Original Research Article

GENDER LIVELIHOOD STRATEGIES AMONG FARMERS' HOUSEHOLD IN KANO STATE, NIGERIA

ABSTRACT

Gender-based livelihood continues to be one of the most prevalent issues facing Nigerian households, with implications in virtually every industry. This study accessed the gender-based livelihood strategies of farmers' households in Kano State, Nigeria. The research was conducted in Kano state, four Local Government Areas (LGAs) in Kano State were selected using a multi-stage sampling procedure, and 215 farmers were randomly selected from 717 households in the LGAs. In addition, 80 households, of which 20 were randomly selected from each LGA, were interviewed about their means of subsistence. A combination of quantitative and qualitative techniques was used to gather information for the study. Both descriptive statistics and the Harvard Analytical Framework were used to analyse the collected data. The results revealed that the average age of farmers in Kano State was 35 years, the majority (89.3%) were married, with an average household size of 9 people, and 55.8% had informal education. The majority of productive activities were carried out by men and boys; both men and women carried out activities that generated income; and more than 70 percent of reproductive activities were carried out by women, as revealed by the household's livelihood strategies. It further revealed that women had limited access to resources and that the majority of resources were under the control of males in the study area. Men dominated access to and control over the resources that were available. It is recommended that women be encouraged to devise legal means for accessing and controlling resources in order to improve their livelihood status.

Keywords: Gender, Livelihood, Access, Control, Resources, Household

1. INTRODUCTION

1.1 Background of the Study

A livelihood comprises the capabilities, assets (stores, resources, claims, and access), and activities required for a means of living [1]; it is also referred to as the systematic procedure of a livelihood based on abilities, resources, and feasibility. In an effort to resolve the issue of the sustainability of farmers' livelihoods, livelihood security and farmer quality in poor areas are regarded as major issues, as well as a vital research hotspot for specialists and researchers [2,20]. Socioeconomic and political circumstances have an impact on the establishment of means of subsistence. The ability to obtain and utilise assets in a beneficial manner can be impacted by markets, social norms, and land ownership policies, institutions, and processes. [3,21]. Gaining access to resources is a fundamental requirement for rural residents to improve their standard of living. Rural women do not have equal access to and control over assets as men, especially land and funds, reducing their socioeconomic well-being [4]. Rural women also lack access to social assets such as networks and associations, which weakens their ability to exert influence in the realm of political decision-making and collective representation [5]. Furthermore, women face inequalities in accessing education, skill development, and training opportunities, which impair their abilities. Rural poverty originates and perpetuates inadequate access to and control of productive resources [6]. ascertained a strong link between access to assets and poverty, an end-result of a continuous low livelihood status. They are socially ensured with the responsibility of improving the welfare, food security, and health of households. However, they engage in low-income activities and poor livelihood options that have serious implications for their livelihood strategies and overall well-being [3]. The ability of children to survive and develop in the aftermath of a conflict is tied to the resources available to them individually, within their families, and in their communities. Conflict exacerbates preexisting situations, reducing the capacity of families and communities to meet these demands by destroying people's ability to earn a living and establish a stable economic foundation that can withstand shocks in the future[21]. The active labour contribution of children to the household is appreciated. When they were doing their various tasks, they socialised earlier and helped both men and women.

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As part of their daily responsibilities, boys and girls represent not only social security in old age but also additional activities like reproductive and productive ones. They are expected to gain other rewards, such as praise, food, clothing, shelter, school equipment, and inheritance rights, in addition to land, when they grow up. The ability of children to perform duties is, without question, inherent in their right to have a livelihood and in the wider family community. Families rely on their children's contributions in developing countries, especially in rural areas, and households are not economically viable without children's financial or labour contributions. Children contribute not only to the improvement of their individual personalities but also to lifting themselves out of poverty and material deprivation by contributing to family livelihoods. Participation involves multiple and often overlapping functions: social skills to develop relationships, economic skills to perform a wide range of household or income-generating activities, as well as generational competencies in caring for young, older, sick family members and maintaining contacts with a greater network of relatives. Families' inability to provide for themselves deepens poverty and depletes resources that are essential to children's' survival, growth, and development. Their safety is jeopardised since families cannot provide for themselves due to unemployment. Therefore, increasing household participation in productive and income-generating activities is critical for economic empowerment and supporting equitable economic growth in Kano State. The study aimed to describe the respondents' socioeconomic characteristics and determine the livelihood strategies of the farmers' households in the study area.

1.2 Conceptual Framework of Gender Household Livelihood Strategies

The household livelihood encompasses the various components necessary for sustaining a means of living, including the capacities, assets (such as resources, control, and access), and activities involved [21]. The sustainability of a household's livelihood is contingent upon its ability to effectively manage and rebound from stress and unforeseen disruptions [21,22]. It also entails preserving different capacities and resources, thereby fostering prospects for

subsequent generations. The activities undertaken by a family range from productive to income-generating, reproductive, and socio-economic. These activities may be carried out collectively (by men, women, boys, and girls) or by certain sub-groups within the household. They have the potential to facilitate resource management, which can in turn improve individuals' quality of life, minimise poverty, and exert a direct or indirect impact on their livelihoods[23]. Consequently, these activities can either enhance or jeopardise their well-being.

