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Strengthening Community Asset Resilience: Evidence from Gidan Kwano, Minna Nigeria

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Abstract

In sub-Saharan Africa, urbanisation has been inevitable and dynamic in addition to coming with numerous challenges relating to land use development and management. One way to tackle the issues is through community support resilience structures in terms of community asset development and management; however, this solution remains poorly understood. Therefore, with a view to providing information that can help in strengthening community land use development and management, this study assessed community asset resilience in Gidan Kwano within Minna metropolis, Niger State, Nigeria. The study employed a mixed-method research approach wherein data was collected with the aid of a questionnaire and Key Informant Interviews in Gidan Kwano (GK) community. The Modified Sustainable Livelihood Framework (SLF) was adopted to test the community asset vulnerability context. It was discovered that the stresses and shocks of urbanisation trends in GK community have been rising, with considerable impact on the community asset. Therefore, the study highlights the need for a far-reaching intervention that will strengthen community asset resilience, stressing the need for the provision of functional infrastructures, the need for stronger corporate social responsibility from neighbouring institutions such as the Federal University of Technology Minna and the enforcement of relevant codes to mitigate the vulnerability contexts in Gidan Kwano. This model can also be applied in communities facing similar challenges.

Keywords: Asset; Community; Land management; Land use; Resilience

1.0 Introduction

Without a doubt, unrestrained and unguided urbanisation has negative effects on community assets in most rural settlements, thus posing grievous challenges on land use development and management. This is a global imperative. Incidences of land use infiltration and conflict have assumed drastic dimensions in our cities and have extended to adjoining rural areas with consequential negative outcomes for community assets. According to Malabanan and Visco

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(2021), unguided urbanisation poses serious risks to community members owing to rapid population growth and difficulties encountered in the management of community assets. Ernston et al. (2010) observed that urbanisation may lead to high levels of vulnerability for community members because of shocks and trends deriving from the process. Consequently, city planners and land managers are increasingly obliged to examine probable vulnerability contexts in the administration of settlements, especially those adjoining major cities, so that they can be better prepared for future risks that may result from shocks and stresses.

Community assets are those shared or communal resources that are available to every community member and can be leveraged upon to promote social cohesion and inclusiveness, thus enhancing physical development as well as the health and total well-being of the citizenry (Dociu & Dunarintu, 2012). A major community asset of the aboriginal Gidan Kwano (GK) people of Minna is land, which according to Nuhu (2008), was initially seen as a gift of nature but has now transformed into an object of inordinate commercialisation.

Regarding the diverse socioeconomic activities that occur on urban land, Salihu et al. (2021) observed that these are mostly guided by official policy. In addition to such policies on land apportionment for various uses, however, other factors may alter or shape the apportioned spaces. Thus, a foremost challenge for city planners in sub-Saharan Africa is ineffective management of unprecedented population explosion, rental exuberance, land use infiltration and contestation as well as inability to withstand shocks and stresses from a host of human actions (Ankeli, 2020; Ankeli et al., 2019). Over the years in Gidan Kwano, community assets have undergone series of extensive transformations requiring measures for reducing vulnerability to shocks, stresses and other forms of exposure to risk.

Globally, concerted efforts are being made to resolve land development and management issues. Some of the interventions are in the areas of disaster management, air quality/smoke emission control, climate change issues and similar challenges. Etinaya (2018) reported that the endorsement of the Sendai Framework for Disaster Risk Reduction by the United Nations General Assembly (and its adoption by 187 nations), the adoption of the Sustainable Development Goals (SDGs), as well as the adoption of the Paris Climate Change Agreement in 2015 and the New Urban Agenda (NUA) Quito Declaration on Sustainable Cities and Human Settlements for all in 2016, were directed at achieving SDG goal 11, which aims to ensure that cities and other human settlements are safe, inclusive, resilient and sustainable. Moreover, the SDG Hub has identified sustainable land management as a means of empowering nations to recover their lands, fast-track social transformation inclusiveness, reduce resource-reuse conflicts and withstand natural catastrophes and socio-political crisis. This position aligns with the argument by Koliou et al. (2018) and Patel and Nosal (2016), who suggested that resilience should not only seek to restore functionality but also correct the prevailing political, social and economic structures that may have heightened exposure and constrained capacity to withstand crisis.

