

SPATIAL ANALYSIS OF URBAN AGRO-CRIME IN OGBOMOSO

IGE James Olateju*

ADIGUN FolasadeOyenike*

ABOLADE Olajoke*

OLAIYARemilekunOlaide*

ATANDA Timothy Adeyemiand**

ABSTRACT.

This study examined the nature of urban agro-crime experienced by households, susceptibility of urban farms to criminal victimization, causes and effects of urban agro-crime in Ogbomoso. It also examined households' response to urban agro-crime in the area. Primary data were collected through in-depth interview and copies of questionnaire randomly administered to 768 households in Ogbomoso. Data were analyzed using descriptive statistics. The nature of agro-crime occurrence experienced by households patterned malicious damage of urban farm property (46.5%), theft and stealing of produce (23.4%), poisoning of animals (16%), illegal hunting of animals (8.6%), barn and store breaking (5.5%). Majority of urban farmers perceived criminal victimization on farm to be very serious and occur at night (28.9%), around middle of the day (23.8%) and early in the morning (15.2%). Causes of agro-crime were attributed to lack of guardianship (33.6%) resulting from size and distance of farm from the residence, presence of suitable target (29.7%), ostentatious display of wealth (19.1%), and easy accessibility to property (17.6%). The effects of agro-crime were mainly fear of being the next victim (35.2%), heavy financial loss (22.3%) and reduced quantity of agricultural products (18%) among others.

*** Department of Urban and Regional Planning, Ladoké Akintola University of Technology, Ogbomoso, Nigeria.**

**** Ministry of Physical Planning and Urban Development, Akinyele Office, Moniya, Ibadan, Nigeria.**

Perpetrators of crime were apprehended to include the town residents (37.9%), other neighboring farmers (27.3%) and organized criminals (21.5%). The households' response to crime in the study area included sitting of farm close to residence (46.9%), use of guard (28.9%) and fencing of farmland (24.2%). Fencing materials used include wood (37.5%), barb wire (31.6%), concrete fencing (18%) and edges (12.9%). Punishment given to criminals caught in the act included public disgrace (79.7%), lynching (13.3%), and handing over to police (7%). Susceptibility to criminal victimization varies significantly among farms of different sizes. It is suggested that there should be strong surveillance of farmland by farmers' collaborative efforts.

Key words: Agro crime, Urban, Susceptibility, Criminal.

1. INTRODUCTION

In Nigeria, crime has all day long become a hydra-headed social monster pervading every dimension of human survival and stable life style (Ige, 2015). Farms, the mainstay of the country's economy are not spared as animals are stolen and crops harvested by thieves before farmers have chance to sell animals and gather crops into their barns. Consequently urban agro-crime is a cankerworm and one of the most notable threats to urban food security and farming practices. Crime, as Omisakin (1998) vehemently expresses, "is a social menace, an undeniable stigma to national image and a significant source of threat to the people's safety and wellbeing". According to Adejumo et al, 2009 insecurity resulting from crime is rampant in Nigeria.

Man has continually sought to improve the quality of life by transforming nature in order to suit his economic, social, psychological and physiological needs (Smith and Nasr, 2001). Such needs are through natural endowment like mineral resources, forests, crude oil, food supply from agricultural activities among others. Agriculture is a major occupational sector in many developing countries and it is one of the mainstay of Nigeria economy, providing the food needed for the teeming population (NBS, 2005). In recent times, people engage in much aspect of these agricultural practices as their major occupation either to sustain livelihood or to acquire income (FAO, 2004). Agriculture is one of the most considerable sectors in the economic development that strengthens the security of a nation through production of food and cash crop for export (World Bank, 2000). Urban agriculture is the cultivation of plant and raising of

animals within cities and towns for foods and other uses. Urban agriculture includes activities such as the production and delivery of inputs, processing and marketing of agricultural products in the core, transitional and peripheral areas of cities. However, production units in urban area in general tend to be in smaller scale than rural enterprises, and exchanges take place across production units. These units are however attacked by criminals thus limiting the gain and imposing hardship on farming operations.

