



Munich Personal RePEc Archive

**Contemporary issues on the sustainable
rural development in Sub-Saharan
Africa: A survey of salient literature**

Abdullahi Shagali, Aminu and Sani Ibrahim, Saifullahi and
Mukhtar, Shuaibu

Kaduna State House of Assembly, Federal university Dutsin-Ma,
Nigeria., Kebbi State Polytechnic Dakingari

29 June 2020

Online at <https://mpra.ub.uni-muenchen.de/101443/>
MPRA Paper No. 101443, posted 07 Jul 2020 07:09 UTC

Contemporary issues on the sustainable rural development in Sub-Saharan Africa: A survey of salient literature

Aminu Abdullahi Shagali

Kaduna State House of Assembly

Email: aminushagali@yahoo.com

Saifullahi Sani Ibrahim*

Department of Economics and Development Studies,

Federal university Dutsin-Ma, Nigeria.

Emails: isani@fudutsinma.edu.ng; ssmatazukt@yahoo.com;

Shuaibu Mukhtar

Department of Social Sciences

Kebbi State Polytechnic Dakingari

Email: mukhs001@yahoo.com

Statement of Competing Interests

The authors have no competing interests

*Postal address of corresponding Author

Department of Economics
Federal University Dutsin-ma
KM 60 along Katsina-Kankara Road
P.M.B. 5001
Dutsin-ma, Katsina State,
Nigeria.

Contemporary issues on the sustainable rural development in Sub-Saharan Africa: A survey of salient literature

Abstract

The concept of ‘sustainable rural livelihoods’ is increasingly central to the debate about rural development, poverty reduction and environmental management. A livelihood is sustainable if it enables a household to cope with and recover from stress and shocks, maintain or enhance assets and capabilities, and provide extended opportunities for the next generation; and contributes net benefits to other livelihoods at the local and global levels both in the short and long term. This study aims to survey literature dealing with contemporary issues on sustainable rural development in Sub-Saharan Africa (SSA). The paper argues for a holistic measure aimed at curbing the social inequalities, demographic transition, and environmental problems so as to achieve sustainable development goals.

Key words: rural development, poverty, resource-driven conflicts.

Introduction

The discussions of sustainable livelihoods are often unclear, inconsistent and relatively narrow. Without concise clarification one runs the risk of adding to a conceptual muddle (Carswell et al. 1997). The concept of ‘sustainable rural livelihoods’ is increasingly central to the debate about rural development, poverty and inequality reduction, and environmental management (Scoones, 1998). A livelihood is sustainable if it enables a household to cope with and recover from stress and shocks, maintain or enhance assets and capabilities, and provide extended opportunities for the next generation; and contributes net benefits to other livelihoods at the local and global levels both in the short and long term (Chambers, 1997; Chambers and Conway, 1992; Ibrahim, 2012). Sustainability is further related to ability of particular combination of livelihood strategies to create gainful employment for a certain portion of the year (Scoones, 1998).

Economic well-being can be enhanced through a sustained diversification strategy into high return economic sectors. It essential to draw a conceptual demarcation between accumulation strategies and adaptive strategies as they relate to the diversification strategy. While accumulation strategies mainly deal with the income flows and stock of asset derived through diversification, the adaptive strategies permit risk spreading through livelihood adjustments or

income diversification (Bessant 2006). Devereux (1999) argued for diversification by necessity that could pave the way for reduction of the severity of livelihood shocks (coping strategies) and, in extremes, to prevent destitution and death (survival strategies).

To avoid ambiguity in this study, diversification denotes the process of constructing diverse portfolios of activities, assets and opportunities for the sake of survival and or accumulation (Ellis, 1998; Bessant, 2006; Scoones, 2009) mirroring the dichotomy between the diversification by necessity and by choice. On the other hand, sustainability concerns the longevity of the capacity of a system to reproduce itself or expand over time (Ellis, 2000). As a consequence, sustainability implies resilience to the turbulence of our politics, economic systems and environmental change that seems to be so embedded within our world (Morse and McNamara, 2013). Thus, livelihood sustainability deals with issues concerning the capacity of household to adopt and sustain diverse range of activities without jeopardising future.

The recent interest in the rural livelihoods research agenda was prompted by the need to uncover an innovative method of addressing the vicious cycle of low quality of life experienced specifically by vulnerable households. Undeniably, rural livelihoods are subjected to recurrent shocks and stresses which increases vulnerability and renders their buffering institutions less resilient (Ziervogel and Calder, 2003; Ibrahim, 2012; Ibrahim et al. 2018). The poor households in particular, faces pervasive disasters, severe shocks and idiosyncratic risks that deepen their subsistence thresholds (Harvey et al. 2014; Gautam and Andersen, 2016), and the recurrent violent conflicts (such as tribal unrest, banditry, kidnapping, raiding of pastoral livelihood assets) particularly in rural SSA, has weakened their adaptive capabilities (Aliero and Ibrahim, 2012a; Ibrahim et al. 2016). Consequently, the customary mix of crop and livestock production was completely disrupted and left households with no option rather than to explore other alternative means of livelihoods (Aliero and Ibrahim, 2012b; Ibrahim et al. 2018).