In the context of Nigeria, earlier studies on city resilience focused on the 'big' cities (e.g., Lagos) as well as other specific industrial and commercial hubs, with little or no attention paid to agrarian communities such as GK and its community assets. As such, little reliable and relevant information exists on community asset disaster resilience resulting from shocks and stresses, hence, the need for this study which assesses asset vulnerability indices and resilience practices in GK with a view to recommending policy actions for strengthening its land administration resilience and adaptive capabilities. The key research questions are: What are the sources of vulnerability in the community? What is the capacity of the community to contextually checkmate its vulnerability?

GK is an agrarian community that hosts the Federal University of Technology, Minna, Niger

State, Nigeria. The community was selected for the study because of its rapid urbanisation rate and proximity to Minna, the state capital. No doubt, the university is the major reason for the massive influx of people to the GK community, leading to land value appreciation as well as land use infiltration and contestation. These factors have posed serious challenges to community land asset development and management, thus worsening the effects of shocks and stresses on community members.

2.0 Literature Review

Empirical and theoretical studies conducted in both advanced and emerging nations reveal significant levels of concerted global efforts by researchers on issues of vulnerability and resilience. Rapidity in the development of a human settlement (a homestead, village or city) depends greatly on its vulnerability context and resilience. In the context of the Philippines, Malabanan and Visco (2021) assessed perceived resilience in community urbanisation of the cities of Cabuyao in Laguna Province in the Philippines, where Barangay Casile and Barangay Sala are located, using the modified sustainable livelihood framework (SLF) based on factors such as community asset, vulnerability context and interventions. The study found that despite the advantages of urbanisation, the intensity of the impact of urbanisation was differently felt within different timeframes in the cities studied. Xiaolin-Lao (2021) evaluated the rights, responsibilities and public nature of affordable housing and their role in the property management services of Chinese communities. Thus, the author explored solutions for misalignment in the responsibilities and rights that could increase property resilience in community governance and improve community resilience. The study examined affordable housing management from the resilience perspective in urban and rural Chinese communities and found that insufficiency of funding for managing affordable housing has aggravated property service issues.

Furthermore, Dociu and Dunarintu (2012) observed that urbanisation processes have severe effects on the socioeconomic standing of a community and warned that poorly managed urbanisation will have severe consequences for the environment. Thus, their study recommended the need for government and policymakers to adopt strategic plans and measures rooted in sustainable development that could help in mitigating the negative impact of urbanisation processes. On their part, Molua and Kagwanja (2015) reviewed the criticality of land in the enhancement of improved livelihoods. They also assessed the institutional requirements for building resilience and sustainability for agricultural land management in the Central African sub-region. The study further examined the comprehensiveness of the principles that enhance agricultural land management in cases of large-scale land investments. They found that the promotion of land management resilience and sustainability requires the encouragement of land policy development and implementation as a package of intertwined procedures for effective land administration. It is important to note that none of the reviewed studies addressed the need to strengthen the community assets resilience of a suburb such as Gidan Kwano.

3.0 Concept and Theory

Researchers have adopted several theories and concepts in the study of vulnerability and resiliency, including the concept of soft and hard resiliency, the sustainable livelihood framework, the social exchange theory, as well as the concept of rewards and recognition, among others. Norris et al. (2008) described community resilience as “a process of linking a set of adaptive capacities to a positive trajectory of functioning and adaptation after a disturbance.” Chandra et al. (2010) proposed a five-component salient resilience framework that can be adopted for studying resilience in any field. The suggested resilience components are psychological and physical status with respect to the population's welfare; the community's socioeconomic resources; enhancing preparedness, recovery through infrastructure provisions and the involvement of social networks. Malabanan and Visco (2021) stated that the three major components of resilience study in the

Sustainable Livelihood Framework are the hazard trends, community network to recover from the hazardous impact and innovative trend using governmental programmes/policies for the mitigation of the negative effects of hazard experienced.