Various illegal activities by perpetrators directly or indirectly affect agricultural practices with huge financial impacts on urban agricultural businesses (Swanson, Et al, 2000). Some of the criminal operations includes: theft of animals such as sheep, goat and pig both on free range and intensive range. Theft of poultry birds such as turkey, chicken, assault on animals, illegal hunting and fishing, poisoning of fish pond and vandalism in the farm premises. All these criminal acts result in incalculable and irreparable damages to farm properties and national economy at large. The effects of the criminal operation on urban farms and agro-businesses are obvious in a new wave of social behavior featuring anxiety, hostility, mistrust and aggressiveness.

Urban agro-crime is a topical issue in criminological research and one of the least understudied topics in the field of environmental criminology especially in the area of generating early warning systems for preparedness against urban crime. Attempts at understanding various aspect of agricultural problems have been carried out in various disciplines such as agriculture, criminology, anthropology, economics, psychology and victimology to mention a few. Until some decades ago when there was a gradual understanding of the fact that the occurrence of crime on urban farm can have a negative influence on the urban households and even urban area at large. Urban agro-crime occurrence is however a spatial affair and the search for geographical analysis of causes and nature of particular types of criminal behavior is an inevitable issue if crime will be ameliorated effectively. Any meaningful and sustainable policies and programmes targeted at curtailing criminal activities and increasing quality of human life in a community must take into consideration the socio-economic and physical environment within various locations where crime occurs (Abodunrin, 2005; Ige et al, 2010). Urban agro-crime has not been comprehensively studied in Nigeria. There is enough information to conclude that the magnitude of the problem is quite serious. In the light of this, it is imperative that the study examines the

spatial analysis of urban agricultural crime in Ogbomoso with a view to providing better information that will facilitate policy response that can effectively ameliorate urban agro-crime not only at Ogbomosho but in Nigeria's urban and peri-urban areas at large. Specifically, the objectives of this work are to: (a) examine the nature of urban agricultural crime in Ogbomoso; (b) analyze the urban farming households' perception of susceptibility of farm to criminal victimization; (c) assess the causes and effects of urban agricultural crime; and (d) examine the perpetrators of urban agro-crime and the urban farming households' response to agro-crime.

The hypotheses that guide this study are stated in null forms

- i) (H₀): There is no relationship between distances of farm from farmers' residence and level of farm susceptibility to criminal victimization.
- ii) (H₀): There is no relationship between the size of farm and the level of farm's susceptibility to criminal victimization.

II. MATERIALS AND METHODS

(a) The Study Area,

Ogbomoso city in Oyo state is located in the south western part of Nigeria. It is an area characterized by heavy rainfall as it is situated in the tropical rain forest zone. Ogbomosho is located on latitude of 8°07'N and longitude 4°14'E of the globe. Ogbomosho is about 105km North-East of Ibadan, the capital of Oyo State, 58km North-west of Oshogbo, the capital of Osun State, 53km South-west of Ilorin the capital of Kwara State and 57km North-east of Oyo town. It is the second largest town in Oyo State and is located on the main high way connecting the North and South of Nigeria on the west flank. The city has a population of 861,300 (2007 census estimate). Ogbomosho lies in the derived savannah vegetation zone. However, it is considered to be a low land rain forest area with about 300m-600m above sea level. The physical geography of the area impacts on its suitability for all manner of agricultural practices. Ogbomoso is a typical example of a traditional African city. The existing rustic buildings that are characteristic of traditional African societies present in the area are a pointer to this fact. There are two local government areas in Ogbomoso town and these are Ogbomoso North and Ogbomoso South Local Government Areas.