Meanwhile, studies on the economics of development have suffered from a materialistic bias (Easterlin, 2001), as the sole emphasis has been on economic growth and neglected other important issues, such as peace and security (Wills-Herrera et al. 2011; Aliero and Ibrahim, 2012c), which to some extent determines the level of development a country could attain. For instance, advanced economies are found to be relatively more peaceful and secured. In this sense, the concept of human security has been proposed as an umbrella concept to emphasize the relationship between individual and social insecurities in the tradition of the human development discourse (Sen, 2005). This highlights the principal idea behind the United Nation Development Programme's (UNDP) computation of Human Development Reports (HDRs) in 2000, with the aim of humanizing the treatment of security, distinguishing the security of

nations or regions from the security of individuals (Wills-Herrera et al. 2011). The focus of HDRs was not to vividly capture the physical aspect of personal security, but to redefine it to include the capacity and abilities of individuals and communities to control their environments and secure basic conditions for prosperous life.

The literature that stems from both the theoretical and empirical evidences connecting insecurity and economic well-being is still under construction. The entire world has in the last decade experienced an unprecedented turmoil that threatens peace and human happiness, and subsequently paving the way for the declining the global per capita income. Although the magnitude of the crisis within the same continents significantly differs from one country to another, however, the understanding that crisis anywhere is a threat to peace and security everywhere has paved the way for the unity among the world leaders to find the effective means of neutralising the dreadful insurgent groups (such as Islamic State of Iraq and Syria (ISIS) and *Boko Haram*) and armed bandits (e.g. cattle rustlers) among others. Certainly, cattle rustling shock had not received the same attention as shocks induced by religious extremism. But recent brutality that the menace assumed has ignited an unprecedented interest from the scientific community to examine the drivers, impact on rural livelihoods and suggests ameliorative pathways. Thus, against this background this paper addresses salient theoretical and practical contemporary issues affecting sustainable rural development in SSA.

The paper is structures as follows: Section two presents an overview on contemporary issues on rural development; section three draws their implication for sustainable rural development, while last section concludes.

Contemporary issues on rural development: an overview

Rural livelihood strategy

Development economist, particularly the rural development scientists have discussed issues relating to the various aspect of diversification. Like other social science concept, the literature offers varied, diverse and sometimes fragmentary insights into this complex phenomenon (Bessant, 2006). Scholars viewed rural livelihood diversification as a process by which vulnerable rural households construct an increasingly diverse portfolio of activities and assets in order to survive and to improve their standard of living (Ellis, 2000; Aliero and Ibrahim, 2013). Just like it is highly risky for an economy to be “Dutch disease” trapped, households relying on a single activity are prone to shocks that might result from any instability emanated from the activity engaged in. Most often, diversification decision is made in line with economic realities: necessity versus choice (Ellis, 2000). Some forward looking households in rural

economy chooses to diversify their livelihoods portfolio voluntarily, not for survival *per se*. Gautam and Andersen (2016) argued that diversification by choice involves making proactive decisions which would undoubtedly enhance economic well-being. Diversification driven by necessity usually suppresses well-being in the short-run. Evidence established that diversification out of desperation often ends up subjecting rural households into more vulnerable livelihood systems (Ellis, 2000; Gautam and Andersen, 2016).

The choice of the livelihood strategy is mainly informed by natural endowments, cultural norms, occupational history, skill and literacy. Livelihood strategies in SSA are basically limited to a customary mix of livestock production (Ibrahim et al. 2018) and crop farming (Sewando et al. 2016). Livestock, especially cattle, is perceived as a crucial asset that stabilises livelihoods and neutralises contingencies, because rural dwellers actually consider livestock as the most critical store of value often used as a buffer stock to counteract sudden income fluctuations. Moreover, the increase in literacy in the last decade as a result of substantial investment in human capital driven from goal number two of Millennium Development Goals (MDGs), has led to a sustained increase in participation of agro-pastoralists into high return sectors such as trading, skills and semi-skills employment.

In arguing for different investment requirements for diverse livelihood activities, Gautam and Andersen (2016) maintained that the so-called “high return sectors” offer higher returns, but demand higher take-off capital in the form of human, social and financial. Thus, poor households without substantial assets may likely remain excluded because their status has confined them continually in low return sectors. In this case, diversification may not break the vicious cycle of poverty. This is not to negate the benefit derivable from shifting away, because diversification particularly within the context of high return enterprises could be a robust response against financial exigencies (Bessant, 2006).

