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# Facing post-crisis livelihood challenges? Insights from young farmers in Kenema city, Eastern Province, Sierra Leone

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#### **Abstract**

Globally, urban and peri-urban agriculture (UPA) research has focused mainly on capital cities, has avoided conflict-affected locations and rarely considered the challenges faced by young cultivators. The latter are particularly important because of the vulnerability of unemployed young people to being drawn into violent, criminal or antisocial behaviour in conflict or fragile states. This paper examines the post-crisis livelihood challenges of youth farmers in Kenema, Sierra Leone's third largest city. The research on which this paper is based comprised multiple methods, including GIS mapping, in-depth interviews and group discussions with youth cultivators and key informants in several sites in Kenema city. Research participants gave first-hand accounts of their experiences of the Civil War and the subsequent Ebola epidemic crisis, and the paper explores their transformation from dangerous living to productive agriculturalists within Kenema. The research uses an exploratory approach to critically examine the engagement of youth in urban and peri-urban agriculture, as a strategy for encouraging young people to become responsible citizens who support city and national development. The paper challenges the pessimistic view that contemporary urban youth in developing countries are characterised by disaffection leading to crime. The study reveals how urban youth in post-crisis contexts can play a vital role in national development when a proactive and pro-youth public platform is evident locally. Appropriate resource mobilisation can unlock the latent potentials of youth for both self and community development.

### Keywords

Post-crisis, youth engagement, municipal challenges, young agriculturalists, Kenema city, Sierra Leone.

# Highlights

- Reveals the importance of secondary cities in the development of our understanding of urban and periurban agriculture.
- Provides evidence of urban and periurban agriculture providing benefits to livelihood opportunities for youth.
- Shows how agriculture can divert young cultivators from crime while contributing to food security for the city.
- Provides 4 policy recommendations to get urban youth engaged in agriculture in post conflict and fragile states.

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# Facing post-crisis livelihood challenges? Insights from young farmers in Kenema city, Eastern Province, Sierra Leone

#### **Keywords**

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#### 1. Introduction

Significant advances in knowledge and understanding about urban and peri-urban agriculture (UPA) have been made in the past two decades (see Thornton, 2008; Crush et al., 2011; Thornton et al., 2012; & Bangura et al., 2018). But much of this research has been conducted in capital cities, and there has been very limited research focusing on those recovering from conflict and associated realities such as population concentration, livelihood and food insecurity, and high levels of unemployment (Bangura et al., 2012). Post-crisis areas are ideal locations for UPA livelihoods promotion, but there has been very little attention specifically given to youth engagement in UPA in secondary cities. In post-crisis environments, evidence suggests that engaging youth in UPA can make a vital contribution to addressing the diverse new urban realities facing them (Maconachie et al., 2012; Lynch et al., 2013; Bangura et al., 2018). Since 2000, studies of youth engaged in urban agriculture have been gaining momentum as a new research area with much potential for in-depth research (see, Maconachie et al., 2012; Lynch, et al, 2013; Bangura et al, 2018). Several scholars have indicated a number of constraints that face young farmers and their supporters, such as;

- access constraints finance and credit problems, land tenure insecurity, (Rogerson, 1996).
- knowledge constraints absence of extension and skills training support (Binns & Lynch, 1998).
- power relations constraints unequal producer-buyer relationships (Porter et al., 2007).

In this paper, we examine how municipal authorities have engaged with street youth by encouraging them to establish as UPA farmers in Kenema, Sierra Leone. Youth street life was a serious concern in the post-war period, and proactive public actions towards addressing young people's attitudes and priorities have resulted in creating significant socio-economic development opportunities for youth in Kenema. Once hard-core young criminals have gained an opportunity to rebuild their lives from violence, crime and drug addiction, and are now focusing their energies on contributing to the growth and development of both themselves and wider society.

This paper begins with an exploration of the theoretical framework on urban youth in African cities, providing the context for considering municipal youth in post-crisis Sierra Leone and Kenema. The paper then presents evidence from the study site, specifically cultivation sites in

and around Kenema, considering evidence, key findings, and finally considering the outcomes of the research and possible policy implications.

# 2. Urban youth in African cities

Youth in Africa have made cities their priority destinations for several reasons, most notably for securing a livelihood and fulfilling their personal and family development needs (Brooks et al., 2013; Banks, 2016). Empirical evidence suggests that satisfying these needs are challenges, particularly in crisis prone municipalities (see Lynch et al, 2013; Bangura et al, 2018). Development strategies in cities must strive towards UN Sustainable Development Goal (SDG) 11 – "make cities and human settlements inclusive, safe, resilient, and sustainable".

Recent decades have seen a significant increase in youth population, especially in developing countries. The UN (2020) reported that 1.25 billion young people aged 15 to 24 years account for 16 % of the global population (United Nations, 2020). Cities host a growing number of these young people, yet resources, infrastructure and employment often remain inadequate relative to increasing demands of the urban population. An overwhelmingly youthful population has provided a significant challenge for cities. Over half of the world's 7 billion people are now below the age of 30 years, and 90 per cent of these are living in developing countries where there is significant youth unemployment. In Nigeria, Africa's most populous country, Okafor suggests that socio-economic vices characteristic of under- or unemployed and jobless youth, like thuggery, militancy, restiveness, and a threat to democracies created by neoliberal conditions, further exacerbate youth unemployment (Okafor, 2011). Gough et al., (2013) conclude that youth unemployment, particularly in Africa, is common and worse in times of economic and social adversity.

Robert Kaplan describes his observations of visiting several West African cities:

"In cities in six West African states I saw young men everywhere – hordes of them. They were like loose molecules in an unstable social fluid, a fluid that was clearly on the verge of igniting ..." (Kaplan, 1994; 46).

UNECA (2017) observes that owing to the demographic, urbanisation and economic growth challenges facing African cities, it is expected that by 2050 the total urban population will increase threefold, while the growth in numbers of young people will add another 830 million to the continent's population (ADB, OECD, & UNDP, 2016; UNECA, 2017).

Optimists have argued that Africa's youth-laden cities are 'engines of growth' (French et al., 2014); For example, Erik Berg, at the Norwegian Ministry of Foreign Affairs, comments;

"When national and world leaders talk about promoting democracy, human rights, and poverty reduction, leaving cities and young people out of the

equation, is like trying to fight a major forest fire with a garden hose" (Cities Alliance, 2012).

Berg suggests that youth are important resources but need genuine attention and investment from public institutions and decision-makers to empower, articulate and actualize their voice, interests, and to address issues affecting their lives. A UNICEF (2017) Report on West and Central Africa indicated that the capacity of youth needs to be developed, they need to be encouraged and they need to be supported to enable them to contribute positively in society.