(b) Methodology

Data from primary source were obtained through questionnaire, direct observation and oral interview. The questionnaire was designed to elicit information on the prevalence of urban agro-crime. The sample frame constituted all households in Ogbomosho north and south. The projected population figure of the entire Ogbomosho in 2006 as obtained from National Population Commission was 287278. This was projected to 369604 in 2015 using a growth rate of 3.2%. Five political wards were randomly selected from each of the two local government areas in Ogbomosho. To arrive at the sample size, sampling ratio of 0.2% of the total population which amounted to 768 residents were chosen from different households in the randomly selected wards. The decision for the choices of 0.3% of all the population was premised on the assertion of Neuman (1994) that 0.05% of larger population was adequate for selection. Having determined 768 households to be interviewed in the selected political wards, a random sampling procedure was used to collect primary data through questionnaire administration. The total number of copies of the questionnaire administered in all the selected wards was therefore 768. The numbers given to housing units for enumeration area demarcation for 2006 population census by National Population Commission, and a good proportion of newly constructed buildings that were outnumbered were updated, and both compiled for the selected wards in each local government area of Ogbomosho. Housing units were randomly selected in each of the selected wards. One of all persons aged 18 years and above was purposively interviewed in each selected household. Notwithstanding, children were also given the privilege of responding to the oral questions. There was, however, exceptional cases like;

- i. Multi-household buildings (more than one household occupying only one building): The household with longest stay in the housing unit was selected.
- ii. A multi-building single household (a single household occupying more than one building). This is a common feature of the traditional Yoruba settlements as a result of the polygamous and extended nature of Yoruba families. If two or more housing units randomly selected were of multi-building single household, only one housing unit was used while others were skipped. In this case, only one questionnaire was used just like any other household, while the remaining questionnaires were used for the nearest unselected housing unit(s). It is equally noteworthy to mention that there were some cases where housing units selected were empty

(either unoccupied or households not at home) such housings units were skipped to the nearest unselected housing units.

Data on types, causes, effects and perpetrators of agrocrime were summarized into frequencies and percentages while Chi-Square statistical technique was used for determining variation in some factors and susceptibility of urban farms to criminal victimization.

III. DISCUSSION OF FINDINGS

The following were the findings of the study:

a) Types and Nature of Urban Agro Crime

The summary on the nature of urban agro-crime and incidence shows this pattern of crime incidence: malicious damage of urban farm property (46.5%), theft and stealing of produce (23.4%), poisoning of animals (16%), illegal hunting of animals (8.6%), barn and store breaking (5.5%). The most prominent of all crime experienced is malicious damage of urban farm properties, and this included vandalism and arson. Vandalism on the farm included damaging of nets, woods and concrete fencing used to guard the farms while arson included willfully setting of bush on fire in the peri-urban areas by individuals hunting for bush rats. Also livestock and poultry theft are prevalent for sheep, goats cattle, and birds. See Table 1. It was observed that crime experienced by various farmers depends on the type of agricultural activities practiced.

Table 1: Types and Nature of Urban Agriculture Crime.

Description	Frequency	Percentage
Malicious damage	357	46.5
Theft and stealing	180	23.4
Illegal hunting of animal	66	8.6
Barn and store breaking	42	5.5
Malicious poison administration to animal	123	16.0
Total	768	100

Source: Author's field survey 2015.

(b) Causes of Urban Agro-Crime.

The bulk of the respondents (33.6%) attributed the causes of urban agro-crime to lack of guidance while 29.7% of the respondents attributed the causes of urban agro-crime to presence

of suitable target, i.e. what to steal. Also 19.1% and 17.6% of the respondents respectively ascribed the causes to ostentatious display of wealth, value of and accessibility to the property. Hence, it can be deduced that lack of guidance is the prime causal factor that provide ideal condition for criminal activities on the farm. See Table 2

Table 2: Causes of Urban Agro- Crime.

