FRAMEWORK FOR LOCAL COMMUNITY PARTICIPATION AS CATALYST FOR SUSTAINABLE DEVELOPMENT EFFORTS IN THE SAHARA AND SAHEL

¹ Saidu Alhassan Umar,^{1,2} Mohd Johari Mohd Yusof, ²Mohd Yazid MohdYunos, ^{1,2} NangkulaUtaberta,

ABSTRACT

Desertification, land degradation and drought constitute an environmental challenge that threatens the habitat of some of the globe's poorest populations located in the Sahara and Sahel zones. Climate change has exacerbated this challenge, leading to increased pressure for the harmonization of African regional and intervention strategies to contain the scourge of desert encroachment. This lead to Africa's Great Green Wall (GGW) for the Sahara and the Sahel initiative, with the aim of carrying out sustainable restoration and local development activities. The program addresses environmental and development issues through sustainable landmanagement approaches tailored to the context of the local communities and the local environment. Although the approach of GGW is to improve the alternative livelihoods of the local people by their active participation in the implementation of the project, yet not much success was recorded in Nigeria. Considering the litany of abandoned projects initiated by most government agencies, the GGW is yet another government effort without active local participation and thus does not generate enthusiasm. hence, this study seeks to develop a framework for community participation in local contexts to ensure the effective and sustainable implementation of GGW in Gombe State, Nigeria. Case study research will be used to focus on qualitative data, which is well suited for exploratory research (Yin R.K, (2003), where little is known. this approach allows me to gather rich, in-depth, qualitative data, thus to become aware of the nexus between desertification and human livelihood activities, values, and principles of effective community participation and how is it reflected and articulated at local contexts, review on relevant policies and GGW projects in Nigeria. the participants include community leaders/ members, and expert officials(GGW officials, State/local govt ministry) in Gombe State,

¹ Department of Architecture, Faculty of Design and Architecture, 43400 University Putra Malaysia, Malaysia.

² Department of Landscape Architecture, Faculty of Design and Architecture, 43400 University Putra Malaysia, Malaysia.

Nigeria.Amodel for Local community participation was established at the end of this research. This study contributes firstly to the literature as it provides a context-specific framework for community participation, and secondly to the existing knowledge of "best practices" for developing a framework within a local context also have implications for generally designing and implementing community participation frameworks in Nigeria, and internationally.

Keywords:Land degradation, Desertification, Drought, Community, Participation, Conservation, Livelihood, Land resource management.

INTRODUCTION

Desertification constitutes an environmental challenge that threatens the habitat of some of the globe's poorest populations, located in the Sahara and Sahel zones (Aigbokhaevbo, 2014). Climate change has exacerbated this challenge, leading to increased pressure for the harmonization of African regional and intervention strategies to contain the scourge of desert encroachment. The "Great Green Wall for Sahara and the Sahel" Initiative (GGWSSI), aimed at planting a wall of trees across Africa in an effort to combat desertification, was hatched in 2002 by then-President Olusegun Obasanjo of Nigeria. In 2007, it was endorsed by African heads of State and government and heralded as the panacea for the adverse socio-economic and environmental malaise of desertification and expanded to embrace assisting local communities in embarking on sustainable utilization and management of their forest, rangeland and other environmental resources (Aigbokhaevbo, 2014).

The implementation plan involves planting a15-kilometer-wide transnational forest belt from Dakar to Djibouti. The band of vegetation could be continuous or rerouted around obstacles like streams, rocky area, and mountains to link uninhabited areas. The trees are to act as natural windbreaks against sandstorms while improving soil fertility with their roots, preventing soil erosion and resisting desert encroachment (Reenberg, 2012).

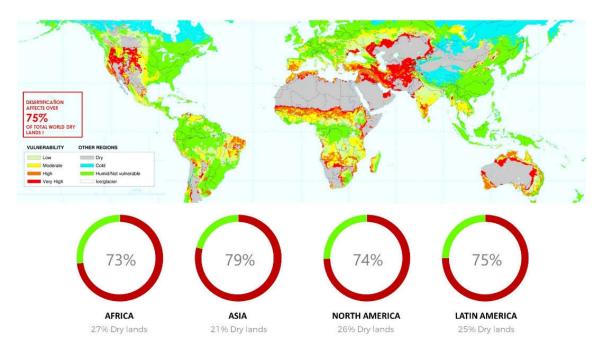


Figure 1.1 The Global status of desertification (Source-UNCCD Secretariat-2013)

The Great Green Wall (GGW) is a concretized metaphor, intended to sensitize the African continent regarding the need to formulate and implement arid-zone-specific policies to amplify sustainable land management practices and identify long-term solutions to the challenges of desertification, land degradation and drought confronting the region (Aigbokhaevbo, 2014). Reforestation is the natural antidote to soil erosion, drought, and desertification. Planting trees in the desert to create a protective wall of trees across the Sahel and Sahara zone was conceptualized as a natural way of halting the expanding desert frontiers.