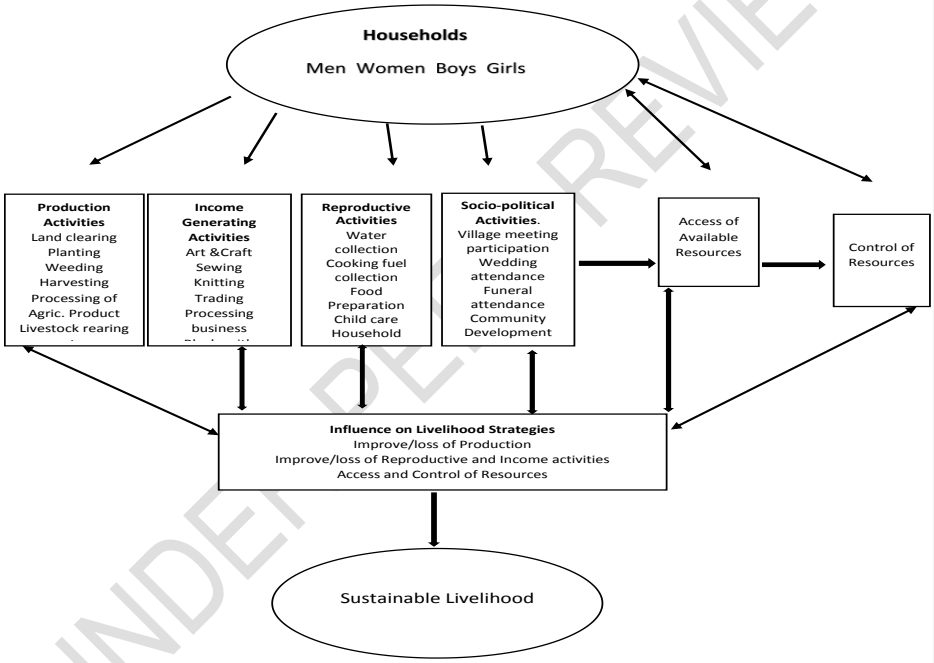

Fig. 1: Conceptual Framework of Gender Household Livelihood Strategies

2. METHODOLOGY

2.1 Study Area

Kano State is situated within the Sudan Savannah Agro-Ecological Zone, between latitudes 9^0 30' and 10^0 33' to 12^0 37' North and longitudes 7^0 34' and 9^0 25' East. The state is bordered on the northwest and west by Katsina State, on the east and northeast by Jigawa State, on the south by Bauchi State, and on the southwest by Kaduna State. The state has 44 local government areas and a total land area of 42,582.8km^2, of which 30,684.8km^2 is agricultural land and 11,898km^2 is forest and livestock land [7]. More than half of the state's population is made up of farmers who cultivate legumes, cereals, and vegetables. Livestock rearing and trading are also common in the state [7]. According to the National Bureau of Statistics (NBS), the estimated population of Kano State in 2022 was 15,462,200 people, including 8,105,029 males, 7,359,171 females, and 7,210,473 children.

The research region has a tropical dry climate with a monomodal rainfall distribution of 600mm per year, the majority of which falls between May and September. Air pollution is highest during the wet season and lowest during the dry season. The average temperature is 29 degrees Celsius, with lows of 15 degrees Celsius from November to February and highs of 39 degrees Celsius in March and May [8]. Kano State's main soil type is windblown sands from acid-crystalline rocks, with light, freely graining, and loamy soils suitable for intensive cultivation. The highest elevation is at the south-western tip, at 1,200m above sea level. The state's natural vegetation is savannah, with trees up to 20 metres high and grasses up to one meter. Some trees, like Baobab and Acacia, develop spreading canopies.

Women and children in the state contribute actively to livelihood activities in order to provide for the family; they are involved in small trading businesses, farming activities, processing businesses, etc. The dominant tribes are the Hausa and Fulani ethnic groups; however, it is home to practically every major and minor tribe in Nigeria. Other nationalities from various populations are estimated to account for 7% of the overall population [7].