Description	Frequency	Percentage
Lack of guidance	258	33.6
Presence of suitable target	228	29.7
Ostentatious display of wealth	147	19.1
Value and accessibility to the property.	45	17.6
Total	768	100

Source: Author's field survey 2015.

(c) Effects of Urban Agro- Crime.

The summary of the effects of the urban agro-crime from the farmer's perspective indicates that bulk of the respondents (35.2%) have fear of been the next victim while 22.3% of the respondents have fear of having greater financial loss. In addition, 16% of the respondents asserted that agro crime reduces the participatory number of farmers while 8.6% of the respondents affirmed that agro crime renders the community insecure. It can however be inferred that urban agricultural crime have psychological and psycho-economical effect. This explained why there are limited numbers of people involved in urban agriculture. While some are scared of investing in urban agriculture others dread losing the invested fortune because of the criminal victimization. See Table 3.

Table 3. Effects of Urban Agricultural Crime.

Description	Frequency	Percentage
Fear of being the next victim.	270	35.2
Fear of having greater financial loss.	171	22.3
Reduces participatory numbers of farmers.	123	16
Renders the community insecure.	66	8.6
Reduced quantity of agricultural produce	138	18
Total	768	100

Source: Author's field survey 2015

(d) Perpetrators of Urban Agro-Crime.

The study observed that 37.7%, 27.3% and 21.5% of farmers that experience criminal victimization on their farm identified the perpetrators to be the town residents, neighbouring farmers and organized criminals respectively. Residents (13.3%) that are in close proximity to the farm are also identified as perpetrators of urban agro crime. This can be interpreted that the town residents are responsible for most of the crime incidences on urban farm, such as illegal hunting of fish, livestock theft, and vandalism among others. Other neighboring farmers out of covetousness and envy perpetrate vicious and destructive act on farm properties. See Table 4.

Table 4: Perpetrators of Urban Agro-Crime

Description	Frequency	Percentage
Town residents	291	37.9
Other neighboring farmers	210	27.3
Organized criminals	165	21.5
Residents close to the farm	102	13.3
TOTAL	768	100

Source: Author's field survey 2015.

(e) Farmers Perception on Time of Crime Occurrence.

With regards to the time of crime occurrence on the farm, the study observed that majority of the farmers (32%), were not certain about the time of occurrence, 28.9% of the respondents submitted that crime occurred at night. Furthermore, 23.8% of the respondents agreed that it occurred around middle of the day and 15.2% of the respondents indicated that criminal activities on farm take place early in the morning. It can be concluded that the bulk of the respondents are not sure of when exactly crime occurred on their farms. See table 5.

Table 5: Farmers' Perception of Time of Crime Occurrence.

Description	Frequency	Percentage
Around middle of the day	183	23.8
At night	222	28.9
Early in the morning	117	15.2
Not certain about the time	246	32
TOTAL	768	100

Source: Author's field survey 2015.

(f) Responses to Criminal Victimization on farm

The study revealed that the majority of the respondents (46.9%) averts criminal victimization by sitting their farm close to their residence while (28.9 %) and (24.2%) of the respondents avert incidences of crime through the use of guard on farm and fencing of their farms respectively. This implied that farms are not adequately guarded thus prone to crime. See Table 6

Table 6: Responses to Criminal Victimization on farm.

Description	Frequency	Percentage
Fencing of the farm	186	24.2
Use of guard on the farm	222	28.9
Sitting of farm close to residence	360	46.9
TOTAL	768	100

Source: Author's field survey 2015.

(g) Materials used for fencing the farm

The study revealed that the majority of the respondents (37.5%) used bamboo/wood for fencing their farms while 31.6% of the respondents used barbwire. Also 18% and 12.9% of the respondents used concrete fence and hedges respectively as fencing materials on their farms. These fencing materials are not strong security barrier capable of elongating the process of gaining entry into farms which could have afforded the opportunity of being caught. This indicated that most of the materials used for fencing the farms are not adequately capable of guarding the farms against crime incidences. See Table 7

Table 7: Materials used for Fencing.