Yatma Guèye, of the Senegalese Ministry of Urban Renewal, Habitat and Living Condition argued that African cities are not just "centres of economic growth loaded with young people serving both as key players and mechanics in the development process", but concludes that managing this development involves prudent planning strategies. For example, Henning et al (2022) found in a study in South Africa that, although young people are heterogenous in their access to resources and capacities, those engaged in agricultural entrepreneurship actually believed in themselves and were more likely to take advantage of livelihood opportunities. This heterogeneity is strongly expressed by respondents in a Ugandan study of 'youth agripreneurs', experiencing the tension between representing a demographic category populated by a heterogenous group whose opportunities and challenges may not be defined as much by age as by other socioeconomic characteristics. Ng'atigwa et al (2020) found that gender and access to land size were key factors affecting young Tanzanian agricultural entrepreneurs, and argued that capacity building, particularly in post-harvest management, investment in infrastructure (particularly storage and packaging) and access to youth-friendly credit could overcome the main barriers that were reported by their survey respondents. LaRue et al (2021) suggest that the dichotomous focus of farm or non-farm employment is not helpful in engaging and supporting young people. With these issues in mind, this paper focuses specifically on a case study of young cultivators within and around Kenema, Sierra Leone, and the challenges and opportunities facing them, with the intention of shedding further light on these issues.

#### 2. Youth in Sierra Leone

Since Sierra Leone's independence from Britain in 1961, young people have been part of the national development equation. Yet, rising youth unemployment, declining access to education and poor youth opportunities were key factors in creating the conditions from which the civil war developed. The situation further deteriorated during the war (1991-2002), and subsequently in the post-war period. The youth still remain a crucial and powerful group, and also a rich resource for national development in the post-crisis period. With purposive public engagement actions, government has taken a lead in addressing youth problems (Neethling, 2007; Aladeokin, 2016) and striving to keep the nation on its post-war development trajectory. Among these have included actions that privileged, mainstreamed and instilled national consciousness, patriotism, and positive management of youth affairs. These policies recognise the significance of youth in the national and local communities, notably:

- Significant population changes have occurred in Sierra Leone since the end of the war in 2002- most notably the rapid rate of population growth. In the first post-war census (2004), Sierra Leone recorded 4,976,871 people, rising to 7,092,113 people in the latest census (2015), and estimated to have reached 8.4 million by 2022,
- Sierra Leone also has a very youthful population. One of the 2015 census reports noted that people under 35 years accounted for 80% of the national population, while children under 15 years comprise 41%,
- There are 2 million people between the ages of 15 and 35 years,
- Youth residency in urban and rural areas accounted for 44.2% and 36.1% respectively of the population; and
- Urban and rural sex ratios were 94.9 and 50.6, respectively.

(Statistics Sierra Leone, 2017b; World Bank, 2023).

Region	Total population of the region	Total	Male	Female	Sex Ratio	% of the total population
Total	7,092,113	873,620	430,792	442,828	97	18
Eastern	1,642,370	286,944	128,895	158,049	82	18
North-West & Northern	2,508,201	416,176	181,192	234,984	77	17
Southern	1,441,308	240,783	106,630	134,153	80	17
Western	1,500,234	314,541	162,341	152,200	107	21

Table 1: Percentage distribution of youth population (25-35 years) in Sierra Leone by region and sex. Source: Adapted from Statistics Sierra Leone (2017a).

The above statistics, and those summarised in Table 1, reflect the urgent need for youth education and employment, and the importance of young people's voices and interests being heard. A sad lesson of youth neglect saw many young people taking up arms during the civil war that devastated Sierra Leone (1991-2002), leading to over 75,000 deaths, a million refugees and thousands of internally displaced persons (IDPs) (Shepler, 2010; Lind and Ndebe, 2015). Many young people were drawn into the conflict, often as child soldiers who then went on to commit war crimes. Despite the well-regarded process of post-war disarmament, demobilisation and reintegration (DDR) (Solomon and Ginifer, 2008), many young ex-combatants continued to perpetrate violent acts, bringing so-called 'jungle practices' into their new locations and further exacerbating urban challenges.

When the Ebola epidemic struck Sierra Leone between May 2014 and November 2015, Kenema, the country's third largest city and capital of the Eastern Province, became the first holding centre for Ebola patients (Bangura et al., 2018). The epidemic developed into an acute public health crisis, killing an estimated 28,616 across Guinea, Liberia and Sierra Leone and causing 3,956 deaths in Sierra Leone. (Bedson, et al, 2020). Margaret Chan of the World Health Organisation called this outbreak one of the most acute public health crises

in modern times and argued that no other biosafety level four pathogen had ever infected so many people over a wide geographical area for such an extended period (Leach, 2015).

Sierra Leone experienced a brief phase of economic recovery in the first post-war decade, and peaceful transitions of government followed the 2007 and 2012 General Elections (Lind and Ndebe, 2015). However, the factors of historical neglect, rural poverty, and youth marginalisation that have been ongoing concerns since the peacebuilding process (Bangura, 2016), combined with the Ebola outbreak (2014-16), further crippled prospects for economic growth (Winter, 2018). Thus, Sierra Leone has experienced a faltering post-war recovery, struggling to achieve progress in development since 2002. Table 2 shows the impact of the war and Ebola crisis on key national indicators and the country's longer-term development progress. The effects of the Covid-19 pandemic, being much more recent, are still difficult to assess.

Indicator	War	Post-war	Ebola	post-Ebola
Life expectancy at birth	44 years (2000)	Steady increase		60 years by 2021
GDP growth rate	26.4 per cent per annum in 2002	Between 3 and 9% p.a. until 2012 and 2013 when it rose to 20.7 per cent	Contracting 2014-15 during the Ebola epidemic (-20.6% 2015).	4-6%, except 2020 when it contracted due to Covid-19 restrictions.
GDP per capita PPP	US\$645-709	US\$752 in 2002, followed by steady growth to US\$1,756 by 2014	Decline to US\$1,556 per capita in 2015	Gradual recovering to \$1,725 by 2019 and then decline in 2020, recovering
Primary enrolment	Declined through the 1980s to a low point just before the outbreak of war at 44%	Climbing to 118% in 2013	Climb stuttering through the Ebola epidemic	Climb to 156% gross enrolment in 2021 including over-enrolment to catch-up on lost ground.
Population growth rate	Fluctuated during the war, with an increase of 5.8% in 2002.	Variation between 2.7-3.4 % p.a. from 2003 until 2013.	Slight decline	Stabilised at 2.2 per cent per annum
Crude birth rate	Declining slowly during the war years	Began to decline from 44 per 1000 in 2002		32 by 2020.
Crude death rate	Long-term decline from 31 per 100 in 1960, slowed during the war	Declining from 22 per 1,000.	Continued decline despite Ebola and Covid-19	Stabilising at 9 per 1000 by 2018.

Table 2: Sierra Leone- development indicators (Source: World Bank, 2023)

Youth are increasingly important in the context of a post-crisis sustainable city, focused on engaging its young people to enable them to contribute to their self-development in a peaceful, crime-free environment that fosters holistic urban development. Although, a small literature exists on youth challenges in crisis and post-crisis cities, fewer published sources exist on youth engagement in agriculture. Losch, (2016) highlights Africa's youth as being

both a barrier and an asset for development. They are a barrier in that youth have unrealistically perceived employment opportunities as existing in the urban sectors. But they are an asset in that they are a ready pool of generally young and fit labour for agriculture. Losch argues that,

"Public policies have to deal with the paradox of a pervading disinterest among youth in farming activities and the fact that youth participation is a key element in the development of family agriculture." (Losch, 2016; 4).

