. This is followed by details of the methodology used for the study and a discussion on the current institutional arrangements for the provision of urban security. The subsequent section presents the results of our study, which commences with a brief discussion on the socio-economic and demographic characteristics of our respondents. Based on our secondary data, we analyse the aerial extent of the police–population ratio to ascertain, spatially, those who are adequately covered and those who are not. We further examine our respondents' perceptions about police performance, based on the various socio-economic constitutions as captured in our study area. The paper concludes with a discussion on how to improve urban safety for all.

Securitization of urban space

To effectively answer our research questions, we sought for deeper understanding of the interface between urbanization within Sub-Sahara Africa and the structural and social changes within the urban space and place. The routine activity theory proves useful and offers an effective conceptual toolkit for such an analysis (Cohen & Felson, 1979). Rooted in the fundamental tenets of classical criminology, the theory holds that people freely choose their behaviour and are motivated by the avoidance of pain and the pursuit of pleasure. It argues that crime is likely to occur when there is the intersection of a motivated offender and a suitable target in the absence of a capable guardian (ibid.). As an analytical pathway, the central premise of the theory is that people are rational beings whose behaviour can be controlled or modified by a fear of punishment. This means that if offenders perceive the costs to be too high, the act to be too risky, or the payoff to be too small, they will choose not to engage in the act. In this way, it is believed offenders can be persuaded to desist from offending by intensifying their fear of punishment. It is in this direction that one expects the arm of the police, the body constitutionally mandated to provide internal security, to reach the entire built environment.

The potency of the routine activity theory rests heavily on the dynamics of three interlinked elements—motivated offender, suitable target, and absence of a capable guardian—which necessarily must converge in time and space for a crime to occur. Cohen and Felson (ibid. 593) postulate that criminal activity is a 'structurally significant phenomenon', implying that violations are neither random nor trivial events. In consequence, crime can be said to be normal and, thus, dependent on available opportunities to offend. By inference, if there is an unprotected target and there are sufficient rewards, a motivated offender will commit a crime. Significantly, guardianship can be the physical presence of a person who is able to act in a protective manner or can take the form of more passive mechanical devices such as video surveillance or security systems. These physical security measures help limit an offender's access to suitable targets. On this score, it can be assumed that an essential aspect of the theory

is the interaction of motivation, opportunity, and targets. The presence of guardians will deter most offenders, rendering even attractive targets off limits. The empirical application of the theory is seen in a growing number of innovative studies (e.g. Sampson & Laub, 1995; Gouvis-Roman, 2002; Campbell et al., 2003). For example, supporting the situational nature of offending, Campbell et al. (2003) found the concept of opportunity to be predictive of both violent and property school-based offences, while Gouvis-Roman (2002) found that schools act as a social milieu for violence. Unique among the authors is the proposition that the presence of opportunity coupled with a lack of guardianship increases criminal motivations and the likelihood of an offence taking place.

Our paper builds upon and expands the work of these scholars. Specifically, we use the model to unpack and contribute to a ground-up understanding of how disadvantaged urban residents (the agency of the fearful) achieve their everyday security in Tamale, Ghana. We examine how the lack of human capacity and logistics (a failure in the state's protection) has compelled them to resort to 'non-state' actors to navigate their fear and land use decisions in the city. The value of the study is derived from the fact that prior studies disproportionately interrogate the situation in developed countries, with relatively fewer studies paying attention to the situation in the developing world (e.g. Weir-Smith, 2004; Xu, 2009; Kigerl, 2011). Ironically, the limited studies in developing countries focus only on macro-structural arrangements and pay scant attention to social-cultural and religious differences and beliefs that influence safety and security outcomes. By building upon these earlier studies, our paper gauges the potency of the theory conceptually by showing how the less privileged access security in Tamale in the absence of a capable official guardian (the police). In order to set the background for the application of the model, we present a descriptive, socio-economic, and religious context account of the study area.