Description	Frequency	Percentage
Bamboo/wood	288	37.5
Barbed wire	243	31.6
Concrete fence	138	18
Hedges	99	12.9
TOTAL	768	100

Source: Author's field survey 2015.

(h) Handling of Criminals

The study revealed that 43.8% of farmers with crime experiences punish the offender and let them go, while 20.3% of the respondents only retrieved what has been stolen by the offender and release them .(16%) Victims who made reports to the community head constitute 16% while 14.1% warned the offender not to repeat such act. Only 5.9% of the farmers with crime experiences report offenders to the police. See table 8. It could be concluded that majority of the farmers punish offenders and later release them. Criminal occurrences on urban farm are not often reported to the police.

Table 8: Handling of Criminals

Description	Frequency	Percentage
Handle them to the police	45	5.9
Retrieve what is stolen and release the criminal	156	20.3
Warn them not to repeat such crime.	108	14.1
Punish them and let them go.	336	43.8
Report them to the community head.	123	15.9
TOTAL	768	100

Source:**Author's field survey 2015****(i) Reason for Non-Reporting Crime.**

The study revealed that majority of the respondents (43.4%) failed to report crime to the police due to lack of proof while 12.5% avoid legal hassles. Some of the respondents (32%) failed to report crime because they feel the police have no adequate knowledge in tackling farm crime while others (12.1%) see it a wasting of time. Poor attitudinal response of victims to report crime to police and jungle justice carry out on offenders were said to be borne out of the opinion that reporting crime to police could not retrieve their stolen properties (see Table 10) and poor attitude of police in handling farm crime cases with a long process in the administration of justice and its attendant perversion that could set the criminal free. Further information from oral interview revealed that urban farmers are skeptical about police protection, considered farm crime incidences to be trivial and they lacked necessary evidence to proof the incidence of crime. They also considered that Nigerian Police lack necessary resources for effective investigation to clamp down the criminal.

Table 10: Reason for not reporting Crime to Police

Description	Frequency	percentage
Lack of proof	333	43.4
Avoiding legal hassle	96	12.5
Police have little knowledge on farm crime.	246	32
A waste of time.	93	12.1
TOTAL	768	100

Source: Author's field survey 2015.

(j) Farmers' Preferred Safety Measures Against Crime.

The study revealed that the bulk of the respondents (36.7%) suggested the use of police on the farm as the most preferred safety measure against crime while 32% and 21.1% of the respondents preferred vigilante group and the use of human guard on farm respectively. Only 10.2% of the respondents suggested formation of farm crime safety group as a preventive measure against crime. Despite the fact that there is a low level of crime reporting to the police, the farmers still wish and prefer that the police be in charge of security surveillance in their farms. See Table 9

Table 9: Farmers' Preferred Safety Measures Against Crime.

Description	Frequency	Percentage
Police	282	36.7
Vigilante group	246	32
Use of guard on farm	162	21.1
Formation of farm crime safety	78	10.2
TOTAL	768	100

Source: Author's field survey 2015.

(k) Susceptibility to Crime

(i) Variation in Level of Susceptibility to Crime among farms with different Distance from Residence

The chi-square analysis performed ($p > 0.05$) indicate that there is insignificant variation in susceptibility to criminal victimization when proximity of farm from residence is considered. The calculated X^2 value is 58.053 while the critical value is 14.68 at 0.05 level of significance. It can be deduced that majority of the farms are located at far distances from home and highly prone to criminal victimization (see Table 11). High victimization might be due to lack of adequate guardianship at night as depicted in perception of time of crime occurrence (Table 5 above).

Table 11: Distance of Farm from Residence and Susceptibility to Crime.