Losch is also clear that the solution to this paradox represents a challenge that requires complex solutions. Some examples of studies on youth engagement in agriculture in Sierra Leone include Maconachie et al., (2012); Ayentimi and Awimboora, (2013); Maconachie, (2016); Bangura et al., (2018). However, engagement of public institutions with youth in urban agriculture in both crisis and post-crisis settings remains an understudied area in Sierra Leone and elsewhere in poor countries.

## 2.2 Post-crisis municipal youth in Sierra Leone

The dual crises of the civil war (1991-2002) and the Ebola epidemic (2014-2016) form the backdrop to this study. In the Sierra Leone context there currently exist two dominating and contrasting narratives in public perceptions about young people. First, that youth are believed to form an imminent threat to national peace, security and stability. Proponents typically refer to youth's past activism and atrocities committed during the civil war, and the current disillusionment, marginalisation and agitative tendencies characterising many youths. Secondly, there is a view that youth constitute a potentially significant and dynamic human resource reservoir ready for innovation and economic development (UNDP, 2006). The implications of these divergent viewpoints clearly indicate, first, that urban youth are in dire need of public attention, and secondly, that they make up a considerable resource ready for mobilisation in positively impacting on future growth and development of Sierra Leone.

Such narratives have arisen in the context of youth neglect during the war, when many unarmed youths fled to the cities to escape the atrocities, many were killed, whilst others took up arms and espoused conflict in desperation for empowerment and development. Even those who made it to the cities lost opportunities to continue their education for over a decade, and these factors have led to use of the term 'crisis of youth' (Peters, 2006; Fanthorpe and Maconachie, 2010; Shepler, 2013). Since the end of the war in 2002, over 70% of Sierra Leone's youth have remained unemployed or underemployed (Humphreys and Weinstein, 2008; GoSL, 2015; Alemu, 2016). The crisis affecting the youth can be further understood from three studies in Sierra Leone undertaken by Cubitt, (2011), Alemu, (2016) and Enria, (2012). Pointing at youth unemployment, Alemu's analysis suggests key vices as major factors contributing to youth unemployment (Alemu, 2016,). Cubitt, (2011) warns that the liberalisation orthodoxy in Sierra Leone, a country characterised with high youth unemployment, poses grave threats to national stability. But Enria's, (2012) study specifically singled out the role of government in hopefully (though unrealistically) creating jobs for all youth as a recipe for reducing problems associated with youth unemployment.

Enria (2012) reports that the Sierra Leone national youth policy was drafted in 2003 (GoSL, 2003) and was reviewed in 2012. Both policy instruments are based on the guiding principles of the Commonwealth Plan of Action for Youth Empowerment and have a mandate to tackle the key challenges of young people and create an enabling environment for them to contribute meaningfully to national development (GoSL, 2015, 2014, p. 26). The National Youth Commission was established as the public platform for national youth engagement, and this, together with British military intervention from the end of the war in 2002, formed the basis for the beginning of economic growth in the early post-war period. A strong surge in growth was achieved between 2001 and 2003, albeit from a low base after the civil war (Collier and Duponchel, 2013, p. 71). However, the growth was subsequently halted by the ripple effects of the 2008-09 world economic recession that adversely affected the economy of Sierra Leone, particularly hitting the mining and general export sectors, though there was a solid recovery in 2010, with growth rising from 3.1% in 2009 to 5% per annum in the period 2010-15. Davis (2015, pp. 10-11, 14) argued that Sierra Leone achieved steady economic growth between 2002 and 2014, while cessation of the conflict and hostilities led to the closure of the UN Peacekeeping mission in March 2014.

The deadly Ebola epidemic, that struck Sierra Leone between May 2014 and 2015, stalled and indeed reversed the earlier economic progress, while national production and mobility were severely constrained with periods of lockdown (UNDP, 2015) and 3,956 deaths (Statistics Sierra Leone, 2017b). In addition to the Ebola epidemic, there was a decline in world iron ore prices, and the country experienced a dramatic fall in GDP growth from 21% in 2015 to 3.7% in 2018. Sierra Leone's cities continued to grow rapidly and the population of Greater Freetown topped one million people (Weekes and Bah, 2017). With rapid population growth there was concern about how young people could be incorporated (or reincorporated) into the economy.

In Kenema city, UPA was the platform managed by the local council that adequately suited the diverse characteristics of urban youth. With local government support, many Kenema youth developed an interest in UPA and organised themselves into farming associations, contrary to Losch's (2016) popular description of youth. Like their counterparts in Freetown, youth in Kenema city engaged in agriculture to circumvent post-war municipal challenges impinging on them and the general urban population (see Maconachie et al., 2012, pp. 197-199). This initiative produced numerous benefits. Among these included a daily source of household food, nutrition supply and other basic urban needs, income generation, and the ability by many youth to cope and respond appropriately to the so-called 'crisis of youth' (see Fanthorpe and Maconachie, 2010; Shepler, 2013).

Several scholars have defined UPA as the cultivation of food crops within (intra-urban) or on the fringe (peri-urban) areas of a town, an urban centre, a city or a metropolis (Maconachie et al., 2012, p. 1; Opitz et al., 2016; Ayambire et al., 2019, p. 261). Mougeot, (1999) and RUAF, (2007) particularly emphasised that UPA involves the growing, processing and distribution of a diversity of food and non-food products (including some livestock). However, very little

attention has been given to young people's involvement in such activities, and that is certainly the case in post-conflict Sierra Leone.

In the research on which this paper is based we considered the National Youth Policy of Sierra Leone (2003), as the legal instrument for youth empowerment and the local government interventionist role was examined through the District Agriculture Office (DAO) of the Ministry of Agriculture, Forestry and Food Security (MAFFS), Ministry of Youth Affairs (MOYA), and its National Youth Commission (NAYCOM) (GoSL, 2014). Additionally, the Kenema City Council (KCC) has shown much concern for youth engagement in agriculture. This intervention is similar to that considered in Newhouse's research in the Torit and Kapoeta towns of Eastern Equatoria State, South Sudan (Newhouse, 2012). With public engagement, young people showed enthusiasm to engage in agriculture for personal and community benefits in Kenema city.