The Sustainable Livelihood Framework (SLF) as adopted and used for this study is an effective framework that has been deployed for evaluating community resilience in the Philippines and Sudan by Malabanan and Visco (2021) and Osman-Elasha et al. (2005). It is a framework that promotes understanding of the strategies governing community assets, policies and institutions (Saxena et al., 2016). It was employed by Malabanan and Visco (2021) in the assessment of communities' livelihood resilience as a holistic approach on the effectiveness of interventions on community livelihood through the numerous data collection methods available. The current study adopted the three factors considered by Malabanan and Visco (2021), viz: vulnerability context, networks and interventions in the assessment of GK asset resilience. These factors were modified, decrypted and characterised into SLF components as presented in Figure 1.

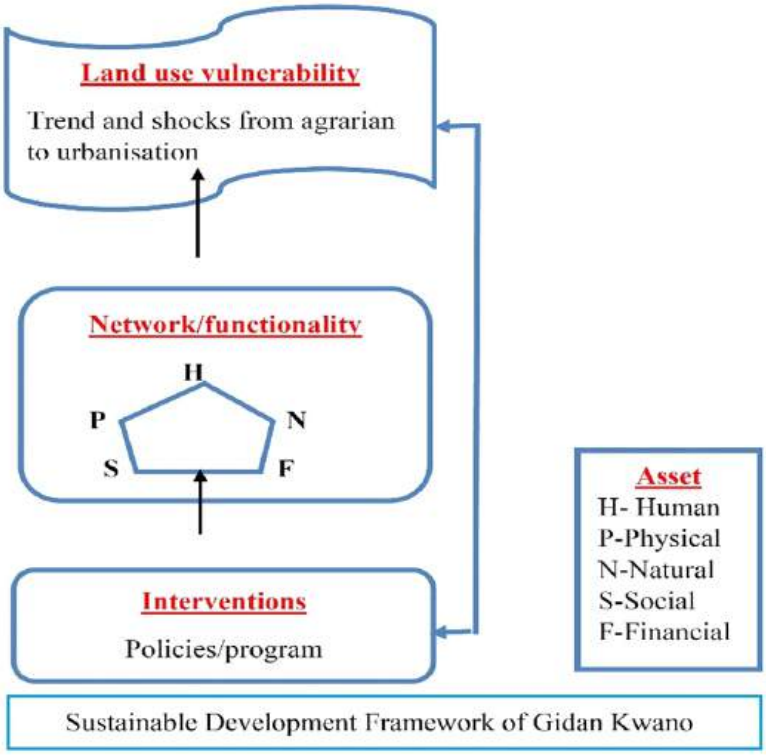

Figure 1: Modified Sustainable livelihood framework

Source: Adapted from Malabanan and Visco (2021)

The framework shows the components of vulnerability context, network and interventions. The components of land use vulnerability context are the trends of stresses/shocks induced by urbanisation including unguided and uncontrolled actions and developments that affect/disturb the community assets, which are usually engendered and exacerbated by the community network/functionality. Another factor that propels/activates community network/functionality are the interventions that come through policies/programmes. The current study, therefore, adapted and tested the five Malabanan and Visco (2021) community network categorisations, viz: the social, the human, the physical and natural assets in the study area, and finance. The contextualisation of SLF to this study further supports the need to evaluate the vulnerability

context, capacity and interventions of the GK community in terms of land use management and development that could mitigate the undesirable effects of urbanisation by improving the community assets that support human life and the overall standard of living.