There are several approaches to a sustainable livelihood framework that were conceptualised in the inclusive development discourse with substantial focus on individual assets, status and capabilities (Carney, 2002), however, in turn, the study presented a synthetic version of these frameworks frequently used while analysing sustainable rural development.

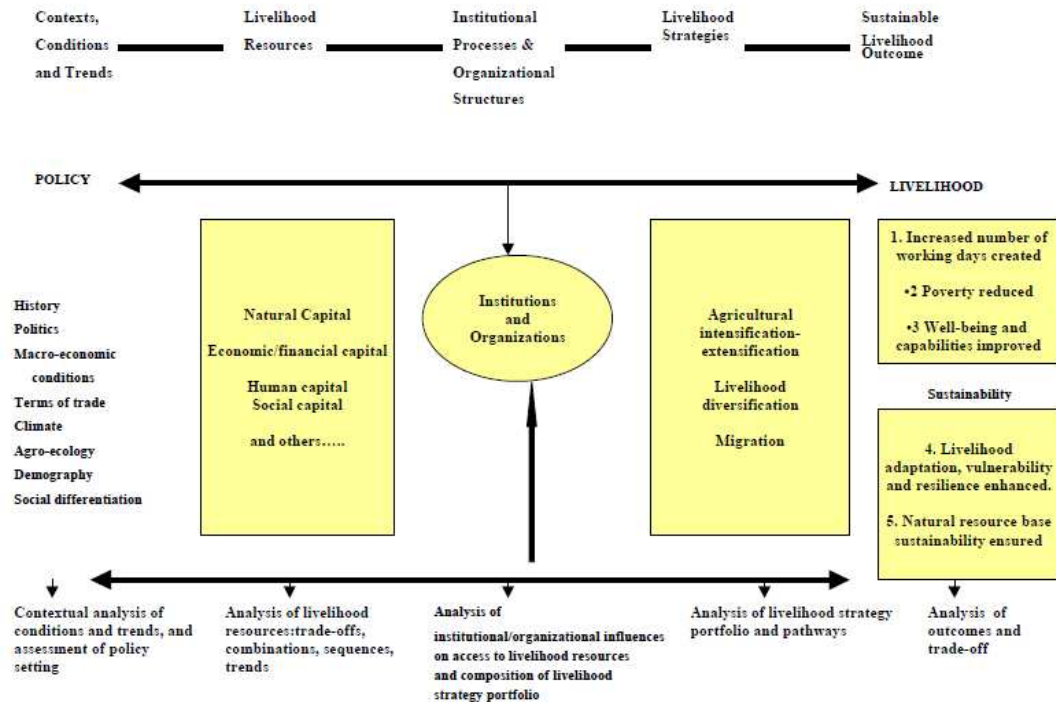


Figure 1: The sustainable livelihood framework (Source: Scoones, 1997)

Sustainable livelihood approach

The sustainable livelihood approach (SLA) is founded upon the notion that intervention must be based upon an appreciation of what underpins livelihood (Morse and McNamara, 2013). The SLA analysis encompasses a broad spectrum of interrelated factors, structures and processes that could make the dramatic impact on rural lives (Carney, 2002; Bessant, 2006). It can be depicted from Fig.1 that given a particular context (of policy setting, politics, history and socio-economic conditions), what combination of livelihood resources (different types of capital) result in the ability to follow what combination of livelihood strategies (agricultural intensification/extensification, livelihood diversification and migration) (Scoones, 1998).

The sustainable livelihood framework, as highlighted in Fig. 1, deals with issues that assess various capitals which characterise the quality of life at the level of individual, household, village or group. The classification of these capitals into economic or financial, human, social and others (physical and natural) are then assessed in terms of their vulnerability to shocks and the institutional context within which they exist (Morse and McNamara, 2013). Policy intervention paths may be geared toward stimulating livelihoods by augmenting the available capital or by depressing idiosyncratic risk and vulnerability. The first three in Fig.1 focus on livelihoods, linking concerns over work and employment (poverty reduction strategies) with broader issues of adequacy, security, well-being and capability. The last two

elements add the sustainability dimension, reflecting the resilience of livelihoods and the natural resource base. Sen (1975) notes three aspects of employment – income (a wage for the employed), production (employment providing consumable output) and recognition (where employment provides recognition for being engaged in something worthwhile). Chambers (1997) argued that such a well-being approach to poverty and livelihood analysis may allow people themselves to define the criteria which are important. This may result in a range of sustainable livelihood outcome criteria, including diverse factors such as self-esteem, security, happiness, stress, vulnerability, power, exclusion (Chambers, 1995; Aliero and Ibrahim 2011).

Drawing from Chambers and Conway (1992) view of sustainability, agro-pastoral mix is simply sustainable if the players involve (operators) can withstand and recover from shocks such as drought, famine, cattle theft, as well as, other endogenous and exogenous shocks, and extend the opportunity for agricultural embedded sustainable livelihoods to the next generation, and overlay the benefit to the generality of community. These shocks were thematically presented in Fig. 2.