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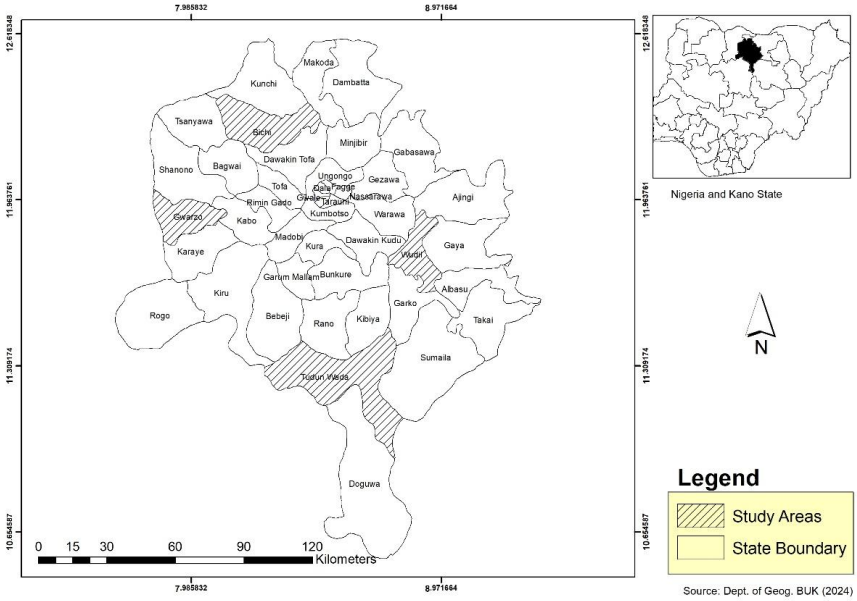

Fig. 2: Map of Kano State showing the Four LGAs Selected from the two agro-ecological zones

Source: Cartography Lab. Geography Department, Bayero University, Kano

2.2 Sampling Procedure

A multistage sampling technique was adopted for the study. Four local government areas (LGAs) were randomly selected: Bichi, Gwarzo, Wudil, and Tudun-Wada LGAs. The second stage involves random selection of the respondents.A 80 households were selected from the 4 LGAs to conduct the Harvard Analytical Framework, and there was also a total of 717 farmers. Random sampling was used to select 30% of the total number of household respondents from the selected LGAs, gives a total of 215 respondents for the study (Table 1).

Table 1:Summary of Sample Size of the Farmers' Co-operative Groups

LGA	No. of Households Selected	No. of Household members	30% of

			Households Members/LGA
Bichi	20	160	48
Wudil	20	185	55
Gwarzo	20	180	54
Tudun-wada	20	192	58
Total	**80**	**717**	**215**

2.3 Data Collection and Analysis

Structured questionnaires and the Harvard Analytical Framework (HAF) obtained the primary data. A questionnaire was used to obtain socio-economic characteristics. HAF was used to collect the gender livelihood strategies data. Descriptive statistics was used to analysed the data collected

3. RESULTS AND DISCUSSION

3.1 Socio-economic Characteristics of the Farmers

The respondents' average age was 35 years, with a range of 10 to 60 years. (Table 2). They were within their active age and may likely relate to accessing livelihood resources and overcoming issues that may arise. This agrees with the findings ofTafida et al. [9], who reported that the mean age of the farmers was 30 years. Anugwaet al. [24] found the average male farmers age of 47 years and women farmers age of 44 years which slightly differs the present findings.The results revealed that the average household size was 9 persons, with a minimum of 2 persons and a maximum of 23 persons. After identifying the general household size, the results went further to categorise the households in relation to the number of adults and children of both sexes in each household, where the average number of adult males and females was the same (five), with the maximum adult males

(nine) being slightly different from the maximum adult females (eight). However, the average and maximum number of children in the household were slightly higher, with respective values of 7 and 13, indicating a large household size (extended family) with more children than adults; consequently, the households may be more productive and knowledgeable on livelihood resource-related issues by encouraging both horizontal and vertical information exchange among the family members. This is similar to the finding of Idriset al. [10], who reported that the average household size was 14 people, with a range of 2 to 25 people. Table 2 further revealed that the average years of farming experience were 23 years, with a minimum of 1 year and a maximum of 40 years (Table 2). Over the years, the farmers had enough experience to understand and cope with any livelihood conditions in the area, resulting in an increase in production. This is in line with the findings ofApata [11], who reported that the years of farming experience of some farmers in southern Nigeria ranged between 21 and 50 years.

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Another important feature of the farmers identified in this study was their annual income (Table 2). The average annual income of the household was ₦ 133,613.23, with a minimum of ₦15,000 and a maximum of 1,000,000. This implied that some respondents in the study area had reasonably low annual incomes that could be of help in diversifying agricultural activities to increase their income and searching for information to improve their livelihoods. This is contrary to the findings of [12], who reported that the average annual income of the farmers in Orumba South was 1,050,000, with a minimum of ₦100,000 and a maximum of ₦5 million annually.