Distance of Farm from Residence	Degree of susceptibility									
	Very much susceptible		Very susceptible		Susceptible		Insusceptible		Total	
	Freq	%	Freq	%	Freq	%	freq	%	Freq	%
Very far (more than 1.2km)	108	40	78	41.9	48	23.9	18	16.2	252	32.8
Far (btw 800m- 1.20km)	69	26	72	38.7	30	14.9	75	67.6	246	32
Close (btw 400m – 800m)	57	21	9	4.8	63	31.3	0	0	129	16.8
Very close (less than 400m)	36	13	27	14.5	60	29.9	18	16.2	141	18.4
Total	270	100	186	100	201	100	111	100	768	100

Source: Author's field survey, 2015.

$$X^2=58.053 \quad df=9 \quad (P>0.05) =14.68$$

(ii) Variation in level of Susceptibility to Crime among Farms of Various Sizes

The chi-square analysis performed indicates that susceptibility to criminal victimization varies significantly among farms of different sizes. The calculated X^2 value is 58.053 while the critical value is 13.36 at 0.05 level of significance. This implies that incidence of crime differs from small to medium and big sized farms. It can be deduced that the prevalence of crime on urban farm is not only based on lack of suitable target but also on the size of the farm. Bigger farms are expected to be susceptible to criminal victimization but the data in this study revealed the contrary. The fact that small farms are closer by that is within the reach of both the farmers and criminals could make it susceptible to attack especially at odd hours of the day and with lack of capable guardian on these farms

Table 12: Size of Farm and Susceptibility to Crime.

Size of Farm	Degree of susceptibility									
	Very much susceptible		Very susceptible		Susceptible		Insusceptible		Total	
	Freq	%	Freq	%	Freq	%	freq	%	Freq	%
Less than a plot	153	56.7	63	33.9	81	40.3	54	48.6	351	45.7
1- 3plot	93	34.4	99	53.2	54	26.9	33	29.7	279	36.3
3-5plot of land	12	4.4	24	12.9	39	19.4	24	21.6	99	12.9
5 plot and above	12	4.4	0	0	27	13.4	0	0	39	5.1
Total	270	100	186	100	201	100	111	100	768	100

Source: Author's field survey, 2015. $X^2=35.501$ Df = 9 (P>0.05) =13.36

V. RECOMMENDATIONS AND CONCLUSION.

For some of the observed evidences and problems of urban agricultural crime, the following set of actions are suggested as necessary steps to ameliorating the scourges of the effects of urban agro crime and thus enhance the efforts of the participants in urban agriculture as well as their returns.

❖ Farmers should be encouraged to work in synergies together with the police to prevent crime, be alert to strangers or suspicious activities on the farm and ensure that they pass all information to the police. All crime incidences should be reported to the police. This will help to build up a profile of urban farm crime and help police to target resources to areas of greatest need. Police should be encouraged to visit farmers and their farms regularly to build up a sense of partnership and help reduce the feeling of isolation experienced by farmers. Work in partnership with police to encourage the development of Neighborhood Watch in the town and outlying urban community. Special regular training should be provided for the police by the government. Nigerian Police Authority should encourage voluntarily interaction with the farmers for acquisition of local knowledge about the areas and other farm related crime issues. Hence well trained officers should be assigned to handle agro criminal incidences.

- ❖ Police should be encouraged to take criminal victimization on farm as felony (serious crime) and not handled as misdemeanor. Thus, crime issues on farm should be treated urgently and not with levity. An offender tends to perpetrate more crime if there is no severity of the punishment given to such offence. Hence, a robust prosecution policy approach should be established such that any offenders caught should be thoroughly punished as this may reduce the opportunity for future criminal victimization.
- ❖ Farmers should develop and maintain good relationship with their neighbors. Community that can work together is the best defense against crime. When there is goodneighbourliness, farmers can intimate their neighboursof their movements from the farm, leave contact telephone number and addressin case of emergency. This will enhance both voluntary and involuntary guardianship on the farm.
- ❖ Farmers should be proactive in distributing information on crime prevention to neighboring farmers in other to encourage safety and security on farms. Whenever crime is been perpetrated on farms, farmers should not keep it to themselves, farmers should alert other neighbouring farmers. In addition farmers should form farm safety group that is concerned with surveillance around farmlands in their area in order to prevent crime incidences.
- ❖ There should be adequate use of formidable security barriers. Gates and good fencing materials with sturdy locks should be used on farm.
- ❖ Government should explore training options for young people on farms and in local industry, through government or community training programs.This could help reduce youth crime and unemployment, enhance community spirit and help young people develop self esteem and confidence instead of perpetrating crime.

