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SOCIO-ECONOMIC IMPORTANCE OF CANOE PRODUCTION IN BURUKU AND KATSINA-ALA LOCAL GOVERNMENT AREAS OF BENUE STATE, NIGERIA

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ABSTRACT

This study assessed the socio-economic importance of canoe production, emphasizing its diverse impact on livelihoods, employment, and community development in Buruku and Katsina-Ala LGAs of Benue State, Nigeria. A total of eight villages were purposively selected for this study. Five villages (Tyowanye, Tyogbande Majov, Mbalagh and Abuku) from Katisina-Ala and three (Tomaataan, Ashitanaku and Mbaakwadam) from Buruku. Multistage sampling technique was employed to select canoe production villages for data collection. Respondents were interviewed with semi-structured questionnaire. Data collected were analysed using descriptive statistics. Results showed that in both LGAs, male was 100% involved in canoe production. Among respondents, 61.1% were married, with highest daily income of between ₦1,000 - ₦10,000. The primary occupation of respondents was canoe production with 53.1% employees in Tyogbande Majov, Katsina-Ala and 38.9% in Mbaakwadam, Buruku. Six wood species in six families were identified as being used in canoe production in Katsina-Ala while in Buruku, 5 wood species in 5 families were utilized. Canoe producers from Tyogbande Majov and Abuku villages had the highest percentage of trees felled per production process, accounting for 24.5%. In Buruku LGA, the majority of respondents claimed that improved transport business (42.37%) was their primary benefit, followed by youth empowerment (20.34%), community development (11.86%), and fishing business (8.47%). Conversely, in Katsina-Ala LGA, respondents primarily highlighted youth empowerment (44.44%) as the most significant benefit, followed by improved transport business (27.78%), community development (16.67%), and fishing business (11.11%). In conclusion, canoe production has shown to improve the socio-economic benefits of respondents in the bothe Atsi-Ala and Buruku LGAs.

Keywords: Buruku, Canoe production, Katsina-Ala, employment, transportation, youth

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INTRODUCTION

Canoe is a light weight narrow vessel, typically pointed at both ends and open on top, propelled by one or more seated or kneeling paddlers facing the direction of travel using a single-bladed paddle. In British English, the term "canoe" can also refer to as '*kayak*', while canoes are then called Canadian canoes to distinguish them from kayaks (Douglas, 1995). The term "canoe" also has its origins in the Carib language, specifically from "kenu" meaning dugout, transmitted through the Spanish term "canoa." Dating back to 8200 - 7600 BC, the Pesse canoe, discovered in the Netherlands, stands as one of the earliest known canoes. Archaeological excavations in Denmark unveil the utilization of dugouts and paddles during the Ertebølle period (5300 - 3950 BC).

Canoes have been innovated by diverse cultures worldwide, featuring designs tailored for sails or outriggers. Until the mid-1800s, canoes played a pivotal role in exploration and trade, persisting in some regions with the incorporation of outboard motors (Ambrose *et*

al., 2001). In historical contexts such as the northern United States, Canada, and New Zealand, where canoes were integral, they continue to be a prominent theme in popular culture. Canoes are typically launched or retrieved from specific points, including designated canoe launch sites, beaches, or riverbanks.

The canoe industry boasts a robust heritage spanning centuries, tracing back to the utilization of large dugout tree trunks by Native Americans (Neuzil, 2017). Projections from Market Reports World (2023) suggest a sustained upward trajectory for the contemporary canoe market from 2024 to 2030, signaling a promising future for the sector. Crafting canoes involves a multifaceted process encompassing cutting, shaping, and assembling various components to fashion a final fiber-based product (Market Reports World, 2023). Material selection for canoe construction has undergone evolution, offering a spectrum from traditional wood to contemporary composites like fiberglass and carbon (Baptista, 2024). Building a wooden canoe necessitates a meticulous sequence involving frame or base creation, incorporation of wood strips, and meticulous sanding, laminating, and finishing of the hull. For outdoors enthusiasts with a penchant for watercraft, establishing a canoe production enterprise presents an enticing opportunity. Armed with the requisite expertise, skills, and resources, such a venture holds the potential for profitability while furnishing clientele with enduring, high-quality canoes for prolonged enjoyment (Neuzil, 2017; Market Reports World, 2023; Baptista, 2024).