Figure 1.2 The GGWSSI Path (FAO, 2012)

To enhance the achievement of the primary goal of reducing soil degradation which facilitates desert encroachment, concerted global action was considered a necessity, for the purpose of promoting synergies and optimal mobilization and utilization of resources which would have posed major challenges for component countries to accomplish. The size of the challenge is enhanced by reports that "land use, land-use change, and forestry (LULUCF)

together with agriculture account for 31 percent of global greenhouse gases (GHGs) with developing countries as prime emitters" (Reenberg, 2012).

In 2002, during the World Day to Combat Desertification and Drought event held in Ndjamena, Chad, the concept of the Great Green Wall emerged as a proposal to enhance the Pan-African effort to address the challenge of Sahara and Sahel desert encroachment. In 2005, it was approved at the conference of leaders, members and heads of State held in Ouagadougou, Burkina Faso, at the 7th Ordinary session of the Community of Sahel-Saharan States.

The realizations that two-thirds of the African continent (with a population of 250 million) is desert or dry land, and that the inhabitants of these lands are either farmers, pastoralists or forest-produce gatherers dependent on goods and services provided by forests, propelled the expansion of the action plan beyond tree planting to the attainment of a land-degradation-neutral world in accordance with the objective of Rio +20 (Aigbokhaevbo, 2014).

The primary objective of the GGWSSI is to strengthen the implementation of existing continental plans and other efforts to address the menace of land degradation and desertification in the Sahel and Sahara region with a view to synergizing such efforts and enhancing their efficacy through the general awareness and acceptance of sound ecosystem management, reducing the inhabitants' vulnerability to climate change, improving food security and living conditions, and reducing drought and desertification. These efforts include the Comprehensive Africa Agriculture Development Programme, with its Regional Economic Communities and National Roundtables, as well as its Regional, Sub-regional and National Action Programmes to combat desertification.

Nigeria is faced with rapid desert encroachment affecting 11 northernmost states from moderate to severe rate. The states located in the region north of 10°N of the country, including Adamawa, Bauchi, Borno, Gombe, Jigawa, Kano, Katsina, Kebbi, Sokoto, Yobe and Zamfara, are desertification frontline states. Out of the 909,890 km2 of the country's land area, about 580,841 km2 accounting for 63.83% of the total land is impinge on by desertification (Ebenezer, 2015). Climatic variability and anthropogenic activities such as deforestation, extensive cultivation, overgrazing, cultivation of marginal land, bush burning, fuelwood extraction, faulty irrigation system, and urbanization are major causes of desertification.

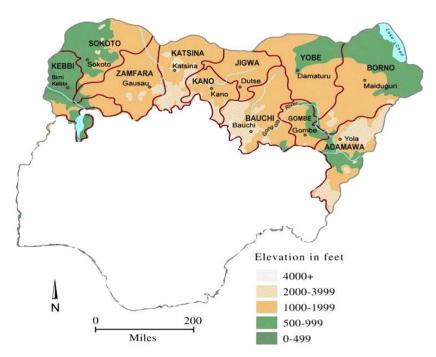


Figure 1.3 Map of Nigeria Showing the Frontline States (Source - Ebenezer, 2015)

Some villages and major access roads have been buried under sand dunes in Katsina, Sokoto, Jigawa, Borno and Yobe states, with siltation of water bodies affecting the livelihoods of approximately 35 million people. It is estimated that the country is losing about 351,000 hectares of its landmass to desert conditions annually and the conditions are estimated to be advancing southward at an annual rate of 0.6km per year (Ebenezer, 2015).

In 1977, as part of its desertification control initiative, the government set up a national committee on Arid Zone Afforestation Programme (AZAP) to conduct an in-depth examination of the problem of desertification with a view to drawing up a suitable program of afforestation to check desert encroachment.