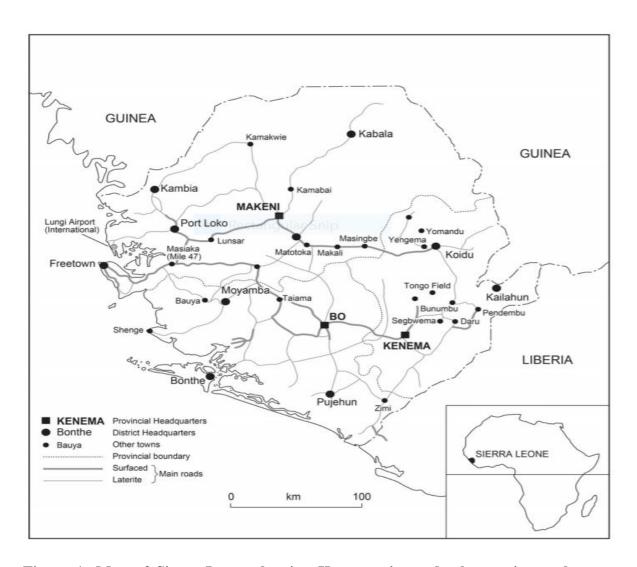
This paper aims to fill these gaps in knowledge and understanding by asking the following questions: First, what are the post-crises municipal challenges that impinged on youth before and during engagement in UPA? Secondly, what are the key policy measures affecting the empowerment of youths engaged in UPA and the development of this new urban livelihood?

# 3. Methodology

The study site.

Kenema city was selected as a focus for this study in order to gain an understanding of the post-crisis challenges facing young people in a city where local government was keen to support youth-related development initiatives. Kenema is Sierra Leone's third largest city and administrative capital of the country's Eastern Province, with a population of 200,000 at the 2015 census (Figure 1). It has an elected City Council (KCC) which is headed by a mayor in whom executive authority is vested. Kenema gained prominence over the years in developing from a formless hunting area to a village in the nineteenth century Simpson, (1967), and later in the twentieth century became a chiefdom and district headquarters, and an important regional and trade centre for the Eastern Province (Bloch and Sesay, 2014; Simpson, 1967). The early prominence gained by Kenema city was associated with the former British colonial railway that from 1896 until its closure in 1975, ran eastwards from Freetown to Pendembu, close to the Guinea and Liberian borders (Chaves et al., 2014). The railway provided a vital link for the export of cash crops such as palm oil, coffee and cocoa from the Eastern Province. Today, Kenema city is a prominent provincial and business hub for the Eastern Province Districts of Kono, Kailahun, and Kenema. With the production and sale of minerals, lumbering, commercial and agriculture products, the city region also has a vast fertile lowlying wetland ecology with rich deposits of soil washed from the neighbouring Kambui Hills. The unique geographical and geological landscapes in and around the city offer an ideal environment for the practice of UPA. Sierra Leone's National Wetland Policy, introduced in the 1970s states that.

"Wetlands are low-lying state-owned areas, not fit for building that are for the exclusive use of farmers" (Repetto et al., 2019).



**Figure 1: Map of Sierra Leone showing Kenema city and other major settlements**. (Source: Adapted from Lynch *et al.*, (2020).

Having undertaken extensive research on UPA in Freetown, Sierra Leone's capital (see Maconachie *et al.*, 2012; Thornton *et al.*, 2012; Lynch *et al.*, 2013; Cadzow and Binns, 2016), it was decided to investigate the practice in one of the country's secondary cities where, as far as we are aware, no field-based research has thus far been undertaken. Kenema provides an interesting location to study, being close to the borders of the Republics of Guinea and Liberia, where there were frequent movements of fighters during the rebel wars in Liberia and Sierra Leone. The research considered the three institutions that are working with youth in Kenema city. The National Youth Policy of the Ministry of Youth Affairs (MOYA) outlines the definition, rights and responsibilities of young people, and of the state, parents, and other stakeholders (see GoSL, 2003), and, together with the National Youth

Commission Act, (2009), they form the basis for the establishment of an institutional mandate to empower youth for national development in Sierra Leone (GoSL, 2009). The governing board (NAYCOM) is constituted by youth representatives, delegates from MOYA and the Ministry of Finance and Economic Development and is charged with promoting youth affairs for national development. With a focus to 're-image' young people, the National Youth Policy was enshrined and cascaded in the Sierra Leone National Youth Policy Review, 2012 (GoSL, 2012). The DAO (District Agriculture Office) and NAYCOM came under the jurisdiction of Kenema City Council (KCC) in 2015, forming the key youth platform institutions that are supporting young farmers who are engaging in UPA (see **Figure 2**).

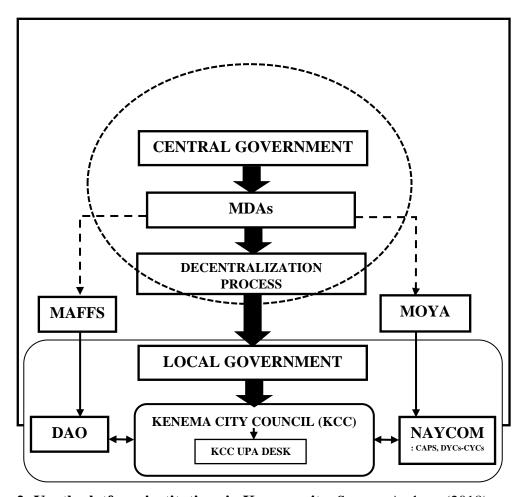


Figure 2: Youth platform institutions in Kenema city. Source: Authors (2018).

Both qualitative and quantitative methods were used to collect data for this study in February, November and December 2018. Data collection methods involved questionnaire surveys, indepth interviews, and focus group discussions (FGD), using the purposive sampling approach. Participants' information for the questionnaire survey was obtained from the database of NAYCOM concerning youth engaged in urban agriculture in the identified and geo-located UPA sites in Kenema city. The criteria for the sample size selection and

respondents' recruitment during the second field visit (November – December 2018) were informed by:

- Youth who were found working on their plots in the mapped areas, and
- The intensity of UPA activities (which comprised high, medium and low UPA activity areas).

For questionnaires administered to young agriculturalists, a random sampling technique was used to select participants, giving 150 respondents drawn from high UPA sites, accounting for 60%, 75 from medium UPA sites (30%), and 25 from low UPA sites (10%) (**Figure 3**). In total, 250 questionnaires were administered and analysed from urban youth cultivators, and we used 'layout', as a helpful planning tool to categorise communities within Kenema city. From these all UPA sites were mapped and 42 fertile wetlands for agriculture were identified and analysed to produce the UPA map of Kenema city (**Figure 4**).

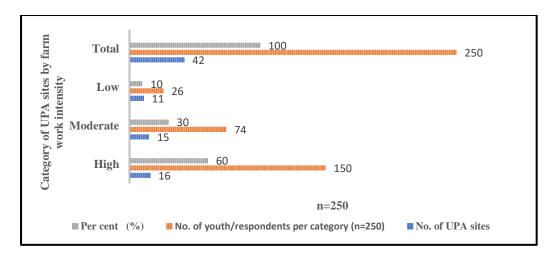


Figure 3: Categories of UPA sites and respondents (youths) in Kenema city. Source: Authors' Field survey, (2018).

Municipal professionals (KCC and DAO officials) were questioned, and all categories of youth farmers were asked the research questions highlighted earlier. Secondary data was collected from a variety of published materials (i.e., books, articles, and academic reports) obtained through detailed internet browsing.

Three main thematic areas were examined in the analysis of the qualitative data. These include: youth challenges in the immediate post-crisis period, prior to engaging in UPA; those faced by youth during engagement in UPA, and finally, the relevant policy options that stood out from the data. We then used descriptive statistical analysis to interpret the quantitative data (**Table 3**).