Canoe production stands as a pivotal economic endeavour within Buruku and Katsina-Ala LGAs, Benue State, Nigeria. These riverside communities lean heavily on canoes for both fishing and transportation along the riverbanks, underscoring their profound cultural significance. Crafted from a diverse array of timber sources, these visually striking canoes spark inquiries into their origins and cultural connotations (Gray, 1996). Buruku, located a significant distance from Makurdi, serves as a riverside enclave where canoes hold indispensable roles in fishing and travel. Along the riverbank and throughout the broader community, residents heavily depend on these canoes, crafted from sizable timbers of various dimensions, inviting inquiries about their cultural implications (Gray, 1996). The perpetual flow of individuals and vehicles traversing the river underscores the enduring essence of canoe design and the preservation of age-old traditions by fishermen, imbued with symbols and proverbs passed down through generations.

Canoes encompass a spectrum of activities including racing, whitewater adventures, touring, camping, freestyle maneuvers, and general recreation, with a storied presence in the Olympics since 1936. The intended purpose of a canoe dictates its hull shape, length, and construction material, historically ranging from dugouts or bark on a wood frame to modern materials like aluminum, molded plastic, or composites such as fiberglass. Serving as vital capital equipment for fishermen, traders, and farmers along the Buruku River, particularly in proximity to Katsina-Ala and across the river in Logo LGA, canoes carry profound societal significance. Nonetheless, scholarly discourse on the socio-cultural aspects of canoe production and utilization remains limited, underscoring gaps in understanding construction and design. Persistent challenges such as inadequate transportation infrastructure and natural hazards endure, impacting the livelihoods and safety of local communities. Particularly during the rainy season, when flooding and erosion pose heightened risks, residents heavily rely on boats and canoes for transportation. While local initiatives to address these challenges have yielded modest results, appeals to higher authorities for intervention persist. Despite these obstacles, canoe operation presents lucrative income opportunities for locals. This study endeavours to comprehensively evaluate canoe production and utilization in Katsina-Ala and Buruku LGAs of Benue State, shedding light on their socio-economic significance and the hurdles they confront.

MATERIAL AND METHODS

Study Area

The study took place in Buruku community in Buruku Local Government Area of Benue State, located at latitudes, $10^{o}37'$and 7^{0} 56' North and longitudes7^{o}- 14′and 9^{o}-5'E. It has an area of 1,246 Km^2 and a population of 203,721 at the 2006 census. It shares boundary with Gboko, Logo, Ushongo and Tarka, Local

Government Areas. Ethnic composition of the place includes: Tiv people (The dominant), Etulo, Nyifon people. The climate is made up of two distinct seasons, wet and dry seasons. The wet season occurs between April and October and the dry seasons occur between Novembers to March. Temperature is 26 °C and relative humidity is between 88%.

The trees and grasses are very green during the rainy season and shed their leaves in the dry season while grasses turn brown. The plants have a way of adapting themselves to the dry season). The study area is located in the Southern guinea savanna. Characterized by relatively fewer trees, more shrubs and predominantly tall grasses, up to 2 m, some of the species here include *Daniela oliveri, Prosopis africana, Burkia africana, Khaya senegalensis, and Stereospermum kunthianum.* The topography and physical features of Buruku is characterized by Rivers: River Buruku, also call River Benue, River Ambighir, River Amile and many others. Streams, Ponds, Swampy areas, Loose soil, Thick forest, among other. Figure 1 show the Buruku and Katsina-Ala LGAs