Table 2. Socio-economic Characteristics of the Respondents

Variables	Min	Max	Mean	SD
Age (years)	10	60	35	10.748
Household Size	2	23	9	6.651
Number of Adult male in the house (≥15)	1	9	5	2.509

Number of Adult female in the house (≥14)	1	8	5	2.414	
Number of Children in the house (≤15yrs)	1	13	7	4.553	
Years of Farming Experience (years)	1	40	23	10.606	
Annual Income (₦)	15,000	1,000,000	133,613.23	136,356.15	

Source: Field survey, 2022

The male respondents were the dominant (69.8%) for the study, and it's an indication they dominated the households and the farming activities, which were the source of their livelihoods, and has to do with cultural orientation in relation to gender differences, particularly with respect to roles and responsibilities. This agreed with the findings of Mustaphaet al.[13], who revealed that the majority (73.8%) of the farmers in Borno State's central agricultural zone were male. Most of the respondents interviewed were married (89.3%) and had an optimum level of responsibility and expectation for meeting family demands. This is consistent with [14], who reported that 90.5% of the farmers in Adamawa, Nigeria, were married and had family responsibilities (Table 3). The educational level of the farmers is an important indicator in understanding farmers' ability to relate with others and clearly utilise different channels of communication for a proper understanding of their livelihood and other related agricultural activities on the farms. The educational status of the respondents shows that 55.8% of the interviewed ones had informal (Qur'anic) education. This implies that a reasonable percentage of them had formal (western) education, which may positively influence access to livelihood resource information (Table 3). This is contrary to the findings of[15], who found that about 60.8% of the arable crop farmers in Ogun State had western education.

Table 3. Socio-economic characteristics of the Respondents (cont.)

Variables	**Frequency**	**Percentage (%)**
Gender		

Male	150	69.8
Female	65	30.2
Marital Status		
Single	12	5.6
Married	192	89.3
Divorced	1	0.5
Widowed	10	4.6
Level of education		
Informal Qur'anic Education	120	55.8
Adult Education	7	3.3
Primary Education	35	16.3
Secondary Education	30	14.0
Tertiary Education	23	10.7
Main Occupation		
Crop Production	197	91.6
Livestock Production	6	2.8
Processing	12	5.6
Total	**215**	**100**

Source: Field survey, 2022

Figure 2 revealed the farmers' contact and frequency of contacts with extension agents; 87.2% of the farmers had contact with the extension agents. However, when the frequency of such contacts was assessed, it also showed that 29.7% of the farmers had contact on a quarterly basis. Having contact with the extension agents tends to improve farmers' productivity, hence their livelihoods. This disagreed with the findings of [16], who reported that 65.91% of the farmers had no contact with the extension agents, which was also the case with [17], who reported that 23.0% had contact with the extension agents on a quarterly basis and 26.0% had such contacts on a monthly basis.

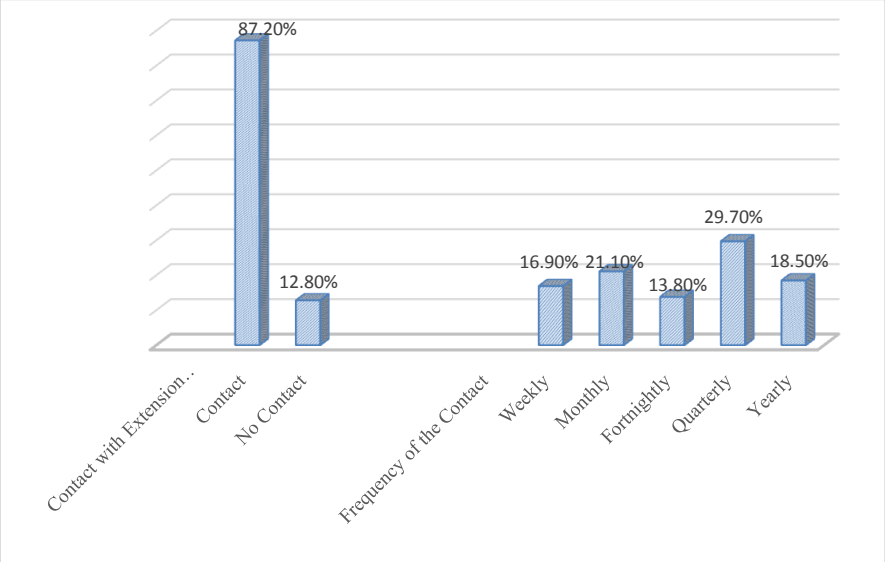

Fig.3. **Contact with Extension Agents** among the Respondents

3.2 Gender Livelihood Strategies

The Harvard Analytical Framework (HAF) discussed the gender livelihood strategies of the farmers' households. The activity profile is the first tool of HAF; access and control of resources are the second tool; and farmers' household community influential factors are the third tool of HAF. The result is represented in Figure 4–10.