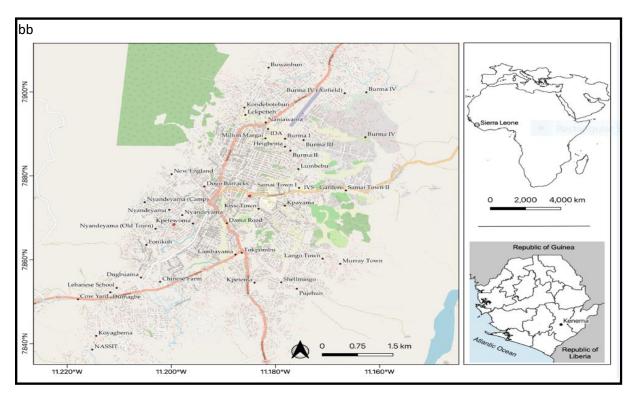


Figure 4: UPA map of Kenema city. Source: Authors' Field survey, (2018).

# 4. Results

The growing urban environment in Kenema city in the post-crisis period has been shaped by social, economic and political factors that are sometimes unfavourable to youth. Socio-economic factors have been manifested through declining opportunities, scarcity and inability to compete for urban jobs, and a lack of financial services. The political factors include branding youth as troublemakers, which caused many youths to adopt deviant behaviours while living in the street. Among these include substance abuse, crime and violence. However, others engaged in driving commercial motorbikes and tricycles to earn a living, whilst others produced food for themselves and contributed towards urban food security. After the end of the civil war many young people found themselves in desperate and precarious circumstances, reflecting the 'crisis of youth' syndrome (Fanthorpe & Maconachie, 2010). The youth situation warranted urgent attention after the civil war.

Field-based research revealed that the institutional structure created from the post-war decentralisation process in Kenema city, has significantly empowered and improved the welfare of young people. The National Youth Policy (GoSL, 2003) has provided a mandate for the operation of these institutions nationwide. Thus, youth empowerment activities have become a key focus in many public institutions in the post-war period. As the National Youth Policy asserts, "youth empowerment refers to privileging and mainstreaming youth-related activities in the overall process of national reconstruction, to ensure dignity in labour, instil

national consciousness, patriotism, and setting the foundation for the emergence of a responsible citizenry in the service of one indivisible country" (GoSL, 2003:1). The decentralisation process has supported this goal by establishing the three institutions in Kenema city as a platform to engage and support youths removed from the street and returned to UPA.

#### Key mapping survey findings

Some forty-two UPA sites were identified (**Figures 3 & 4**) from the GIS mapping, drawn from high, moderate and low UPA intensity locations within and around Kenema city. We identified one supermarket selling 'exotic' vegetables, and nine local markets selling leafy vegetables and locally produced rice on both retail and wholesale bases to residents and traders from outside Kenema, and to small-scale animal husbandry (goats, pigs, sheep, chicken) and bee-keeping enterprises. The post-war period witnessed large-scale building and infrastructural development in response to the need for housing. But in some areas of the city, buildings encroached into wetlands, thus contravening the 1970 wetland policy and affecting urban agriculture practices (Repetto et al., 2019). In some cases, young farmers were either evicted from those plots of land or put under pressure by landowners. Although at present land scarcity in Kenema is by no means as severe as in Freetown, it seems likely that greater land scarcity will become an increasingly serious issue in Kenema.

# Key findings from the data collection

Post-crisis African cities may be locations with considerable economic potential, but they can also be volatile as there is frequently a large population of young men and women (Sommers, 2010). As this situation was recognised as a possibility in Kenema city, the post-war decentralisation initiative has led to a purposeful engagement with youth.

Method	Informants	Materials used, and Recruitment approach used in Data Collection	Duration and C	
Mapping of agricultural sites N/A		Used mapping materials such as Google Earth, application of mapping science and GIS techniques, downloading Google Earth images of agricultural sites in Kenema city. Use of a topographic map with a scale of 1:50,000,	Two weeks in Jamapping 42 urb sites were idention of the study area	
Questionnaire survey	Urban Youth Farmers	Use of NAYCOM database to identify youth participants registered with the Commission engaged in agriculture within and around Kenema city. Meeting youth farmers on their farm sites	Two weeks in N administered am	
In-depth interviews	Youth group leaders and NAYCOM Coordinator	Use of all categories of youth farmers and staff of NAYCOM, Kenema city	One week in De interviews with UPA sites chose and vegetables pand low-intensit Coordinator.	
Focus Group Discussion (FGD)	Kenema City Council (KCC), District Agriculture Office (DAO). Landowners where NAYCOM is working with youth.	Key persons from three institutions with youth in agriculture portfolios, and landowners	In the same wee	
Analysis of secondary data	Internet databases	Relevant publications on the topic studied at national and international levels (policy, articles, reports, conference materials, etc.)	Manuscript writ	

**Table 3: Research methodologies.** Source: Authors' research (2018).

Decentralisation, according to Rondinelli, (1983, 18), is "the transfer of planning, decision making or administrative authority from the central government to its field organisations, local administrative units, semi-autonomous and parastatal organisations, local governments or non-governmental organisations." However, Aaron Schneider, (2003) argued that decentralisation is an elusive concept with little agreement about what constitutes its causes and effects. He defines 'decentralisation' as the transfer of power and resources away from the central government through fiscal, administrative, and political dimensions. In fiscal decentralisation, the central government cedes fiscal resources, in political decentralisation it allows political functions, and in administrative decentralisation it passes autonomy to the local government (Rondinelli, 1983; Schneider, 2003). Though the other two forms are important, the autonomy element of administrative decentralisation has been the key strategy of central government in bringing governance closer to the people, through the creation of new spaces for increased interaction between state agencies, traditional leaders and communities (Maconachie et al., 2008; Fanthorpe et al., 2011). Distinctive roles and

responsibilities are recognised for paramount chiefs, chiefdom authorities (traditional leaders) and elected Local Council Officials within an administrative area (a city or district council), as established in the Local Government Act (LGA) of 2004.

UPA provides a useful focus to examine local development initiatives. The limited studies of the challenges faced by youth in Sierra Leone have noted a legacy of historical neglect, social marginalisation and exclusion of youth by successive governments (Bangura, 2016; Hobson et al., 2022). This research suggests the need for authorities to closely attend to youth issues in order to ensure continuing stability and prevent a relapse into violence when the grievances and frustrations of youth are left unaddressed. Based on the unique features of Kenema city, we used it for this exploratory research. This research identified two major kinds of municipal challenges impinging on youths in Kenema city, namely challenges before engaging in urban farming, and challenges faced whilst engaging in urban farming.