4.0 Methodology

The study adopted a survey approach employing a mixed research strategy, with Key Informant Interviews (KII) conducted with the Dagaci (District Head) and the Mai-anguwas (neighbourhood heads). The study group visited the Dagaci to intimate him of their intentions before the formal submission of letters requesting a meeting with the stakeholders (see Plate 1). The stakeholders meeting provided the researchers the opportunity to access the target population for reliable data on the influence of urbanisation trends on the community's assets and other information relating to the history of GK, land boundaries and subdivisions of community land. In addition to the KII, a questionnaire was administered to landowners in the community. The purposive sampling technique was utilised for the selection of the property owners. In all, 310 property owners were identified, with some of the property owners/investors having more than one property in the study area.

However, information from the Abuja Electricity Distribution Company (AEDC) revealed that only 234 properties, representing 75% of the property owners in GK, actually registered/metered their properties. The study therefore adopted and used the figure from AEDC as the sample size for data collection. The AEDC figure was considered to be an adequate and reliable representation of the study population (Krejcie & Morgan, 1970 in Salihu et al., 2021). A structured questionnaire was used in the collection of empirical data relating to the GK community asset vulnerability and resilience, while data on GK historical background and other qualitative data were obtained using the unstructured questionnaire. The data was analysed by aggregating/triangulating the results. The structured questionnaire was designed to measure the community assets by asking the respondents to rate the variables on the bases of a psychometric scale through respondents' affective and cognitive proficiencies, using a quantitative measuring scale of frequencies and percentages. Changes in community asset and the understanding of resilience were further interpreted using descriptive analyses.

The Relative Importance Index was used to determine the relative importance of the variables and the prioritisation/ranking of factors from respondents' perceptions on the community asset vulnerability to hazard. The community asset vulnerability to hazard was generated as weighted indices based on a 5-point Likert-type scale. Percentages and degrees of the frequency of occurrences of the variables, aggregate weighted scores [Σw] and the mean scores [$\frac{\Sigma fx}{N}$] were calculated to determine the perception of the respondents. The formula used by Ankeli et al. (2020) and Somiah et al. (2015) was adopted and used for calculation of the RII. The formula is presented as:

$$\mathrm{RII} = \frac{\Sigma W}{A * N}$$

5.0 Findings and Discussion

5.1 Gidan Kwano Vulnerability Context

The Context of Vulnerability in GK is urbanisation due to its hosting of the Federal University of Technology, its proximity to Minna Township and subsequent land value appreciation leading to increase in family spending. GK is said to be one of the fastest growing suburbs in Niger State, thus making it a major factor for the high-level exposure of the community to vulnerability. The vulnerability context adapted from previous literature and their exposure to hazards in GK is discussed below.

The study observed that GK was exposed to physical hazard because of the taking over of land by

the university as well as the existence of housing shortage and the absence of other critical infrastructures that are necessary for the functioning of the community. The few available but overstretched infrastructures in the community were provided by the university and private property investors. For instance, GK has no hospital or standard maternity home except a primary health centre visibly functioning below capacity (see plate 2); most times patients are referred to hospitals in Minna Town. Besides, there is no recreation centre in GK, even as the existing police station can best be described as an outpost. As part of the traffic challenges posed by the ever-busy Minna-Bida Highway, road crashes are frequent around the University gate during peak hours. In the area of social vulnerability, women and children as well as the elderly and youth are in serious need of health services and educational infrastructure, especially at the primary and secondary levels. Social vulnerability affects the human vulnerability, as the community has low levels of educational attainment and employment capacity.

In terms of the natural hazard, the study observed that the urbanisation rate of GK, owing to the relocation of the university from Bosso to Gidan Kwano, has led to more demand for land, resulting in land use infiltration/contestation. Commercial and residential land uses have taken over GK land use from previous agricultural land use. The formerly agrarian community has been transformed to a hustling and bustling residential/commercial university neighbourhood with a high influx of migrants. Expectedly, there has been substantial loss of farmland and farm produce as agricultural land rapidly gives way to residential and commercial land uses, which further increases environmental pollution from waste dumps.