In 2014, the government mapped out strategies to encourage local communities to engage in tree planting, forest protection, and conservation. Other programs focus on the stabilization of 180 hectares of sand dunes in Borno, Yobe, Jigawa, Sokoto and Kebbi states. Additional programs focus on the tools for improvement of livelihoods to reduce dependence on fragile lands, including vegetable gardens, the training of 2,200 youths in various skills and trades, and the provision of 860 improved wood stoves, 430,000 kerosene stoves and 215,000 solar stoves (MOE, 2016).

In spite of these laudable efforts, concern has been expressed that, due to low levels of rainfall in the arid region and inadequate irrigation projects, the herdsmen who allow their herds to feed on "anything green" may render the efforts unproductive. In Kebbi State, for example, the Commissioner for the Environment lamented that 40–50 percent of trees planted had been eaten by cattle (Aigbokhaevbo, 2014), owing to the absence of a protective fence around the shelter belt. In Borno State, the Commissioner HabilahAminani decried the challenge of insurgency in his state, which has affected program implementation

https://www.jsrd-humanities.com/

PROBLEM STATEMENT

The major challenge confronting the GGWSSI is funding. At the national level, the initiative is expected to be implemented by individual countries from their national budgets. According to World Bank President, Jim Yong Kim, African countries are among the world's poorest poor and Nigeria, the initiator of the GGWSSI, is usually listed among the very poorest. Together, India, China, Nigeria, Bangladesh and the Democratic Republic of Congo account for two-thirds of the world's poorest people. As a result, financing of the GGWSSI could prove to be too stressful for the participant countries' resources. This accounts for the wobbly start of the implementation process in some countries and the fact that others are yet to take off (Reenberg, 2012), (Aigbokhaevbo, 2014).

Economic conditions that cause deforestation in developing countries are the catalyst for soil degradation and desertification as people lack adequate resources for appropriate land management. Unless these conditions are addressed, the GGWSSI could ultimately prove incapable of attaining its objective (Aigbokhaevbo, 2014). It is anticipated that the GGW will pass through rural communities with varying land- tenure systems, cultural planting traditions, and plants. One key challenge could be sensitizing them and obtaining their cooperation in embracing soil-fertility-enhancing crops and abandoning cultural farming practices that enhance soil degradation and desert encroachment. Hence a comprehensive community engagement (Aigbokhaevbo, 2014)

Transhumance activities of herdsmen whose activities have contributed to soil degradation and desertification in the Sahara and Sahel region are also interfering with the reforestation and rehabilitation of rangeland. Their interference occurs as a result of grazing their animals on reforested land to the frustration of the GGWSSI (Waweru, 2015).

The size of the area managed under the GGWSSI is large. Efforts to harmonize national and regional institutional frameworks have been plagued by systemic lapses. Improper management of resources and poor governance poses the greatest challenge to GGWSSI (Reenberg, 2012).

The GGWSSI is a government-propelled initiative. Hence, the distrust with which leaders are treated as a result of years of frustrated expectations may cause the local populace to view the project with suspicion (Reenberg, 2012). Lack of transparency of project facilitators and corruption in the GGWSSI implementation process are already bedeviling the attainment of set goals in Nigeria. In light of the litany of abandoned projects initiated by most government agencies, the GGWSSI is seen as yet another government effort and thus does not generate enthusiasm (Aigbokhaevbo, 2014).

Lack of formal Community participation(S. A. Umar et al., 2015) and poor knowledge of appropriate land management techniques(S. Umar & Yusuf, 2016) and inadequate resources for the rural poor to access the requisite skill to sustainably manage their land are limiting factors which GGWSSI has to grapple with (Aigbokhaevbo, 2014).

Although the approach of GGW is to improve the alternative livelihoods of the local people by their active participation in the implementation of the Project, yet not much success was recorded in Nigeria. Considering the litany of abandoned projects initiated by most government agencies, the GGW is yet another government effort without active local

participation and thus does not generate enthusiasm. Thus, there is a need to develop a framework for local community participation (CP) that suggest implementation techniques for context-specific adaptation, land resource conservation, and management strategies to enhance the effectiveness of GGW

RESEARCH QUESTIONS

- 1) What are the existing frameworks (policies, plan, programs, and projects) proposed or implemented (GGW inclusive) for sustainable land-use and management and how far do these represent the present conditions of land resource use and management?
- 2) What are the Values and principles of effective community participation, and how is it reflected and articulated at local contexts in Nigeria?
- 3) What framework required to promote community participation practice/ policy at local contexts for effective and sustainable implementation of GGW thus, enhance local livelihoods of Gombe State, Nigeria?