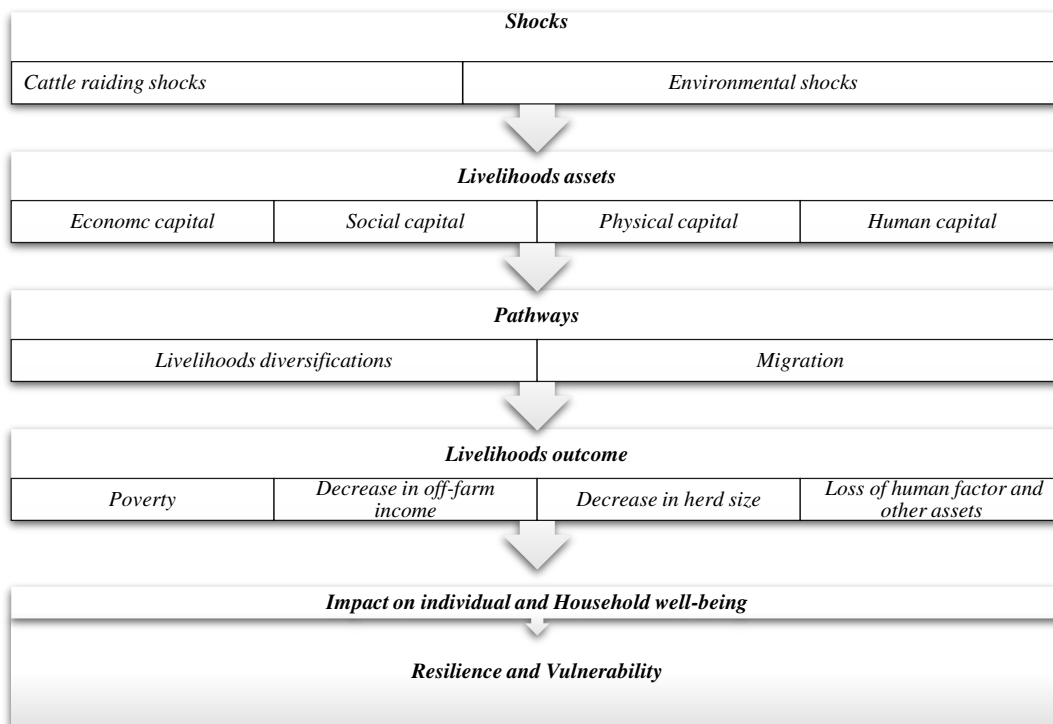


Figure 2: Modified sustainable livelihood framework

Admittedly, agro-pastoralism in SSA is suffering from low levels of capitalisation as well as weak forward and backward linkages which constrains the adaptive strategies of the households. As mitigating strategies, sometimes farm operators routinely make adjustments to a wide range of internal and external factors: environmental uncertainties, market volatility,

structural disadvantages and diminishing returns (Bessant, 2006). However, due to policy and institutional failures little attention has been paid in developing the capacity of rural households to engage in sustainable pro-poor activities outside agriculture (Bryceson, 2002).

Contingencies such as acute illness of any family members or loss of crops due to extreme weather events incur additional economic burden (Gautam and Andersen, 2016; Ibrahim and Tanimu, 2016). This further necessitates search for an alternative or supplementary income generating activity (Dzanku, 2015) which may result in functional improvements to agricultural value chains and assuring better market access and enhances rural well-being (Ibrahim and Muhammad, 2014).

Micro-credit as a pathway to inequality and poverty reduction

Micro-credit is an innovative model developed to help marginalized poor household in remote areas through sustainable deepening in access to rurally modified financial services to the poor, who are generally excluded from the traditional banking system (Aliero et al. 2010; Aliero and Ibrahim, 2012c; Boamah and Alan, 2016). The delivery of micro-credit is usually group-based which stem from using group of households as an alternate option to traditional collateral requirement as a micro-loan conditionality. This unique feature of collateral-free micro-loan distinguishes rural formal credit from the traditional credit offered in conventional banking arrangement (Aliero et al. 2010; Ibrahim et al. 2018). The idea behind this modelled banking system is to enable group of individual to form unions, such as cooperative, societies that would mainly offset the risks associated with borrowers who lack credit history and collateral (Boamah and Alan, 2016; Tanimu and Ibrahim, 2014). Another form of group-based financing is self-help group (SHG) mechanism of pooling resource together and revolves around the contributing members (Ibrahim, 2012). In this sense, micro-credit delivery is somehow appealing because it presents a new strategy for deepening livelihood diversity which could substantially serve as a pathway to reduce poverty (Ibrahim et al. 2012; Atteraya et al. 2016). Contrastingly, risks are not spread to group in individual lending model, rather the burden is placed entirely on the individual borrower (Kodongo and Kendi, 2013).