The study has established that there are incidences of urban agricultural crime which is a serious and costly social problem that have propensity to negatively affect not only farmers but also the society at large. Second, such crime incidences are not adequately reported to the law enforcement agencies for myriad of reasons. And, third, urban farms are not properly protected against criminal incidences.

Juxtaposed against these observations is the fact that there are many policy options from which farmers, law enforcement agencies, prosecutors, and communities can choose in their attempts to

reduce agricultural crime. Not least, as detailed in the recommendations section above, are a wide range of guardianship and target-hardening efforts that make agricultural crime less easy, and aggressive law enforcement and prosecution, guided by a general problem-solving orientation informed by research and analysis to crime-fighting (Ratcliffe 2003; Peak and Glensor 2004). Education of farmers, law enforcement officers, and prosecutors also can be critical, leading to increased reporting of crime and more proactive, effective approaches to addressing it. Ultimately, however, effective urban agricultural crime prevention strategies must begin with assessing the need for crime prevention, the feasibility of the diverse strategies listed above, and the unique capacities within the context of specific communities.

From this research, it was observed that lack of capable guardianship on farm is the prime causal factor of urban agricultural crime. To this guardianship of farm property remains an important tool for preventing crime on farms. In crime prevention, the ultimate goal is to reduce the risk of being a victim. In order to accomplish this effectively, it is of great importance to check every opportunity for perpetrators to take advantage of farms. More so, all offenders caught must be dealt with. In conclusion, little is known about crimes against farm operations in Ogbomosho city and yet agriculture plays a significant role in the economy of the city. It is evident from this study that crime against farms is becoming a problem. Highly valuable farm properties such as machinery parts (injector pumps, engine starters), equipment, tools chemicals, fuel, livestock, and farm produce are easily turned into cash by thieves. The continued social and economic changes in urban areas are posing a threat to the development of urban areas. More proactive measures should be channeled towards improving the social and economic status of people living in urban cities. Further, a concerted partnership-based approach between the government, the community, and farmers is needed to tackle farm crimes at both the community and national level. Therefore, there is need for planners to consider not only the aesthetic and accessibility but also security when planning for a neighborhood. Hence, there is a definite need for more research into the unique, costly and little understood nature of urban agricultural crime in Ogbomosho. Thus, farm victimizations needs to be taken seriously as the costs of farm crime can impact on individual farmers, their families, communities and consumers.