Maintaining internal security: The Ghanaian experience

The complexity and heterogeneity of urban areas generate challenges that necessarily require a formal role for the state. The efficiency and effectiveness with which the supposedly impartial formal state institution(s) carry out their functions dictate how well city dwellers inhabit, modify, move through, and share the urban space. Our literature search therefore sought to understand this official arrangement for controlling and managing the urban space and providing urban safety. This was deemed important since prior studies, mostly from the global North (see Rimmer, 2009; Sargeant et al., 2014), indicate that lack of efficient policing strategies provokes a feeling of insecurity and increasing lack of trust in the police. Typically and constitutionally (see Article 200 (3) of the 1992 Constitution), the Ghana Police Service remains the statutory body responsible for providing internal security and, therefore, protecting life and property throughout the territorial boundaries of Ghana. Specifically, section I (1) of the Police Service Act (Act 350) of 1970 states, inter-alia:

It shall be the duty of the Police to prevent and detect crime, to apprehend offenders, and to maintain public order and safety of persons and property. This is essentially so because in the common law accusatorial legal regime, the court system of judicial adjudication can only be effective if complemented by a well-organised police institution. It can be argued that in the special context of human rights enforcement, the enjoyment or otherwise of the fundamental

freedoms of the individual citizen largely depends on the manner in which the Police discharge their statutory functions.

Admittedly, there is some controversy as to when formal policing started in Ghana, but an in-depth interrogation of the subject is beyond the scope of the current study. Suffice it to say, however, that one of the most cited narratives about the history of Ghana's police is by Michael Teku, who argues:

Policing in the Gold Coast started in 1831 when Captain George MacLean formed a body of one hundred and twenty-nine men to maintain and enforce the provisions of the 'Treaty of Peace' which he signed with the Coastal chiefs and the King of Ashanti. (Teku, 1984)

Be that as it may, available data indicates that in pursuance of this constitutionally mandated responsibility, the police administration adopts a hierarchical operational organogram or formation, beginning from the national headquarters in Accra through to the police stations in towns and police posts at the community and village levels. As at December 2014, there were 11 regional, 55 divisional, and 208 districts headquarters as well as 769 police stations and police posts countrywide (see SITU, 2014). Throughout its existence, the operationalization of the police Criminal Code has been the major manifestation of the formal social control in cites and beyond. Thus, the spectre of the criminal law hovers above all aspects of urban life, and the police Criminal Code regulates and prohibits specific behaviour and threatens punishment for defaulters.

It is also important to add that the constitution of Ghana also assigns responsibilities to other state institutions which serve to complement the police quest to maintain security. This is in line with Arias's (2011) admonition that addressing issues of internal security in contemporary cities, with their unique and diverse challenges, necessitates looking beyond the traditional role of the police regarding public safety to strive for the participation of a range of other equally important stakeholders. Table 1 lists some state institutions which provide complementary assistance to the police in maintaining public order.

Table 1: State institutions in the provision of security services in Ghana

State	Legislation	Main objective	Remarks
Ghana Police Service	Article 200; Act 1970 (Act 350)	To maintain internal security	Increasing patrols in cities but perceived as corrupt
Ghana Armed Forces	Article 210; Act 1962 (Act 105)	To defend the territorial boundaries of Ghana	Enhancing civil–military relationship to defuse public feared use of violence
Ghana Immigration Service	Immigration Act 2000 (Act 573)	To control and manage borders	Perceived inability to protect the national borders
Ghana Prison Service	Article 205	To reform and rehabilitate prisoners	Public perceive prisons as hub for recruiting criminals
Ghana Fire Service	ACT 219 of 1963 amended as Fire Service Act 537, 1997	To protect life and property	Public perception about rescue missions other than fire fighting is limited
Customs, Excise & Prevention Service	CEPS Law 1993, PNDC 330	To collect, account and protect tax revenues	Accused of facilitating tax invasion
Bureau of National Investigation	Security and Intelligence Agencies Act (Act 526) 1996	To keep close watch over the government	Work is shrouded in secrecy, hence losing public confidence in intelligence gathering
Economic & Organized Crime Office	Act 804	To prevent and detect crime as well as seize the benefits of crime from perpetrators	Accused of partiality in criminal investigations
Judicial Service	Articles 125 of 1992 Constitution	To resolve conflicts according to the law	Accused of corruption and administration of injustice

Source: Adapted from Constitution of Ghana, 1992

Whither the Ghana Police Service? The intent of this paper is not to evaluate the police administration and its performance (or lack thereof). Without doubt, there are myriad institutional factors that influence police effectiveness. Quoting from the *Ghanaian Times* of November 2001, page 1, Aning (2006: 29) reveals that '[p]olice inability to adequately discharge the services that are expected from the Service by the public is also due to problems with telecommunications and transportation.' He further catalogued other factors, including poor funding of the service, inadequate facilities for police work, and poor resources management. We are of the opinion, however, that if the police are to be successful in meeting new and diverse societal challenges, then the service ought to be conscious of the way it interacts and responds with the society of which it is a member. Essentially, the police ought to take into consideration the political, economic, and social environment within which it functions and 'transform the negative legacy of being seen as a corrupt "buyable", non-performing service' (ibid.).