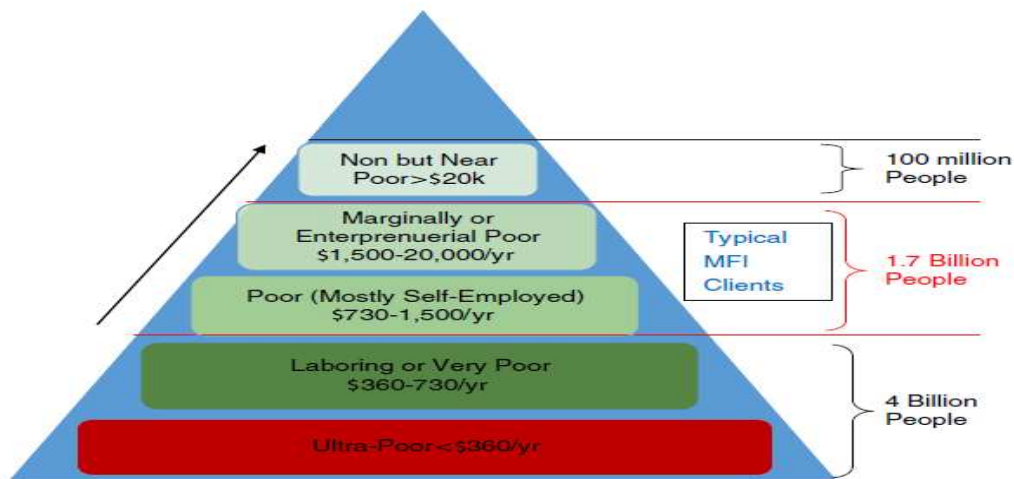


Figure 3: Micro-credit client targeting pyramid (Source: Toindepi, 2016)

Micro-credit delivery model assumed that obstacles to livelihoods diversity can be reduced through provision of credit services to the vulnerable poor at affordable rate. This is hypothesised to particularly serve as a pathway out poverty because it could lead to increase in well-being, equity and sustainability (Ibrahim and Ibrahim 2014). Otherwise, society may experience set of constraints that could spur civil strife and surge relative deprivation. There are different categories of vulnerable households primarily targeted by micro-credit institutions. Within the fivefold categories of poor household shown in Fig. 3, micro-credit institutions are mainly targeting clients in the middle pyramid. Households in this group are entrepreneurs and self-employed poor with minimum average income of \$730 per annum.

At the bottom of the pyramid shows that more than four billion people earn up to \$730 per year (Toindepi, 2016) whom were excluded from micro-credit services because they exhibit high risk of credit repayment (Mathie, 2001, Ibrahim, 2018). This group of poor people includes the ultra-poor or destitute and poor labourers in which the expectation for running some sustainable livelihood diversification strategies is unrealistic (Aghion and Morduch, 2005; Ibrahim, 2014).

Violent conflicts: Enterprise theory of organised crime

The induced theory of organised crime lent itself to enterprise theory of organised crime. Under this theory it is assumed that organised crime exists because legitimate markets leave many customers and potential customers unsatisfied (Smith, 1978). The impetus behind organised crime is not a criminal conspiracy, but simple market opportunity, which can also constrain organised crime's structure, form, and social perniciousness (Ibrahim et al. 2016). No doubt

literature has stressed that cattle is the most sought of all among the pastoral livelihood assets during raiding operation. Sometimes, raiders use to offer window for a conditional cash swap of the confiscated belongings (Ibrahim and Aliero, 2020).

Unfortunately, the cross-border remote areas are the epicentre of the menace thereby casting little hope of penetrating their market and its environment through any meaningful intervention for minimising the crime (Lyman & Potter, 2007; Ibrahim and Shagali, 2019). Thus, criminal enterprise will escalate with little hope controlling it due to potential high profit it could offer to perpetrators, because goods and services in this market are supplied at rates far below competitive market prices (Smith, 1980; Ibrahim et al. 2017). Assuming an ever-increasing market demand for illegally acquired goods due to lower prices, Liddick (1999) rightly observed that as long as demand exists, a marketplace exists, and entrepreneurs (cattle rustlers, kidnappers, etc. in the case of this study) will seek to meet demand regardless of the legality of the transaction (Ibrahim et al. 2020).

Implications for sustainable rural development

This review explores several studies on the contemporary issues on sustainable rural development that serve as positive examples for identifying sustainable rural livelihoods strategy and presents a conceptualised synthetic framework, the sustainable livelihood approach (SLA), which is frequently used while analysing sustainable rural development. Consequently, a modified sustainable livelihood framework was developed to improved sustainable livelihood in rural SSA (Ibrahim et al. 2019a, 2019b).