Challenges of youth before urban farming:

Following the end of the war in 2002 there were large numbers of unemployed and disaffected youths 'hanging around' the street corners in Sierra Leone's cities. As one official from the District Agricultural Office commented:

"Immediately after the civil conflict, the youths' situation in Kenema city showed they were not participating in urban farming. so we were just working with rural youth in the district. Youth in the city preferred idling, and living on the street, spending endless hours in ghettos taking drugs, others in 'ataya' places, perceived as social places where young people converge, discuss issues of the day affecting the average citizen, and in the process resolved to use and abuse of drugs, drinking of alcohol and green tea (locally called 'ataya'), from where they orchestrate criminal acts that they implement in communities within and around the city. Today, the situation is different, more urban youth have come to engage in agriculture. This conscious change in urban youth behaviour towards agriculture became very clear in 2015 after the Ebola epidemic when youth started to grow crops in backyard gardens close to their homes. From those backyard gardens, they have upgraded their agricultural practices and now have become well-established urban cultivators. They realised that an urban garden is a secure means to reduce household costs on food and is also a source of income and employment in a job scarce society" (DAO staff, Focus Group Discussion, December 2018).

From the 250 youths sampled in the Kenema study, 30% commented that they took an early interest in urban farming to meet their household needs and gain maximum revenue from crop sales. They organised themselves into urban farming groups prior to receiving support from NAYCOM and the KCC agricultural interventions for youth. We observed a notable shift in young people's interest in UPA as a viable livelihood strategy for ameliorating the compounding impacts of the crises faced nationally and locally in Kenema city. The remaining 70% of youth respondents had gradually followed the example of their 'early adopter' compatriots and had registered with NAYCOM and were progressively being introduced to urban farming after abandoning a life on the streets.

From our focus group discussion, it became evident that many young people never had an opportunity to be educated or skilled, and, therefore, could not secure formal urban jobs to meet family needs. The acute shortage of formal employment opportunities, inadequate childhood education, and an inability to attract limited public and private sector jobs further aggravated their situation. Hence, to earn money, youth respondents often resorted to quick, dubious and sometimes criminal means which led to prison sentences.

A successful reorientation from antisocial and criminal behaviour was reported and youth had embraced urban agriculture to generate their needed income and to contribute towards urban food security. The considerable success of this initiative was undoubtedly in no small measure due to the motivation and expertise of the three institutions in Kenema city, as explained by the National Youth Commissioner:

"Our Commission has the expertise, and we believe in the adage: "Those who feel it knows it'. We go out to meet the youth, approach them, we go to the streets, the ghettos and the 'ataya base' clubs and we do not condemn them. We don't condemn them by saying, for example, 'smoking, drinking, drug addiction are bad, or their past activism during the civil conflict was their fault. Rather, we make friends with them, we feel and care about them and show that we are part of them, and they are part of us. We use coaching methods and talk to them on a one-on-one basis or through their groups, that the street or ghetto life is not the end of their life, and that all is not lost.

"On several occasions, we visit them and tell them about the effects of drugs like alcohol, nicotine, cannabis sativa, 'Kush', and others they take. Our sensitization drew their interest to us, and we engaged with authorities like landowners in the communities they live in, and they were very pleased to give youth secure access to cultivate the 'idle wetlands' within the city. Today, the majority of the young agriculturists cultivate on such lands. We sensitise youth, give them seed rice, and vegetable inputs, which they nurse and cultivate with the help of the agricultural extension services of the District Agriculture Office, Ministry of Agriculture, Forestry and Food Security (MAFFS). I think things have been going on well since we started our intervention" (Sama, personal communication, 19/12/2018).

*Urban farming challenges faced by youth farmers:* 

A key finding of this study is that youth in Sierra Leone are economically and socially active and are vitally important for the development of the country (see **Table 4**). NAYCOM outreach efforts in Kenema, in the shape of radio broadcasts, public gatherings, sensitisation talks, and working with youths, successfully recruited over 100 youth organizations from ghettos and the streets. NAYCOM then trained and mobilised them into UPA practice, and there was a universal willingness to engage in programmes that benefitted themselves, their families and their community. Kenema City Council, Commission and the DAO were all involved in this initiative as explained by the KCC UPA staff:

"Now, we have an expanded focus, targeting youth in schools because we noticed the idea of agriculture practice is fading out even in schools. An example has been Council and the DAO Crop Division staff supported by the Methodist and Holy Trinity (commonly called T-School) Junior Secondary Schools Garden projects, from the devolved agriculture fund to Council. We supported them with assorted

vegetable seeds, farm tools and field schools' opportunities. Pupils in the two schools were able to identify farm tools, construct nursery beds, do basic vegetable gardening, and explain the nutritional role of vegetables to various categories of people (children, pregnant and breastfeeding women, etc). The knowledge acquired by school children has further increased the household demand for vegetables in Kenema city". (KCC UPA staff, Focus Group Discussion, December 2018).

#### The UPA Desk Crops Officer commented on the changing scenario, thus:

"Youth engaged in agriculture in Kenema city have played a tremendous role in the area of food security, where there was an acute shortage of leafy and exotic vegetables. Now there is a shift in trend, no more shortage of vegetables. Our impact (Kenema District Agriculture Extension Office) on youth has been considerable - in addition to vegetables, now they can grow, for example, Nerica L19, an improved rice variety, three times a year" (DAO Crops Officer, Kenema city, December 2018).

However, it is important to ask whether if this support ceases, 'what will the future hold for urban youth in UPA? Will they slip back into their old habits? These questions are crucial and must be considered. More sustainable action is therefore needed to make 'youth support' a flagship agenda in the governance of the country, and in any strategy for national development.

Youth farmers' contributions to development in Kenema city	% of contribution in city's UPA (n = 250)
1. Economy	<u> </u>
Increase the real value of land (swampland, upland)	10
Poverty alleviation, employment creation, local economic development	15
Diversity of UPA produce in markets, food shops and homes	5
Self-created jobs & income, youth formerly in crime now economically useful to themselves & their	18
community	10
Lower living maintenance costs for all households - growers, urban poor and the rich	20
More self-employment for youths in the urban food and agriculture sectors	10
Increased harvest of cheaper fresh food	12
Supply of fresh vegetables to local and regional or provincial markets	n =100%
2. Social	
Better connection between youths and broader community with peaceful and crime-free urban environment	22
Gender and social cohesion: youth working together and relating amicably within their communities.	18
Better health for all, & increased consumption of fresh, clean urban agricultural produce	
More empowerment of youth in urban agriculture	20
Stimulate more interest in agriculture for pupils in junior & senior schools, through the revival of school	25
gardens.	15
	n =100%
3. Ecology	
More green spaces and attractive neighbourhoods	30
Possibility to lower or reduce CO <sub>2</sub> emissions (climate change effects)	10
Better waste management and use of decomposed urban waste	40
Productive use of urban land and water.	20
	n=100%

**Table 4: Youth farmers' contributions to the development of Kenema city.** Source: Authors' research, (2018).

#### Urban land challenges

The study indicated that land ownership is very rare among youth in agriculture, and we identified five categories of access to land in Kenema city (see **Figure 5**). As shown by Pilgrim, (1967) according to the Mende indigenous land tenure system in Eastern Sierra Leone, ownership of land is a social issue, where it is held by extended family groups.