We see poor evaluation of the police by residents or public disaffection with the conduct, integrity, and effectiveness of the police as a recipe for chaos and disappointment, which are often expressed in the form of hostile actions toward the service, resulting in a police–community relation that is based on mistrust and hostility.

Table 2: Non-state institutions in the provision of security services

Non-state informal	Main objective	Remarks
Traditional authorities	Preserve peace and security	Sometime accused of biases
Community Watch Group	Support police in crime prevention and detection	Members are often volunteers
Religious bodies (imams, pastors, shrines, etc.)	Resolve conflicts/ offer judicial services per belief or doctrine	Partly effective for loyalists
Landguards	Protect individual property	Operations can be fearful and fatal
Non-state formal		
Civil Society Organizations/NGOs	Human rights activism and legal assistance programmes	Support human rights activism and reduce inequality
Private security services	Complement police activities	Largely escape supervisory role by the state

Source: Adapted from Badong, 2008

The above observation is consistent with Herbert's (1997) observation that the police's ability to successfully assert their authority to restore peace is deeply connected to their capacity to control territory. From this perspective, the collective expectation of a community that the police will maintain socio-spatial order is most obvious when public order fails, such as during the *Andani* and *Abudu* clashes in Tamale (see Oteng-Ababio et al., 2016). In all situations when order breaks down, the legitimacy of the police suffers immensely, making other mechanisms

besides the institution of the police—a manifestation of formal social control in action—acceptable means of maintaining security and social control. Some of these non-formal institutions are listed in Table 2.

The importance of these non-state actors cannot be overemphasized. Historically, the traditional authorities were part of the British colonial government structure through the indirect rule systems (MacGaffey, 2006). In recent times, land disputes in Tamale (northern Ghana) are predominantly resolved by the *Tindama* (Tsikata & Seini, 2004). The effectiveness and the extent of their involvement in providing security will be interrogated in later sections of this paper but not until after highlighting the pathways used to collect the requisite data for the study.

The study area and methodology

Tamale, a city located within the savannah woodland, is one of the ten regional capitals in Ghana (Northern Region). Historically, the city emerged at the confluence of three ancient trade routes, including the famous Salaga slave and Daboya salt trade routes (Briggs, 2010), a location which currently houses the palace of Gulkpe Naa, the paramount chief of Tamale. The city today is composed of a conglomeration of towns where one can find an architectural blend of traditional mud houses and more modern buildings (MacGaffey, 2006). With a total land area of 646.90 sq km in 2010 (GSS, 2013), Tamale's population grew from 1,435 in 1907 (Staniland, 1975) to 371,351 in 2010 and is projected to reach 563,916 by 2020 (GSS, 2013), making it the third-largest city in Ghana and the fastest-growing city in West Africa (MacGaffey, 2006).

As is characteristic of most fast-growing cities, Tamale hosts a youthful population (36.4% aged less than 15 years). Economically, the city has an economically active population (63.3%), of whom 92.6% are engaged in varied livelihood strategies, mainly in the service and sales sector (33%) and craft and trade works (21.5%). Traditionally, 90.5% of residents belong to the two dominant Muslim sects—Alsuna and Tijani—which, over the last decade, have engaged in attacks and reprisals against each other. Like most cities in the country, the authorities have proved unable to respond positively to the rapid urbanization by providing adequate social infrastructure. This has not only resulted in inequality in income and access to urban services, but has also significantly impacted on the hitherto traditionally bounded safety nets that had held society together. This has been fuelled by the interplay of extreme antagonistic party politics and traditional governance (chieftaincy), making Tamale artificially calm on the surface but polarized along religious, party political, and chieftaincy lines.