The study further found that the establishment of the university led to changes in the design, quality and type of buildings in the community, given the preferences of migrants. The income levels of some families have also risen, as property owners rented out extra rooms while others sold part of their land. The presence of students in the community has also boosted business while influencing the lifestyle of youthful indigenes who would have ordinarily been content to remain on the farm. On the negative side of things, many poor elderly farmers and youths lost their land but were not found to be employable by the university owing to their low academic background. Inevitably, this led to a serious impact on family spending, thus exposing the community to financial hazards.

Plate 1: Stakeholders' meeting at the Dagaci's Palace

Source: Picture taken during authors' field survey (2022)

Plate 2: The only health centre in Gidan Kwano

Source: Picture taken during authors' field survey (2022)

5.2 Respondents' Perception on Gidan Kwano Community Assets Exposure to Hazard

Quantitative data were later collated and analysed. Secondary data obtained from previous literature were subjected to tests in order to determine respondents' level of understanding of the issues. This was achieved with frequency distribution tables and the relative importance index. A frequency distribution table allows for the summarisation of categorical data collected and the use of more complex techniques that can reveal the hidden characteristics of the relative abundance of each of the vulnerability contexts through percentage rates and the degree of their exposure.

Table 1 shows the frequency, percentage and the degree of vulnerability context and their hazard to GK community Asset. From the table, the vulnerability context involved community loss of farmland (39%), loss of crops (39%) to the Federal University of Technology Minna, land use incursion/infiltration (35%), increasing crime rate (35%) and family spending (35%), among others. The table also reveals that resilience undertaking in GK was discovered to be hampered by low educational attainment (13%), the cultural inclinations of GK indigenes and inefficient institutional support mechanisms by the government.

Table 1: Vulnerability Contexts and their Hazard to GK Community Assets

Vulnerability Context	Frequencies	Percentages	Degree
Physical Vulnerability			
Land/Building Use	80	34.8	125
Power (Electricity)	70	30.4	110
Water Supply	50	21.7	78.1
Telecommunication (GSM)	30	13.0	47
Total	**230**	**100**	**360**
Social Vulnerability			
Health Services	70	30.4	110
Educational Attainment/culture	30	13.0	47
Crime Rate	80	34.8	125
Night Life	50	21.7	78.1
Total	**230**	**100**	**360**
Human Vulnerability			
Unemployment Rate	50	21.7	78.1
Working age/Population	60	26.1	94.0
Traffic Control	75	32.6	117.3
Security Management	45	19.6	70.6
Total	**230**	**100**	**360**
Natural Vulnerability			
Loss of Farm Land	90	39.1	140.8
Loss ofCrops	90	39.1	140.8
Waste Management Problem	25	10.9	39.2
Noise Pollution	25	10.9	39.2
Total	**230**	**100**	**360**
Financial Vulnerability			
Family Spending	80	34.8	125
Income Disparity	50	21.7	78.1
Poverty Incidence	50	21.7	78.1
Economic Empowerment	50	21.7	78.1
Total	**230**	**100**	**360**

Source: Authors' field survey (2022)

However, the perceptions of the respondents on the categorised vulnerability context, as calculated using mean scores and the RII formula as shown in Table 2, revealed that natural asset vulnerability ranked first among all the other factors, having a mean score of 1,058 and RII of 2.7363. The gradual transition of GK from an agrarian community to a semi-commercial/residential university neighbourhood had severe consequences on the community's agricultural land spaces and uses. The university took a substantial portion of the community's land, leading to serious effects on annual crop production capacity. Apart from distorting the traditional lifestyle of indigenes, migrant influx to the community came with environmental pollution from the generation of excess waste. There was no noise or waste management plan or any organised/formal noise or waste control/management system in the community (a risky situation for the health of residents in both short and long term).

Physical vulnerability ranked second with an RII of 2.3517 and a mean score of 909. However, findings from the field revealed that the community's major sources of water supply are boreholes, deep wells, streams and *mairuwa*/water vendors (see Plate 3), with implications on

community health. Electricity supply to the community is from the public mains but epileptic, thus affecting productivity. Respondents further noted that the quality and types of building improved significantly with relatively exorbitant rent compared with rent on similar properties in nearby areas. The community witnessed some element of improved standard of living and economic progression, especially in the area of household income and socialisation. Despite the progression, however, the negative impact of the trend on community assets was monumental and dangerous. To buttress this, the respondents argued that the increase demand for accommodation resulting in the increase number of houses and other land use developments came with noise pollution and other environmental challenges.