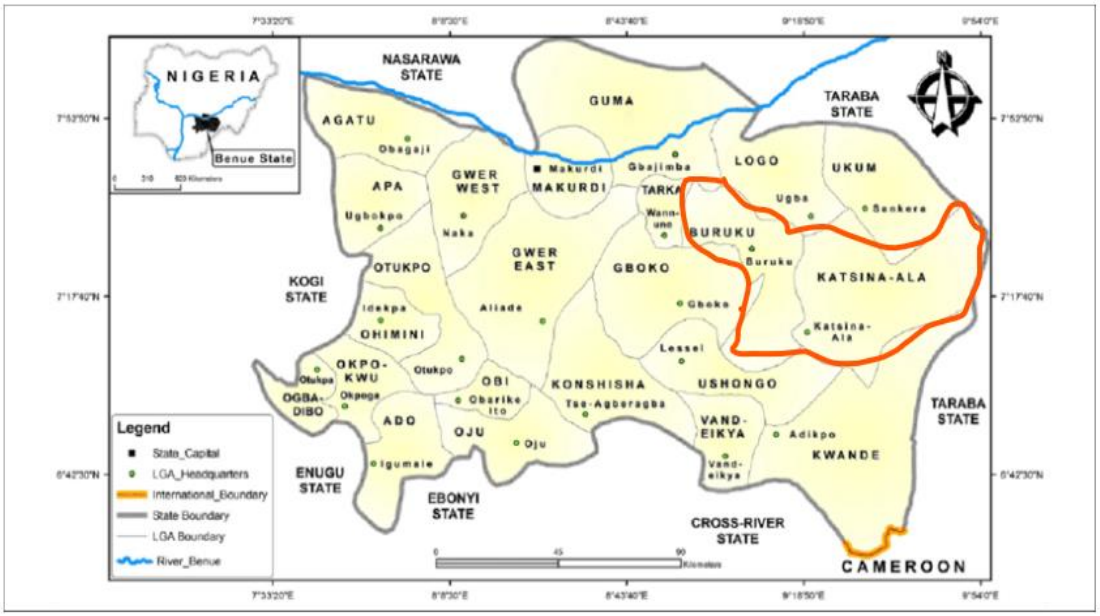

Fig 1: Map of Benue showing Buruku and Katsina-Ala LGAs Nigeria zip code (2024)

Data Collection Techniques

Canoe-producing villages were identified using snowball sampling techniques. The target group includes, fishermen, chief-fishermen, canoe artists like painters, carpenters, canoe owners' custodians, and carvers' marketers in the study areas. Thereafter, the identified canoe-producing villages were randomly selected and visited. A Multi-stage sampling technique was employed to select respondents for data collection. Personal interview and semi-structured questionnaire were used. A total of eight villages were purposively selected for this study. Five villages (Tyowanye, Tyogbande Majov, Mbalagh and Abuku) from Katisina-Ala and three (Tomaataan, Ashitanaku and Mbaakwadam) from Buruku.

Semi-structured questionnaire was used to collect data from respondents. A total number of one hundred (100) copies of questionnaire were used in the communities in the LGAs. That is, fifty in each LGA. Ten (10) copies of the semi-structured questionnaire were administered in each village which five (5) each administered to canoe producers, fishermen, canoe owners respectively. However, only 67 copies of questionnaire were recovered because there were not sufficient respondents to respond to the questions

Data Analysis

Simple descriptive statistics like frequency and percentages were used in capturing social economic variables and in ranking which types

of wood is mostly used and which of the wood species were preferred by the carvers.

RESULTS

Demographic Data of Respondent in the Study Area

Table 1 presents the demographic information of respondents in Katsina-Ala and Buruku LGAs. Results that in both LGAs male was 100% involved in canoe business. Regarding age distribution, the majority of respondents in Buruku LGA fall within the 21-30 age group (34.7%), while in Katsina-Ala LGA, the 21-30 and 41-50 age groups were the most prevalent (38.9% and 16.7%, respectively). Education-wise, the majority of respondents in both LGAs had secondary education (38.8% in Buruku and 50.0% in Katsina-Ala). Occupation analysis indicates that farming was the dominant profession in both areas, with 53.1% in Buruku and 66.7% in Katsina-Ala. The marital status distribution shows a higher percentage of married respondents in both LGAs, with 63.3% in Buruku and 61.1% in Katsina-Ala.