The data for this study was extracted from a national baseline survey of a three-year project, 'Exploring poverty and crime nexus in urban Ghana', funded by Canada's International Development Research Center (IDRC) and the United Kingdom's Department for International Development (DFID) as part of a worldwide research program entitled 'Safe and Inclusive Cities' (SAIC) (for detailed methodology, see Frimpong, 2016; Owusu et al., 2015; Owusu et al., 2016a; Owusu et al., 2016b; Wrigley-Asante et al., 2016; Oteng-Ababio et al., 2016; Oteng-

Ababio, 2016). This paper is based on data collected from Tamale, which involved a 450-household survey, ten face-to-face interviews, and three focus group discussions (FGDs). In general, participants for the survey were selected from three socio-economic neighbourhoods (Aboabo-Tamale, Zogbeli, and Russian Bungalow).

The study results and discussion

Gauging crime levels in Tamale

This section examines the crime levels of Tamale in accordance with the data provided by the police vis-à-vis other cities in the overall study. This then provides the basis to compare participants' perception of the crime levels in their respective local communities. Table 1 presents the police reported cases of five of the major offences across the four major cities in the country. The results show that as the number of reported cases in the three other cities kept on oscillating between 2011 to 2013, the case of Tamale points to the contrary, with all the five major offences (robbery, murder, assault, rape, and defilement) showing consistent increases over the period. For example, the reported murder cases increased from 25 in 2011 to 37 cases by 2013, an increase of 48%. Suffice it to add that the available data produce only broad crime trends. In a sense, but for data paucity, the analysis would have been more appropriate using the rate of offences officially cleared up by the police, which would also serve as an indication of police effectiveness and efficiency (Appiahene-Gyamfi, 2003). As noted by Oteng-Ababio et al. (2016):

the data pose a significant barrier to accurate data interpretation since apart from their implicit limitations, it fails to provide insights into intra-neighbourhood relationships and dynamics. It masksthe predominant social and environmental characteristics that can have an impact on crime, and how the identification of such predictors can influence policy initiatives, thus providing room and justification for stereotyping.

It is believed the inherent possibilities and limitations of the study, emanating from data paucity, would also be better served by drawing on and analysing the participants' perceptions, albeit with some limitations.

To tackle the observed shortcomings due to lack of disaggregated data at the community level from official sources and gain further insights into the crime levels in the metropolis, we relied on the results of the household research survey, which comprised 54.3% males with an average of 23 years of continuous stay in the respective communities. Figure 1 presents respondents' perception of crime levels in their respective communities in Tamale. From the data, about one in three respondents (about 33%) from Aboabo-Tamale (the low-income community) indicated either crime is low, moderate, or high, which by implication means that crime in the community can be said to be normal, which in principle accords with the police data as depicted.

Table 1: Major reported offences in selected cities in Ghana

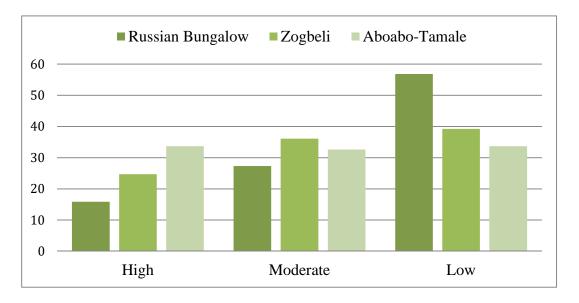| Crime/City/Year	Accra			Kumasi			Sekondi/Takoradi			Tamale		
	2011	**2012**	**2013**	**2011**	**2012**	**2013**	**2011**	**2012**	**2013**	**2011**	**2012**	**2013**
Robbery	238	235	255	333	367	245	46	62	67	21	22	33
Murder	31	66	45	91	147	140	52	59	58	25	27	37
Defilement	447	506	514	304	275	255	272	333	279	29	32	46
Rape	169	165	157	69	51	68	46	74	46	13	20	16
Assault	30,576	27,036	25,460	12,937	11,889	11,062	7,083	8,170	5,747	608	722	732

Source: Ghana Police Service, 2012 & 2013

Figure 1: Respondents' perception of general crime levels in their local area

Source: Field survey, 2014.