The study demonstrated that while contemporary issues on sustainable rural development in SSA such as poor system of agriculture, lack of skill labour, lack of capital, lack of community participation, illiteracy, organised crime, among others as well as how dealing with these several social, economic and environmental factors leads to a desired results are well documented, there is a need for more studies to empirically explore more burning issues so as to robust sustainable rural development in the region and to determine stronger causal linkages between sustainable rural development programmes and desired outcomes. Further, more studies are needed to examine the cost-effectiveness and draw comparisons between the varying approaches of earning a good living in rural SSA. Such researches are imperative to support evidence-based sustainable rural development policy-making by identifying livelihood promotion programs that can achieve the greatest development return on investment (Ibrahim and Ahmad, 2013; Gani and Ibrahim, 2015).

This study also highlighted several strategies grouped into two major strategies in accomplishing sustainable rural livelihoods. The two major strategies are “accumulation strategies” that mainly deals with the income flows and stock of assets derived through, sustained diversification into high return economic sectors other than customary system of agriculture and “adaptive strategies” that permits risk spreading through livelihood adjustments or income diversification. However, the study observed that diversification into high return sectors is capital intensive in terms of human, economic physical, environmental and social as well. The study highlighted provision of short term and long term micro-credit facilities to rural areas could enhance their economic activities and hence their overall standard of living.

Similarly, evidence gathered from this review presents some of the successes of community participation and involvement in yielding positive outcomes at the community, group and individual level. It is therefore a worthwhile endeavour for policymakers to devote resources in enabling community engagement, creating platforms for involvement, and in facilitating successful collaborations with development partners in order to develop a community participation strategy which policy-makers can utilise to achieve desired sustainable rural development in SSA. As policy-makers consider new and effective ways of planning, implementing, monitoring, and evaluating sustainable rural development through community participation and involvement, the desired sustainable rural development in SSA can be achieved (Ibrahim and Bakori, 2011; Ibrahim and Aliero, 2012).

Conclusion

The purpose of this review was to identify and explore the contemporary issues on the sustainable rural development in SSA with the view to enhance economic well-being of the rural populace. The study presents several challenges to the sustainable rural development revolving around social, economic and environmental, natural endowments, culture, occupation, skill and literacy. To achieve sustainability in rural livelihoods several strategies and interventions are required. The two major strategies are “accumulation strategies” that mainly deals with the income flows and stock of assets derived through, sustained diversification into high return economic sectors other than customary system of agriculture and “adaptive strategies” that permits risk spreading through livelihood adjustments or income diversification. Social intervention programme that could enhance financial inclusion and reduce violent conflicts are key to sustainable rural development (Aliero and Ibrahim, 2010; Aliero et al. 2013). Given that diversification into high return sectors is capital intensive in terms of human, economic, physical, and environmental. In this way, provision of short term

and long term micro-credit facilities to rural areas could enhance their economic activities and hence their overall standard of living. Similarly, there need promote people-centred development approaches with a focus to establish a system that will facilitate community participation on affairs affecting their livelihoods as this could provide them with opportunity of contributing to sustainable development.

References

- Aghion, B.A., & Morduch, J. (2005). *The economics of microfinance*, The MIT Press, Cambridge.
- Aliero, H. M. & Ibrahim, S. S (2013). The challenges of youth empowerment through access to credit in the rural areas of Nigeria. *European Journal of Sustainable Development*, 2(3), 25–34.
- Aliero, H. M. & Ibrahim, S. S. (2010). An analytical study of the determinants of access to insurance services in rural Nigeria. In Adam, J. A. & Obansa, S. A. J. (eds) *Nigeria's Macroeconomic Development: Issues and challenges*. Richard & Partners, Abuja. 159 – 172.
- Aliero, H. M. & Ibrahim, S. S. (2011). Relationship between population growth and poverty situation in Nigeria. *Maiduguri Journal of Arts Social Sciences*, 9(1), 191 – 196.
- Aliero, H. M. & Ibrahim, S. S. (2012b). Does access to finance reduce poverty? Evidence from Katsina State. *Mediterranean Journal Social Sciences*, 3(2), 575 – 581.
- Aliero, H. M. & Ibrahim, S. S. (2012c). The relationship between energy consumption and economic growth in Nigeria: a causality analysis. *International Journal of Marketing and Technology*, 2(3): 1 – 13.
- Aliero, H. M., & Ibrahim, S. S. (2012a). An analytical review of financial intermediation in the rural areas of Nigeria. In Muktar, M. (ed) *Studies in the State of the Nigerian Economy*. Katsina: UMYUK.
- Aliero, H. M., Abubakar, M., & Ibrahim, S. S. (2010). An investigation into the determinant of access to finance of rural areas of Katsina State. *Journal Management Studies*, 3,194 – 205.
- Aliero, H. M.; Ibrahim, S. S. & Sha'aibu, M. (2013). An empirical investigation into the relationship between financial sector development and unemployment in Nigeria". *Asian Economic and Financial Review*, 3(10), 1361 – 1370.
- Atteraya, M. S. Gnawali, S., & Palley, E. (2016). Women's participation in self-help groups as a pathway to women's empowerment: A case of Nepal. *Int J Soc Welfare*, 25, 321–330.
- Bessant, K. (2006). A farm household conception of pluriactivity in Canadian agriculture: Motivation, Diversification and Livelihood. *Canadian Review of Sociology*, 43(1), 51 – 72.
- Boamah, M., & Alan, J. (2016). Canadian micro-credit programs: an investigation of model differences. *Journal of Small Business & Entrepreneurship*, 28(4), 307-324.