Table 2: Demographic Information of the Respondents from Katsina-Ala and Buruku LGAs

Variables	Buruku LGA		Katsina-Ala LGA	
	F	%	F	%
Gender				
Male	49	100.0	18	100.0
Female	0	0	0	0
Total	**49**	**100.0**	**18**	**100.0**
Age (years)				
0-20	5	10.2	2	11.1
21-30	17	34.7	7	38.9
31-40	9	18.4	3	16.7
41-50	13	26.5	3	16.7
51 and above	5	10.2	3	16.7
Total	**49**	**100**	**18**	**100**
Level of Education				
Primary	15	30.6	5	27.8
Secondary	19	38.8	9	50.0
Tertiary	14	28.6	4	22.2
Post Tertiary	1	2.0	0	0
Total	**49**	**100**	**18**	**100**
Occupation				
Civil Servant	0	0	0	0
Farmer	26	53.1	12	66.7
Trading	13	26.5	3	16.7
Others	10	20.4	3	16.7
Total	**49**	**100**	**18**	**100**
Marital Status				
Married	31	63.3	11	61.1
Unmarried	8	16.3	5	27.8
Divorced	2	4.1	0	0
Widow	0	0	0	0
Widower	8	16.3	2	11.1
Total	**49**	**100**	**18**	**100**

Table 2 shows the wood species utilized in canoe production in Buruku and Katsina-Ala LGAs. Six wood species belong to six families were identify as being used in canoe production in Katsina-Ala while in Buruku LGA, 5 wood species belonging to 5 families were used. In Buruku LGA, wood species like *Gmelina arborea* and *Daniella oliveri* are employed for the construction of stern seat and toggle handle in canoe respectively. *Khaya senegalensis* was used to reinforce canoe deck, while *Prosopis africana* and *Vitellaria paradoxa* were mainly utilized at the bottom base and canoe keel, respectively. *Parkia biglobosa* serves in the stern and aids in aerodynamics.

Similarly, in Katsina-Ala LGA, *Prosopis africana*, *Vitellaria paradoxa*, and *Gmelina arborea* were used for the bottom base,

gunwale, and bow, respectively. *Parkia biglobosa* contributes to the stern, while *Daniella oliveri* was employed as a thwart for bracing. The wood species serve structural functions, such as base coverage and hull protection, with additional applications in furniture, roofing, and crafting.

Table 3 presents details of the canoe production process in various villages within the Buruku and Katsina-Ala LGAs, specifically focusing on the number of trees felled and the duration of the production process. In the Buruku LGA, Tyogbande-Majov and Abuku villages had the highest percentage of trees felled per production process, accounting for 24.5%, respectively while the Abuku village recorded the highest percentage of trees felled per week at 26.5%. The duration of the canoe production process varies, ranging from one to two weeks across the villages in Buruku.

For Kaisna-Ala LGA, Mbaakwadam village had highest percentage of trees felled per production process at 50%. In terms of weekly tree felling, Tomaataan village with 38.9%. The duration of the production process in Kaisna-Ala also spans one to two weeks, with variations observed among the villages.