The perceived crime level in the middle-income community of Zogbeli was not markedly different. Some level of difference was evident, however, in the high-income community (Russian Bungalow), where only 16% indicated a high crime rate, with about 57% indicating low crime rates. In this case, only 16% of high-income residents compared with 25% of middle-income and 34% of low-income residents perceived crime to be high in their respective communities. A statistical analysis revealed a chi-square value of 10.693 at 4 degrees of freedom and p-value 0.001. The result points to a strong relationship between an area's socio-economic characteristics and residents' perception of crime. Put differently, it can be deduced that the residents in low-income Aboabo-Tamale perceive the area as more crime-prone than the middle- and high-income areas of Zogbeli and Russian Bungalow, even though earlier results show the city is generally calm. This was also evident during the in-depth interviews, when participants from Aboabo-Tamale and Zogbeli overwhelmingly talked about the ways in which the atmosphere in the community had become chaotic and unsettled, mainly fuelled by the protracted ethnic conflict. One participant noted:

Ordinarily, the area is calm, but things have changed these days. A variety of factors have contributed to what we are seeing in this place. You have to take into account Tamale's chieftaincy history. Looking back, this confusion started in 2000 when the Ya Na was murdered.

Since then, we have known no peace. Even outright rumour or fabricated falsehood can spark reprisal attacks. (An Abudu,[1] lifetime resident)

The assertion above raises key questions about social production of insecurity in the community—the issue of fear existing in 'quiet' neighbourhoods. The high prevalence of perceived safety in Aboabo-Tamale (33.7%) and Zogbeli (39%) is at odds with the current public perception about the two communities, which conveys an idea of constant volatility. The critical lesson from the narratives is that without attention to a community's nuanced historical and political economic contexts, it will be difficult to understand their underlying safety concerns. Our findings indicate that the following factors are much more strongly related to views of changing levels of local crime:

- respondents who lived in low-income, deprived communities were more likely to think that crime had risen in their local area than those resident in affluent areas.
- to the extent that most low-income areas are also likely to be physically disordered, those living in such areas were more likely than those living in affluent areas to believe local crime had risen.

Typically, researchers measure the amount of crime as a first step in understanding why some neighbourhoods have more crime than others; residents also assess the amount of crime in a community before making decisions on which one to walk about in, whether to move in or out. In this context, we agree with Shirlow and Pain (2003) that fear, which varies with everyday lived experiences, is not reducible to generalization (as the police data depicts) but needs to be viewed as location-specific, complex, and often arising from multiple causes, some of which tend to escape the lens of some fear of crime discourse. This understanding, however, is indispensable and fundamental if we are to maintain universal security for the entire built environment.

Maintaining internal security: Physical deployment of police personnel

In this section, we seek to problematize state agencies' rhetoric around urban security, which as far as some of the members of the community are concerned, does nothing to enhance their neighbourhood security but rather controls and suppresses marginalized groups (see Oteng-Ababio et al., 2016). We draw on our empirical research to argue that contemporary safety and security measures that are appropriate for a city depend technically on its circumstances (see Ploger, 2006). By convention, the police adopt a risk-based approach in deciding what level of security to provide for each community and judge effectiveness and success primarily by the number of reported cases. Principally, the officers and men assigned in each unit take responsibility for all life and property within that jurisdiction. In order to ensure adequate conformity with their constitutional role, police officers are inducted into the service by training, skills development, and submission to an ethical code.

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[1] One of the two factions among the Dagombas vying for the chieftaincy in Dagbon.

Table 3: Trends in Ghana's national population and police–population ratio (1947–2014)

Year	Population of Ghana (million)	Current police strength	Expected police strength	Police/population ratio
1947	4.01	2,700	8,020	1:1,485
1952	4.06	3,480	8,120	1:1166
1957	6.00	6,000	12,000	1:1000
1971	8.50	19,410	17,000	1:438
1992	16.00	15,484	32,000	1:1,033
1999	18.50	16,212	37,000	1:1,141
2001	18.50	14,412	37,000	1:1,283
2014	27.00	29,155	54,000	1:926

Source: Adapted from Aning, 2006; SITU, 2014

Table 3 presents the current police–population ratio countrywide in order to situate the Tamale Metropolis in perspective. The data makes for interesting reading, especially regarding the progressively oscillating strength of the Ghana Police Service in the face of increasing national population. For example, from a police–population ratio of 1:1,485 in 1947, the situation appreciated significantly to 1:438 in 1971 but plummeted again to 1:1,283 in 2001. If we are to ensure optimum security for all citizens, the situation is particularly worrying when gauged against the UN-recommended standard police–population ratio of 1:500 (Arthur, 2012). Thus, as a ratio in relation to 2014 population figures, the full complement of the Ghana Police Service to ensure optimum protection should have been about 54,000 officers to match the population of almost 27 million. According to the above statistics, there is a deficit in police personnel of almost 25,000.