3.2.1 Activities Profile of the Respondents

The agricultural production activities considered for this study include, among others, land clearing, planting, weeding, and harvesting; processing; sale of agricultural products; livestock rearing; and sale of livestock. It revealed that males (men and boys) were responsible for more than half of the production activities. The women were engaged in other activities, especially the processing of agricultural products (60%), sales of some products (42%), and livestock rearing (40%). They were active in performing these activities and were able to divide their time to engage in other household chores. The girls were also active in livestock rearing (Figure 3). This shows that the farmers rely on family labour for agricultural production, and the household's engagement in these activities was mostly a sign of commitment and determination in order to improve the family's livelihood status

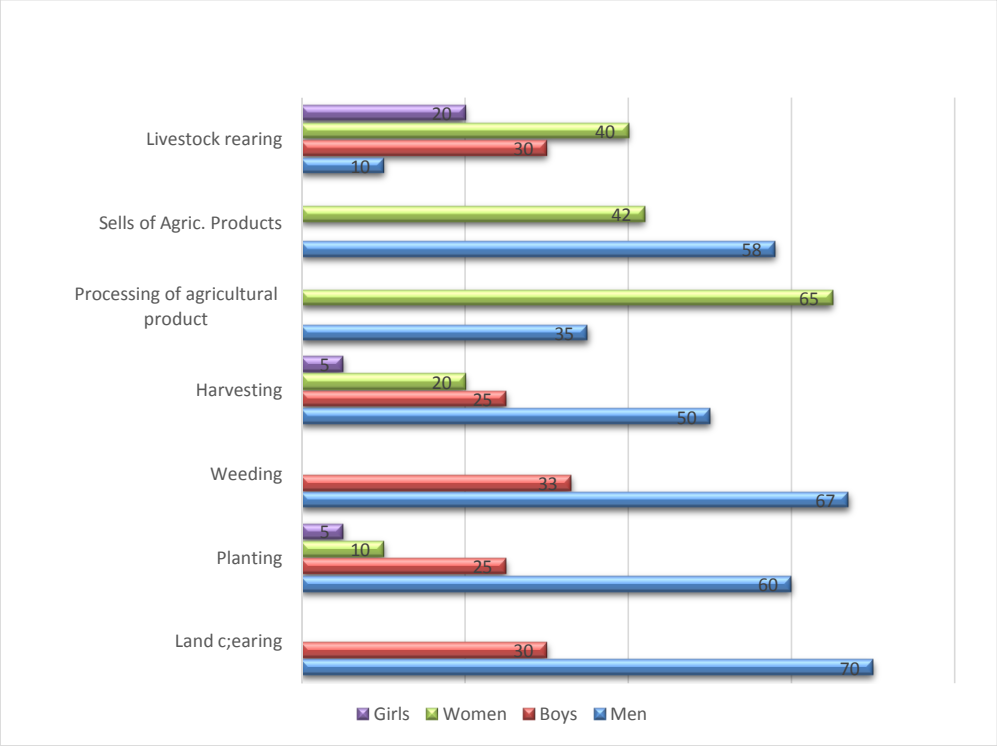

Fig. 4: Agricultural Production Activities (Activity Profile) among the Respondent

Income-generating activities involve involvement in a variety of economic activities as part of complex livelihood strategies and are obtained in Kano State (Figure 4). The activities listed in this study were sewing, art and craft, knitting, trading, carpentry, blacksmithing, and processing business. The majority of the activities were performed by the females, and the males were equally engaged in the same number of activities as the females. The activities engaged by males were carpentry (80%), blacksmithing (85%), trading (62%), and some engaged in sewing clothes (45%). Out of the activities listed, only a few were performed by the boys and girls. The adults in the household play a significant role in providing for and improving the livelihood of the family, especially the women, who are so active in helping the family's development. There is no succession plan in the areas, which could lead to a crisis

in the long run since the adults did not engage their children in their income-generating activities.