- Bryceson, D. (2004). Agrarian vista or vortex: African rural livelihood policies. *Review of African Political Economy*, 31(102), 617-629.
- Carney, D. (2002). Sustainable livelihoods approaches: progress and possibilities for change. London: Department for International Development.
- Carswell, G., Hussein, G., McDowell, K., & Wolmer, W. (1997). Sustainable livelihoods: a conceptual approach. IDS, Brighton.
- Chambers, R. (1995). Poverty and livelihoods: whose reality counts? IDS Discussion Paper 347. IDS, Brighton.
- Chambers, R. (1997). Responsible well-being- a personal agenda for development. *World Development*, 25, 1743 – 1745.
- Chambers, R., & Conway, G. R. (1992). Sustainable rural livelihoods: practical concepts for the 21st Century. IDS Discussion Paper 296. IDS Brighton.
- Devereux, S. (1999). Making less last longer: informal safety nets in Malawi. *IDS Discussion Paper 373*. IDS, Brighton.
- Dzanku, F. M. (2015). Transient rural livelihoods and poverty in Ghana. *Journal of Rural Studies*, 40, 102–110.
- Easterlin, R. A. (2001). Income and happiness: towards a unified theory. *The Economic Journal*, 111, 465 – 484.
- Ellis, F. (1998). Household strategies and rural livelihood diversification. *The Journal of Development Studies*, 35(1), 1-38.
- Ellis, F. (2000). The determinants of rural livelihood diversification in developing countries. *Journal of Agricultural Economics*, 51 (2), 289–302.
- Gani, I. M. & Ibrahim, S. S. (2015). Capital market development and economic growth: evidence from Nigeria. *International Journal of Social Sciences and Humanities Research*, 3(5), 22-32.
- Gautam, Y., & Andersen, P. (2016). Rural livelihood diversification and household well-being: Insights from Humla, Nepal. *Journal of Rural Studies*, 44, 239–249.
- Harvey, C. A., Rakotobe Z. L., Rao N. S., Dave R., Razafimahatratra H., Rabarijohn R. H., Rajaofara H., & MacKinnon J. L. (2014). Extreme vulnerability of smallholder farmers to agricultural risks and climate change in Madagascar. *Phil. Trans. R. Soc. B* 369: 20130089.
- Ibrahim, A., Ibrahim, S. S., & Abdulazeez, A. (2018). The incidence and impact of cattle rustling in some rural communities of Katsina State, Nigeria. *FUDMA Journal of Sciences*, 2(2), 288-296.
- Ibrahim, S. S. & Ahmad, A. M. (2013). Equitable budgetary allocation: a catalyst for achieving national development of Nigeria. *European Scientific Journal*, 9(7), 264 – 274.
- Ibrahim, S. S. & Aliero, H. M. (2012). An analysis of farmers' access to formal credit in the rural areas of Nigeria. *African Journal of Agricultural Research*, 7(47), 6249 – 6253.