In the case of Tamale, a city with a landmass of 646.90 sq km and a population of 371,299, currently it has only two main police stations, located toward the Central Business District (CBD), and two police posts along the Accra–Paga road, perhaps because of its international nature. Quite conspicuous is the complete physical absence of police in the middle- and low-income communities of Zogbeli and Aboabo-Tamale, respectively, which are both conflict-laden and highly populated. This reflects an unbalanced distributive justice with respect to the siting of police stations and deployment of police services. The current police personnel strength of 235 (against the expected 743 required to provide optimum protection) represents a deficit of 508 men within the metropolis.

By implication, this means that about 68% of the population in the metropolis remains underserved or marginalized. The critical questions then are who is secured and how do the unsecured survive within the urban settings? With the low- and middle-income areas virtually cut-off from the services of the police, we can tentatively infer that the police–population relationship in Tamale favours high-class socio-economic neighbourhoods. Put differently,

there appears to be limited police visibility at the fringes as well as in the low- and middle-income socio-economic residential areas in Tamale. This observation resonates with our household survey. We analysed our respondents' responses to the question: 'In general, do you need more police in your community?' The evidence shows that the majority of respondents (84.9%) from low- and middle-income areas voiced considerable anxiety about the need for more police visibility, with only 6% from Russian Bungalow expressing similar anxiety.

Maintaining internal security: Public perceptions of police performance

In general, evaluating the performance of the police is an exceptionally difficult task, not least because it is quite easy to say how many murders have taken place in a community but much more difficult to prove how many crimes have been prevented. In this study, using factor analysis we evaluated the performance of the police by measuring the level of respondents' responses to their confidence in, satisfaction with, and trust in the police. We began by assessing the suitability of the data set for factor analysis by employing the Kaiser-Meyer-Olkin (KMO) measures of sampling adequacy and Bartlett's test of sphericity (Table 4).

Table 4: Kaiser-Meyer-Olkin and Bartlett's Test

KMO Measure of sampling adequacy	Bartlett's test of sphericity		
KMO Value	Approx. Chi-Square	Df	Sig.
0.742	1512.40	28	0.00

Source: Field data, 2014

The sampling adequacy test predicts whether data are likely to factor well, based on correlation and auto-correlation. The KMO statistic varies between 0 and 1. A value of 0 indicates that the sum of partial correlations is large relative to the sum of correlations, and therefore factor analysis may be inappropriate. A value close to 1 indicates that patterns of correlations are relatively compact, and so factor analysis is likely to yield distinct and reliable factors. Kaiser (1974) recommends accepting values greater than 0.5; and since our data reports 0.742, Bartlett's test of sphericity was employed to test the null hypothesis that the original correlation matrix is an identity matrix. At 5% level of significance, the results show that the data is highly significant ($p < 0.001$), and therefore factor analysis is appropriate.

The variance rotation method was used to rotate the three retained factors, and the resultant factor matrix with its factor loadings is presented in Table 5. In this study, we considered factor loading greater than 0.4 as high enough to interpret a particular factor.

Table 5: Total variance of respondents' perception of police performance

Component	Initial Eigenvalues			Extraction sums of squared loadings			Rotation sums of squared loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.567	44.584	44.584	3.567	44.584	44.584	2.812	35.153	35.153
2	1.506	18.820	63.404	1.506	18.820	63.404	1.710	21.371	56.524
3	1.054	13.180	76.584	1.054	13.180	76.584	1.605	20.059	76.584
4	.614	7.676	84.259						
5	.468	5.846	90.105						
6	.314	3.925	94.030						
7	.271	3.382	97.412						
8	.207	2.588	100.000						

Source: Field data, 2014

Table 6: Rotated component matrix of police performance rating into three components

	Component (Factors)		
	1	2	3
The security services arrest criminals within the community promptly (Arrest promptly)		0.922	
They respond to calls in a timely manner (Respond timely)		0.815	
They are committed to fighting crime (Commitment)	0.670		
They are trustworthy (Trustworthy)	0.853		
They treat all citizens equally (Fairness)	0.898		
They are transparent (Transparent)	0.803		
They are corrupt (Corruption)			0.880
They have a lackadaisical attitude to work (Lazy)			0.866

Source: Field data, 2014

Table 6 presents details of various groupings under each factor. For the purpose of our discussion, each factor is assigned a common name based on the variables that fall into that category. Variables that load highly on Factor 1 are 'Commitment', 'Trustworthy', 'Fairness' and 'Transparent'. Factor 1 can be described as 'dependable', because it collectively relates to attributes that build public confidence in the Police Service. A high score indicates that respondents perceive the police as highly dependable. The variables that load highly on Factor 2 are 'Arrest promptly' and 'Respond timely'. Factor 2 can be described as 'time conscious', indicating that the respondents have confidence that the police respond to their duties with promptness. A high score for this factor indicates that the respondents have a positive perception of the police's time consciousness. Finally, two variables ('Corruption' and 'Lazy') make up Factor 3, representing 'irresponsibility'.