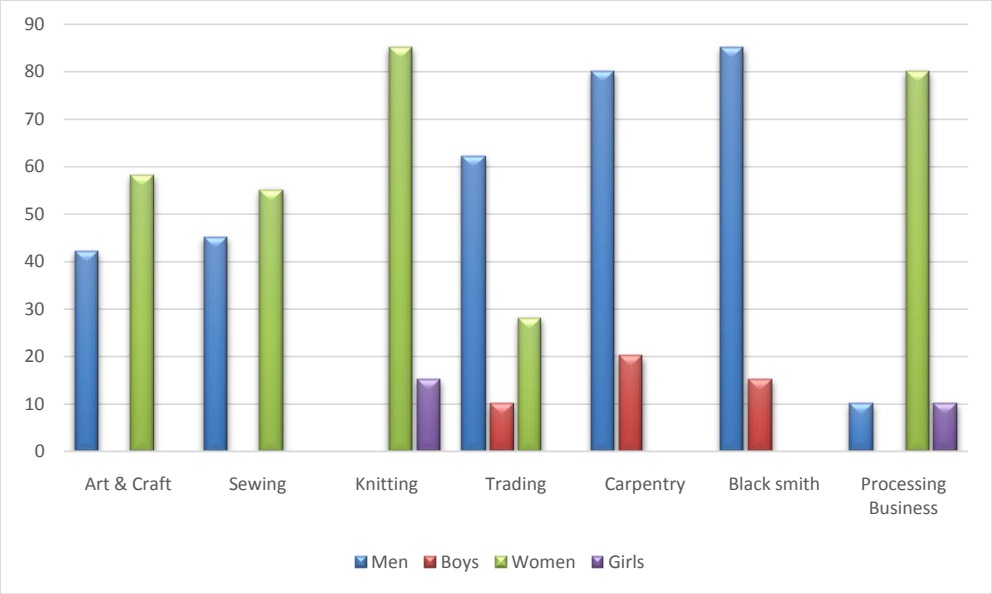

Fig.5: Income Generating Activities (Activity Profile) among the Respondents

The reproductive activities listed in this study were the collection of water, the collection of firewood, food preparation, child care, household chores, and feeding livestock (Figure 5). All the reproductive activities were mainly performed by women and girls in the household, but the collection of firewood was performed by men and boys. In addition to the collection of firewood, the boys were also engaged in fetching water and feeding livestock. Virtually all girls were involved in these activities from an early age, from 7 years old to 13 years old. They assisted in feeding the animals, transporting water, and gathering fuel wood. There was a school area, but many girls, especially those whose mothers' lots of work, had to drop out [18].

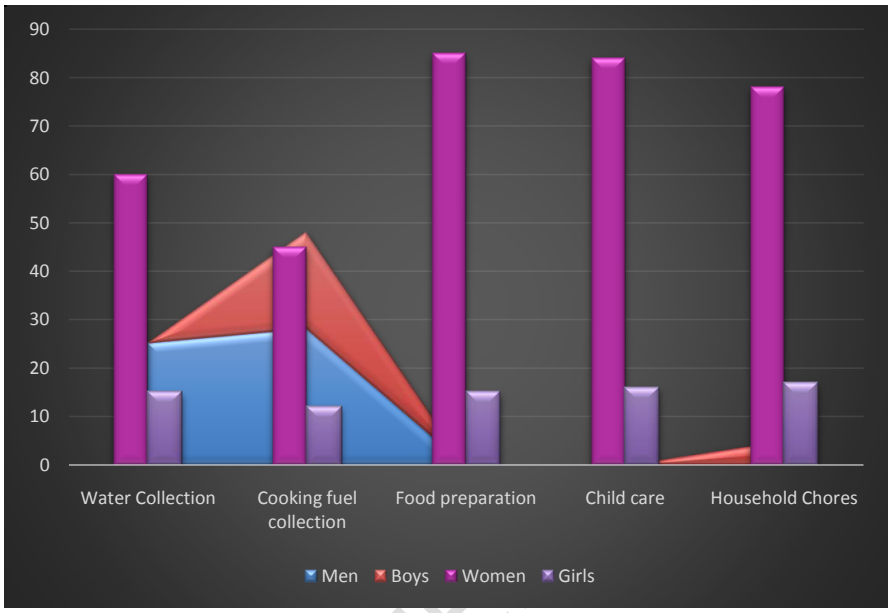

Fig. 6: Reproduction Activities (Activity Profile) among the Respondents

Socio-political activities have to do with participation in village activities in order to contribute to the lives of the people and feel "at home" in the community. Socio-political activities listed were participation in village meetings, attending weddings and funerals, participating in religious activities, participating in community development projects, and participating in conflict resolution, as shown in Figure 6. In the study area, men and boys carried out all of these activities. The women in Kano State were good at engaging themselves in activities like attending weddings (40%), religious activities (35%), and conflict resolution (42%), especially conflicts related to marital affairs.

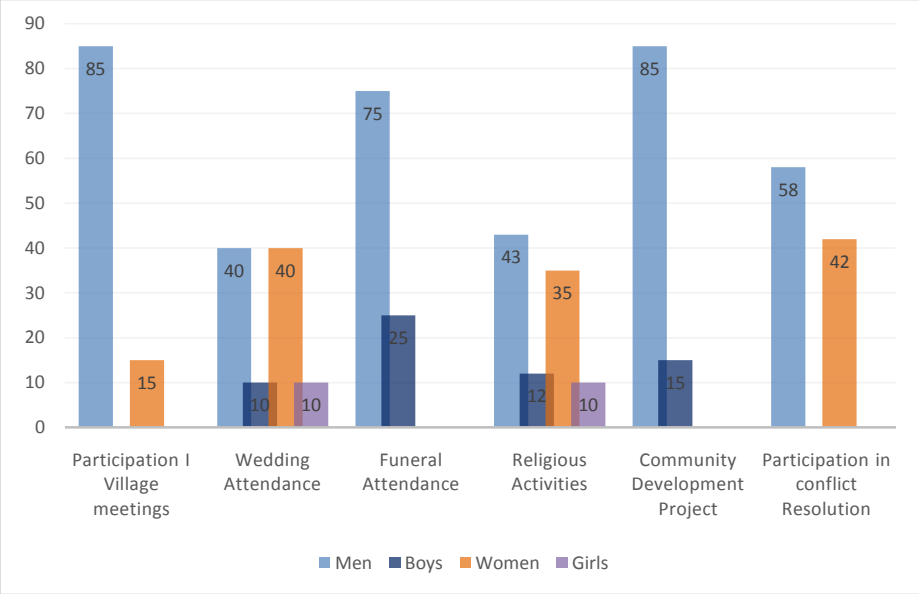

Fig.7: Socio-Political Activities (Activity Profile)