RESEARCH OBJECTIVES

- 1) To review the existing frameworks (policies, plan, programs, and projects) proposed or implemented relating to land resource management and local livelihoods.
- 2) To explore how the values and principles of effective community participation are reflected and articulated within the Nigeria GGW policy & Framework structure and the way it is carried out.
- 3) To develop a framework that suggests implementation techniques for place and context specific adaptation, land resource conservation, and management strategies.

SIGNIFICANCE OF STUDY

The concept of community participation has been a sustainable development application tool to involve local people in development, policy formulation, and practice. In spite of its use for over four decades, there is still a lack of explicit understanding of the idea of formal community participation at local contexts in developing countries (Nigeria inclusive).

This study would help GGW, statutory bodies, organizations/ institutions to understand some of the major snarl-ups and contradictions that influence effective community participation. In addition, it would serve as a basis for development policy formulation and help development facilitators to understand Local people in their own world as they involve them in GGW and other sustainable development projects. Finally, it would identify new areas for future

development research to improve not only community participation, but also sustainable development practice.

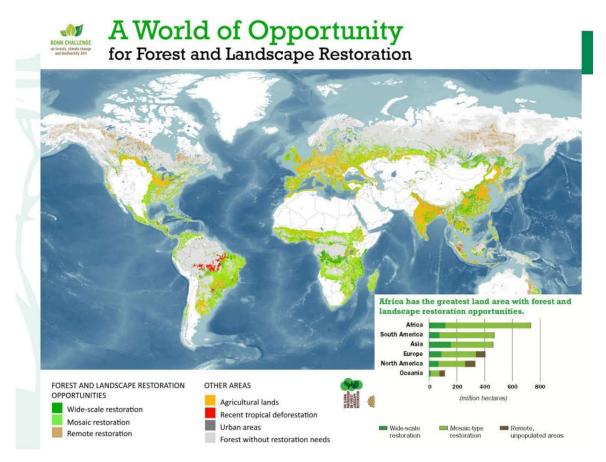


Figure 1.4 A World of opportunity for restoration (Source-UNCCD Secretariat-2013)

METHODOLOGY:

This study uses a "Case study strategy.". This is because There is limited research exploring the practices for the development and implementation of community participation at local contexts in developing countries (Nigeria inclusive). As a result, in determining which methods are best suited in my approach to this research and its goals, I selected to focus on qualitative data, which is well suited for exploratory research (Yin R.K., (2003). Conducting research using this approach allowed the researcher to gather rich, qualitative data, thus to become aware of the fact that weather community participation is conceptualized, valued, or implemented differently among Localities and between staff members operating within each locality.

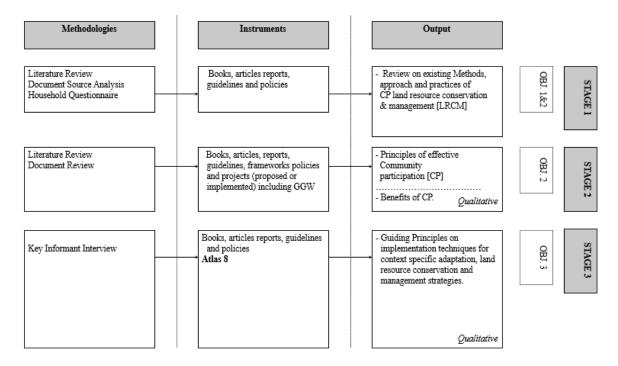


Figure 1.5 A Research Instruments and output (Source-Author, 2019)

STUDY AREA

Nigeria, officially the Federal Republic of Nigeria, is a federal constitutional republic comprising 36 states and its Federal Capital Territory, Abuja. Nigeria is located inWest Africa and shares land borders with the Republic of Benin in the west, Chad and Cameroon in the east, and Niger in the north. Its coast in the south lies on the Gulf of Guinea in the Atlantic Ocean.

Present-day Nigeria has been the site of numerous kingdoms and tribal states spanning over a millennium. The modern state has its origins in British colonization during the late 19th to early 20th centuries, with the merging of the Southern Nigeria Protectorate and Northern Nigeria Protectorate. During the colonial period, the British set up administrative and legal structures whilst retaining traditional chiefdoms. Nigeria achieved independence in 1960, but plunged into a two-year civil war several years later. It has since alternated between democratically-elected civilian governments and military dictatorships, with its 2011 presidential elections being viewed as the first to be conducted reasonably freely and fairly.