Table 2: Wood Species Used for Canoe Production in Buruku and Katsina-Ala LGAs

LGA	S/No	Botanical name	Family	Common Name	Tiv Name	Part of canoe wood species is used for	Reasons for choice of wood	Other uses of wood species
Buruku	1	*Gmelina arborea*	Verbanbceae	Gmelina	Gmalina	Stern seat	Cross bars that aid sitting of passengers	Roofing, Fencing
	2	*Daniella oliveri*	Caesalpinoideae		Chiha	Toggle or Grab Handle	A handle attached by rope to the bow and stern of the kayak designed to make carrying, launching, towing or transporting the kayak easier.	furniture, craft, fencing, roofing
	3	*Khaya senegalensis*	Miliaceae	Mahogany	Haa	Canoe Deck	The deck of a canoe helps reinforce the tips of the canoe at the bow and stern	Furniture, poles
	4	*Prosopis africana*	Mimosoidae	Iron wood	Gbaaye	Bottom base	For base coverage and prevent excess water from entering the canoe	furniture, Roofing
	5	*Vitellaria paradoxa*	Sapotaceae	Shea buter	Chamegh	Canoe keel	protect the hull from scrapes, scratches and punctures	furniture, roofing, planks
	6	*Parkia biglobosa*	Fabaceae	Locust bean	Nune	stern	Its job is to cut through the air on the front edge and on the back edge reduce turbulence	furniture, roofing, planks, poles
	Total	**6**	**6**					
Katsina-Ala	1	*Prosopis africana*	Mimosoidae	Iron wood	Gbaaye	Bottom base	For base coverage and prevent excess water from entering the canoe	Furniture, roofing, poles
	2	*Vitellaria paradoxa*	Sapotaceae	Sheabuter	Chamegh	gunwale	Used at the upper edge of the canoe, serve as handle	furniture, roofing, timber
	3	*Gmelina arborea*	Verbanbceae	Gmelina	Gmalina	bow	Front of the canoe, serves as its shape helps a canoe cut or glide through the water ahead.	furniture, poles, roofing
	4	*Parkia biglobosa*	Fabaceae	Locust bean	Nune	stern	Its job is to cut through the air on the front edge and on the back edge reduce turbulence	furniture, Bridge construction
	5	*Daniella oliveri*	Caesalpinoideae	African mahogany	Chihar	thwart	placed across the width of a canoe to help brace the edges (gunwales) of a canoe from side to side	furniture, craft, fencing, roofing
	Total	**5**	**5**					

Table 3: Number of Trees Felled and Duration of Canoe Production Process

LGA	Villages	No. of trees felled per production F	%	No. of trees felled per week F	%	Duration of Canoe production Process	Season of Canoe production
Buruku	Buruku	8	16.3	7	14.3	2 weeks	Dry season
	Tyowanye	9	18.4	10	20.4	1 week	Dry season
	Tyogbande Majov	12	24.5	10	20.4	1 week	Dry season
	Mbalagh	8	16.3	9	18.4	2 weeks	Dry season
	Abuku	12	24.5	13	26.5	1 weeks	Dry season
Total		**49**	**100**	**49**	**100**		
Kaisna-Ala	Mbaakwadam	9	50	8	44.4	2 weeks	Dry season
	Tomaataan	7	38.9	9	50	1 week	Dry season
	Ashitanaku	2	11.1	1	5.56	2 weeks	Dry season
Total		**18**	**100**	**18**	**100**		

Table 4 shows the daily earnings from canoe production in the Buruku and Katsina-Ala LGAs. In Buruku LGA, the highest percentage of earnings of respondents falls within ₦1,000 to ₦ 10,000, accounting for 34.69%, followed by ₦11000-₦15,000 with 22.45% and ₦51,000 and above with 16.33%. Producers from Abuku village had the highest earnings. In Katsina-Ala LGA, canoe producers in Tomaataan village had the highest earnings. Comparatively, canoe producers in of Katsina-Ala LGA had a more earnings compare to those of Buruku LGAs.

Table 4: Daily Earnings from Canoe Production in Buruku and Katsina-Ala LGAs

LGA	Villages	₦1,000 - ₦10,000	₦11000 - ₦15,000	₦16000 - ₦20,000	₦21,000 - ₦30,000	₦31,000 - ₦40,000	₦41,000 - ₦50,000	₦51,000 Above	Total
Buruku	Buruku	6	2	1	0	0	0	6	**15**
	Mbalagh	2	3	1	0	1	0	0	**7**
	Tyowanye	3	1	0	0	0	0	1	**5**
	Abuku	4	5	3	2	2	2	1	**19**
	Tyogbande Majov	2	0	0	0	1	0	0	**3**
	Frequency	**17**	**11**	**5**	**2**	**4**	**2**	**8**	**49**
	Percentage (%)	**34.69**	**22.45**	**10.20**	**4.08**	**8.16**	**4.08**	**16.33**	**100.00**
Katsina-Ala	Tomaataan	3	0	3	0	1	1	1	**9**
	Ashinatanaku	0	2	0	0	1	0	0	**3**
	Mbaakwadam	2	1	0	1	1	1	0	**6**
	Frequency	**5**	**3**	**3**	**1**	**3**	**2**	**1**	**18**
	Percentage (%)	**27.78**	**16.67**	**16.67**	**5.56**	**16.67**	**11.11**	**5.56**	**100.00**