By implication, it can be argued that although residents see the police as dependable and time conscious, at the same time paradoxically they see them as 'irresponsible'. This resonates with the Aning's (2006: 29) admonishment to the service to take into consideration the political, economic,

and social environment within which it functions and to 'transform the negative legacy of being seen as a corrupt "buyable", non-performing service'. As already stated, such negative perception creates public disaffection for the police, which harms the police–community relationship and is a potential recipe for chaos, mistrust, and hostility. In such a context and consistent with Herbert's (1997) observation, the situation can impact negatively on the police's ability to successfully assert their authority. Indeed, it contradicts respondents' belief that efficient urban security involves local communities taking ownership of their own safety and actively working with the police.

Our earlier results point to an overwhelming desire on the part of survey respondents for more police visibility in contexts of low socio-economic status, to rectify the obvious skewed deployment of the Police Service in favour of high-income areas and against low-income and fringe communities. Based on this we analysed how respondents in disadvantaged communities protect themselves and attempt to prevent and control crime against their personal and property safety. The results show that about 26.8% of the respondents resort to the environmental approach (see Owusu et al., 2015), which aims to modify the physical environment to reduce the opportunities for crime to occur. They resort to target hardening through the use of security doors as well as special door and window locks to secure their safety and properties. Another important observation was the use of community solidarity and the use of burglar-proofs, which accounted for about 20% each of our responses. Interestingly, while about 16% depend on magic, prayers, and other religious options, 11% believe in the status quo and therefore do nothing, while just over 1% rely on security guards, guard dogs, and/or have installed alarm systems as safety precautions.

Conclusively, it can be deduced that formal and non-formal actors are functionally integrated into crime control efforts in Tamale. However, there is a direct relationship between the use of formal state institutions and the socio-economic status of one's place of residence, with the low-income areas clearly disadvantaged. This stands in stark contrast to the dictates of the Constitution of Ghana, which expects police officers to demonstrate complete decency, selflessness, protection of human rights, and the pursuit of citizens' happiness in the discharge of its functions. Admittedly, it must be stated that the current constitutional democratic order places measured legal limitations and restraints on the actions of the police, at least to some extent—for example, in their use of coercive power. Aside from the constitutional challenge, other challenges include lack of communication, transportation, intelligence, and investigative tools and facilities (Aning, 2006). Thus, the police have to live with the often unpleasant situation of having to negotiate the complexities that arise from the inevitable conflicts between justifiable individual rights and uncompromised societal interests. This state of affairs underscores the saying that law enforcement is forever at odds with civil liberty (Taylor, 2006).

(In)Formalization of urban security and social control

The narrative so far points not only to significant differences in the perceived level of crime in Tamale Metropolis but also to unbalanced and skewed police–population deployment, to the disadvantage of low-income socio-economic residential neighbourhoods. As one would expect, residents of the high socio-economic status residential area (Russian Bungalow) are relatively better serviced not only because of their nearness to the regional and metropolitan police headquarters but, more importantly, because this neighbourhood's houses serve the military, police, and other senior security services officers. In addition, residents tend to engage private security personnel on a commercial basis, in addition to the sparsely deployed police personnel at the residences of some officers. It is therefore not surprising that only 16% of respondents in the high-income community (Russian Bungalow) referred to a high crime rate, as against 34% in the low-income community (Aboabo-Tamale). The findings are in consonance with the tenets of the routine activity theory (see Cohen & Felson, 1979), which is based upon the premise that crime is often opportunistic: preventive strategies aim to modify contextual factors to limit the opportunities for offenders to engage in criminal behaviour (see also Tonry & Farrington, 1995). Such situational prevention comprises a range of measures that highlight the importance of targeting very specific forms of crime in certain circumstances (Clarke 1997) and involve identifying, manipulating, and controlling the situational or environmental factors associated with certain types of crime (Cornish & Clarke, 2003).