3.2.2 Access and Control of Resources

Access and control of livelihood resources such as Land, animals, and agricultural implements, as well as financial resources such as credit, are required, particularly when making agricultural production decisions. Ownership and control over land are fundamental to agriculture, especially for farmers to feel more secure about investing in land improvement technologies to increase production (Figure 7). The farmers claimed access to almost all the resources identified, which include, among others, land, houses, livestock, farm equipment, light supply, communication facilities, capital, and training in farming. The male farmers had both control and access to all the resources, while women had access to some resources with the exception of houses, farm equipment, and training on farming technique, which was dominated by the men. It was also found that for the control of resources, men mostly had access to and control over land, especially husbands, elder sons, or brothers. This has to do with the norms and values of the people in Kano State; any resources owned by a woman

had to be controlled by a male relative or husband, especially land. The women's demand for communal land involved bargaining with male relatives and communal authorities. However, family members and communal leaders did not always acknowledge women's need for land and resources [19].

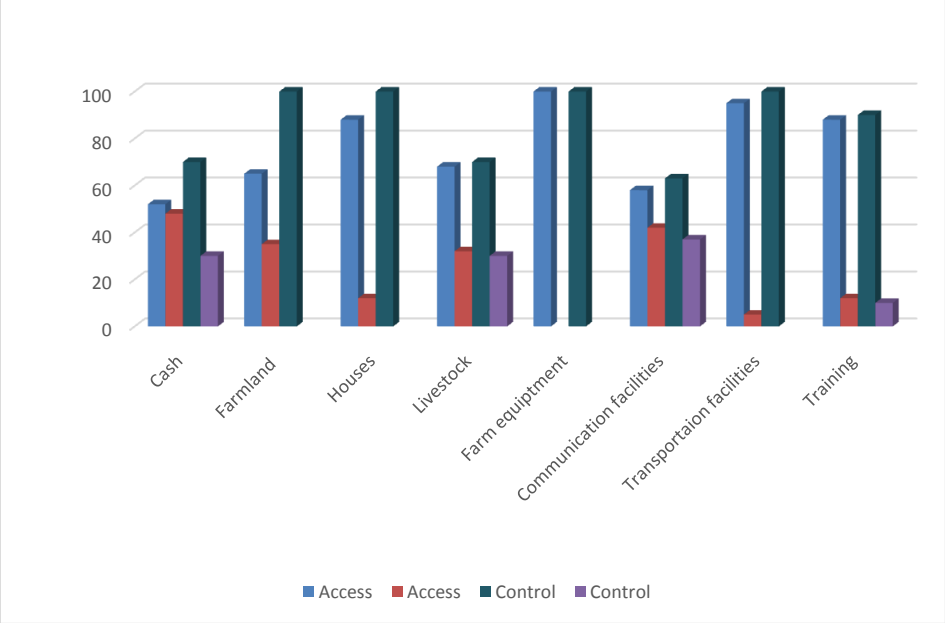

Fig.8: Access and Control of Resources among the Respondents

On the access and control of benefits the farmers had, it was found that male farmers, mostly men, benefited from things like credits, extension services, basic needs, asset ownership, education, politics, and leadership (figure 8), while female farmers benefited from credit, basic needs, and asset ownership and controlled only the basic needs as the people that process the most important basic needs (food). The farmers had access to and control over the resources, which is a sign of improved livelihood strategies.