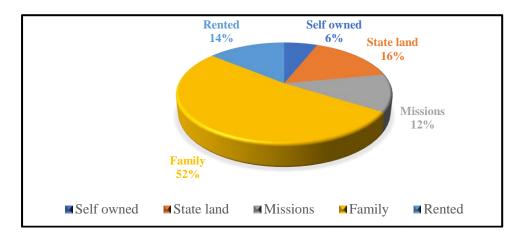


Figure 5: Land tenure by category for youth engaged in UPA in Kenema city. Source: Authors' field survey, (2018).

With security of land titles, the individual has more incentive to invest capital and labour in the development of land. The Kenema research revealed that family or customary-owned land accounts for 52% in the study area, and 35% of urban cultivators revealed that they have gained usufruct rights through direct informal arrangements with family groups who have a long history of land ownership. Field-based research discovered that a high level of land insecurity is gradually occurring, thus confirming Pilgrim's observation of land insecurity, such that at any moment landowners may demand the use of their land (Pilgrim, 1967) for non-agricultural purposes. This situation is illustrated as follows:

"We had an informal arrangement with the landowner. I have been cultivating his swamp every year for the past six years and each season I pay 100,000 Leones (c.£4.25). Also, I give a portion of the harvested rice to him. This year after I have planted vegetables and am now expecting to harvest my spring onions, corn, and sweet potatoes, the landowner asked for his land to put up a house. I heeded not to his request and, all of a sudden, he hired people to uproot my crops. He failed to understand that I was a former ex-combatant commander in the jungle days, so I thrashed him severely" (Personal communication, Gbotima Farmers Association, December 2018).

State-owned land accounted for 16% of land, rented - 14%, missions - 12%, and youth owning land - 6%. State-owned land includes the inland valley swamps, RTI, IDA and Chinese Farm UPA sites formerly under the MAFFS. With regard to youth accessing land for UPA, 25% of respondents said they cultivated on state land, 45% on Mission land, 17% on

rented and 13% on self-owned land. **Table 5** shows a large positive correlation between plot size and cultivated area. In several cases, the questionnaire survey showed that even though land availability is often a major constraint in urban farming in many cities, the Kenema study revealed that 51% of respondents suggested that land availability was not currently a major issue. One possible reason here is the fact that the study area is in an emerging secondary city. The study further indicated that 30% of urban youth felt that they did not have the networks, resources and bargaining power to gain secure outright access to land for agriculture in Kenema city. To create access for youth to practice UPA, the land tenure issue was managed by the three devolved institutions through the KCC on behalf of youth groups that registered with NAYCOM. The outcome of these negotiations led to an increase in the usufruct rights of youth groups to undertake UPA.

## Market challenges

Young agriculturalists interviewed in this study reported major constraints in terms of access to markets in Kenema city. Some 40% of respondents reported having informal arrangements with vegetable buyers (referred to as 'middlemen') from cities such as Freetown, Bo, Makeni and Koidu. The method and location of sales vary. The possibility exists for middlemen from Freetown and other cities to buy exotic vegetables in Kenema and within a few hours return to sell (in Freetown and other cities), either on same day or the next day, owing to the good road network. Field-based research indicated that, whilst 'low' and 'medium' intensity producers mainly sold their produce locally in the city's markets, youth cultivators from the 'highly intensive' sites marketed most of their produce on-farm ('at the farm gate'), because they produce large quantities of vegetables on a regular basis which attracts wholesale customers often travelling from some distance. Middlemen commonly contacted producers in advance by mobile phone and agreed on the varieties and quantities that would be supplied to middlemen when they arrived. Produce is generally transported in locally made large circular baskets made of palm fronds or canes, but producers recognise there is scope for improvement in transportation methods. The questionnaire survey revealed that 45% of respondents sold their produce 'at the farm gate' to 'middlemen' from Bo and Freetown, and there were frequently concerns about perishability, wastage and possible loss of income. However, despite such challenges, these marketing opportunities have brought very considerable economic gains to urban cultivators in Kenema. This benefit is corroborated in the words of the youth leader of the 'Naniawama Vegetable Farmers Association', based at the Methodist Secondary School Garden site:

"My group can now boast of harvesting and selling to middlemen from Freetown, Bo and other cities between 30 - 40 baskets of exotic vegetables, especially spring onions, every week in the harvest season. About 80% of my group's produce is bought by vegetable sellers from Freetown, the other 20% by those from Bo and other secondary cities in Sierra Leone. During harvest time, I can earn up to 1,500,000 Leones (c.£63.30) every week, thanks to the network of vegetable 'middlemen' who come to buy our vegetables. Now life is much better for me and my family" (Personal communication, December 2018).

UPA Intensity	No. of UPA Sites	Names of communities mapped	No. of urban cultivators sampled	Rank	Average plot size per farmer in Hectares	Net cultivated area for UPA in hectares	Rank	Difference of Rank (d)	d <sup>2</sup>
Low (Intensive UPA Activities)	3	Simbek, Topkgbombu, Mulema	5	1	3.45	17.25	10	9	81
	3	Kissy Town, Blango Town	6	2	3.52	21.12	12	10	100
	3	Legbetieh, Sojeh/Show Field, Badru Deen,	n, Sojeh/Show Field, Badru Deen, 6 2 3.60 21.60 13	11	121				
	2	Tisor, Congo, Tigloma	9	4	3.61	32.49	14	10	100
	11		26	-		92.46	-	-	-
Medium (Semi-Intensive	3	Burma 3 -Ngoilahun, Burma 4-Back of Airfield, IDA	15	6	0.34	5.10	1	5	25
(Semi-Intensive UPA Activities)	3	Kpetema, Cow Yard, Lebanese Farm	15	6	0.39	5.85	2	4	16
	3	Gombu, T-School, New England	13	5	0.49	6.37	3	5 4 2 4	4
	3	Kordehbotihun, Dauda Town, Samai Town	16	9	0.44	7.04	5	4	16
	3	Gbotima, Kakajama, Koyagbema	15	6	0.482	7.23	6	0	0
	15	-	74	-	-	31.59	-	-	-
High (Intensive UPA	3	Burma 1- Lumbebu, Burma 2, Milton Margai- Naniawama	28	11	0.24	6.75	4	7	49
Activities)	3	RTI, Heilegbema, Buwanhun,	23	10	0.38	8.75	7	3	9
	3	Nyandeyama, Kpetewoma, Chinese Farm	28	11	0.43	12.00	8	3	9
	3	Fornikor YMCA, Kpayama,	30	13	0.47	14.00	9	4	16
	4	Dumagbe, Lambayama, MAFFS/IVS, K-School	41	14	0.45	18.45	11	3	9
	16		150		-	-	-	-	-
TOTAL	42		250		-	184.00	-		555

Table 5. Calculation of Spearman's Ranking Correlation Coefficient. Source: Authors' Field survey, (2018).