Table 6 illustrates the benefits of canoe production reported by respondents in both Buruku and Katsina-Ala LGAs. In Buruku LGA, the majority of respondents cited improved transport business (42.37%) as the primary benefit, followed by youth empowerment (20.34%), community development (11.86%), and fishing business

(8.47%). Conversely, in Katsina-Ala LGA, respondents primarily highlighted youth empowerment (44.44%) as the most significant benefit, followed by improved transport business (27.78%), community development (16.67%), and fishing business (11.11%).

Table 6 presents data on respondents' benefits from canoe production in both Buruku and Katsina-Ala LGAs. In Buruku, fishing business, community development, youth empowerment, and improved transport business constitute the primary benefits, with 8.47%, 11.86%, 20.34%, and 42.37% respectively. Similarly, in Katsina-Ala, these benefits are observed, with percentages of 11.11%, 16.67%, 44.44%, and 27.78% respectively. The data suggests that canoe production contributes significantly to various sectors, including fishing, community development, and youth empowerment, highlighting its importance in enhancing economic activities and social development in both LGAs.

Table 7 shows employment statistics in the canoe business across different villages in Katsina-Ala and Buruku LGAs. In Buruku LGA, Tyogbande Majov village shows the highest employment rate with 53.1%, followed by Buruku village with 26.5%. The other villages, namely Mbalagh, Abuku, and Tyowanye, also contribute to employment in the canoe business. In Katsina-Ala LGA, Mbaakwadam village leads with 38.9% of the total employment, followed by Tomaataan and Ashitanaku villages. The data underscores the significant employment opportunities provided by the canoe business in both LGAs, contributing to local economic development and livelihoods.

Table 6: Respondents, benefits from canoe production in both Katsina-Ala and Buruku LGAs

S/No.	Respondents benefits from canoe production	Buruku LGA		Katsina-Ala LGA	
		F	%	F	%
1.	Fishing business	5	8.47	2	11.11
2.	Community development	7	11.86	3	16.67
3.	Youth empowerment	12	20.34	8	44.44
4.	Improved transport business	25	42.37	5	27.78
	Total	**49**	**100**	**18**	**100**

Table 7: Employment in canoe business in Katsina-Ala and Buruku LGAs

LGA	Villages	No. of Employees	
		F	%
Buruku	Buruku	13	26.5
	Tyogbande Majov	26	53.1
	Tyowanye	1	2.0
	Mbalagh	4	8.16
	Abuku	5	10.2
	Total	**49**	**100**
Katisna-Ala	Tomaataan	6	33.3
	Ashitanaku	5	27.8
	Mbaakwadam	7	38.9
	Total	**18**	**100**

Figure 1 reveals the socio-economic impact of the canoe business in the Buruku and Katsina-Ala LGAs. In Buruku LGA, the canoe business plays a significant role in aiding fishing (26.5%), improving the standard of living (12.3%), and enhancing transport (34.7%). Additionally, the business contributes to the development of the community (8.2%). An interesting observation is the high percentage (12.1%) associated with youth empowerment. In Katsina-Ala LGA, the canoe business has a substantial impact on community development

(27.8%), improved transport (27.8%), and youth empowerment (16.7%). However, it shows a lower influence in aiding fishing (16.7%) and crime reduction (11.1%). Comparatively, the Buruku LGA demonstrates a more diverse and comprehensive socio-economic impact, with higher percentages in aiding fishing, standard of living improvement, and youth empowerment. Katsina-Ala LGA, on the other hand, excels in community development and improved transport.