Nigeria has a varied landscape. The far south is defined by its tropical rainforest climate, where annual rainfall is 60 to 80 inches (1,500 to 2,000 mm) a year. Everything in between the far south and the far north is savannah (insignificant tree cover, with grasses and flowers located between trees). Rainfall is more limited, to between 500 and 1,500 millimeters (20 and 60 in) per year. The savannah zone's three categories are Guinean forest-savanna mosaic, Sudan savannah, and Sahel savannah.

Nigeria is often referred to as the "Giant of Africa", owing to its large population and economy. With approximately 174 million inhabitants, Nigeria is the most populous country in Africa and the seventh most populous country in the world. Nigeria has one of the largest populations of youth in the world. The country is inhabited by over 500 ethnic groups, of which the three largest are the Hausa, Igbo and Yoruba.

Gombe State, located in the north-eastern part of Nigeria, is one of the country's 36 states; its capital is Gombe. The boundaries of the state roughly correspond to those of the Tangalewaja Chiefdom and Gombe Emirate, a traditional state.

The State, nicknamed the Jewel of Excellence, was formed in October 1996 from part of the old Bauchi State by the Abacha military government. Being it located in the north eastern zone, right within the expansive savannah allows the state to share common borders with the states of Borno, Yobe, Taraba, Adamawa and Bauchi. The state has an area of 20,265 km².

RESEARCH FINDINGS AND DISCUSSION

The Nigeria national policies and program documents related to natural resources, ecosystems, rural livelihoods, and food security are detailed, well-intentioned, and cross-cutting. The nexus among these key issues is also well-articulated. However, evidence from the field suggests a disconnect between these well-articulated documents and the true situation on the ground even after decades of their supposed implementation.

There is a lack of government-community partnership and incentives for the community-driven initiatives are notavailable. There is a lack of capacity on the part of the government to implement some of these policies and programs and local capacity to sustain some of the projects are notavailable. Any future program or project with the chance to make a positive impact on natural resources management, local livelihoods, and food security must have been a community-centered and community-driven with elements of private-public partnership.

Also In this research, the practices found for successful community participation, as outlined above, were explored and categorized based on their influence on policy sustainability and their influence or ability to elicit reciprocal benefits (community). The research also identified community participation principles, strategies and policystructures that have partially been employed with proven success. The current study found two types of best practices: 1) theoretical mechanics of change which includes a formalized policy (values, principles, framework) and deliberative attention within the policy to diversity and empowerment; and 2) facilitation processes and resources of implementation that put theory into practice (e.g., community partnerships and champions). These findings inform the work of the Local policy makers directly and have implications for a model of successful community participation within local settings that articulates how to develop and deliver community participation.

The Model for Effective Community participation within local Setting stems from a community development framework in its utilization of top and bottom down processing, and a strength-based approach, as described by Bracht and Tsouro (1990), Jorgenson and Van Domelen (1999) and Dongier (2004). Such an approach involves the creation of ideal conditions, involving governmental, non-governmental, and community groups for community engagement to take place in the most effective manner.

In this model, I propose that such conditions may be created through formalizing participation processes within' the government and through facilitating opportunities to build on community strengths. Further, if this work is done in reciprocally reinforcing ways, as facilitated through relationship building, conditions for more empowerment and participatory democratic methods should ensue as a result, and benefits should flow to both the community and LGA.

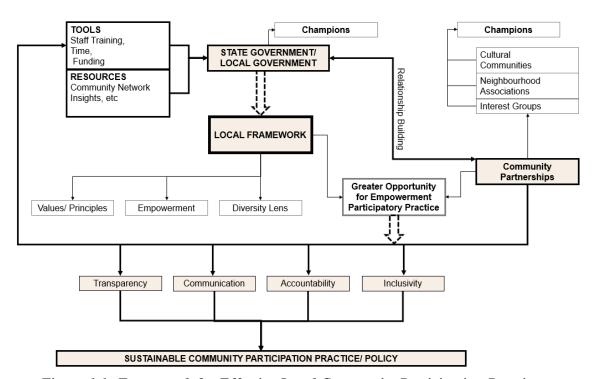


Figure 1.1: Framework for Effective Local Community Participation Practice

These key findings relate to the field of Urban Planning and Policy Development and Community Psychology (CPS) significantly. CPS aims to understand the quality of communities, societies, and the individual lives that operate within these systems.