Social Asset vulnerability was also considered by respondents as a risk factor, ranking third with an RII of 2.3189 and a mean score of 899. However, it was observed that the change in the social asset of the community has slightly improved the literacy rate/knowledge of GK residents, particularly that of the youths, owing to improvement in educational services in GK. Despite the merit of the urbanising rate of GK, all previous resilience efforts were hampered by rigid cultural inclinations as manifested in the ineffective application and adjustment of the recommended resilience actions heightened by inefficient institutional support mechanisms. This finding agrees with Nuhu (2011), who asserted that a vivacious affiliation exists between man and land as entrenched in the African society's dynamic culture. Furthermore, cases of crimes due to improved social factors orchestrated by migrants and others outside GK have been on the increase and have a negative impact.

Plate 3: Water Vendors (*mai ruwa*) supplying water to Gidan Kwano residents

Source: Picture taken during authors' field survey (2022)

Human asset ranked fourth with an RII of 2.2207 and a mean score of 859. GK household spending increased because of migrant influx. Some of the GK residents that were thrown out of their agribusiness because of loss of their land picked up work with the university, took up commercial motorcycle riding (*Okada/bike)*, became point of sale (POS) operators, phone repairers or entered into other petty businesses. Of course, many remained in abject poverty. This development has increased the number of vehicles with attendant traffic challenges, insurgency, banditry and other security issues.

Regarding financial asset vulnerability, respondents averred that the financial asset of the

community improved with reduced incidences of poverty, as the residents could venture into diverse forms of petty trade to serve the large population. However, the presence of these businesses attracted criminals and other forms of insecurity to the community. This supports the assertion of Ankeli (2022) and Nuhu et al. (2022) that unguided population explosion exacerbate criminality despite its merit of developmental attractions.

Table 2 is a summary of the mean scores and relative importance indices of the vulnerability context on GK community asset.

Table 2: Relative Importance Index (RII) on Gidan Kwano Community Asset Resilience

Vulnerability Context	5	4	3	2	1	∑w	$\frac{\sum fx}{N}$	RII	Ranking
Physical Vulnerability									
Land/Building use	98	120	0	9	5	993		0.8560	
Electricity/water	86	65	40	30	11	881		0.7595	
Telecommunication services	79	71	32	29	21	854		0.7362	
Total/Mean							**909**	**2.3517**	2nd
Social Vulnerability									
Health services	48	105	39	24	16	841		0.725	
Educational Attainment/culture	78	89	30	20	15	891		0.7681	
Crime/Nightlife	120	64	20	20	8	964		0.8310	
Total/Mean							**899**	**2.3241**	3rd
Human Vulnerability									
Employment Opportunity	89	100	20	13	10	941		0.8112	
Traffic/Security Management	99	64	25	15	29	885		0.7629	
Working age/population	67	60	10	50	45	750		0.6466	
Total/Mean							**859**	**2.2207**	4th
Natural Vulnerability									
Loss of Farmland	165	50	10	7	0	1069		0.9216	
Loss of Crops	150	65	17	0	0	106 1		0.9147	
Waste/Noise Management Problem	140	70	20	2	0	1044		0.9000	
Total/Mean							**1,058**	**2.7363**	1st
Financial Vulnerability									
Income Disparity	55	87	69	11	10	862		0.7431	
Family Budget/spending	60	60	50	30	32	782		0.6741	
Poverty Incidence	70	80	50	15	17	867		0.7474	
Total/Mean							**837**	**2.1646**	5th

Source: Authors' field survey (2022)

6.0 Community Interventions (Policies, Programmes and Projects)

In an attempt to tackle social vulnerability, incessant crime and other insecurity incidences, the GK community and Bosso Local Government Area of Niger Sate had on several occasions-imposed curfews on the community and embarked on anti-drug campaigns, among other measures. Furthermore, community members also participated in the school feeding and free

education programmes of the government. Other policies meant to protect community assets included ban on sale of alcoholic drinks, setting up local vigilante outfits to complement the effort of the police, and designing agricultural programmes for fertilizer and seedling distribution.