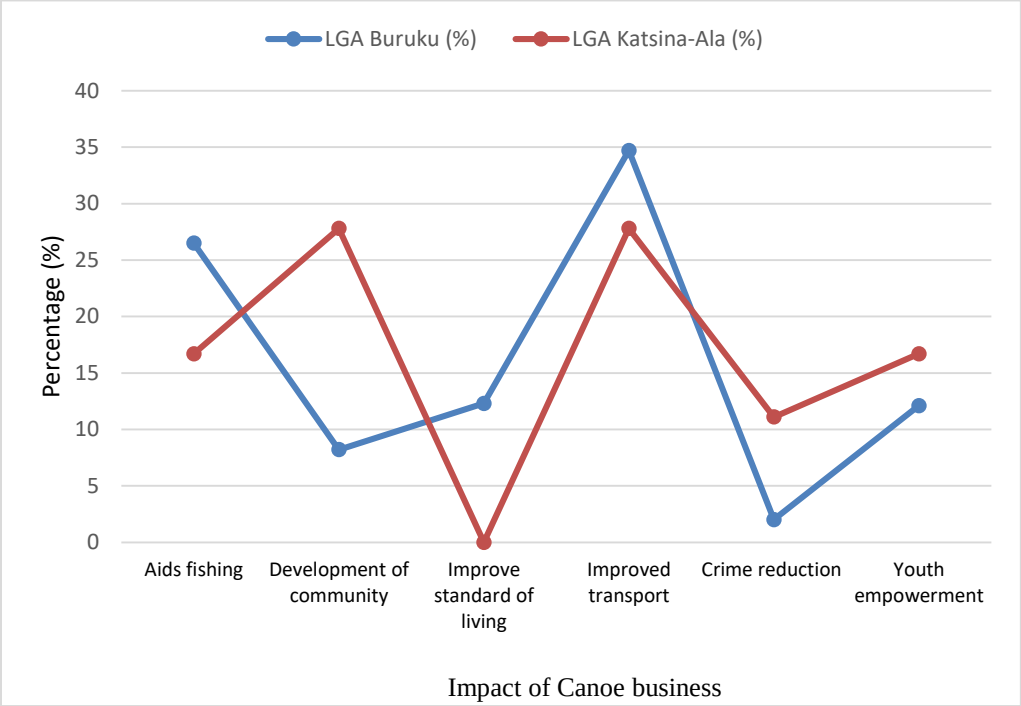

Figure 1: Socio-economic impact of Canoe Business Buruku and Katisna-Ala LGAs

Plates 1 and 2 feature the use of different wood types, *K. senegalensis* and *G. arborea*, in canoe production, with Plate 3 portrayed the process in Abuku, Buruku LGA. Plates 4 and 5 portray the outcomes of this production, showcasing a newly constructed planked canoe and the construction of a ferry's back hull in Buruku LGA. Plates 6-9 highlight various aspects process including a newly constructed planked canoe with galvanized iron aluminum strips, a ferry lineup at the Buruku River bank, and a loaded ferry conveying people across the river.

Plate 1: Planks of *K. senegalensis* used for Canoe Production in Tomaataan K/Ala

Plate 2: Plank of *Gmelina arborea* at Canoe Production Site at Abuku in Buruku LGA

Plate 3: Production Process of Canoe in Abuku (Buruku LGA)

Plate 4: New constructed planked Canoe at Buruku LGA

Plate 5: Construction of ferry at Buruku (back hull)

Plate 6: A newly constructed planked Canoe with strips of galvanized iron aluminum

Plate 7: Ferry's line-up at the bank of river Buruku River

Plate 8: Mr. Elihar and Ben in a canoe at river Katsina-Ala

Plate 9: Loaded ferry at Buruku River about conveying people across

DISCUSSION

Canoe production industry in Buruku and Katsina-Ala LGAs exhibited a notable gender disparity, with a higher representation of males than females. This discrepancy may be attributed to the physically demanding nature of the job, suggesting that the requisite physical energy is more commonly found in males. This observation aligns with the findings of (Kathleen and Lipset,1997); Adeniji, *et al*., 2015), who asserted that women played a limited role in Canoe and charcoal production respectively, emphasizing the arduous nature of the work. Most respondents involved in canoe production were predominantly youths, which agrees with similar demographic patterns identified by (Adeniji, *et al*., 2015).