Our study further suggests that a significant proportion of the underserved reside within the low socio-economic status and fringe areas of the city. This manifests in the disproportionate siting of police stations. The situation is further compounded owing to the inadequate human and financial resources confronting the Ghana Police Service in general—occupational challenges which have been well-documented in prior studies (Aning, 2006; Atuguba, 2007; Badong, 2008). As noted earlier, Tamale is witnessing unprecedented levels of mobility (within and beyond its boundary) and population change, as well as rising levels of insecurity generated by the post-chieftaincy conflicts in 2000 (see Oteng-Ababio, 2016). Indeed, the police have severally expressed concern about the rising levels of intolerance among different ethnic, political, and religious groups. During the key informant interviews, some discussants expressed the opinion that insecurity has emerged as one of the most important management challenges facing any sustainability agenda of the city authorities. In their view, the security of persons and their properties is a basic resource underpinning development, not just in terms of poverty alleviation but also more sustained economic growth and social development.

The different levels of perceived (or perhaps actual) crime coincide with the level of a neighbourhood's social and economic deprivation, which is also in tandem with the perceived level of police protection or community-based narratives of police (in)visibility, (in)justice, and victimhood. Consequently, residents in deprived areas or with limited access to police services

largely rely on self-help efforts, such as target hardening, community solidarity, and magico-religious activity to offset the limited formal services, a practice which prior studies have adequately examined (see Tewksbury & Mustaine, 2003; Badong, 2008; Arias, 2011). Our results revealed that even though all the participants agreed the threat of formal punishment can serve as an inducement for criminals to behave in a particular fashion and that some prefer to avoid jail and not run afoul of the authorities, yet many equally abstain from crimes owing to the fear of disapproval from peers. Such people seek not to attract disapproving looks and want to be included by groups with whom they wish to associate. Thus, this fear of informal sanctions compels some people to abide by the often implicit norms of their society. To some authors (Wilson, 1987; Bursik, 1999), however, such practices are individualistic and do not necessarily result in social control efforts. Thus, we can infer that community solidarity is more a case of fostering a survivalist strategy than necessarily a case of efforts toward universal social control. We are of the opinion that a potential collaborative tool must be created between the formal (Police Service) and informal (non-state) crime prevention strategies in order to provide a competitive service delivery.

Concluding remarks

Using the case of Tamale, this paper has highlighted the need for inclusivity in the provision of urban safety if the sustainable development goal SDG 11 is to become an effective policy tool for ensuring sustainable urban development. This calls for engaging with all the key stakeholders, including the widespread informal crime prevention strategies present in cities, in a complementary rather than in a dichotomizing manner. It also requires securing all spaces that are run-down, abandoned, or neglected, as well as blighted neighbourhoods and places that seem to have outlived their usefulness and are by-passed by society. Indeed, informality in general must be seen as an intrinsic urban phenomenon, one that should be recognized by local authorities and urban managers and incorporated within sustainable urban development programs. Strategies to address such informality must inform policy formulation and planning practices. It is from this perspective that the paper advocates for a more geographically sensitive and nuanced understanding of each neighbourhood's concerns. It also calls for a re-consideration of security interventions to reflect not only the broad spectrum of safety demands of the affluent but also of the socially excluded and more economically disadvantaged groups in society. City managers should strive to avoid situations where the security landscape appears more an outcome of ideology than of rationality, with what 'works' increasingly becoming populism rather than responsibility.

Never before has the city more needed an integrated approach to crime prevention. The truth is that the state and non-state approaches are deeply (see Beek, 2012) interlinked and must be seen as such. While there are many trade-offs related to the use of formal and informal crime prevention strategies, the nexus perspective is primarily about seeking opportunities and achieving multiple benefits through better and more efficient management of resources. This reflects why there is the need for new approaches beyond the predominant, traditional silo (or sector) thinking and management approaches. The community-policing concept, if well planned with beneficiaries and

implemented with them (but not for them), could be a perfect answer to this call. It could form a comprehensive strategy of the formal–informal nexus and the many dimensions associated with this nexus. The principles and strategies inherent in this concept provide a roadmap for effectively securing the urban space. The concept offers not just a problem description but also innovative approaches to managing urban security from a wider systems perspective. It balances the challenges and opportunities related to the nexus and signifies a practical approach and solution to the complexities of urban crime.

Acknowledgement

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