CONCLUSION AND RECOMMENDATION

Community expectations around the government's ability to be responsive, accountable, and effective have risen in recent years. Often informal approaches to participation have proven to leave initiatives "short of legitimacy and lacking robustness" (Enhancing Community Participation in Local Government, (1998). As a result, there is continuing pressure on local government to effectively and formally involve people in local decision-making processes.

The prominence of the GGW has brought the necessity for sustainable utilization of agroforest resources to the doorsteps of constituent States of the AU. Poverty is inextricably linked to unsustainable environmental resource utilization. Overcoming systemic drawbacks and integrating the objectives of GGWSSI into policy implementation processes by participating https://www.jsrd-humanities.com/

countries are key steps that can provide the key for elevating the living standards of the world's poorest poor inhabiting the Sahara and Sahel.

This study contributes firstly to the literature as it provides a context-specific framework for community participation, and secondly to the existing knowledge of "best practices" for developing a framework within a local context and have implications for designing and implementing community participation frameworks in other frontline states, Nigeria, and internationally.

REFERENCES

- Aheto, D. W., Kankam, S., Okyere, I., Mensah, E., Osman, A., Jonah, F. E., & Mensah, J. C. (2016). Community-based mangrove forest management: Implications for local livelihoods and coastal resource conservation along the Volta estuary catchment area of Ghana. *Ocean and Coastal Management*, 127, 43–54. https://doi.org/10.1016/j.ocecoaman.2016.04.006
- Anderson, J., Mehta, S., Epelu, E., & Cohen, B. (2015). Managing leftovers: Does community forestry increase secure and equitable access to valuable resources for the rural poor? *Forest Policy and Economics*, *58*, 47–55. https://doi.org/10.1016/j.forpol.2014.12.004
- Ayodeji, O. J., Ayodele, I. A., & Reuben, M. (2016). Assessment of stakeholders engagement in natural resource management using typologies of participation in Kainji lake national park. *Sky Journal of Soil Science and Environmental Management*, 5(1), 18–25.
- Brooks, J., Waylen, K. A., & Mulder, M. B. (2013a). Assessing community-based conservation projects: A systematic review and multilevel analysis of attitudinal, behavioral, ecological, and economic outcomes. *Environmental Evidence*, 2(1), 2. https://doi.org/10.1186/2047-2382-2-2
- Brooks, J., Waylen, K. A., & Mulder, M. B. (2013b). Assessing community-based conservation projects: A systematic review and multilevel analysis of attitudinal, behavioral, ecological, and economic outcomes. *Environmental Evidence*, 2(1), 2. https://doi.org/10.1186/2047-2382-2-2
- Calfucura, E. (2018). Governance, Land, and Distribution: A Discussion on the Political Economy of Community-Based Conservation. *Ecological Economics*, *145*, 18–26. https://doi.org/10.1016/j.ecolecon.2017.05.012
- Chasek, P., Safriel, U., Shikongo, S., & Fuhrman, V. F. (2015). Operationalizing Zero Net Land Degradation: The next stage in international efforts to combat desertification? *Journal of Arid Environments*, 112, 5–13. https://doi.org/10.1016/j.jaridenv.2014.05.020
- Chen, S., Pearson, S., Wang, X. H., & Ma, Y. (2017). Public participation in coastal development applications: A comparison between Australia and China. *Ocean & Coastal Management*, *136*, 19–28. https://doi.org/10.1016/j.ocecoaman.2016.11.016
- Downing, D., Covington, M. M., Purchase, H. C., Richard E., M., Du, Y., Participation, C., ... Bathgate, T. (2009). Four different approaches to community participation. *Library and Information Science Research*, *13*(2), 177–188. https://doi.org/10.1016/j.socscimed.2005.06.005
- Drazkiewicz, A., Challies, E., & Newig, J. (2015). Public participation and local environmental planning: Testing factors influencing decision quality and implementation in four case studies from Germany. *Land Use Policy*, *46*, 211–222. https://doi.org/10.1016/j.landusepol.2015.02.010