About 98% of respondents indicated that they used locally made traditional tools (hoes, machetes, axes, knives) to cultivate the land and produce vegetables, but many expressed a desire to change from over-reliance on manually operated tools to power tools. They believed that using mechanised cultivation would enable timely cultivation of larger areas, and the possibility of improved yields. There is an urgent need to scale-up to more modern modes of agricultural production with support from government and development partners. Producers felt that an over-reliance on the use of traditional tools and manual labour is a recipe for low yields and poverty. Furthermore, respondents commented on the adverse effects of climate change, notably the increasing unpredictability of rainfall, meaning that farm work often has to be completed quickly, which is difficult with only manual labour. Heavily relying on rainwater, respondents also reported being exposed to risks and shocks in the event of a sudden change in rainfall and other weather elements. The Chairlady of 'Naniawama Vegetable Farmers Association' confirmed this challenge:

"Before now, we had been working individually on our swamps, and that takes a long time to finish preparing the land and by the time you sow or nurse the vegetables, they will have little time to grow well and that affects our crop or vegetable yields. Now, as women we have learnt to organise ourselves to prepare our swamplands in groups, usually comprising 40 to 50 members. Depending on the size of the land, we can decide to prepare the plot of a member in two or three days, and we rotate this pattern to all members. This practice has helped us to catch up with the planting calendar and that is also replicated in the harvesting and marketing of vegetables and other crops that we grow. It has also helped us to control the price, especially for the exotic vegetables (spring onions, carrots, cabbages, lettuces) that we grow. We can now earn an appreciable income from our work" (Personal communication, December 2018).

The study further revealed that the heavy labour demand includes the building of raised bunds and the digging of water wells during the dry season, work which is largely undertaken by men, who are either hired from male youth groups, or are husbands or friends of female urban cultivators. The study revealed that 60% of males are hired from male youth groups to do heavy labour work, while 40% of those hired are either the husbands or boyfriends of women farmers.

#### **5. Discussion and Conclusion**

This paper has focused on young cultivators in a post-conflict urban setting, because the research base suggested that urban and periurban agriculture (UPA) provides potential employment and diversion from antisocial and criminal behaviour. Thus far UPA research has been dominated by main or capital cities, so this research has focused on a secondary city where recent growth has been rapid. Within this, the research set out to address the following questions: what are the post-crises municipal challenges that impinged on youth before and during engagement in UPA? Secondly, what are the key policy measures affecting the empowerment of youths engaged in UPA and the development of this new urban livelihood?

The case study city in this paper, Kenema, is in a country that is still recovering from civil war (1991-2002) and an Ebola epidemic (2014-2016) and there is concern that the impacts have exacerbated the shortage of livelihood opportunities available to young people. Disaffected young people are known to have had a destabilising effect in the run-up to the

civil war in Sierra Leone and similar evidence is found for other civil wars and the Arab Spring (2011). This research has integrated several data collection methods including GIS mapping of the UPA sites, questionnaire surveys, focus group discussion, and in-depth interviews with cultivators. The evidence is sampled from UPA sites around the city which were earlier identified through the GIS mapping of 42 sites. The findings have provided valuable insights into the challenges faced by young people practising UPA. The findings show that the young cultivators were challenged by low levels of education, some experience of criminal behaviour, alcohol and substance misuse, and low levels of land security (only 6 per cent owning the land that they cultivate), but the respondents had negotiated access to land through a range of informal tenure and usufruct arrangements. Around 2 in 5 of producers surveyed were growing intensive vegetables such as spring onions for markets in other cities such as Freetown and Bo, which resulted in commercial sales particularly during the harvest season. Cultivators use hand labour, but many expressed the view that mechanised labour could increase their yields and therefore the income earned from UPA. One response has been to organise into associations to share knowledge, labour and marketing, as well as forming self-supporting networks. Interestingly, farmers comprise both men and women, but men comprise the vast majority of the casual labour employed, and women were more forthcoming in their reporting of self-supporting networks. The research breaks new ground in studying UPA outside the capital city, Freetown. Furthermore, investigating the involvement of youth in UPA and the local support that has been provided in Kenema, has provided a new dimension to work undertaken on youth activities and employment and possible mechanisms for encouraging these.

The actions undertaken by NGOs, agencies and local government in post-crisis Kenema provide an impressive example of how to support youth. The evidence suggests that households and the community benefit from UPA as it provides opportunities for employment, wealth generation and food security. The research has revealed how youth have felt increasingly empowered and feel that they have a voice within the community. Youth engagement discussed in this paper has undoubtedly been transformational for some and a much-needed restorative practice in the post-crisis context. At its best, the impact has transformed crime-ridden, drug-addicted, violent or disillusioned youth into peaceful, responsible, hard-working and productive citizens who are committed to making a living through UPA.

The challenges experienced by urban young people, combined with political will, has led to the development of this model of youth transformation. Sierra Leone's 'crisis of youth' has received much attention since the end of the civil war in 2002. Many young people were engaged as combatants and committed violent acts during the twelve-year conflict. Since the war, concern has focused on the continuing existence of such a significant disillusioned and often unemployed section of the population, and the possibility that this could lead to continued instability.

This study has shown how three institutions have engaged with young urban cultivators since the end of the civil war, facilitating the development of clusters of young farmers and selfsupporting associations. The research also indicates that further concerted initiatives are needed to unlock the full potential of urban youth participating in UPA for broader benefits to be achieved among both youth and their communities. Policy measures must also address the challenges facing youth and UPA and there is a need to direct more attention to securing land tenure, financial services, market opportunities, and appropriate technology. This paper has provided evidence of how developing the capacity of youth to engage in urban farming can bring benefits and how Kenema could provide a model for other cities faced with similar challenges.

Emanating from this research are a number of possible policy recommendations:

- First, UPA provides livelihood opportunities for urban youth, and can target idle and potentially dangerous young people. Successful UPA policies may sustainably transform them into productive and socially responsible citizens;
- Secondly, creating and managing youth development programmes, including skills
  development, educational training, agricultural extension and entrepreneurship could
  accelerate these processes;
- Thirdly, sharing success stories from youth who are already successfully involved in UPA with stakeholders, investors and humanitarian organisations could stimulate enthusiasm and support for national pro-youth empowerment programmes and the strengthening of existing institutions;
- Fourthly, strengthening the political will and initiating legislation to ameliorate the immediate challenges of youth is vital. For example, providing access to capital, enhancing infrastructure, establishing and supporting marketing-supply chain systems, and enhancing skills among young people engaged in UPA.

In conclusion, this paper calls on authorities in governance to scale-up their attention towards youth affairs. In collaboration with international development partners, there is an urgent need to collectively establish national and global enabling environments that strive toward unlocking the latent potential of youth, especially those engaged in agriculture, for broader socio-economic development. There is considerable scope for further research on youth mobilisation similar to that undertaken in Kenema, and particularly in secondary cities which have often been neglected in favour of capital or main cities. One possible area for future exploration is the role of gender in the challenges and opportunities facing such young urban cultivators.

# Credited author statement

**Bangura** gathered evidence, conducted the analysis and led the drafting of the paper. **Gbanie** provided conceptual support and spatial analysis, and edited and approved the manuscript. **Lynch** provided conceptualisation and assisted in the review and edit of the manuscript. **Binns** provided conceptualisation, and review and editing in the completion and revision of the manuscript.

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