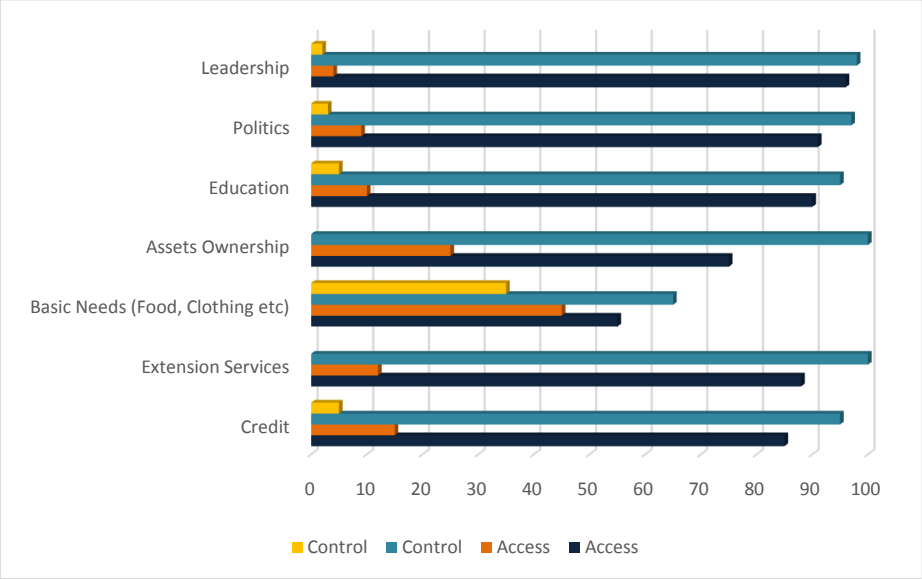

Fig.9: Access and Control of Benefits Profile among the Respondent

3.2.3 Influential Factors of the Farmers' Household Community

Social norms are informal understandings that regulate how individuals in a society behave. Community norms have a significant role in shaping the social structure by influencing the dynamics between leaders and subordinates. This relationship gives rise to a hierarchical stratification within social frameworks that exhibits a preference for leadership across all domains of society. It also impacted people in the study area by shaping their behaviour and inculcating discipline. But some members of the study area find it difficult to abide by the norms of their community, which results in conflicts. It is also an opportunity to empower the farmers in order to live comfortably.

Farmers' demographic factors are important for the management of farms, livelihoods, adoption of new technologies (Figure 9), and exhibiting good behaviour in the community, which will help the farmers improve their lives. Farmers have an opportunity since individuals with a high degree of knowledge look for technologies that can improve their farming skills.

Aged farmers, who are the experienced ones, help the younger ones in training. Institutional factors are the structures in society; these include rules, norms, and routines that guide the behaviours of the farmers, and this is part of the culture of the people in Kano State as presented in figure 9. These factors influence the farmer's access to credit to improve their businesses, access to extension services, and technical advice. The institutional factors are constraints for the farmers because people in political power use their youth to create issues in the community to achieve their political power.

Economic factors are the most influential to farmers since the resources they worked and lived in are under those factors, such as land, labour, capital, technology, and market. With these factors, the farmer's livelihood improved. They are also an opportunity for advancement and improvement in the farming business (Figure 9). The problem is that most farmers' children work on family farms; they work long hours, which puts them at greater risk of illness and injury. Long-working children are older, have less education, live and work on low-productivity farms, and live in households that allocate less money to household expenditures.

Education is also influential; it is a way to obtain paid employment or to generate income through self-employment through the skills acquired in school (Figure 9). Those farmers who are educated had better yields than those without education; this is because the educated farmers adopted new technologies that improved their farming easily and even went to the extent of looking for technical assistance, and also because these farmers are normally the leaders in the farmers' group. The attitude of the community towards development work is an opportunity for farmers in the area. This is due to the fact that this attitude will help the community improve without always waiting for the government or any organisation to intervene in any small project, which will take a very long time before the government supports it, as presented in figure 9.

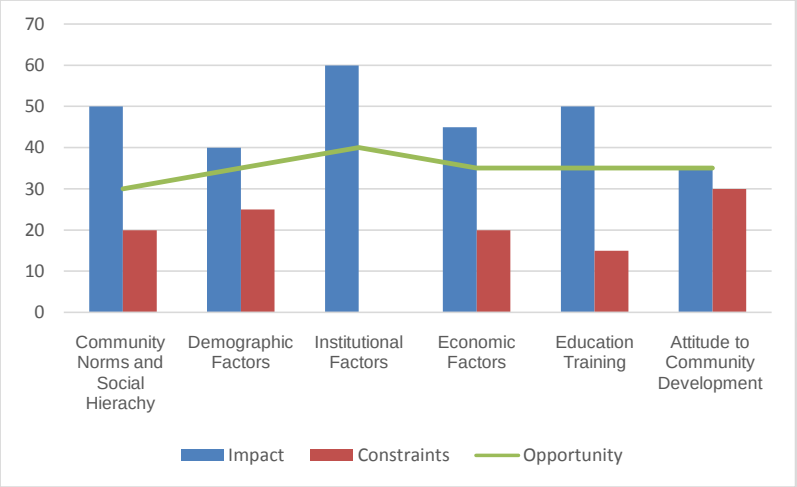

Figure 10: Influential Factors of the Farmers' Household Community

4. CONCLUSION AND RECOMMENDATION

In conclusion, the farmers household were within the active age and can perform the livelihood strategies. Men and women both participated in the majority of activities that contribute to livelihood, and men also controlled most of the resources available. Consequently, it is recommended that women be encouraged to control their resources, which will help them improve their livelihood strategies.

Competing interest of the authors:

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