Buruku exhibited a higher employment rate in the Canoe production business compared to Katsina-Ala LGA. This potentially link to decreased level of unemployment rate the among youths in the area. The National Bureau of Statistics (NBS) reports that Nigeria experienced a rise in youth unemployment, reaching 7.2 percent during the second quarter (Q2) of 2023 (TheCable, 2024). Although Uddin and Uddin (2013) noted that youth

unemployment poses a significant challenge in Nigeria and presents a tangible risk to the country's democracy, this study has found that wood based industry like canoe production has the capacity of engaging the youth with employment. This finding agrees with the report of Lippe *et al,* (2022) that estimates derived from data collected from 56 countries show that during the period from 2017 to 2019, approximately 7.7 million individuals were informally employed, constituting 77 percent of all employment related to forests in those nations.

The educational profile of respondents in the Canoe business primarily indicated a secondary school level of education. This demographic characteristic corresponds to the typical profile of rural married farmers, as observed in the study conducted by Adeniji, *et al*., (2015) on Canoe production and producers in Lekki lagoon of Lagos State, Nigeria. Most of the wood based industries in do not necessarily engage high skilled labour. This makes it easier for youths in Buruku and Katsina-Ala to engaged in canoe business.

In Buruku LGA, respondents engaged in Canoe production felled an average of 49 trees per week, whereas in Katsina-Ala LGA, the corresponding figure was 18 trees per week, resulting in a cumulative weekly deforestation rate of 63 trees. The study highlighted a concerning trend where the rate of tree harvesting far exceeded replanting efforts, raising alarms about potential environmental consequences and the impending risk of extinction for preferred tree species. Among the 10 wood species utilized for Canoe production in both LGAs, *G.* emerged as the most favored, closely followed by *K. senegalensis.* This preference aligns with earlier findings by Adeniji *et al*. (2015), who identified *G. arborea* as the preferred species in canoe production due to its multipurpose attributes.

While a total of 8 villages were involved in Canoe production in both LGAs, the primary focus among respondents was on increasing canoe production for transportation purposes. Remarkably, the study revealed a higher concentration of Canoe producers in Buruku LGA compared to Katsina-Ala LGA, possibly influenced by the absence of a bridge for road transportation in the former. Among the villages, Abuku in Buruku LGA accounted for the highest number of Canoe producers, while Tomaataan in Katsina-Ala LGA had the highest count.

The economic impact of Canoe production was evident in the study, as 21 canoe producers in Buruku reported weekly earnings ranging from ₦1000 to ₦10,000, while 6 producers in Katsina-Ala LGA earned between ₦11,000 and ₦15,000. These earnings were reported to be instrumental in meeting various family needs, including food, school fees, and housing expenses. This aligns with the findings of Tunde *et al*. (2013), underscoring the positive impact wood based industries on the well-being of producers, contributing to poverty reduction.

Furthermore, respondents highlighted the role of Canoe production in improving transportation to otherwise inaccessible areas, facilitating fishing activities. Road transport has become a serious problem in Benue State due to bad roads and insecurity. Water transport for travelers across Buruku and Katsina-Ala LGAs in Benue State have reduced the burdens of bad roads.

CONCLUSION

The study revealed a predominant male involvement in canoe business in both Buruku and Katsina-Ala LGAs. The study identified six wood species in six families as being used for canoe production in Katsina-Ala while in Buruku LGA, 5 wood species belonging to five families with *Gmelina arborea* mostly utilized. Buruku LGA canoe producers generally earned higher incomes compared to their Katsina-Ala counterparts. In Buruku LGA, canoe business significantly aids fishing, improves living standards, enhances transport, contributes to community development, and empowers youth while in Katsina-Ala LGA excels in community development and improved transport but shows a lower influence in aiding fishing and crime reduction. This study has found that wood based industries like canoe production has the capacity of engaging the youth with employment and livelihoods.

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