- Ibrahim, S. S. & Aliero, H. M. (2020). Testing the impact of financial inclusion on income convergence: empirical evidence from Nigeria. *African Development Review*, 32: 42 – 54.
- Ibrahim, S. S. & Bakori, S. M. (2011). Population growth and level of poverty in Nigeria. *Kano Journal of Arts and Social Sciences*, 8 (1), 338 – 343.
- Ibrahim, S. S. & Ibrahim, H. (2014). Budgetary allocation dynamics and its impact on poverty spread among the geopolitical zones of Nigeria. *American Journal of Economics*, 4(2), 124-129.
- Ibrahim, S. S. & Muhammad, A. (2014). Information and communication technology and bank performance in Nigeria: a panel data analysis. *Journal of Social Sciences*, Near East University, Northern Cyprus, VII (2), 165 – 176.
- Ibrahim, S. S. & Shagali, A. A. (2019). Gender dimension of shocks heterogeneity and coping strategies in resource-scarce areas: Case study. *International journal of Ecological Economics and Statistics*, Vol. 40 (4), 52 – 60.
- Ibrahim, S. S. & Tanimu, N. (2016). The linkages between trade openness, financial openness and economic growth in Nigeria. *Sokoto Journal of the Social Sciences*, 6(2), 383 – 393.
- Ibrahim, S. S. (2012). An alternative approach to ending economic insecurity in Nigeria: the role of revolving credit association. *International Journal of Economics and Financial Issues*, 2(4), 395 – 400.
- Ibrahim, S. S. (2014). Does rural financial development spur economic growth? Evidence from Nigeria. In Umar, M. Z.; Abubakar, S. D.; Dankani, I. M.; Baba, Y. T. & Okoko, N. C. (eds) *Contemporary Issues in Nigeria's National Development*. Faculty of Social Science, Usmanu Danfodiyo University, Sokoto. 257 – 266.
- Ibrahim, S. S. (2018). Environmental attachment and migration in deprived remote areas prone to cattle rustling in Nigeria. *Journal of Economic Studies*, 15 (1), 135 – 150.
- Ibrahim, S. S., Ibrahim, A., Na-Allah, A., & Saulawa, L. A. (2016). Building of a community cattle ranch and radio frequency identification (RFID) technology as alternative methods of curtailing cattle rustling in Katsina State. *Pastoralism: Research, Policy and Practice*, 6(10), 1–9.
- Ibrahim, S. S., Mohammed, B. S., & Gani, I. M. (2012). Recapitalisation and Bank Performance: Evidence from Banks in Nigeria. *International Journal of Marketing and Technology*, 2(3), 26.
- Ibrahim, S. S.; Celebi, A.; Ozdeser, A. & Sancar, N. (2017). Modelling the impact of energy consumption and environmental sanity in Turkey: A STIRPAT framework. *Procedia Computer Science*, 120, 229 – 236.
- Ibrahim, S. S.; Huseyin, O. & Behiye, C. (2019a). Financial inclusion as a pathway to welfare enhancement and income equality: Micro-level evidence from Nigeria. *Development Southern Africa*, 36 (3), 390 – 407.
- Ibrahim, S. S.; Huseyin, O. & Behiye, C. (2019b). Vulnerability to recurrent shocks and disparities in gendered livelihood diversification in remote areas of Nigeria. *Environmental Science and Pollution Research*, 26, 2939 – 2949.

- Ibrahim, S. S.; Huseyin, O. & Behiye, C. (2020). Testing the impact of environmental hazards and violent conflicts on sustainable pastoral development: micro-level evidence from Nigeria. *Environment, Development and Sustainability*, 22, 4169 - 4190.
- Kodongo, O., & Kendi, L.G. (2013). Individual lending versus group lending: an evaluation with Kenya's microfinance data. *Review of Development Finance*, 3 (2), 99-108.
- Liddick, D. (1999). The enterprise model of organized crime: assessing theoretical propositions. *Justice Quarterly*, 16 (2), 403-430.
- Mathie, A. (2001). Lessons learned from the poverty targeting strategies used by micro-finance providers", The Coady International Institute, Antigonish.
- Morse, S., & McNamara, N. (2013). Sustainable livelihood approach: a critique of theory and practice. Netherlands: Springer, 1- 190. DOI: 10.1007/978-94-007-6268-8
- Scoones, I. (1998). Sustainable rural livelihoods: A framework for analysis. IDS working paper No. 72.
- Scoones, I. (2009). Livelihoods perspectives and rural development. *Journal of Peasant Studies*, 36(1), 171-196.
- Sen, A. (1975). *Employment, technology and development*, Oxford: Clarendon Press.
- Sewando, P. T., Mutabazi, K. D., & Mdoe, N. Y. S. (2016). Vulnerability of agro-pastoral farmers to climate risks in northern and central Tanzania, *Development Studies Research*, 3(1), 11-24.
- Smith, D. C. (1978). Organized crime and entrepreneurship. *International Journal of Criminology and Penology*, 6 (2), 161 – 177.
- Smith, D. C. (1980). Paragons, pariahs, and pirates: a spectrum-based theory of enterprises. *Crime and Delinquency*, 26(3), 358 – 386.
- Tanimu, N. & Ibrahim, S. S. (2014). An Empirical study on the relationship between poverty, inequality and economic growth in Nigeria. *Journal of Economics and Sustainable Development*, 5(26), 20 – 24.
- Toindepi, J. (2016). Investigating a best practice model of microfinance for poverty alleviation: Conceptual note. *International Journal of Social Economics*, 43 (4) 346-362.
- Wills-Herrera, E., Orozco, E. L., Forero-Pineda, C., Pardo, O., & Andonova, V. (2011). The relationship between perceptions of insecurity, social capital and subjective well-being: Empirical evidences from areas of rural conflict in Colombia. *Journal of Socio-Economics*, 40, 88–96.
- Ziervogel, G., & Calder, R. (2003). Climate variability and rural livelihoods: assessing the impact of seasonal climate forecasts in Lesotho. *Area*, 35(4), 403-41.