- Eneji, V. C. O., Gubo, Q., Okpiliya, F. I., Aniah, E. J., Eni, D. D., & Afangide, D. (2009). Problems of public participation in biodiversity conservation: the Nigerian scenario. *Impact Assessment and Project Appraisal*, 27(4), 301–307. https://doi.org/10.3152/146155109X479431
- FAO. (2014). Harmonized regional strategy for implementation of the "Great Green Wall Initiative of the Sahara and the Sahel." *2014*, 33.
- Filho, W. L. (2015). Handbook of Climate Change Adaptation. *Handbook of Climate Change Adaptation*, (Ipcc 2007), 1–2198. https://doi.org/10.1007/978-3-642-38670-1
- Forrest, N., & Wiek, A. (2015). Success factors and strategies for sustainability transitions of small-scale communities Evidence from a cross-case analysis. *Environmental Innovation and Societal Transitions*, 17, 22–40. https://doi.org/10.1016/j.eist.2015.05.005
- Gibson, C. C., & Koontz, T. (1998). When "community" is not enough: Institutions and values in community-based forest management in southern Indiana. *Human Ecology*, 26(4), 621–647. https://doi.org/10.4103/0972-4923.110937
- Hung, H. C., Yang, C. Y., Chien, C. Y., & Liu, Y. C. (2016). Building resilience: Mainstreaming community participation into the integrated assessment of resilience to climatic hazards in metropolitan land use management. *Land Use Policy*, 50, 48–58. https://doi.org/10.1016/j.landusepol.2015.08.029
- Jana, S. K., Lise, W., & Ahmed, M. (2014). Factors affecting participation in joint forest management in the West Bengal state of India. *Journal of Forest Economics*, 20(4), 317–332. https://doi.org/10.1016/j.jfe.2014.09.003
- Kabiri, N. (2016). Public participation, land use, and climate change governance in Thailand. *Land Use Policy*, *52*, 511–517. https://doi.org/10.1016/j.landusepol.2014.12.014
- Mantyka-Pringle, C. S., Martin, T. G., Moffatt, D. B., Udy, J., Olley, J., Saxton, N., ... Rhodes, J. R. (2016). Prioritizing management actions for the conservation of freshwater biodiversity under changing climate and land-cover. *Biological Conservation*, *197*, 80–89. https://doi.org/10.1016/j.biocon.2016.02.033
- May, C. K. (2012). Active non-participation among local natural resource-dependent communities: The case of North Carolina fisheries governance. *Journal of Environmental Management*, *113*, 407–416. https://doi.org/10.1016/j.jenvman.2012.09.022
- Medugu, N. I., & Majid, M. R. (2011). Drought and desertification management in arid and semi-arid zones of Northern Nigeria. *Of Environmental Quality*. https://doi.org/10.1108/14777831111159725
- Méndez-López, M. E., García-Frapolli, E., Pritchard, D. J., Sánchez González, M. C., Ruiz-Mallén, I., Porter-Bolland, L., & Reyes-Garcia, V. (2014). Local participation in biodiversity conservation initiatives: A comparative analysis of different models in South East Mexico. *Journal of Environmental Management*, 145, 321–329. https://doi.org/10.1016/j.jenvman.2014.06.028
- Nelson, F., & Agrawal, A. (2008). Patronage or participation? Community □ based natural resource management reform in sub □ Saharan Africa. *Development and Change*. https://doi.org/10.1111/j.1467-7660.2008.00496.x
- Nyanga, A., Kessler, A., & Tenge, A. (2016). Key socio-economic factors influencing sustainable land https://www.jsrd-humanities.com/