V1 REFERENCES RÉFÉRENCES REFERENCIAS

1. **Abodunrin, F. O. (2005)** Spatio -temporal Variation in Incidence of and Residents' Response to Crime in Ogbomosho. Unpublished M.Tech thesis submitted to the Department of Urban and Regional planning, LadokeAkintola University of Technology, Ogbomosho.
2. **Adejumobi, C.A. Oni, N.O. and Ige, J.O. (2009)** "Crime Occurrence and Community Policing in Southwestern Nigeria". *Journal of Social Policy and Society*. 4(1), pp 112-119
3. **Anderson, K. M., & McCall, M.(2005)**. Farm crime in Australia. Canberra, AU: Australian Institute of Criminology.
4. **Bean, T.L. and Lawrence, L.D. (1978)** Crime on Farms in Hampshire County, West Virginia, Morgantown: College of Agriculture and Forestry, West Virginia University.
6. **Bottoms, A.E. and Willes, P. (1995)** "Crime and Insecurity in the City", In C. Fijnatet.al (Ed) Changes in Security, Crime and Criminal Justice in Europe, two vols. The Hague: Kluwer
7. **Bouffard A. L. & Muftić R.L. (2006)**. The "rural mystique": Social disorganization and violence beyond urban communities. *Western Criminology Review*, 7, 56–66.
8. **Brantingham, P.L and Brantingham, P.J. (1995)** "Environmental Criminology and Crime Prevention", In P.O.H. Wilkstrom, R.V. Clark and J. McCord (Eds), *Integrating Crime Prevention Strategies: Propensity and Opportunity*, National
9. **Bursik, R.J. and H. G. Grasmick(1993)**, "Methods of Studying Community Change in the Rate and Pattern of Crime". In D.P. Farrington, R.J. Sampson and P-O. H.Wikstrom (eds), *Integrating Individual and Ecological Aspects of Crime*, National Council for Crime Prevention, Stockholm,
10. **Bursik, R. J., & Grasmick. H. G. (1993)**. Neighbourhoods and crime: The dimensions of effective community control. NY: Lexington Books.
11. **Butler, L. and D.M. Moronek (eds.)(May 2002)**. "Urban and Agriculture Communities: Opportunities for Common Ground". Ames, Iowa: Council for Agricultural Science and Technology.

12. **Clarke, R.V. (1995)** 'Situational crime prevention', in M. Tonry and D.P. Farrington (eds.) Building a Safer Society: Strategic Approaches to Crime Prevention, Chicago: University of Chicago Press.
13. **Cleland, C.L. (1990)** Crime and Vandalism on Farms in Tennessee: Farmer Opinions About and Experiences With. Knoxville: Agricultural Experiment Station, Institute of Agriculture, University of Tennessee.
14. **Cohen, L.E. and Felson, M. (1979)** 'Social change and crime rate trends: a routine activities approach', American Sociological Review, 44(4) 588-608.
15. **FAO, (2007)**; the State of World Fisheries and Agriculture 2006. Food and Agriculture Organization of the United Nations, Rome. ISBN
16. **Ige, J.O. (2015)** Spatial Analysis of Crime Occurrence in Oke-Ogun Area of Oyo state Nigeria. PhD Thesis, Department of Geography, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria.
17. **Ige, J.O., Aloba, O. and Aboyeji, S.O. (2010)** "Agro-crime and Rural Agriculture Sustainability: An Experience in Guinea Savannah of Nigeria". Journal of Research in Agriculture, 8 (1) 6-8.
18. **Jones, J.(2008)** Farm Crime on Anglesey: Local Partners and Organisations Views on the Issues, Unpublished report presented to Anglesey Joint Action Group Committee, Aberystwyth: Aberystwyth University.
19. **McCall, M. (2003)**. Results from the 2001-02 National Farm Crime Survey. Australian Institute of Criminology, Trends and Issues in Crime and Criminal Justice, No.266 Spore Magazine (2009). Theft: Tactics for battling crime.
20. **NFU Mutual(2012)** Crime in the Countryside: NFU Mutual Rural Crime Survey, August.
21. **Neuman, W.L (1994)** Social Research method: Qualitative and Quantitative Approaches, Allyn and Vacon, Massachussets.
22. **Omisakin, I.S. (1998)** "Crime Trends and prevention strategy in Nigeria". A study of Oyo state". NISER Monograph pp 1-7
23. **Smit, J., A. Ratta, and J. Nasr. (2001)**. Urban Agriculture: Food, Jobs, and Sustainable Cities. The Urban Agriculture Network, Inc., New York, NY
24. **Wikipedia(2009)**: http://en.wikipedia.org/wiki/urban_agriculture_crime. (Retrieved on 7th August 2015).