To mitigate the inadequacy of hospital/maternity services in the community, the community resorted to alternative medicine to complement the dysfunctional primary health centre. Besides, indigenes were allowed to make use of the acquired university land for farming on a temporary basis for a small fee. Thus, unemployed youth were kept engaged, thus mitigating their natural and financial vulnerabilities. Another curative approach adopted by the university on traffic was the introduction of road signs and speed bumps/breakers around the university gate. The university and GK community vigorously involved her staff and local vigilante in controlling traffic and ensuring proper parking around university gate area. Moreover, the school management was in constant dialogue with real estate investors as well as AEDC and telecommunication network providers as part of efforts to provide stable services to tackle physical and human vulnerabilities.

Plate 4: Local Security (Vigilante/Yanbanga) Post built by the community

Source: Picture taken during authors' field survey (2022)

Table 3 offers some innovative resilience procedures that can strengthen GK community assets.

***Table 3:** Resilience-strengthening interventions and required actions

Asset	Current Intervention	Required Actions
Physical	Boreholes, water vendor, power, buildings, and internet problems	*Evaluation and creation of awareness on the state of ground water and sustainable usage *Alternative power sources and efficient energy usage *Improve telecommunication services * Enforcement of building code and slum upgrade *Rent control laws
Social	*Temporary maternity and hospital *School feeding program *Unorthodox medicine *Curfew and restriction of the use of some products *Local traffic control volunteers *High illiteracy rate/defective learning structure, migrant influx	*Permanent standard maternity hospital in GK *Free and compulsory education for all children * Traffic light and speed bumps/zebra crossing sign *Education inspectorate taskforce * Comprehensive records of migrants *More scholarship programs for GK indigenes in FUT and structured/module learning and certified craftsmanship training
Human	*Letting of farmland to GK indigene by FUT Management *Security Patrol *Yanbanga/local vigilante	*Enhance FUT social community responsibility *Fusion of technology in learning to get the GK indigene ready for the fourth industrial revolution. *Provision of security van and surveillance cameras at strategic locations
Natural	*Agricultural programmes (seeds and fertilizer distribution) * Bush and waste burning *Open defecation and waste disposal system *Tree cutting and drought	* Modern farming techniques *Waste segregation/control and management strategy *Erosion control and provision of public toilets *Tree planting/greening campaign *Training and seminars on disaster/drought Management and avoidance.
Financial	*Private individual financial efforts *Employment from FUT	*Cultivation of funders through crowd funding and/or cooperative societies * Women and Men empowerment programme *Social investment

Source: Authors' field survey (2022)

7.0 Conclusion

This assessment of GK community asset resilience offers valuable insight regarding strengthening community land development and management. It was observed that the stresses and shocks of urbanisation trends have been rising in the GK community, with enormous impact on community assets. In order to provide information on the numerous challenges facing our cities and that could help in strengthening community land use development and management, the study assessed community asset resilience in Gidan Kwano through a mixed-method research approach. The Modified Sustainable Livelihood Framework (SLF) was adopted to test

the community asset vulnerability context. It was discovered that the stresses and shocks of urbanisation trends in GK community have been on the rise, with considerable impact on the community asset.

Therefore, in addition to the need for far-reaching interventions that will strengthen community asset resilience in the event of adverse urbanisation effects, the study recommends the provision of functional infrastructures. This can be conveniently achieved through public private partnership initiatives, site and services scheme among others. The involvement of the Federal University of Technology Minna in more corporate social responsibilities efforts in the community could help in taking away vulnerabilities from the streets. The study further recommends the enforcement of health, building and traffic related codes to mitigate the vulnerability contexts in GK.

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