- management investments in the West Usambara Highlands, Tanzania. *Land Use Policy*, *51*, 260–266. https://doi.org/10.1016/j.landusepol.2015.11.020
- Odey, S. A., & Ph, D. (2014). Community Participation and Government Vision towards the Conservation and Management of the Ecosystem in Cross River State, Nigeria. *International Journal of Humanities Social Sciences and Education (IJHSSE)*, 1(7), 130–137.
- Ojha, H. R., Ford, R., Keenan, R. J., Race, D., Carias Vega, D., Baral, H., & Sapkota, P. (2016). Delocalizing Communities: Changing Forms of Community Engagement in Natural Resources Governance. *World Development*, 87, 274–290. https://doi.org/10.1016/j.worlddev.2016.06.017
- Proli, S. (2011). Improving an urban sustainability environment through community participation: The case of Emilia-Romagna region. *Procedia Engineering*, *21*, 1118–1123. https://doi.org/10.1016/j.proeng.2011.11.2119
- Puppim de Oliveira, J. A., & Fra.Paleo, U. (2016). Lost in participation: How local knowledge was overlooked in land use planning and risk governance in T??hoku, Japan. *Land Use Policy*, *52*, 543–551. https://doi.org/10.1016/j.landusepol.2014.09.023
- Raymond, C., Fazey, I., Reed, M., & Stringer, L. (2010). Integrating local and scientific knowledge for environmental management. *Journal of Environmental*. https://doi.org/10.1016/j.jenvman.2010.03.023
- Reenberg, A. (2012). Insistent dryland narratives: Portraits of knowledge about human-environmental interactions in sahelian environment policy documents. *West African Journal of Applied Ecology*, 20(1), 97–111.
- Republic, F., Environment, M. O. F., Green, G., For, W., & Initiative, S. (2012). Federal Republic of Nigeria Ministry of Environment Great Green Wall for the Sahara and Sahel Initiative National Strategic Action Plan. (October), 1–65.
- Rouillard, J. J., Reeves, A. D., Heal, K. V, & Ball, T. (2014). Land Use Policy The role of public participation in encouraging changes in rural land use to reduce flood risk. *Land Use Policy*, *38*, 637–645. https://doi.org/10.1016/j.landusepol.2014.01.011
- Sadiqi, Z., Trigunarsyah, B., & Coffey, V. (2017). A framework for community participation in post-disaster housing reconstruction projects: A case of Afghanistan. *International Journal of Project Management*, 35(5), 900–912. https://doi.org/10.1016/j.ijproman.2016.11.008
- Sam, Edet, I., Nnaji, Samuel, E., Etefia, & Titus, E. (2014). Level Of Community Participation In The Conservation Of Natural Resources In Akamkpa Local Government Area, *Www.Iosrjournals.Org*, 4(4), 30–35.
- Schroeter, R., Scheel, O., Renn, O., & Schweizer, P. J. (2016). Testing the value of public participation in Germany: Theory, operationalization and a case study on the evaluation of participation. *Energy Research and Social Science*, *13*, 116–125. https://doi.org/10.1016/j.erss.2015.12.013
- Shahidul, M., & Swapan, H. (2016). Who participates and who doesn 't? Adapting community participation model for developing countries. *Jcit*, *53*, 70–77. https://doi.org/10.1016/j.cities.2016.01.013
- Shumsky, S., Hickey, G. M., Johns, T., Pelletier, B., & Galaty, J. (2014). Institutional factors affecting https://www.jsrd-humanities.com/

- wild edible plant (WEP) harvest and consumption in semi-arid Kenya. *Land Use Policy*, *38*, 48–69. https://doi.org/10.1016/j.landusepol.2013.10.014
- Sorice, M. G., Oh, C. O., Gartner, T., Snieckus, M., Johnson, R., & Donlan, C. J. (2013). Increasing participation in incentive programs for biodiversity conservation. *Ecological Applications*, 23(5), 1146–1155. https://doi.org/10.1890/12-1878.1
- Stavi, I., & Lal, R. (2015). Achieving Zero Net Land Degradation: Challenges and opportunities. *Journal of Arid Environments*, 112, 44–51. https://doi.org/10.1016/j.jaridenv.2014.01.016
- Turner, J. F. C., Bank, W., & Wates, N. (2012). Community Participation. 11-23.
- Umar, S. A., Omi, F. S., Utaberta, N., Ariffin, F. M., Mohd Yunos, M. Y., Ismail, N. A., & Ismail, S. (2015). Community participation in land resources conservation and management in Gombe State, Nigeria. *Advances in Environmental Biology*, 9(24), 38–45.
- Umar, S. A., Zavari, S., Johari, M., Mohd, B., & Wanishak, W. (2017). Resident 's Perception on the Impact of Transitional Spaces On Safety Performance in Low-Cost High Rise Urban Housing in Kuala Lumpur, Malaysia. 2(4), 1–16.
- Umar, S., & Yusuf, M. (2016). Level of community participation in land resource conservation and management in Gombe State, Nigeria. *European Social Sciences Research Journal*, 5(1), 1–12.
- UN-Habitat. (2016). Urbanization and Development: Emerging Challenges. In World Cities Report.
- Waweru, R. (2015). Factors Which Promote Community Participation in the Community Driven Development Approach. *International Journal of Humanities & Social Science Studies*, 2349–6959. Retrieved from http://www.ijhsss.com
- Whitten, S. M., Reeson, A., Windle, J., & Rolfe, J. (2013). Designing conservation tenders to support landholder participation: A framework and case study assessment. *Ecosystem Services*, *6*, 82–92. https://doi.org/10.1016/j.ecoser.2012.11.001